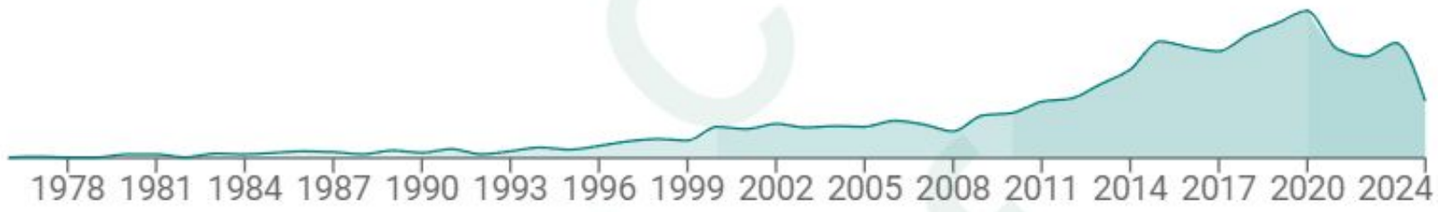
IDiyas Upfront Research Reports

# "LITHIUM BATTERY"

CREATED BY

IDiyas

**First Date:** 1976-12-14 **First Patent:** 3997363




## Top 10 CPC

H01M10-0525 (773 patents) - Rocking-chair batteries, i.e. batteries with lithium insertion or intercalation in both electrodes; Lithium-ion batteries

H01M10-052 (610 patents) - Li-accumulators

H01M4-366 (369 patents) - Composites as layered products

Y02E60-122 (346 patents) -

H01M4-525 (343 patents) - Selection of substances as active materials, active masses, active liquids of inorganic oxides or hydroxides of nickel, cobalt or iron of mixed oxides or hydroxides containing iron, cobalt or nickel for inserting or intercalating light metals, e.g. LiNiO2, LiCoO2 or LiCoOxFy

H01M4-505 (299 patents) - Selection of substances as active materials, active masses, active liquids of inorganic oxides or hydroxides of manganese of mixed oxides or hydroxides containing manganese for inserting or intercalating light

H01M2004-028 (237 patents) - Positive electrodes

H01M2004-027 (212 patents) - Negative electrodes

H01M4-131 (268 patents) - Electrodes based on mixed oxides or hydroxides, or on mixtures of oxides or hydroxides, e.g. LiCoOx

H01M2004-021 (200 patents) - Physical characteristic e.g. porosity, surface area

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# PATENTS

| # | Patent No | Pub. Date | Filed | Title | Inventors | Assignees |
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| 1 | 12021200 | 2024-06-25 | 2021-06-17 | Electrode structure with built-in ultrasonic structures, and an ultrasonic battery thereof | Zhijun Peng; | |
| 2 | 12021239 | 2024-06-25 | 2020-06-02 | Negative electrode for rechargeable lithium battery and rechargeable lithium battery including same | Seyoung Oh; Dongwan Seo; | Samsung Sdi Co., Inc.; |
| 3 | 12018350 | 2024-06-25 | 2019-01-29 | Method for recycling lithium batteries | Christian Hanisch; Tobias Elwert; Lisa Brückner; | Dusenfeld Gmbh; |
| 4 | 12021198 | 2024-06-25 | 2018-08-06 | Method and apparatus for assembling electrodes | Fabrizio Nanni; | Manz Italy S.r.l.; |
| 5 | 12015120 | 2024-06-18 | 2020-07-13 | Additive, electrolyte for rechargeable lithium battery, and rechargeable lithium battery | Hyunbong Choi; Younghye Kang; Dongyoung Kim; Soojin Kim; Aeran Kim; Suyeol Ryu; Jeongmin Shin; Junyong Lee; Tae Jin Lee; Jin-Hyeok Lim; Myunghwan Jeong; Wonseok Cho; Pavel Shatunov; Jungmin Han; | Samsung Sdi Co., Inc.; |
| 6 | 12015151 | 2024-06-18 | 2022-05-19 | Composite positive electrode active material, method of preparing the same, positive electrode including composite positive electrode active material,and lithium battery including positive electrode | Donghee Yeon; Byoungwoo Kang; Junghwa Lee; Byungjin Choi; Sukgi Hong; Jinsu Ha; | Samsung Electronics Co., Ltd.; Postech Academy-industry Foundation; |
| 7 | 12006594 | 2024-06-11 | 2023-07-03 | Quad-polymer precursor for producing carbon fiber, method for producing same and method for using same | Min Hye Jung; Hyun Kyu Shin; Kyu Soon Park; Duck Joo Yang; Benjamin Batchelor; Samsuddin Mahmood; | University of Texas System; Korea Institute of Carbon Convergence Technology; |
| 8 | 12009505 | 2024-06-11 | 2020-05-12 | Conducting polymer network/graphene-protected negative electrode for a lithium-ion battery | Sheng-Yi Lu; Aruna Zhamu; Bor Z Jang; | Honeycomb Battery Company; |
| 9 | 12009520 | 2024-06-11 | 2019-03-15 | Secondary lithium battery anode and secondary lithium battery including same | Jungmin Lee; Ilkyong Kwon; Myungseop Kim; Yuhyun Kim; | Samsung Sdi Co., Inc.; |
| 10 | 12002920 | 2024-06-04 | 2021-07-09 | Method for suppressing thermal runaway of lithium batteries | Szu-Nan Yang; | Prologium Technology Co., Ltd.; Prologium Holding Inc.; |
| 11 | 12002932 | 2024-06-04 | 2021-06-21 | Surface reforming of negative electrode layers | Jing Gao; Xingcheng Xiao; Brian J Koch; | Gm Global Technology Operations LLC; |
| 12 | 12002987 | 2024-06-04 | 2019-03-27 | Separator for rechargeable lithium battery and rechargeable lithium battery comprising same | Minho Cho; Hana Kim; Myungkook Park; Seung Rim Yang; Byungmin Lee; Jungsue Jang; Bokyung Jung; | Samsung Sdi Co., Inc.; Samsung Electronics Co., Ltd.; |
| 13 | 11999811 | 2024-06-04 | 2019-02-05 | Copolymers of ester and ether units, processes for producing same and uses thereof | Basile Commarieu; Jean-Christophe Daigle; Pierre-Michel Jalbert; Gilles Lajoie; Catherine Gagnon; Abdelbast Guerfi; Michel Armand; Karim Zaghib; | Hydro-quÉbec; |
| 14 | 12002924 | 2024-06-04 | 2021-05-28 | Passivated LLZO particles and tape casting of LLZO films | Zhen Song; Michael Edward Badding; Jacqueline Leslie Brown; Brent Daniel Conway; Aaron David DeGeorge; Yinghong Chen; Jason Allen Brown; | Corning Incorporated; |
| 15 | 11996514 | 2024-05-28 | 2021-08-19 | Power supply station and charging and discharging method thereof | Mingkui Tong; | Ningbo Zhongxin Electronic Technology Co., Ltd.; |
| 16 | 11996552 | 2024-05-28 | 2021-08-02 | Anode, lithium battery including anode, and method of preparing anode | Youngeal Kim; Ryounghee Kim; Seokgwang Doo; Satoshi Maruyama; Toshinori Sugimoto; Dongmin Im; | Samsung Electronics Co., Ltd.; Samsung Sdi Co., Inc.; |
| 17 | 11996558 | 2024-05-28 | 2022-08-08 | Ternary positive material of large monocrystal-like particles, method for preparing the same, and lithium-ion battery having the same | Guozhen Wei; Yaobin Ye; Jingren Wang; Nengjian Xie; Pengfeng Wang; Lin Lin; | Xtc New Energy Materials (xiamen) Co., Ltd.; |
| 18 | 11996560 | 2024-05-28 | 2023-10-25 | Positive electrode material of lithium-ion battery and preparation method therefor | Junfan Tong; Yanbin Chen; Yuqiang Jin; Wenbo Wang; Xuequan Zhang; Yafei Liu; | Beijing Easpring Material Technology Co., Ltd.; |
| 19 | D1027826 | 2024-05-21 | 2023-08-14 | Lithium battery | Minhui Wang; | |
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| 22 | 11984580 | 2024-05-14 | 2019-05-06 | Protected anode active material particles for rechargeable lithium batteries | Yi-jun Lin; Yen-Po Lin; Sheng-Yi Lu; Bor Z Jang; | Honeycomb Battery Company; |
| 23 | 11975346 | 2024-05-07 | 2021-12-17 | On-line automatic cleaning apparatus of slit extrusion type coating die for lithium battery and cleaning method thereof | Donghua Chen; Zhenhua Fan; | Jiangsu Katop Automation Co., Ltd; |
| 24 | 11978904 | 2024-05-07 | 2020-10-07 | Polymer binder for lithium battery and method of manufacturing | Hui He; Aruna Zhamu; Bor Z Jang; | Honeycomb Battery Company; |
| 25 | 11971457 | 2024-04-30 | 2021-11-05 | Method for measuring AC impedance of battery in composite power supply power system | Tiancai Ma; Yanbo Yang; Kaihang Song; Weikang Lin; Naiyuan Yao; | Tongji University; |
| 26 | 11973181 | 2024-04-30 | 2021-12-06 | Multilayer nanoporous separator | David W Avison; Steven A Carlson; Benjamin Sloan; | Lg Energy Solution, Ltd.; |
| 27 | 11973192 | 2024-04-30 | 2021-10-07 | Electrode body and cylindrical lithium battery containing the same | Jui-Min Tsai; Tsung-Yi Tsai; Kun-Miao Tsai; Wei-Dung Chang; | E-one Moli Energy Corp.; |
| 28 | 11973366 | 2024-04-30 | 2021-10-19 | Battery booster | Patrick J Clarke; Brian F Butler; Xiao Ping Chen; Barry O'Dell; Ronald Walkup; John S Whiting; | Schumacher Electric Corporation; |
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| 30 | 11967723 | 2024-04-23 | 2021-12-14 | Solid-state electrolyte for lithium air batteries | Mohammad Asadi; Alireza Kondori; Mohammadreza Esmaeilirad; | Illinois Institute of Technology; |
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| 32 | 11961998 | 2024-04-16 | 2019-05-06 | Method of producing protected anode active material particles for rechargeable lithium batteries | Yi-Jun Lin; Yen-Po Lin; Sheng-Yi Lu; Bor Z Jang; | Honeycomb Battery Company; |
| 33 | 11955602 | 2024-04-09 | 2021-12-15 | Solid electrolyte and lithium battery including the same | Tomoyuki Tsujimura; Naoki Suzuki; Yuichi Aihara; | Samsung Electronics Co., Ltd.; |
| 34 | 11955631 | 2024-04-09 | 2019-03-20 | Composite cathode active material, cathode and lithium battery each containing composite cathode active material, and method of preparing composite cathode active material | Dongwook Shin; Sukgi Hong; Jinhwan Park; Byungjin Choi; | Samsung Electronics Co., Ltd.; Samsung Sdi.co., Ltd.; |
| 35 | 11955632 | 2024-04-09 | 2020-11-06 | Positive active material precursor, positive active material, method of preparing the same, positive electrode including the same and rechargeable lithium battery including the same | Jinhwa Kim; Minhan Kim; Donggyu Chang; Jihyun Seog; Yuntaek Oh; Jungwoo Son; | Samsung Sdi Co., Inc.; |
| 36 | 11945975 | 2024-04-02 | 2023-11-02 | Water-based adhesive and preparation method thereof, and use in anode of lithium battery | Lianxiang Feng; Feng Hai; Mingtao Li; Qinwei Zhou; Shuguang Qu; Shunping Wang; | Qihe Leahou Chemical Co., Ltd.; |
| 37 | 11949098 | 2024-04-02 | 2022-07-27 | Positive active material for rechargeable lithium battery and rechargeable lithium battery including same | Yongmok Cho; Young-Hun Lee; Hyunjei Chung; | Samsung Sdi Co., Inc.; |
| 38 | 11949109 | 2024-04-02 | 2021-03-12 | Flame-resistant electrodes lithium containing quasi-solid or solid-state electrolytes and manufacturing method | Bor Z Jang; | Honeycomb Battery Company; |
| 39 | 11949063 | 2024-04-02 | 2020-09-08 | Flame-resistant quasi-solid hybrid electrolyte for safe anode-less lithium batteries and production method | Hui He; Aruna Zhamu; Bor Z Jang; | Global Graphene Group, Inc.; |
| 40 | 11949124 | 2024-04-02 | 2019-01-04 | Coated separators, lithium batteries, and related methods | Zhengming Zhang; Michael B Lane; Insik Jeon; Edward Kruger; Xiang Yu; Ronnie E Smith; Stefan Reinartz; Junqing Ma; Daniel R Alexander; | Celgard Inc.; |

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| 43 | 11933496 | 2024-03-19 | 2023-08-31 | Self-generating movable heat source | Qinglong Gao; | |
| 44 | 11923496 | 2024-03-05 | 2020-03-03 | Separator for rechargeable lithium battery and rechargeable lithium battery including the same | Jungsue Jang; Minho Cho; Hana Kim; Myungkook Park; Seung Rim Yang; Byungmin Lee; Bokyung Jung; Rae Sung Kim; | Samsung Sdi Co., Inc.; Samsung Electronics Co., Ltd.; |
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| 46 | 11923513 | 2024-03-05 | 2021-11-26 | Ultrasonic solid-state lithium battery with built-in ultrasonic vibrating effect | Zhijun Peng; | |
| 47 | 11923539 | 2024-03-05 | 2021-02-16 | Lithium antimonide sulfide as Li conductive compounds for the application of thick coating layer in Li metal battery and solid electrolyte in all-solid-state lithium batteries | Chen Ling; | Toyota Motor Engineering & Manufacturing North America, Inc.; |
| 48 | 11916189 | 2024-02-27 | 2020-04-29 | Method and apparatus for forming a non-flammable quasi-solid electrolyte in a lithium battery | Hui He; Aruna Zhamu; Bor Z Jang; | Global Graphene Group, Inc.; |
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| 50 | 11910752 | 2024-02-27 | 2023-03-28 | Electric riding lawn mower | Qian Liu; Toshinari Yamaoka; Zhen Wang; Fangjie Nie; | Nanjing Chervon Industry Co., Ltd.; |
| 51 | 11906590 | 2024-02-20 | 2022-04-11 | Method and device for detecting abnormality of lithium battery, battery management system, and battery system | Zhi Liu; Dongyang Shi; | Contemporary Amperex Technology Co., Ltd.; |
| 52 | 11908999 | 2024-02-20 | 2020-10-27 | Electrolyte for rechargeable lithium battery and rechargeable lithium battery | Myunghwan Jeong; Younghye Kang; Haneol Kang; Dongyoung Kim; Soojin Kim; Aeran Kim; Hoon Kim; Suyeol Ryu; Moon Jeong Park; Jeongmin Shin; Junyong Lee; Tae Jin Lee; Jin-Hyeok Lim; Wonseok Cho; Hyunbong Choi; Jungmin Han; | Samsung Sdi Co., Inc.; Postech Academy-industry Foundation; |
| 53 | 11909032 | 2024-02-20 | 2019-07-08 | Composite cathode active material, cathode and lithium battery each containing composite cathode active material, and preparation method of cathode active material | Sukgi Hong; Byongyong Yu; Donghee Yeon; Byungjin Choi; | Samsung Electronics Co., Ltd.; Samsung Sdi Co., Inc.; |
| 54 | 11909037 | 2024-02-20 | 2022-12-01 | Positive electrode and lithium battery including the same | Hongsoo Choi; Hyeokjo Gwon; Soyeon Kim; Hyunseok Kim; Wonseok Chang; | Samsung Electronics Co., Ltd.; Samsung Sdi Co., Inc.; |
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| 56 | 11909036 | 2024-02-20 | 2021-09-29 | Silicon/carbon composite material with highly compact structure, method for preparing same, and use thereof | Anhua Zheng; Dexin Yu; Yongjun Yang; | Guangdong Kaijin New Energy Technology Co., Ltd.; |
| 57 | 11909070 | 2024-02-20 | 2018-10-19 | Ceramic nanowire battery separators | Xinjie Zhang; Kuiyang Jiang; | Novarials Corporation; |
| 58 | 11901544 | 2024-02-13 | 2020-05-18 | Ion conductor, and positive electrode, solid electrolyte, and lithium battery each including the ion conductor, and method of preparing the ion conductor | Sangbok Ma; Donghwa Seo; | Samsung Electronics Co., Ltd.; |
| 59 | 11901562 | 2024-02-13 | 2021-03-10 | Bipolar electrodes containing flame-resistant quasi-solid or solid-state electrolyte, bipolar lithium batteries, and manufacturing method | Bor Z Jang; | Global Graphene Group, Inc.; |
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| 62 | 11888119 | 2024-01-30 | 2021-04-07 | Method of producing flame-resistant quasi-solid electrolytes and lithium batteries containing same | Bor Z Jang; | Global Graphene Group, Inc.; |
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| 64 | 11888340 | 2024-01-30 | 2020-12-04 | Method to enhance the life of a lithium battery | Pradeep Tolakanahalli Nagabhushanrao; Nagaraju Ingurthi; Pavan Kumar Gudipalli; Anurag Arjundas Jivanani; Himamshu V Prasad; | Schneider Electric It Corporation; |
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| 66 | 11881580 | 2024-01-23 | 2021-03-19 | Flame-resistant bipolar electrodes, bipolar lithium batteries, and manufacturing method | Bor Z Jang; | Global Graphene Group, Inc.; |
| 67 | 11872595 | 2024-01-16 | 2021-05-13 | Wet sorting process for waste lithium battery and application thereof | Jieming Zhao; Qinxue Gong; Ruokui Chen; Qiang Li; Changdong Li; | Hunan Brunp Recycling Technology Co. Ltd.; Guangdong Brunp Recycling Technology Co., Ltd; Hunan Brunp Ev Recycling Co., Ltd.; |
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| 69 | 11870032 | 2024-01-09 | 2022-02-15 | Lithium all-solid-state battery | Thomas A Yersak; Se-Hee Lee; Conrad Stoldt; | University of Colorado; |
| 70 | 11870060 | 2024-01-09 | 2020-11-05 | Composite, electrochemical active material composite using the composite, electrode including the composite or electrochemical active material composite, lithium battery including the electrode, field emission device including the composite, biosensor including the composite, semiconductor device including the composite, and thermoelectric device including the composite | Inhyuk Son; Jonghwan Park; Jaejun Chang; Junhwan Ku; Xiangshu Li; Jaeman Choi; | Samsung Electronics Co., Ltd.; |
| 71 | 11870079 | 2024-01-09 | 2018-02-23 | Electrode assembly and lithium battery comprising same | Juhee Sohn; Junggyu Nam; Junwon Suh; Jungyup Yang; Hyeri Eom; Jeongdoo Yi; Daun Han; Juhyeong Han; Seokhun Hong; Jandee Kim; Bongkyoung Park; Hyunhwa Song; Sol Choi; | Samsung Sdi Co., Inc.; |
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| 74 | 11870054 | 2024-01-09 | 2020-06-30 | Solid-state lithium batteries incorporating lithium microspheres | Mohammed Hussain Abdul Jabbar; | Nissan North America, Inc.; |
| 75 | 11862812 | 2024-01-02 | 2021-03-23 | Composite separator including porous substrate with porous layer including polyacrylic acid metal salt binder and inorganic particles, lithium battery including the same, and method of preparing the same | Minho Cho; Byungmin Lee; Kyoseon Koo; Esul Jung; | Samsung Sdi Co., Inc.; |
| 76 | 11855257 | 2023-12-26 | 2022-12-27 | Fluoride compounds as lithium super-ionic conductors, solid electrolyte and coating layer for lithium metal battery and lithium ion battery | Chen Ling; Ying Zhang; Yifei Mo; Qiang Bai; | Toyota Motor Engineering & Manufacturing North America, Inc.; University of Maryland, College Park; |
| 77 | 11848417 | 2023-12-19 | 2021-05-02 | Gel polymer electrolyte including crosslinked network of poss and peg, ionic liquid, and lithium salt, lithium battery including the same, and process of preparing the same | Xiaowei Li; Yongwei Zheng; Christopher Li; | Drexel University; |
| 78 | 11848440 | 2023-12-19 | 2021-04-01 | Prelithiated negative electrodes including composite Li—Si alloy particles and methods of manufacturing the same | Bradley R Frieberg; Zhongyi Liu; Xiaosong Huang; James R Salvador; | Gm Global Technology Operations LLC; |
| 79 | 11848444 | 2023-12-19 | 2020-03-13 | Preparation method of positive electrode material of lithium battery | Fu-Ming Wang; Nan-Hung Yeh; Laurien Merinda; Xing-Chun Wang; | National Taiwan University of Science and Technology; |
| 80 | 11848446 | 2023-12-19 | 2021-11-11 | Anode-free rechargeable lithium battery including transition metal | Suk Jun Kim; Jun Ho Lee; | Korea University of Technology and Education Industry- |

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| 82 | 11843107 | 2023-12-12 | 2023-01-10 | Ion conductor, and positive electrode, solid electrolyte, and lithium battery each including the ion conductor, and method of preparing the ion conductor | Sangbok Ma; Donghwa Seo; | Samsung Electronics Co., Ltd.; |
| 83 | 11839177 | 2023-12-12 | 2023-03-28 | Electric riding lawn mower | Qian Liu; Toshinari Yamaoka; Zhen Wang; Fangjie Nie; | Nanjing Chervon Industry Co., Ltd.; |
| 84 | 11839178 | 2023-12-12 | 2023-03-28 | Electric riding lawn mower | Qian Liu; Toshinari Yamaoka; Zhen Wang; Fangjie Nie; | Nanjing Chervon Industry Co., Ltd.; |
| 85 | 11833763 | 2023-12-05 | 2022-12-06 | Separators, batteries, systems, vehicles, and related methods | Xiaomin Zhang; Gerald P Rumierz; Karl F Humiston; Charles E Haire; Tyrone S Fields; Michael A Braswell; Ronald A Proctor; Ronnie E Smith; | Celgard Inc.; |
| 86 | 11837699 | 2023-12-05 | 2020-05-01 | All-solid lithium battery and method of manufacturing same | Yukinobu Yura; Yukihisa Takeuchi; Yosuke Sato; Toshihiro Yoshida; Yuji Katsuda; | Ngk Insulators, Inc.; |
| 87 | 11837714 | 2023-12-05 | 2020-11-05 | Composite, electrochemical active material composite using the composite, electrode including the composite or electrochemical active material composite, lithium battery including the electrode, field emission device including the composite, biosensor including the composite, semiconductor device including the composite, and thermoelectric device including the composite | Inhyuk Son; Jonghwan Park; Jaejun Chang; Junhwan Ku; Xiangshu Li; Jaeman Choi; | Samsung Electronics Co., Ltd.; |
| 88 | 11837716 | 2023-12-05 | 2021-08-26 | Electrode assembly for rechargeable lithium battery, and rechargeable lithium battery including same | Hyo-Jung Song; Jinhyon Lee; | Samsung Sdi Co., Inc.; |
| 89 | 11837729 | 2023-12-05 | 2020-03-19 | Conducting polymer network-protected cathode active materials for lithium secondary batteries | Mingrui Liu; Hao-Hsun Chang; Bor Z Jang; | Global Graphene Group, Inc.; |
| 90 | 11830972 | 2023-11-28 | 2021-02-01 | Negative active material for rechargeable lithium battery, method of preparing the same and rechargeable lithium battery including the same | Sang-Eun Park; Young-Ugk Kim; | Samsung Sdi Co., Inc.; |
| 91 | 11830976 | 2023-11-28 | 2021-01-25 | Flame-resistant electrolyte compositions, quasi-solid and solid-state electrolytes, and lithium batteries | Bor Z Jang; | Global Graphene Group, Inc.; |
| 92 | 11830984 | 2023-11-28 | 2020-11-10 | Lithium battery, lithium battery module, and electronic device | Ryo Oe; | Casio Computer Co., Ltd.; |
| 93 | 11831165 | 2023-11-28 | 2020-10-11 | Hierarchical control method for island power grid energy storage system for increasing new energy generation fluctuation | Jian Yang; Jianhua Lv; Guode Ying; Zuofu Jiang; Xin Wang; Haohua Wu; Yongling Li; Jianjun Zhu; Daojian Hong; Haili Liang; Huiqi Chen; Qingxi Cai; Baorong Liu; Yiting Hu; Xingbai Wang; Chuhang Xu; Lijun Zhu; Qiang Gao; Xinghui Jiang; Xiaofei Wang; Yin Lin; Xun Ma; | State Grid Zhejiang Electric Power Co., Ltd. Taizhou Power Supply Company; |
| 94 | D1005228 | 2023-11-21 | 2023-07-03 | Lithium battery | Minhui Wang; | |
| 95 | 11824186 | 2023-11-21 | 2021-04-02 | Prelithiated negative electrodes including Li—Si alloy particles and methods of manufacturing the same | Bradley R Frieberg; Nicole Ellison; Xiaosong Huang; Zhongyi Liu; | Gm Global Technology Operations LLC; |
| 96 | 11824198 | 2023-11-21 | 2018-12-21 | Silicon composite cluster and carbon composite thereof, and electrode, lithium battery, and electronic device each including the same | Inhyuk Son; Mijong Kim; Jumyeung Lee; Minwoo Lim; Junghyun Choi; Sungsoo Han; | Samsung Electronics Co., Ltd.; Samsung Sdi Co., Inc.; |
| 97 | 11817556 | 2023-11-14 | 2022-03-01 | Composite gel polymer electrolyte lithium battery structure and method of fabricating the same | Shang-En Liu; Tien-Hsiang Hsueh; Min-Chuan Wang; | Institute of Nuclear Energy Research, Atomic Energy Council, Executive Yuan, R.o.c; |
| 98 | 11817570 | 2023-11-14 | 2021-08-05 | Method of manufacturing a solid-state lithium battery and a battery manufactured by the method | Ali Sadeghi; Yuri Vorobyev; Gene Kristul; Leonid Velikov; | |
| 99 | 11813764 | 2023-11-14 | 2022-10-18 | Fixed blade monitoring structure and cutting device | Yitai Guo; Zhihua Wen; Keqiang Li; Cong Zhang; Yunru Shi; Jun Hu; | Contemporary Amperex Technology Co., Ltd.; |
| 100 | 11813830 | 2023-11-14 | 2021-12-23 | Battery separators and related methods | Lie Shi; Christopher L Cowger; Heba K Botros; | Celgard Inc.; |

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| 102 | 11802244 | 2023-10-31 | 2023-03-20 | Gemini surfactant for use in recycling lithium batteries | Tushar Kanti Sen; Chi Phan; | King Faisal University; |
| 103 | 11804619 | 2023-10-31 | 2018-09-17 | Solid polymer electrolyte including solvating polymer, lithium salt, and PVdF-HFP copolymer and battery including same | Philippe Bernardo; Vincent Bodenez; Marc Deschamps; Mathieu Dru; Margaud Lecuyer; | Blue Solutions; |
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| 163 | 11682813 | 2023-06-20 | 2022-10-12 | Lithium battery and manufacturing method thereof | Shuli Lu; Yajun Li; Qingyi Wang; Jin Zhang; Yangqing Luo; Yongchang Tang; Bainong Zhu; Fazuan Le; | Shenzhen Greensun Technology Co., Ltd.; |
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| 796 | 10305094 | 2019-05-28 | 2014-04-22 | Negative electrode active material for rechargeable lithium battery, negative electrode including same, and rechargeable lithium battery including negative electrode | Beom-Kwon Kim; Woon-Suk Jang; Dong-Ho Son; Ki-Jun Kim; | Samsung Sdi Co., Inc.; |
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| 836 | 10249873 | 2019-04-02 | 2017-07-31 | Composite positive active material, positive electrode including the same, and lithium battery including the positive electrode | Donghan Kim; Jayhyok Song; Jinhwan Park; | Samsung Electronics Co., Ltd.; Samsung Sdi Co., Inc.; |
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| 845 | 10224543 | 2019-03-05 | 2015-01-09 | Positive active material for rechargeable lithium battery, method of preparing the same and rechargeable lithium battery including the same | Young-Ki Kim; Na-Ri Park; Young-Hun Lee; Soon-Rewl Lee; Ick-Kyu Choi; Yong-Chul Park; | Samsung Sdi Co., Inc.; |
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| 877 | 10158144 | 2018-12-18 | 2016-07-06 | Solid electrolyte material and all solid lithium battery | Erika Oki; Naoki Osada; | Toyota Jidosha Kabushiki Kaisha; |
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| 37 | Young-Ki Kim | Yongin-si, KR | 18 |
| 38 | Jae-man Choi | Hwaseong-si, KR | 18 |
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| 53 | Chang-Ui Jeong | Yongin-si, KR | 16 |
| 54 | Kyoung-Han Yew | Yongin-si, KR | 16 |
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| 56 | Young-gyoon Ryu | Suwon-si, KR | 16 |
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| 58 | Yong-Beom Lee | Yongin-si, KR | 15 |
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| 61 | WooCheol Shin | Yongin-si, KR | 15 |
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| 63 | Yong-Chan You | Yongin-si, KR | 15 |
| 64 | Eon-Mi Lee | Yongin-si, KR | 15 |
| 65 | Myung-Hwan Jeong | Yongin-si, KR | 15 |
| 66 | Chang-Su Shin | Yongin-si, KR | 15 |
| 67 | Ui-Song Do | Yongin-si, KR | 15 |
| 68 | Jeremy Barker | Shipton-Under-Wychwood, GB | 15 |
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| 71 | Russell Clayton Pratt | San Mateo, CA (US) | 14 |
| 72 | Jong-Seo Choi | Yongin-si, KR | 14 |
| 73 | Beom-Kwon Kim | Yongin-si, KR | 14 |
| 74 | Kyu-Nam Joo | Yongin-si, KR | 14 |
| 75 | Goo-Jin Jeong | Suwon-si, KR | 14 |
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| 81 | Miyoung Son | Yongin-si, KR | 13 |
| 82 | Ick-Kyu Choi | Yongin-si, KR | 13 |
| 83 | Soon-Rewl Lee | Yongin-si, KR | 13 |
| 84 | Ho-Seok Yang | Yongin-si, KR | 13 |
| 85 | Young-min Choi | Suwon-si, KR | 13 |
| 86 | Min-sang Song | Seongnam-si, KR | 13 |
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| 88 | Su-Hee Han | Yongin-si, KR | 13 |
| 89 | Jin-Hyunk Lim | Yongin-si, KR | 13 |
| 90 | Cheol-Soo Jung | Yongin-si, KR | 13 |

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| 91 | Yong-Mook Kang | Suwon-si, KR | 13 |
| 92 | Masahisa Fujimoto | Osaka, JP | 13 |
| 93 | M Yazid Saidi | Henderson, NV (US) | 13 |
| 94 | Rene Koksbang | San Jose, CA (US) | 13 |
| 95 | Myunghwan Jeong | Yongin-si, KR | 12 |
| 96 | Fu-Ming Wang | Taipei, TW | 12 |
| 97 | Young-Ugk Kim | Yongin-si, KR | 12 |
| 98 | Xingfeng He | Greenbelt, MD (US) | 12 |
| 99 | Kijun Kim | Yongin-si, KR | 12 |
| 100 | Siyoung Cha | Yongin-si, KR | 12 |
| 101 | Chang-Wook Kim | Yongin-si, KR | 12 |
| 102 | Byung-Joo Chung | Yongin-si, KR | 12 |
| 103 | Jung-Yi Yu | Yongin, KR | 12 |
| 104 | Tae-Hyun Bae | Yongin, KR | 12 |
| 105 | Na-Rae Park | Suwon-si, KR | 12 |
| 106 | Mi-Hyeun Oh | Yongin-si, KR | 12 |
| 107 | John B Goodenough | Austin, TX (US) | 12 |
| 108 | So-Hyun Hur | Yongin-si, KR | 12 |
| 109 | Jae-Yul Ryu | Yongin-si, KR | 12 |
| 110 | Jun-Won Suh | Suwon-si, KR | 12 |
| 111 | Ryuichi Shimizu | Yokohama, JP | 12 |
| 112 | Maruo Kamino | Tokushima, JP | 12 |
| 113 | Masaya Asao | Kyoto, JP | 12 |
| 114 | Hiroshi Nakajima | Hirakata, JP | 12 |
| 115 | Ryuji Ohshita | Tokushima, JP | 12 |
| 116 | Suyeol Ryu | Yongin-si, KR | 11 |
| 117 | Sukgi Hong | Seongnam-si, KR | 11 |
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| 119 | Qiang Bai | College Park, MD (US) | 11 |
| 120 | Lie Shi | Matthews, NC (US) | 11 |
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| 123 | Seung-Hun Han | Yongin-si, KR | 11 |
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| 127 | Sang-Min Lee | Suwon-si, KR | 11 |
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| 133 | Volker Hennige | Duelmen, DE | 11 |
| 134 | Christian Hying | Rhede, DE | 11 |
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| 137 | Hongsoo Choi | Seoul, KR | 10 |
| 138 | Wonseok Chang | Seoul, KR | 10 |
| 139 | Jonghwan Park | Yongin-si, KR | 10 |
| 140 | Xiaomin Zhang | Charlotte, NC (US) | 10 |
| 141 | Kwangjin Park | Seongnam-si, KR | 10 |
| 142 | Jaehwan Ha | Yongin-si, KR | 10 |
| 143 | Yeonhee Yoon | Yongin-si, KR | 10 |
| 144 | Kyuseo Lee | Yongin-si, KR | 10 |
| 145 | John D Affinito | Tucson, AZ (US) | 10 |
| 146 | Jaephil Cho | Ulsan, KR | 10 |
| 147 | Makhmut Khasanov | Yongin-si, KR | 10 |
| 148 | Moon-Sung Kim | Yongin-si, KR | 10 |
| 149 | Hee-Young Chu | Yongin-si, KR | 10 |
| 150 | Sung-Hwan Moon | Yongin-si, KR | 10 |
| 151 | Beom-Wook Lee | Yongin-si, KR | 10 |
| 152 | Joon-Sup Kim | Yongin, KR | 10 |
| 153 | In-Haeng Cho | Yongin-si, KR | 10 |
| 154 | Soon-Sung Suh | Yongin-si, KR | 10 |
| 155 | Min-Seok Sung | Suwon-si, KR | 10 |
| 156 | Sae-Weon Roh | Yongin-si, KR | 10 |
| 157 | Won-Il Jung | Suwon-si, KR | 10 |
| 158 | Dong-joon Lee | Seoul, KR | 10 |
| 159 | Hiromasa Yagi | Nishinomiya, JP | 10 |
| 160 | Young-gyoon Ryu | Yongin-si, KR | 10 |
| 161 | Gerhard Hoerpel | Nottuln, DE | 10 |
| 162 | Hisaki Tarui | Shijyonawate, JP | 10 |
| 163 | Aeran Kim | Yongin-si, KR | 9 |
| 164 | Donghee Yeon | Seoul, KR | 9 |
| 165 | John Ledden | Augusta, GA (US) | 9 |
| 166 | Brian G Morin | Greenville, SC (US) | 9 |
| 167 | Donghan Kim | Suwon-si, KR | 9 |
| 168 | Kwang-Jo Cheong | Yongin-si, KR | 9 |
| 169 | Cheol-Hee Hwang | Yongin-si, KR | 9 |
| 170 | Jaegu Yoon | Suwon-si, KR | 9 |
| 171 | Kyoung-Hyun Kim | Yongin-si, KR | 9 |
| 172 | Malar Azagarsamy | Fremont, CA (US) | 9 |
| 173 | Jae-myung Lee | Seoul, KR | 9 |
| 174 | Yonggun Lee | Suwon-si, KR | 9 |
| 175 | Jung-Woo An | Yongin-si, KR | 9 |
| 176 | Sungjin Ahn | Anyang-si, KR | 9 |
| 177 | Ha-Rim Lee | Yongin-si, KR | 9 |
| 178 | Jay-Hyok Song | Yongin-si, KR | 9 |
| 179 | Chang-Rung Yang | Hsinchu, TW | 9 |
| 180 | Jung-Hyun Nam | Yongin-si, KR | 9 |

# INVENTORS

| # | Name | Location | Patents |
|---|---|---|---|
| 181 | Chae-Woong Cho | Yongin-si, KR | 9 |
| 182 | Vladimir Egorov | Yongin-si, KR | 9 |
| 183 | Yun-Hee Kim | Yongin-si, KR | 9 |
| 184 | Ki-Jun Kim | Yongin-si, KR | 9 |
| 185 | Na-Ri Park | Yongin-si, KR | 9 |
| 186 | Sang-Hoon Kim | Yongin-si, KR | 9 |
| 187 | Jung-Ock Yeou | Yongin-si, KR | 9 |
| 188 | Hye-Sun Jeong | Yongin-si, KR | 9 |
| 189 | Yoon-Chang Kim | Yongin-si, KR | 9 |
| 190 | Alexey Tereshchenko | Yongin-si, KR | 9 |
| 191 | Denis Chernyshov | Yongin-si, KR | 9 |
| 192 | Young-Su Kim | Suwon-si, KR | 9 |
| 193 | Ilias Belharouak | Bolingbrook, IL (US) | 9 |
| 194 | Seung-Uk Kwon | Yongin-si, KR | 9 |
| 195 | Jong-Hwa Lee | Yongin-si, KR | 9 |
| 196 | Jeom-Soo Kim | Yongin-si, KR | 9 |
| 197 | Jong-Hee Lee | Yongin-si, KR | 9 |
| 198 | Myung-dong Cho | Hwaseong-si, KR | 9 |
| 199 | Shigeki Matsuta | Kobe, JP | 9 |
| 200 | Michael Pozin | Brookfield, CT (US) | 9 |
| 201 | Jean-Marie Tarascon | Mennecy, FR | 9 |
| 202 | Naoya Kobayashi | Shizuoka, JP | 9 |
| 203 | Yoichi Domoto | Ikoma, JP | 9 |
| 204 | Hiroaki Ikeda | Hyogo, JP | 9 |
| 205 | Seiji Yoshimura | Kobe, JP | 9 |
| 206 | Sang-Young Yoon | Cheonan-si, KR | 9 |
| 207 | Hideo Yasuda | Kyoto, JP | 9 |
| 208 | Soojin Kim | Yongin-si, KR | 8 |
| 209 | Hana Kim | Suwon-si, KR | 8 |
| 210 | Myungkook Park | Suwon-si, KR | 8 |
| 211 | Byungmin Lee | Suwon-si, KR | 8 |
| 212 | Norman R Padgett | Evans, GA (US) | 8 |
| 213 | Jaejun Chang | Seoul, KR | 8 |
| 214 | Carl C Hu | Taylors, SC (US) | 8 |
| 215 | Zhengcheng Zhang | Naperville, IL (US) | 8 |
| 216 | Jens Paulsen | Daejeon, KR | 8 |
| 217 | Kyoungsoo Kim | Yongin-si, KR | 8 |
| 218 | Yunhee Kim | Yongin-si, KR | 8 |
| 219 | Hyejin Park | Yongin-si, KR | 8 |
| 220 | Ulrich Wietelmann | Friedrichsdorf, DE | 8 |
| 221 | Jun-young Mun | Seoul, KR | 8 |
| 222 | Ming-Zi Hong | Yongin-si, KR | 8 |
| 223 | Ki-Hyun Kim | Yongin-si, KR | 8 |
| 224 | Jeongkuk Shon | Hwaseong-si, KR | 8 |
| 225 | Jong-Ki Lee | Yongin-si, KR | 8 |
| 226 | Young-Kee Kim | Yongin-si, KR | 8 |
| 227 | Jong-Hwan Park | Yongin-si, KR | 8 |
| 228 | Hyun-Woo Kim | Yongin-si, KR | 8 |
| 229 | Won-chang Choi | Yongin-si, KR | 8 |
| 230 | Hee-Yeon Hwang | Yongin-si, KR | 8 |
| 231 | Duck-Hyun Kim | Yongin-si, KR | 8 |
| 232 | Yu-Mi Song | Yongin-si, KR | 8 |
| 233 | Kwi-Seok Choi | Yongin-si, KR | 8 |
| 234 | Se-Ho Park | Yongin-si, KR | 8 |
| 235 | Kazunori Takada | Tsukuba, JP | 8 |
| 236 | Ha-Young Lee | Yongin-si, KR | 8 |
| 237 | Jun-Kyu Cha | Yongin-si, KR | 8 |
| 238 | Bong-Chull Kim | Yongin, KR | 8 |
| 239 | Su-Kyung Lee | Yongin-si, KR | 8 |
| 240 | Jae-young Choi | Suwon-si, KR | 8 |
| 241 | Euy-Young Jung | Yongin-si, KR | 8 |
| 242 | Sun-Ho Kang | Naperville, IL (US) | 8 |
| 243 | Sang-Min Lee | Yongin-si, KR | 8 |
| 244 | Sang-Jin Kim | Suwon-si, KR | 8 |
| 245 | Hyeong-Gon Noh | Yongin-si, KR | 8 |
| 246 | Masaki Shima | Uji, JP | 8 |
| 247 | Dongyoung Kim | Yongin-si, KR | 7 |
| 248 | Dongmin Im | Seoul, KR | 7 |
| 249 | Jinhwa Kim | Yongin-si, KR | 7 |
| 250 | Sangmin Ji | Yongin-si, KR | 7 |
| 251 | Jungsue Jang | Suwon-si, KR | 7 |
| 252 | Minho Cho | Suwon-si, KR | 7 |
| 253 | Jumyeung Lee | Suwon-si, KR | 7 |
| 254 | Jaehong Kim | Yongin-si, KR | 7 |
| 255 | Hana Ra | Yongin-si, KR | 7 |
| 256 | Sunjoo Choi | Yongin-si, KR | 7 |
| 257 | Changsu Shin | Yongin-si, KR | 7 |
| 258 | Sam-Jin Park | Suwon-si, KR | 7 |
| 259 | Yordan M Geronov | Tucson, AZ (US) | 7 |
| 260 | Christopher J Sheehan | Santa Fe, NM (US) | 7 |
| 261 | Jason Croy | Plainfield, IL (US) | 7 |
| 262 | John T Vaughey | Elmhurst, IL (US) | 7 |
| 263 | Yoon-sok Kang | Seongnam-si, KR | 7 |
| 264 | Junho Park | Seoul, KR | 7 |
| 265 | Shigenori Hama | Shunntou-gun, JP | 7 |
| 266 | Joong-Ho Moon | Yongin-si, KR | 7 |
| 267 | Jing-Pin Pan | Hsinchu County, TW | 7 |
| 268 | Yang-Kook Sun | Seoul, KR | 7 |
| 269 | Min-Young Lee | Yongin-si, KR | 7 |
| 270 | Lonnie G Johnson | Atlanta, GA (US) | 7 |

# INVENTORS

| # | Name | Location | Patents |
|---|---|---|---|
| 271 | E-Rang Cho | Yongin-si, KR | 7 |
| 272 | Yoshimi Hata | Takehara, JP | 7 |
| 273 | Na-Leum Yoo | Yongin-si, KR | 7 |
| 274 | Yu-Jeong Cho | Yongin-si, KR | 7 |
| 275 | Mi-Hyun Lee | Yongin-si, KR | 7 |
| 276 | Ping Liu | Irvine, CA (US) | 7 |
| 277 | Jin-Sung Kim | Yongin-si, KR | 7 |
| 278 | Zonghai Chen | Bolingbrook, IL (US) | 7 |
| 279 | Man-Seok Han | Yongin-si, KR | 7 |
| 280 | Yo-Han Park | Yongin-si, KR | 7 |
| 281 | Yury Matulevich | Yongin-si, KR | 7 |
| 282 | Chun-Gyoo Lee | Yongin-si, KR | 7 |
| 283 | Tae-Sik Kim | Yongin-si, KR | 7 |
| 284 | Kirakodu S Nanjundaswamy | Sterling, VA (US) | 7 |
| 285 | Gu-Hyun Chung | Yongin-si, KR | 7 |
| 286 | Sang-kook Mah | Seoul, KR | 7 |
| 287 | Jin-Sung Kim | Suwon-si, KR | 7 |
| 288 | Su-Yeong Park | Suwon-si, KR | 7 |
| 289 | Yoshio Kato | Kobe, JP | 7 |
| 290 | Seok-gwang Doo | Suwon-si, KR | 7 |
| 291 | Sang-Hoon Choy | Yongin-si, KR | 7 |
| 292 | Hyun-Sook Jung | Yongin-si, KR | 7 |
| 293 | Jeffrey Swoyer | Henderson, NV (US) | 7 |
| 294 | Alan H Bruder | Burlington, MA (US) | 7 |
| 295 | Wonseok Cho | Yongin-si, KR | 6 |
| 296 | Jungmin Han | Yongin-si, KR | 6 |
| 297 | Toshinori Sugimoto | Hwaseong-si, KR | 6 |
| 298 | David W Avison | Boxborough, MA (US) | 6 |
| 299 | Benjamin Sloan | Exeter, NH (US) | 6 |
| 300 | Xiangshu Li | Hwaseong-si, KR | 6 |
| 301 | Yongkyoung Kim | Yongin-si, KR | 6 |
| 302 | Jungyoon Lee | Yongin-si, KR | 6 |
| 303 | Jinhyon Lee | Yongin-si, KR | 6 |
| 304 | Mijong Kim | Suwon-si, KR | 6 |
| 305 | Ryounghee Kim | Yongin-si, KR | 6 |
| 306 | Yi Cui | Stanford, CA (US) | 6 |
| 307 | Jongmin Kim | Yongin-si, KR | 6 |
| 308 | Soonrewl Lee | Yongin-si, KR | 6 |
| 309 | Dongmyung Lee | Yongin-si, KR | 6 |
| 310 | Jaehou Nah | Yongin-si, KR | 6 |
| 311 | Mingzi Hong | Yongin-si, KR | 6 |
| 312 | Yeonji Chung | Yongin-si, KR | 6 |
| 313 | Chariclea Scordilis-Kelley | Tucson, AZ (US) | 6 |
| 314 | Yasuyuki Kusumoto | Hyogo, JP | 6 |
| 315 | Alain Vallee | Varennes, CA | 6 |

| # | Name | Location | Patents |
|---|---|---|---|
| 316 | Myungjin Lee | Seoul, KR | 6 |
| 317 | Jun-Seok Park | Yongin-si, KR | 6 |
| 318 | Hoon Seok | Yongin-si, KR | 6 |
| 319 | Jun-ho Park | Gyeongsangnam-do, KR | 6 |
| 320 | Byung-jin Choi | Seoul, KR | 6 |
| 321 | Minsang Song | Seongnam-si, KR | 6 |
| 322 | Sang-In Park | Yongin-si, KR | 6 |
| 323 | Ryoji Kanno | Tokyo, JP | 6 |
| 324 | Glenn Amatucci | Peapack, NJ (US) | 6 |
| 325 | Sun-Ho Kang | Yongin-si, KR | 6 |
| 326 | Mohit Singh | Santa Clara, CA (US) | 6 |
| 327 | Jung-Mu Hsu | Penghu County, TW | 6 |
| 328 | Hironari Takase | Yokohama, JP | 6 |
| 329 | Myung-Duk Lim | Yongin-si, KR | 6 |
| 330 | Kwang Man Kim | Daejeon, KR | 6 |
| 331 | Se-Jeong Park | Yongin-si, KR | 6 |
| 332 | Young-sin Park | Suwon-si, KR | 6 |
| 333 | Da-Woon Han | Yongin-si, KR | 6 |
| 334 | Ihn Kim | Yongin-si, KR | 6 |
| 335 | Koji Abe | Yamaguchi, JP | 6 |
| 336 | Chang-Hyuk Kim | Yongin-si, KR | 6 |
| 337 | Jeong-Seop Lee | Yongin-si, KR | 6 |
| 338 | Shinya Kagei | Takehara, JP | 6 |
| 339 | Dong-Yung Kim | Yongin-si, KR | 6 |
| 340 | Bok-Hyun Ka | Yongin-si, KR | 6 |
| 341 | Jeong-kuk Shon | Cheonan-si, KR | 6 |
| 342 | Ha-Na Yoo | Yongin-si, KR | 6 |
| 343 | Frederic Le Cras | Villenave d'Ornon, FR | 6 |
| 344 | Xiang-Ming He | Beijing, CN | 6 |
| 345 | Jun Liu | Naperville, IL (US) | 6 |
| 346 | Jack W Marple | Avon, OH (US) | 6 |
| 347 | Barry C Muffoletto | Alden, NY (US) | 6 |
| 348 | Sébastien Patoux | Saint Nicholas de Macherin, FR | 6 |
| 349 | Shou-Shan Fan | Beijing, CN | 6 |
| 350 | Doo-Kyoung Lee | Suwon-si, KR | 6 |
| 351 | Michel Gauthier | La Prairie, CA | 6 |
| 352 | Christophe Michot | Montréal, CA | 6 |
| 353 | Calin Wurm | Amiens, FR | 6 |
| 354 | Mathieu Morcrette | Amiens, FR | 6 |
| 355 | Maya Stevanovic | Framingham, MA (US) | 6 |
| 356 | Akira Takamuku | Yokohama, JP | 6 |
| 357 | Takao Ogura | Kyoto, JP | 6 |
| 358 | Hiroshi Kurokawa | Katano, JP | 6 |
| 359 | Kenji Asaoka | Sumoto, JP | 6 |
| 360 | Jae-Phil Cho | Suwon, KR | 6 |

# INVENTORS

| # | Name | Location | Patents |
|---|---|---|---|
| 361 | Shigeo Kondo | Hirakata, JP | 6 |
| 362 | Khalil Amine | Illinois, IL (US) | 6 |
| 363 | Yuko Fujita | Kyoto, JP | 6 |
| 364 | Ulrich von Sacken | Coquitlam, CA | 6 |
| 365 | Jinsu Ha | Seongnam-si, KR | 5 |
| 366 | Szu-Nan Yang | Taoyuan, TW | 5 |
| 367 | Karim Zaghib | Longueuil, CA | 5 |
| 368 | Qian Liu | Nanjing, CN | 5 |
| 369 | Toshinari Yamaoka | Nanjing, CN | 5 |
| 370 | Zhen Wang | Nanjing, CN | 5 |
| 371 | Fangjie Nie | Nanjing, CN | 5 |
| 372 | Soyeon Kim | Suwon-si, KR | 5 |
| 373 | Robert Charles Bradley | Augusta, GA (US) | 5 |
| 374 | Patrick Dwaine Warden | Grovetown, GA (US) | 5 |
| 375 | Hyeri Eom | Yongin-si, KR | 5 |
| 376 | Margaud Lecuyer | Combrit, FR | 5 |
| 377 | Seonyoung Kwon | Yongin-si, KR | 5 |
| 378 | Bokhyun Ka | Suwon-si, KR | 5 |
| 379 | Kyeuyoon Sheem | Suwon-si, KR | 5 |
| 380 | Lincoln Miara | Lincoln, MA (US) | 5 |
| 381 | C Glen Wensley | Rock Hill, SC (US) | 5 |
| 382 | Luke Anthony O'Hara | Augusta, GA (US) | 5 |
| 383 | Ickkyu Choi | Yongin-si, KR | 5 |
| 384 | Soonkie Hong | Yongin-si, KR | 5 |
| 385 | Wonsung Choi | Seoul, KR | 5 |
| 386 | Insun Park | Suwon-si, KR | 5 |
| 387 | Meinan He | Willowbrook, IL (US) | 5 |
| 388 | Jung-Yeon Won | Yongin-si, KR | 5 |
| 389 | Jin-Man Jeoung | Yongin-si, KR | 5 |
| 390 | Jonathan Mailoa | Cambridge, MA (US) | 5 |
| 391 | Tomofumi Yokoyama | Matsumoto, JP | 5 |
| 392 | Patrick Leblanc | Boucherville, CA | 5 |
| 393 | Boris Kozinsky | Waban, MA (US) | 5 |
| 394 | MinJu Lee | Yongin-si, KR | 5 |
| 395 | Nancy J Dudney | Knoxville, TN (US) | 5 |
| 396 | Sujeet Kumar | Newark, CA (US) | 5 |
| 397 | Sun-Il Park | Yongin-si, KR | 5 |
| 398 | Yoonsok Kang | Seongnam-si, KR | 5 |
| 399 | Jae-Hyun Shim | Yongin-si, KR | 5 |
| 400 | Chorng-Shyan Chern | Taipei, TW | 5 |
| 401 | Takamasa Ohtomo | Susono, JP | 5 |
| 402 | Koji Kawamoto | Miyoshi, JP | 5 |
| 403 | Koji Hoshiba | Yokohama, JP | 5 |
| 404 | Seungsik Hwang | Seongnam-si, KR | 5 |
| 405 | Jin-Hyon Lee | Yongin-si, KR | 5 |

| # | Name | Location | Patents |
|---|---|---|---|
| 406 | Yeon-Joo Choi | Yongin-si, KR | 5 |
| 407 | Hokuto Yokotsuji | Yokohama, JP | 5 |
| 408 | Seungrim Yang | Seongnam-si, KR | 5 |
| 409 | Hyoungwoo Choi | Hwaseong-si, KR | 5 |
| 410 | Dong Ok Shin | Daejeon, KR | 5 |
| 411 | Young-Gi Lee | Daejeon, KR | 5 |
| 412 | Min-sik Park | Hwaseong-si, KR | 5 |
| 413 | Ryoung-hee Kim | Yongin-si, KR | 5 |
| 414 | Young Sam Park | Yongin-si, KR | 5 |
| 415 | Kyeong-Min Jeong | Yongin-si, KR | 5 |
| 416 | Bum-Jin Chang | Yongin-si, KR | 5 |
| 417 | Un-gyu Paik | Seoul, KR | 5 |
| 418 | Nam-Seon Kim | Daejeon-si, KR | 5 |
| 419 | Kwang-Sik Choi | Daejeon-si, KR | 5 |
| 420 | Seung-Tae Lee | Yongin-si, KR | 5 |
| 421 | Dong-Myung Choi | Yongin-si, KR | 5 |
| 422 | Dae-Yup Shin | Yongin-si, KR | 5 |
| 423 | Dong-joon Lee | Yongin-si, KR | 5 |
| 424 | Myung-Hoon Kim | Yongin-si, KR | 5 |
| 425 | Jung-Joon Park | Yongin-si, KR | 5 |
| 426 | Chang-Yin Jiang | Beijing, CN | 5 |
| 427 | Jian Gao | Beijing, CN | 5 |
| 428 | Jian-Jun Li | Beijing, CN | 5 |
| 429 | Ho-suk Kang | Seoul, KR | 5 |
| 430 | Jeong-na Heo | Yongin-si, KR | 5 |
| 431 | Naoya Kobayashi | Yokohama, JP | 5 |
| 432 | Jea-Woan Lee | Yongin-si, KR | 5 |
| 433 | Tae-Keun Kim | Yongin-si, KR | 5 |
| 434 | Yong-Mi Yu | Yongin-si, KR | 5 |
| 435 | Lawrence G Scanlon, Jr | Fairborn, OH (US) | 5 |
| 436 | Sang-Kook Mah | Yongin-si, KR | 5 |
| 437 | Jinjun Shi | Columbus, OH (US) | 5 |
| 438 | Donald R Vissers | Naperville, IL (US) | 5 |
| 439 | Chen Feng | Beijing, CN | 5 |
| 440 | Kai-Li Jiang | Beijing, CN | 5 |
| 441 | Han-su Kim | Yongin-si, KR | 5 |
| 442 | Wu Xu | Broadview Heights, OH (US) | 5 |
| 443 | Laurent Gauthier | Montréal, CA | 5 |
| 444 | Donald Lavoie | Montréal, CA | 5 |
| 445 | Nathalie Ravet | Montréal, CA | 5 |
| 446 | Noriyuki Tamura | Kobe, JP | 5 |
| 447 | Michael Wixom | Ann Arbor, MI (US) | 5 |
| 448 | Sylvain Gwizdala | Brienon sur Armancon, FR | 5 |
| 449 | Kazuhiko Funabashi | Ibaraki, JP | 5 |
| 450 | Ho-Sung Kim | Yongin-si, KR | 5 |

# INVENTORS

| # | Name | Location | Patents |
|---|---|---|---|
| 451 | Sven Augustin | Ober-Ramstadt, DE | 5 |
| 452 | Christopher Boczer | Shelton, CT (US) | 5 |
| 453 | Frank M Delnick | Southbury, CT (US) | 5 |
| 454 | Minkoo Kang | New Milford, CT (US) | 5 |
| 455 | Lucyna M Pawlowska | Norwalk, CT (US) | 5 |
| 456 | Dharmendra Rana | Danbury, CT (US) | 5 |
| 457 | John J Weckesser | Oxford, CT (US) | 5 |
| 458 | Keiko Matsubara | Yokohama, JP | 5 |
| 459 | Toshiaki Tsuno | Yokohama, JP | 5 |
| 460 | Ji-Guang Zhang | Atlanta, GA (US) | 5 |
| 461 | Rakesh Bhola | Mississauga, CA | 5 |
| 462 | Dong-Gon Park | Seoul, KR | 5 |
| 463 | Michael J Lyden | Shoreview, MN (US) | 5 |
| 464 | Hyun-Jeong Lim | Suwon-si, KR | 5 |
| 465 | Hyung-gon Noh | Seoul, KR | 5 |
| 466 | Hans Feil | Eindhoven, NL | 5 |
| 467 | Huanyu Mao | Burnaby, CA | 5 |
| 468 | Younghye Kang | Yongin-si, KR | 4 |
| 469 | Jeongmin Shin | Yongin-si, KR | 4 |
| 470 | Junyong Lee | Yongin-si, KR | 4 |
| 471 | Tae Jin Lee | Yongin-si, KR | 4 |
| 472 | Sheng-Yi Lu | Taipei, TW | 4 |
| 473 | Xingcheng Xiao | Troy, MI (US) | 4 |
| 474 | Bokyung Jung | Suwon-si, KR | 4 |
| 475 | Patrick J Clarke | St. Charles, IL (US) | 4 |
| 476 | Brian F Butler | Chicago, IL (US) | 4 |
| 477 | Hyeokjo Gwon | Hwaseong-si, KR | 4 |
| 478 | Soojin Park | Hwaseong-si, KR | 4 |
| 479 | Changdong Li | Guangdong, CN | 4 |
| 480 | Minwoo Lim | Hwaseong-si, KR | 4 |
| 481 | Kiyong Ahn | Yongin-si, KR | 4 |
| 482 | Myung-Ro Lee | Yongin-si, KR | 4 |
| 483 | Su-Min Lee | Yongin-si, KR | 4 |
| 484 | Yongchan You | Yongin-si, KR | 4 |
| 485 | Chul Youm | Yongin-si, KR | 4 |
| 486 | Changqing Wang Adams | Fort Mill, SC (US) | 4 |
| 487 | Hyeji Park | Seoul, KR | 4 |
| 488 | Hyelim Choi | Seoul, KR | 4 |
| 489 | Heeman Choe | Kyunggi-do, KR | 4 |
| 490 | Joongho Moon | Yongin-si, KR | 4 |
| 491 | Myongchun Koh | Hwaseong-si, KR | 4 |
| 492 | Brandon C Robinson | West Palm Beach, FL (US) | 4 |
| 493 | Jungjoon Park | Yongin-si, KR | 4 |
| 494 | Youngjoo Chae | Yongin-si, KR | 4 |
| 495 | Michel Armand | Paris, FR | 4 |

| # | Name | Location | Patents |
|---|---|---|---|
| 496 | Minoru Senga | Sodegaura, JP | 4 |
| 497 | Masaru Nakagawa | Sodegaura, JP | 4 |
| 498 | Jagjit Nanda | Knoxville, TN (US) | 4 |
| 499 | Yuki Katoh | Brussels, BE | 4 |
| 500 | Chaoyi Zhou | Guiyang, CN | 4 |
| 501 | Lijuan Wang | Guiyang, CN | 4 |
| 502 | Zhu'an Yin | Guiyang, CN | 4 |
| 503 | Daixiang Yang | Guiyang, CN | 4 |
| 504 | Qianxin Xiang | Guiyang, CN | 4 |
| 505 | Ming Mei | Guiyang, CN | 4 |
| 506 | Peng Peng | Guiyang, CN | 4 |
| 507 | Jin Yang | Pleasanton, CA (US) | 4 |
| 508 | Chi Cheung Su | Westmont, IL (US) | 4 |
| 509 | Masatsugu Nakano | Yokohama, JP | 4 |
| 510 | Dongjin Ham | Anyang-si, KR | 4 |
| 511 | Michael Schmidt | Alsbach-Haehnlein, DE | 4 |
| 512 | Frederic Cotton | Montreal, CA | 4 |
| 513 | Cedric Reboul-Salze | Montreal, CA | 4 |
| 514 | Ute Emmel | Frankfurt am Main, DE | 4 |
| 515 | Olga Tsay | Yongin-si, KR | 4 |
| 516 | Georgy Samsonidze | Boston, MA (US) | 4 |
| 517 | Sandeep Unnikrishnan | Veldhoven, NL | 4 |
| 518 | Youhwan Son | Seongnam-si, KR | 4 |
| 519 | Jean-Yves Sanchez | Saint-Ismier, FR | 4 |
| 520 | Hyoncheol Kim | Ann Arbor, MI (US) | 4 |
| 521 | Marc Langlois | Ann Arbor, MI (US) | 4 |
| 522 | Myoungdo Chung | Ann Arbor, MI (US) | 4 |
| 523 | Ann Marie Sastry | Ann Arbor, MI (US) | 4 |
| 524 | Dong-Ho Son | Yongin-si, KR | 4 |
| 525 | Seongjae Ko | Yongin-si, KR | 4 |
| 526 | AeHui Goh | Yongin-si, KR | 4 |
| 527 | Jeong-Woo Han | Yongin-si, KR | 4 |
| 528 | Jonathan C Pistorino | Oakland, CA (US) | 4 |
| 529 | Deepak Srivastava | San Jose, CA (US) | 4 |
| 530 | Ki-Soo Lee | Yongin-si, KR | 4 |
| 531 | Se-Hee Lee | Yongin-si, KR | 4 |
| 532 | Hyeon-Ah Ju | Yongin-si, KR | 4 |
| 533 | Joong Sun Park | Woodridge, IL (US) | 4 |
| 534 | Seunguk Kwon | Yongin-si, KR | 4 |
| 535 | Dukhyoung Yoon | Yongin-si, KR | 4 |
| 536 | Laurent Zinck | Mothern, FR | 4 |
| 537 | Christian Pszolla | Karlsruhe, DE | 4 |
| 538 | Christiane Ripp | Pfinztal, DE | 4 |
| 539 | Markus Borck | Stuttgart, DE | 4 |
| 540 | Claudia Wollfarth | Karlsruhe, DE | 4 |

# INVENTORS

| # | Name | Location | Patents |
|---|---|---|---|
| 541 | Yuki Kato | Susono, JP | 4 |
| 542 | Nariaki Miki | Susono, JP | 4 |
| 543 | Woon-Suk Jang | Yongin-si, KR | 4 |
| 544 | Joseph P Fellner | Kettering, OH (US) | 4 |
| 545 | Dominique Guyomard | Sautron, FR | 4 |
| 546 | Eun-Young Goh | Yongin-si, KR | 4 |
| 547 | Hyun-Ki Park | Yongin-si, KR | 4 |
| 548 | Bing-Joe Hwang | Taipei, TW | 4 |
| 549 | Seung-Mo Kim | Yongin-si, KR | 4 |
| 550 | Jenam Lee | Seongnam-si, KR | 4 |
| 551 | Joungwon Park | Yongin-si, KR | 4 |
| 552 | Eun-Sung Lee | Yongin-si, KR | 4 |
| 553 | Tae-young Kim | Seoul, KR | 4 |
| 554 | Seung-wook Baek | Hwaseong-si, KR | 4 |
| 555 | Jiuh-Ming Liang | Hacienda Heights, CA (US) | 4 |
| 556 | Myoung-Sun Kim | Yongin-si, KR | 4 |
| 557 | Steven J Visco | Berkeley, CA (US) | 4 |
| 558 | Yevgeniy S Nimon | Danville, CA (US) | 4 |
| 559 | Bruce D Katz | Moraga, CA (US) | 4 |
| 560 | Young Jun Kim | Yongin, KR | 4 |
| 561 | Jun Ho Song | Seongnam, KR | 4 |
| 562 | Kunyoung Kang | Daejeon, KR | 4 |
| 563 | Yanbo Wang | Huber Heights, OH (US) | 4 |
| 564 | Duk-Hyoung Yoon | Yongin-si, KR | 4 |
| 565 | Gai Yang | Beijing, CN | 4 |
| 566 | Jie-Rong Ying | Beijing, CN | 4 |
| 567 | Jeong-hee Lee | Seongnam-si, KR | 4 |
| 568 | Michael W Wemple | Westlake, OH (US) | 4 |
| 569 | Soo-Mi Eo | Yongin-si, KR | 4 |
| 570 | Carole Bourbon | Saint Michel de Geoirs, FR | 4 |
| 571 | Chihiro Yada | Susono, JP | 4 |
| 572 | Shoji Yokoishi | Mishima, JP | 4 |
| 573 | Thierry Le Gall | Southampton, GB | 4 |
| 574 | Duncan Clifford Alan Smith | Bitterne Park, GB | 4 |
| 575 | Christopher Edward Lee | Southampton, GB | 4 |
| 576 | Sébastien Martinet | St. Quentin/Isère, FR | 4 |
| 577 | Gholam-Abbas Nazri | Bloomfield Hills, MI (US) | 4 |
| 578 | Nina K Gusarova | Irkutsk, RU | 4 |
| 579 | Ji-Jun Hong | Seoul, KR | 4 |
| 580 | Jun-Sik Kim | Yongin-si, KR | 4 |
| 581 | Fu-I Yang | Taoyuan County, TW | 4 |
| 582 | Yoshiaki Nitta | Yongin-si, KR | 4 |
| 583 | Sang-Ho Park | Cheonan-si, KR | 4 |
| 584 | Nikolai N Issaev | Woodbridge, CT (US) | 4 |
| 585 | Nobuhiro Takano | Ibaraki, JP | 4 |

| # | Name | Location | Patents |
|---|---|---|---|
| 586 | Jun-Ho Kim | Yongin-si, KR | 4 |
| 587 | Rosauro Del Rosario | Danbury, CT (US) | 4 |
| 588 | Dong-Hyun Jung | Suwon-si, KR | 4 |
| 589 | Soo-Jin Park | Suwon-si, KR | 4 |
| 590 | Taeko Ota | Osaka, JP | 4 |
| 591 | Hiroyuki Fujimoto | Kobe, JP | 4 |
| 592 | Ju-yup Kim | Seoul, KR | 4 |
| 593 | Yong-beom Lee | Suwon, KR | 4 |
| 594 | Ki-ho Kim | Cheonan, KR | 4 |
| 595 | Takashi Okamoto | Gunma, JP | 4 |
| 596 | Terrill B Atwater | North Plainfield, NJ (US) | 4 |
| 597 | Nobuhiro Nishiguchi | Sumoto, JP | 4 |
| 598 | Kazuya Iwamoto | Sakai, JP | 4 |
| 599 | Rifat Ata Mustafa Hikmet | Eindhoven, NL | 4 |
| 600 | Wolfgang Appel | Kelkheim, DE | 4 |
| 601 | Sergej Pasenok | Kelkheim, DE | 4 |
| 602 | Jan Naess Reimers | Maple Ridge, CA | 4 |
| 603 | Hiroshi Watanabe | Sumoto, JP | 4 |
| 604 | John B Bates | Oak Ridge, TN (US) | 4 |
| 605 | David Stanley Wainwright | Vancouver, CA | 4 |
| 606 | Gerald H Newman | Westfield, NJ (US) | 4 |
| 607 | Dongwan Seo | Yongin-si, KR | 3 |
| 608 | Abdelbast Guerfi | Brossard, CA | 3 |
| 609 | Youngeal Kim | Hwaseong-si, KR | 3 |
| 610 | Xiao Ping Chen | Buffalo Grove, IL (US) | 3 |
| 611 | Tomoyuki Tsujimura | Yokohama, JP | 3 |
| 612 | Naoki Suzuki | Yokohama, JP | 3 |
| 613 | Dongwook Shin | Suwon-si, KR | 3 |
| 614 | Minhan Kim | Yongin-si, KR | 3 |
| 615 | Ronnie E Smith | Huntersville, NC (US) | 3 |
| 616 | Stefan Reinartz | Waxhaw, NC (US) | 3 |
| 617 | Sangbok Ma | Suwon-si, KR | 3 |
| 618 | Se-Hee Lee | Louisville, CO (US) | 3 |
| 619 | Juhyeong Han | Yongin-si, KR | 3 |
| 620 | Sol Choi | Yongin-si, KR | 3 |
| 621 | Xiaosong Huang | Novi, MI (US) | 3 |
| 622 | Gain Kim | Yongin-si, KR | 3 |
| 623 | Yangseob Kim | Yongin-si, KR | 3 |
| 624 | Junghyun Choi | Yongin-si, KR | 3 |
| 625 | William John Paulus | Waxhaw, NC (US) | 3 |
| 626 | Gerbrand Ceder | Orinda, CA (US) | 3 |
| 627 | Jaehyun Cho | Suwon-si, KR | 3 |
| 628 | Wooyoung Yang | Yongin-si, KR | 3 |
| 629 | Yumi Song | Yongin-si, KR | 3 |
| 630 | Joseph B Kejha | Meadowbrook, PA (US) | 3 |

# INVENTORS

| # | Name | Location | Patents | # | Name | Location | Patents |
|---|---|---|---|---|---|---|---|
| 631 | Yeonjoo Choi | Yongin-si, KR | 3 | 676 | Hyorang Kang | Anyang-si, KR | 3 |
| 632 | Sangkook Mah | Seoul, KR | 3 | 677 | Tsutomu Teraoka | Matsumoto, JP | 3 |
| 633 | Chen Liao | Westmont, IL (US) | 3 | 678 | Michael G Laramie | Tucson, AZ (US) | 3 |
| 634 | Sherman H Zeng | Troy, MI (US) | 3 | 679 | James A Phipps | Tucson, AZ (US) | 3 |
| 635 | Nelson S Bell | Albuquerque, NM (US) | 3 | 680 | Veronika G Viner | Tucson, AZ (US) | 3 |
| 636 | Nancy A Missert | Tijeras, NM (US) | 3 | 681 | Yen-Hung Chen | Ann Arbor, MI (US) | 3 |
| 637 | Karen Lozano | McAllen, TX (US) | 3 | 682 | Stephen Buckingham | Ypsilanti, MI (US) | 3 |
| 638 | Yatinkumar N Rane | Edinburg, TX (US) | 3 | 683 | Dong-Hwan Yu | Yongin-si, KR | 3 |
| 639 | Junghyun Nam | Yongin-si, KR | 3 | 684 | Sanghoon Kim | Yongin-si, KR | 3 |
| 640 | Yan Wang | Brookline, MA (US) | 3 | 685 | Inhaeng Cho | Yongin-si, KR | 3 |
| 641 | Jinah Seo | Seoul, KR | 3 | 686 | Seonghun Jeong | Yongin-si, KR | 3 |
| 642 | Young-Min Kim | Yongin-si, KR | 3 | 687 | Naoki Osada | Susono, JP | 3 |
| 643 | Sung Bin Park | Daejeon, KR | 3 | 688 | Haijing Liu | Shanghai, CN | 3 |
| 644 | Hyunseok Kim | Suwon-si, KR | 3 | 689 | Chaitanya Kumar Narula | Knoxville, TN (US) | 3 |
| 645 | Jongseok Moon | Suwon-si, KR | 3 | 690 | Jae Hou Nah | Yongin-si, KR | 3 |
| 646 | Sewon Kim | Suwon-si, KR | 3 | 691 | Lucas A Haverkate | Eindhoven, NL | 3 |
| 647 | Kyueun Shim | Daegu, KR | 3 | 692 | Scott Allen Mullin | San Leandro, CA (US) | 3 |
| 648 | Kyounghwan Choi | Suwon-si, KR | 3 | 693 | Myong-A Woo | Yongin-si, KR | 3 |
| 649 | Soojeong Lee | Yongin-si, KR | 3 | 694 | Sujin Um | Yongin-si, KR | 3 |
| 650 | Ryo Aburatani | Sodegaura, JP | 3 | 695 | Jun Li | Zenhai, CN | 3 |
| 651 | Tsuyoshi Ota | Sodegaura, JP | 3 | 696 | Sang Yang | Palo Alto, CA (US) | 3 |
| 652 | Dohyung Park | Yongin-si, KR | 3 | 697 | Sangwoo Han | Mountain View, CA (US) | 3 |
| 653 | Erang Cho | Yongin-si, KR | 3 | 698 | Saeed Khaleghi Rahimian | San Jose, CA (US) | 3 |
| 654 | Soonbong Choi | Yongin-si, KR | 3 | 699 | Mehdi Forouzan | Santa Clara, CA (US) | 3 |
| 655 | Igor P Kovalev | Vail, AZ (US) | 3 | 700 | Ying Liu | Fremont, CA (US) | 3 |
| 656 | Cathie Burgess | Tucson, AZ (US) | 3 | 701 | Yifan Tang | Santa Clara, CA (US) | 3 |
| 657 | Jusik Kim | Yongin-si, KR | 3 | 702 | Hyun-Joo Je | Yongin-si, KR | 3 |
| 658 | Woojin Bae | Yongin-si, KR | 3 | 703 | Jeong-Hoon Kim | Yongin-si, KR | 3 |
| 659 | Kanghee Lee | Suwon-si, KR | 3 | 704 | Yimin Zhu | Union City, CA (US) | 3 |
| 660 | Seongho Jeon | Yongin-si, KR | 3 | 705 | Chunsheng Du | Fremont, CA (US) | 3 |
| 661 | Taeyoung Kim | Seoul, KR | 3 | 706 | Joon Shin | San Jose, CA (US) | 3 |
| 662 | Dongjoon Lee | Suwon-si, KR | 3 | 707 | Brandon R Long | Plainfield, IL (US) | 3 |
| 663 | Hitoshi Yamamoto | Chino, JP | 3 | 708 | Eungje Lee | Naperville, IL (US) | 3 |
| 664 | Kihyun Kim | Yongin-si, KR | 3 | 709 | Seongyong Park | Hanam-si, KR | 3 |
| 665 | Kwanghwan Cho | Yongin-si, KR | 3 | 710 | Ying-Te Huang | Taipei, TW | 3 |
| 666 | Arumugam Manthiram | Austin, TX (US) | 3 | 711 | Chao-Hsien Lin | Taipei, TW | 3 |
| 667 | Yuki Takei | Yokohama, JP | 3 | 712 | Teng-Ko Ma | Taipei, TW | 3 |
| 668 | Weiyang Li | Sunnyvale, CA (US) | 3 | 713 | Ching-Yao Yuan | Taipei, TW | 3 |
| 669 | Zhi Wei Seh | Stanford, CA (US) | 3 | 714 | Bernard Lestriez | Nantes, FR | 3 |
| 670 | Guangyuan Zheng | Stanford, CA (US) | 3 | 715 | Tsun-Yu Chang | Taichung, TW | 3 |
| 671 | Yuan Yang | Stanford, CA (US) | 3 | 716 | Chun-Chieh Chang | Taichung, TW | 3 |
| 672 | Austin Lai | Taichung, TW | 3 | 717 | Xuefa Li | Matthews, NC (US) | 3 |
| 673 | Kai-Yang Cheng | Taichung, TW | 3 | 718 | Jaehyuk Kim | Yongin-si, KR | 3 |
| 674 | Wei-Fu Hsu | Taichung, TW | 3 | 719 | Soonsung Suh | Yongin-si, KR | 3 |
| 675 | Seoksoo Lee | Yongin-si, KR | 3 | 720 | Sora Lee | Yongin-si, KR | 3 |

# INVENTORS

| # | Name | Location | Patents | # | Name | Location | Patents |
|---|---|---|---|---|---|---|---|
| 721 | Tsung-Hsiung Wang | Dali, TW | 3 | 766 | Bernhard Goller | Villach, AT | 3 |
| 722 | Shih-Chieh Liao | Taoyuan, TW | 3 | 767 | Guenter Zieger | Villach, AT | 3 |
| 723 | Cheon-Soo Kim | Yongin-si, KR | 3 | 768 | Michael Sorger | Villach, AT | 3 |
| 724 | Yeongap Kim | Yongin-si, KR | 3 | 769 | Philemon Schweizer | Feffernitz, AT | 3 |
| 725 | Sung-Woo Oh | Seoul, KR | 3 | 770 | Michael Sternad | Graz, AT | 3 |
| 726 | Jin-Bum Kim | Suwon-si, KR | 3 | 771 | Jocelyn Hicks-Garner | Venice, CA (US) | 3 |
| 727 | Jing-Yih Cherng | Taoyuan, TW | 3 | 772 | Adam F Gross | Santa Monica, CA (US) | 3 |
| 728 | Jin-Ming Chen | Taoyuan, TW | 3 | 773 | Sang-Geun Kim | Yongin-si, KR | 3 |
| 729 | Sung Soo Han | Hwaseong-si, KR | 3 | 774 | Young-Hee Lee | Suwon-si, KR | 3 |
| 730 | Yooseong Yang | Yongin-si, KR | 3 | 775 | Hee-Sun Yun | Yongin-si, KR | 3 |
| 731 | So-yeon Kim | Suwon-si, KR | 3 | 776 | Hyun-Jung Kim | Daegu, KR | 3 |
| 732 | Hong-Kyu Choi | Yongin-si, KR | 3 | 777 | Ki-Tae Kim | Daejeon, KR | 3 |
| 733 | Joo-Han Song | Yongin-si, KR | 3 | 778 | Je-Young Kim | Daejeon, KR | 3 |
| 734 | Rikiya Yamashita | Tokyo-to, JP | 3 | 779 | Andreas Kay | Lausanne, CH | 3 |
| 735 | Kazuki Yamada | Tokyo-to, JP | 3 | 780 | Mi-Ran Song | Yongin-si, KR | 3 |
| 736 | Xianhui Meng | Yongin-si, KR | 3 | 781 | Gyeong-Jae Heo | Yongin-si, KR | 3 |
| 737 | Jeong-Hye Lee | Yongin-si, KR | 3 | 782 | Hyun-Deok Lee | Yongin-si, KR | 3 |
| 738 | Sung-Hoon Kim | Yongin-si, KR | 3 | 783 | Jin-Hyoung Seo | Yongin-si, KR | 3 |
| 739 | Yoshiyuki Inaguma | Nishitokyo, JP | 3 | 784 | Min-Ju Kim | Yongin-si, KR | 3 |
| 740 | Yeon-Gap Kim | Yongin-si, KR | 3 | 785 | Jeffrey R Dahn | Upper Tantallon, CA | 3 |
| 741 | Kai Wei Nieh | Monrovia, CA (US) | 3 | 786 | Chin-Shu Cheng | Hsinchu County, TW | 3 |
| 742 | Hitohiko Ide | Takehara, JP | 3 | 787 | Brian Elliott Hayden | Lyndhurst, GB | 3 |
| 743 | Hirofumi Nakamoto | Kyoto, JP | 3 | 788 | In-Tae Mun | Yongin-si, KR | 3 |
| 744 | William Hudson | Oakland, CA (US) | 3 | 789 | Jin-Kyu Hong | Yongin-si, KR | 3 |
| 745 | Tae-seob Song | Seoul, KR | 3 | 790 | William A Feld | Beavercreek, OH (US) | 3 |
| 746 | Ju-Hee Sohn | Yongin-si, KR | 3 | 791 | Leah R Lucente | Beavercreek, OH (US) | 3 |
| 747 | Lutgard C De Jonghe | Lafayette, CA (US) | 3 | 792 | Jacob W Lawson | Springfield, OH (US) | 3 |
| 748 | Yang-soo Kim | Daejeon-si, KR | 3 | 793 | Hiroshi Suyama | Mishima, JP | 3 |
| 749 | Tetsuya Mitsumoto | Takehara, JP | 3 | 794 | Hung-Chun Wu | Jhubei, TW | 3 |
| 750 | Hyun-Jun Choi | Yongin-si, KR | 3 | 795 | Dezhong Yang | Nanjing, CN | 3 |
| 751 | Seung-Wan Kim | Yongin-si, KR | 3 | 796 | Shengshui Zhang | Olney, MD (US) | 3 |
| 752 | Hee-Joong Kim | Yongin-si, KR | 3 | 797 | Liang Liu | Beijing, CN | 3 |
| 753 | Dai-In Park | Yongin-si, KR | 3 | 798 | Xiao-Bo Zhang | Beijing, CN | 3 |
| 754 | Ji-man Kim | Suwon-si, KR | 3 | 799 | Jin-Hee Kim | Yongin-si, KR | 3 |
| 755 | Jake Kim | Yongin-si, KR | 3 | 800 | Kyung-ho Kim | Cheonan-si, KR | 3 |
| 756 | Luca Toia | Carnago, IT | 3 | 801 | Hisashi Tsukamoto | Saugus, CA (US) | 3 |
| 757 | Johnny Mio Bertolo | Fiume Veneto, IT | 3 | 802 | Josette Olivier-Fourcade | Jacou, FR | 3 |
| 758 | Giorgio Longoni | Monza, IT | 3 | 803 | Daizo Jito | Kobe, JP | 3 |
| 759 | Marco Amiotti | Cornaredo, IT | 3 | 804 | Hun-joon Sohn | Seoul, KR | 3 |
| 760 | Woo Suk Cho | Namyangju, KR | 3 | 805 | Frank M Delnick | Albuquerque, NM (US) | 3 |
| 761 | In-yong Song | Suwon-si, KR | 3 | 806 | Fred J Berkowitz | New Milford, CT (US) | 3 |
| 762 | Hong-Kyu Park | Daejeon, KR | 3 | 807 | Chuanjing Xu | Ann Arbor, MI (US) | 3 |
| 763 | Masataka Takeuchi | Kanagawa, JP | 3 | 808 | Jeong-Soon Shin | Yongin-si, KR | 3 |
| 764 | Magdalena Forster | Villach, AT | 3 | 809 | Carroll Vergelati | Saint Baudille de la Tour, FR | 3 |
| 765 | Katharina Schmut | Villach, AT | 3 | 810 | Albane Audemer | Lier, BE | 3 |

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| # | Name | Location | Patents | # | Name | Location | Patents |
|---|---|---|---|---|---|---|---|
| 811 | Nobuhiro Ota | Itami, JP | 3 | 856 | Neil McLellan | Garland, TX (US) | 3 |
| 812 | Hansu Kim | Seoul, KR | 3 | 857 | Mike Strittmatter | Carrollton, TX (US) | 3 |
| 813 | Joon-Won Suh | Cheonan, KR | 3 | 858 | Joseph Patrick Hundt | Corinth, TX (US) | 3 |
| 814 | Takeshi Kosuzu | Shizuoka, JP | 3 | 859 | Christopher M Sells | Carrollton, TX (US) | 3 |
| 815 | Hidetoshi Tsuzuki | Kanagawa, JP | 3 | 860 | Francis A Scherpenberg | Carrollton, TX (US) | 3 |
| 816 | Binod Kumar | Dayton, OH (US) | 3 | 861 | Gerald Halpert | Pasadena, CA (US) | 3 |
| 817 | Ki-Ho Kim | Cheonan-si, KR | 3 | 862 | Edward J Plichta | Howell, NJ (US) | 3 |
| 818 | Hyo-Sug Lee | Suwon-si, KR | 3 | 863 | Lawrence P Klemann | Somerville, NJ (US) | 3 |
| 819 | Chung-Kun Cho | Suwon-si, KR | 3 | 864 | Zhijun Peng | Guangdong, CN | 2 |
| 820 | Charles Austen Angell | Mesa, AZ (US) | 3 | 865 | Christian Hanisch | Braunschweig, DE | 2 |
| 821 | Xiangxin Bi | Pleasanton, CA (US) | 3 | 866 | Byoungwoo Kang | Pohang-si, KR | 2 |
| 822 | Nobuyuki Kambe | Menlo Park, CA (US) | 3 | 867 | Junghwa Lee | Pohang-si, KR | 2 |
| 823 | James T Gardner | Cupertino, CA (US) | 3 | 868 | Min Hye Jung | Jeonju-si, KR | 2 |
| 824 | Xianglan Wu | Daejeon, KR | 3 | 869 | Hyun Kyu Shin | Changwon-si, KR | 2 |
| 825 | Yong Joon Park | Daejeon, KR | 3 | 870 | Kyu Soon Park | Jeollabuk-do, KR | 2 |
| 826 | Kwang Sun Ryu | Daejeon, KR | 3 | 871 | Duck Joo Yang | Flower Mound, TX (US) | 2 |
| 827 | Soon Ho Chang | Daejeon, KR | 3 | 872 | Benjamin Batchelor | Dallas, TX (US) | 2 |
| 828 | Terje A Skotheim | Tucson, AZ (US) | 3 | 873 | Samsuddin Mahmood | Dallas, TX (US) | 2 |
| 829 | Ikuo Yonezu | Hirakata, JP | 3 | 874 | Brian J Koch | Berkley, MI (US) | 2 |
| 830 | George W Moutsios | Parma, OH (US) | 3 | 875 | Seung Rim Yang | Seongnam-si, KR | 2 |
| 831 | Xuekun Xing | Richmond Heights, OH (US) | 3 | 876 | Jean-Christophe Daigle | St-Bruno-de-Montarville, CA | 2 |
| 832 | Jimmie B Allred, III | Skaneateles, NY (US) | 3 | 877 | Zhen Song | Painted Post, NY (US) | 2 |
| 833 | Earl R Holdren, III | Scottsville, NY (US) | 3 | 878 | Michael Edward Badding | Campbell, NY (US) | 2 |
| 834 | Jeffrey B Mallon | Lockport, NY (US) | 3 | 879 | Ryounghee Kim | Uiwang-si, KR | 2 |
| 835 | Philip S Wutz | Williamsville, NY (US) | 3 | 880 | Seokgwang Doo | Seoul, KR | 2 |
| 836 | Michael F Pyszczek | LeRoy, NY (US) | 3 | 881 | Satoshi Maruyama | Hwaseong-si, KR | 2 |
| 837 | Jack A Belstadt | Lockport, NY (US) | 3 | 882 | Minhui Wang | Huazhou, CN | 2 |
| 838 | Charles L Mozeko | Tonawanda, NY (US) | 3 | 883 | Yi-jun Lin | Taoyuan, TW | 2 |
| 839 | Richard W Mott | East Amherst, NY (US) | 3 | 884 | Yen-Po Lin | Hsinchu, TW | 2 |
| 840 | C Edwin Tracy | Golden, CO (US) | 3 | 885 | John S Whiting | Hampshire, IL (US) | 2 |
| 841 | Makoto Fujino | Moriguchi, JP | 3 | 886 | Calvin Ting | Kokomo, IN (US) | 2 |
| 842 | Tatsuya Nakamura | Hiroshima-ken, JP | 3 | 887 | Mohammed Alobaidi | Kokomo, IN (US) | 2 |
| 843 | Koji Nishio | Hirakata, JP | 3 | 888 | Goo Sung | Kokomo, IN (US) | 2 |
| 844 | John M Cotte | New Fairfield, CT (US) | 3 | 889 | Yuichi Aihara | Yokohama, JP | 2 |
| 845 | Madhav Datta | Yorktown Heights, NY (US) | 3 | 890 | Donggyu Chang | Yongin-si, KR | 2 |
| 846 | Raymond J Kuwik | Lancaster, NY (US) | 3 | 891 | Yongmok Cho | Yongin-si, KR | 2 |
| 847 | Qiming Zhong | Coquitlam, CA | 3 | 892 | Hyunjei Chung | Yongin-si, KR | 2 |
| 848 | Naohiko Oki | Wako, JP | 3 | 893 | Jinkyu Kang | Hwaseong-si, KR | 2 |
| 849 | Minoru Noguchi | Wako, JP | 3 | 894 | Hyunchul Lee | Hwaseong-si, KR | 2 |
| 850 | Atsushi Demachi | Wako, JP | 3 | 895 | Euncheol Do | Seoul, KR | 2 |
| 851 | Kenji Sato | Wako, JP | 3 | 896 | Donghwa Seo | Burlington, MA (US) | 2 |
| 852 | Denis G Fauteux | Acton, MA (US) | 3 | 897 | Song Chen | Guangdong, CN | 2 |
| 853 | Jeffery Raymond Dahn | Surrey, CA | 3 | 898 | Ruokui Chen | Hunan, CN | 2 |
| 854 | Jun-ichi Yamaki | Mito, JP | 3 | 899 | Qiang Li | Hunan, CN | 2 |
| 855 | Richard K Brow | Albuquerque, NM (US) | 3 | 900 | Thomas A Yersak | San Diego, CA (US) | 2 |

# INVENTORS

| # | Name | Location | Patents | # | Name | Location | Patents |
|---|---|---|---|---|---|---|---|
| 901 | Conrad Stoldt | Golden, CO (US) | 2 | 946 | Timothy S Arthur | Ann Arbor, MI (US) | 2 |
| 902 | Juhee Sohn | Yongin-si, KR | 2 | 947 | Soonho Ahn | Suwon-si, KR | 2 |
| 903 | Junwon Suh | Yongin-si, KR | 2 | 948 | Hideyuki Komatsu | Yokosuka, JP | 2 |
| 904 | Jeongdoo Yi | Yongin-si, KR | 2 | 949 | Shigemasa Kuwata | Palo Alto, CA (US) | 2 |
| 905 | Seokhun Hong | Yongin-si, KR | 2 | 950 | Maarten Sierhuis | San Francisco, CA (US) | 2 |
| 906 | Bongkyoung Park | Yongin-si, KR | 2 | 951 | Balachandran Gadaguntla Radhakrishnan | San Mateo, CA (US) | 2 |
| 907 | Hyunhwa Song | Yongin-si, KR | 2 | 952 | Shreyas Honrao | Sunnyvale, CA (US) | 2 |
| 908 | Linh Nguyen | Elk Grove Village, IL (US) | 2 | 953 | John Lawson | San Francisco, CA (US) | 2 |
| 909 | Shenzhong Zhu | Des Plaines, IL (US) | 2 | 954 | Kyusung Park | Greenwood Village, CO (US) | 2 |
| 910 | Mohammed Hussain Abdul Jabbar | Farmington Hills, MI (US) | 2 | 955 | Yurim Cha | Yongin-si, KR | 2 |
| 911 | Bradley R Frieberg | Farmington Hills, MI (US) | 2 | 956 | Ilya A Shkrob | Chicago, IL (US) | 2 |
| 912 | Zhongyi Liu | Troy, MI (US) | 2 | 957 | Daniel Abraham | Bolingbrook, IL (US) | 2 |
| 913 | Gerald P Rumierz | Fort Mill, SC (US) | 2 | 958 | Xin Xia | Cheonan, KR | 2 |
| 914 | Karl F Humiston | Tucson, AZ (US) | 2 | 959 | Maxime Blangero | Cheonan, KR | 2 |
| 915 | Charles E Haire | Lancaster, SC (US) | 2 | 960 | Jing Zhang | Cheonan, KR | 2 |
| 916 | Tyrone S Fields | Charlotte, NC (US) | 2 | 961 | Wenlong Yang | Cheonan, KR | 2 |
| 917 | Michael A Braswell | Charlotte, NC (US) | 2 | 962 | Jiyoon Kim | Yongin-si, KR | 2 |
| 918 | Ronald A Proctor | York, SC (US) | 2 | 963 | Zhixian Zhang | Jinan, CN | 2 |
| 919 | Yukihisa Takeuchi | Nagoya, JP | 2 | 964 | Chit Fung So | Hong Kong, CN | 2 |
| 920 | Yosuke Sato | Nagoya, JP | 2 | 965 | Yigang He | Hubei, CN | 2 |
| 921 | Yuji Katsuda | Nagoya, JP | 2 | 966 | Yuan Chen | Hubei, CN | 2 |
| 922 | Hyo-Jung Song | Yongin-si, KR | 2 | 967 | Zhong Li | Hubei, CN | 2 |
| 923 | Hao-Hsun Chang | Centerville, OH (US) | 2 | 968 | Liulu He | Hubei, CN | 2 |
| 924 | Christopher L Cowger | Charlotte, NC (US) | 2 | 969 | Chul Haeng Lee | Daejeon, KR | 2 |
| 925 | Heba K Botros | Waxhaw, NC (US) | 2 | 970 | Yan-Yan Hu | Tallahassee, FL (US) | 2 |
| 926 | Yong Lak Joo | Ithaca, NY (US) | 2 | 971 | Xuyong Feng | Tallahassee, FL (US) | 2 |
| 927 | Jaehyuk Lee | Ithaca, NY (US) | 2 | 972 | Andrea Vittorio Oriani | Milan, IT | 2 |
| 928 | Vincent Bodenez | Saint Yvi, FR | 2 | 973 | Yumi Rho | Kyeonggi-do, KR | 2 |
| 929 | Changhoon Jung | Seoul, KR | 2 | 974 | Eunjoo Lee | Yongin-si, KR | 2 |
| 930 | Dowon Kim | Suwon-si, KR | 2 | 975 | Yunsheng Liu | Hyattsville, MD (US) | 2 |
| 931 | Hyeonsun Choi | Yongin-si, KR | 2 | 976 | Daniel R Vissers | Wheaton, IL (US) | 2 |
| 932 | Byung-Soo Kim | Suwon-si, KR | 2 | 977 | Paul V Braun | Champaign, IL (US) | 2 |
| 933 | Zheng Liang | Stanford, CA (US) | 2 | 978 | Jihyun Jang | Yongin-si, KR | 2 |
| 934 | Yayuan Liu | Stanford, CA (US) | 2 | 979 | Raymond Winter | Riverside, CA (US) | 2 |
| 935 | Dingchang Lin | Stanford, CA (US) | 2 | 980 | Maksudul M Alam | Glendora, CA (US) | 2 |
| 936 | Donghyun Kil | Yongin-si, KR | 2 | 981 | Uma Sampathkumaran | Torrance, CA (US) | 2 |
| 937 | Quanguo Zhou | Beijing, CN | 2 | 982 | John Abolencia | Los Angeles, CA (US) | 2 |
| 938 | Lijia Zhou | Beijing, CN | 2 | 983 | Young Uk Park | Daejeon, KR | 2 |
| 939 | Rongjian Yan | Beijing, CN | 2 | 984 | Ji Young Park | Daejeon, KR | 2 |
| 940 | Zhidong Wang | Beijing, CN | 2 | 985 | Bo Ram Lee | Daejeon, KR | 2 |
| 941 | Jiuyang Cheng | Beijing, CN | 2 | 986 | Chi Ho Jo | Daejeon, KR | 2 |
| 942 | Ronghua Lan | Beijing, CN | 2 | 987 | Young Cheol Choi | Daejeon, KR | 2 |
| 943 | Yancheng Lu | Beijing, CN | 2 | 988 | Hyuck Hur | Daejeon, KR | 2 |
| 944 | Qingguo Yang | Beijing, CN | 2 | 989 | Wang Mo Jung | Daejeon, KR | 2 |
| 945 | Naoyuki Hase | Yongin-si, KR | 2 | 990 | Jinkyu Park | Suwon-si, KR | 2 |

# INVENTORS

| # | Name | Location | Patents | # | Name | Location | Patents |
|---|---|---|---|---|---|---|---|
| 991 | Bilal El-Zahab | Miami Beach, FL (US) | 2 | 1,036 | Bokkyu Jeon | Yongin-si, KR | 2 |
| 992 | Amir Chamaani | Miami, FL (US) | 2 | 1,037 | Dongjin Lee | Seoul, KR | 2 |
| 993 | Neha Chawla | Miami, FL (US) | 2 | 1,038 | Na-Ri Seo | Yongin-si, KR | 2 |
| 994 | Meer Safa | Miami, FL (US) | 2 | 1,039 | Chaewoong Cho | Yongin-si, KR | 2 |
| 995 | Yu-Sheng Su | Dayton, OH (US) | 2 | 1,040 | Robert S Rubino | Williamsville, NY (US) | 2 |
| 996 | Arturo Gutierrez | Naperville, IL (US) | 2 | 1,041 | William C Thiebolt | Tonawanda, NY (US) | 2 |
| 997 | Sung-Hwa Eo | Yongin-si, KR | 2 | 1,042 | Marcus J Palazzo | Wheatfield, NY (US) | 2 |
| 998 | Yongseok Kim | Yongin-si, KR | 2 | 1,043 | Joseph M Lehnes | Williamsville, NY (US) | 2 |
| 999 | Geoffroy Hautier | Brussels, BE | 2 | 1,044 | Ho-Chul Yun | East Amherst, NY (US) | 2 |
| 1,000 | Anna Miglio | Louvain-la-Neuve, BE | 2 | 1,045 | Mark J Roy | Buffalo, NY (US) | 2 |
| 1,001 | Youngsoo Kim | Suwon-si, KR | 2 | 1,046 | Eun-Ok Oh | Yongin-si, KR | 2 |
| 1,002 | Younggyoon Ryu | Suwon-si, KR | 2 | 1,047 | Patrick Bouchard | Shawinigan, CA | 2 |
| 1,003 | Kunli Wang | Guangdong, CN | 2 | 1,048 | Kisoo Lee | Yongin-si, KR | 2 |
| 1,004 | Taejeong Kim | Yongin-si, KR | 2 | 1,049 | Tomoya Suzuki | Susono, JP | 2 |
| 1,005 | Sondra Hellstrom | Sunnyvale, CA (US) | 2 | 1,050 | Han-Tu Lin | Hsinchu County, TW | 2 |
| 1,006 | Tristan Palmer | San Francisco, CA (US) | 2 | 1,051 | An-Li He | Changhua County, TW | 2 |
| 1,007 | John F Christensen | Elk Grove, CA (US) | 2 | 1,052 | Sihua Geng | Shenzhen, CN | 2 |
| 1,008 | Hongyue Du | Shanghai, CN | 2 | 1,053 | Zhou Yi | Dongguan, CN | 2 |
| 1,009 | Siyuan Xu | Shanghai, CN | 2 | 1,054 | Jianfei Liu | Dongguan, CN | 2 |
| 1,010 | Hyunpyo Lee | Seoul, KR | 2 | 1,055 | Sen Wang | Dongguan, CN | 2 |
| 1,011 | Heungchan Lee | Seongnam-si, KR | 2 | 1,056 | Zhiqiang Yu | Shanghai, CN | 2 |
| 1,012 | Shinji Nakanishi | Mishima, JP | 2 | 1,057 | Jeffrey Sakamoto | Ann Arbor, MI (US) | 2 |
| 1,013 | Martin A Chiarizio | Coral Springs, FL (US) | 2 | 1,058 | Travis Thompson | Ann Arbor, MI (US) | 2 |
| 1,014 | Robert Reginald Albert Feltham | Fort Lauderdale, FL (US) | 2 | 1,059 | Ken Ogata | Seongnam-si, KR | 2 |
| 1,015 | Vyacheslav Voloshin | Coral Springs, FL (US) | 2 | 1,060 | Koichi Takei | Hwaseong-si, KR | 2 |
| 1,016 | Soohyeon Kim | Yongin-si, KR | 2 | 1,061 | Jung-Min Han | Yongin-si, KR | 2 |
| 1,017 | Jaeho Lee | Yongin-si, KR | 2 | 1,062 | Jae-Ho Lee | Yongin-si, KR | 2 |
| 1,018 | Soon Ho Ahn | Yongin-si, KR | 2 | 1,063 | Sreekanth Pannala | Knoxville, TN (US) | 2 |
| 1,019 | Wen-Zhen Li | Beijing, CN | 2 | 1,064 | Raymond Robert Unocic | Knoxville, TN (US) | 2 |
| 1,020 | Michael Bielmann | Zurich, CH | 2 | 1,065 | Surendra Kumar Martha | Knoxville, TN (US) | 2 |
| 1,021 | Hee Jin Woo | Gyeonggi-do, KR | 2 | 1,066 | William Cox | Sunrise, FL (US) | 2 |
| 1,022 | Dae Gun Jin | Gyeonggi-do, KR | 2 | 1,067 | Youngjin Choi | Yongin-si, KR | 2 |
| 1,023 | Hee Yeon Ryu | Gyeonggi-do, KR | 2 | 1,068 | Nobuyuki Imanishi | Tsu, JP | 2 |
| 1,024 | Yoon Ji Lee | Gyeonggi-do, KR | 2 | 1,069 | Osamu Yamamoto | Tsu, JP | 2 |
| 1,025 | Yong Gu Kim | Seoul, KR | 2 | 1,070 | Haixia Deng | Fremont, CA (US) | 2 |
| 1,026 | Na Ry Shin | Seoul, KR | 2 | 1,071 | Karim R Gadelrab | Boston, MA (US) | 2 |
| 1,027 | Eun Ji Kwon | Gyeonggi-do, KR | 2 | 1,072 | San Moon | Seoul, KR | 2 |
| 1,028 | Sang Jin Park | Gyeonggi-do, KR | 2 | 1,073 | Brian Marc Pepin | Oakland, CA (US) | 2 |
| 1,029 | Chueh Liu | Dayton, OH (US) | 2 | 1,074 | Hojr Sedaghat Pisheh | Rohnert Park, CA (US) | 2 |
| 1,030 | David Brun-Buisson | Vatilieu, FR | 2 | 1,075 | Dat Phung | San Jose, CA (US) | 2 |
| 1,031 | Sylvie Genies | Saint-Egreve, FR | 2 | 1,076 | James Etzkorn | Mountain View, CA (US) | 2 |
| 1,032 | Junkyu Lee | Yongin-si, KR | 2 | 1,077 | Eunha Park | Seoul, KR | 2 |
| 1,033 | Victor Roev | Hwaseong-si, KR | 2 | 1,078 | Hyung-Bae Kim | Yongin-si, KR | 2 |
| 1,034 | Russell William King | Evans, GA (US) | 2 | 1,079 | Byeong-Gyu Cho | Yongin-si, KR | 2 |
| 1,035 | Mordechai Kornbluth | Brighton, MA (US) | 2 | 1,080 | Eun-Gyeong Lee | Yongin-si, KR | 2 |

# INVENTORS

| # | Name | Location | Patents | # | Name | Location | Patents |
|---|---|---|---|---|---|---|---|
| 1,081 | Jin-Hyuk In | Yongin-si, KR | 2 | 1,126 | Na Liu | Fujian, CN | 2 |
| 1,082 | Soo-Youn Park | Yongin-si, KR | 2 | 1,127 | Xuguang Gao | Fujian, CN | 2 |
| 1,083 | Dorothee Christine Hermes | 's-Gravenhage, NL | 2 | 1,128 | Francis Martin Behan | Corning, NY (US) | 2 |
| 1,084 | Lu Li | Guiyang, CN | 2 | 1,129 | Indrajit Dutta | Horseheads, NY (US) | 2 |
| 1,085 | Dae-Hoe Lee | Yongin-si, KR | 2 | 1,130 | Shawn Michael O'Malley | Horseheads, NY (US) | 2 |
| 1,086 | John Muldoon | Saline, MI (US) | 2 | 1,131 | Vitor Marino Schneider | Painted Post, NY (US) | 2 |
| 1,087 | Jeeeun Yang | Uiwang-si, KR | 2 | 1,132 | Christoph Hartnig | Eppstein, DE | 2 |
| 1,088 | Liangcai Tan | Dublin, CA (US) | 2 | 1,133 | Hanna Siwek | Ellwangen, DE | 2 |
| 1,089 | Wenli Yu | Pleasanton, CA (US) | 2 | 1,134 | Jiyeon Kwak | Yongin-si, KR | 2 |
| 1,090 | Xin Hu | Dublin, CA (US) | 2 | 1,135 | Youngugk Kim | Yongin-si, KR | 2 |
| 1,091 | In Kim | Yongin-si, KR | 2 | 1,136 | Heeseon Choi | Yongin-si, KR | 2 |
| 1,092 | Hironobu Fukahori | Osaka, JP | 2 | 1,137 | Hyun-Joo Bang | Seoul, KR | 2 |
| 1,093 | Hyunjae Song | Hwaseong-si, KR | 2 | 1,138 | Seung Min Oh | Gumi-si, KR | 2 |
| 1,094 | Inyong Song | Suwon-si, KR | 2 | 1,139 | Byung-Chun Park | Seoul, KR | 2 |
| 1,095 | Erika Oki | Susono, JP | 2 | 1,140 | Jun Hyuk Song | Daejeon, KR | 2 |
| 1,096 | Takayuki Uchiyama | Susono, JP | 2 | 1,141 | Eun Kyung Kim | Daejeon, KR | 2 |
| 1,097 | Kyounghyun Kim | Yongin-si, KR | 2 | 1,142 | Sang Wook Woo | Daejeon, KR | 2 |
| 1,098 | Xiusheng Zhang | Shanghai, CN | 2 | 1,143 | Ye Ri Kim | Daejeon, KR | 2 |
| 1,099 | Quoc Thai Pham | Taipei, TW | 2 | 1,144 | Ju Ho Chung | Daejeon, KR | 2 |
| 1,100 | Xiaochao Que | Shanghai, CN | 2 | 1,145 | Su-Jeong Koh | Yongin-si, KR | 2 |
| 1,101 | Jihyun Kim | Yongin-si, KR | 2 | 1,146 | Jun Hyuk Moon | Daejeon, KR | 2 |
| 1,102 | Yu-Hyun Kim | Yongin-si, KR | 2 | 1,147 | Peter Cordani | Palm Beach Gardens, FL (US) | 2 |
| 1,103 | Byong-Yong Yu | Yongin-si, KR | 2 | 1,148 | Shoei-Lai Chen | New Taipei, TW | 2 |
| 1,104 | Te-Chao Liao | Taipei, TW | 2 | 1,149 | Wen-Hsiang Cheng | New Taipei, TW | 2 |
| 1,105 | Chen-Ho Lai | Taipei, TW | 2 | 1,150 | Guesung Kim | Suwon-si, KR | 2 |
| 1,106 | Wei-Jen Liu | Chung Li, TW | 2 | 1,151 | Yun Lei | Shenzhen, CN | 2 |
| 1,107 | Joël Gaubicher | Nantes, FR | 2 | 1,152 | Jun-ho Park | Gyeonggi-do, KR | 2 |
| 1,108 | Philippe Poizot | Treillieres, FR | 2 | 1,153 | Jae-Han Lee | Yongin-si, KR | 2 |
| 1,109 | Ji-Woon Lee | Yongin-si, KR | 2 | 1,154 | Eun-Cheol Lee | Yongin-si, KR | 2 |
| 1,110 | Ling Tang | Newton, MA (US) | 2 | 1,155 | Shoichi Tsujioka | Tokyo, JP | 2 |
| 1,111 | Jing Ye Shea | Groveland, MA (US) | 2 | 1,156 | Atsushi Sakuda | Ikeda, JP | 2 |
| 1,112 | Minyang Huang | Andover, MA (US) | 2 | 1,157 | Tomonari Takeuchi | Ikeda, JP | 2 |
| 1,113 | Jolyon Browne | San Jose, CA (US) | 2 | 1,158 | Hikari Sakaebe | Ikeda, JP | 2 |
| 1,114 | Masayoshi Suzuta | Tokyo, JP | 2 | 1,159 | Kuniaki Tatsumi | Ikeda, JP | 2 |
| 1,115 | Dae-Sik Kim | Yongin-si, KR | 2 | 1,160 | Masataka Okushita | Tokyo-to, JP | 2 |
| 1,116 | Saebom Ryu | Suwon-si, KR | 2 | 1,161 | Satoshi Wakasugi | Owariasahi, JP | 2 |
| 1,117 | Erik K Koep | Houston, TX (US) | 2 | 1,162 | DuckHyun Kim | Yongin-si, KR | 2 |
| 1,118 | Heeyoung Chu | Yongin-si, KR | 2 | 1,163 | TaeHyun Bae | Yongin-si, KR | 2 |
| 1,119 | Hana Yoo | Yongin-si, KR | 2 | 1,164 | Gun-Ho Kwak | Yongin-si, KR | 2 |
| 1,120 | Ae-Hui Goh | Yongin-si, KR | 2 | 1,165 | Kwo Young | Troy, MI (US) | 2 |
| 1,121 | Stefan Scherer | Griesheim, DE | 2 | 1,166 | Ki Deok Song | Suwon-si, KR | 2 |
| 1,122 | Cheng-Zhang Lu | Zhudong Township, TW | 2 | 1,167 | Sun Hyoung Lee | Iksan-si, KR | 2 |
| 1,123 | Thierry Guena | Longueuil, CA | 2 | 1,168 | Tae Jin Jo | Seongnam-si, KR | 2 |
| 1,124 | Xiangpeng Fang | Fujian, CN | 2 | 1,169 | Seul Ki Park | Jindo-gun, KR | 2 |
| 1,125 | Chengren Wu | Fujian, CN | 2 | 1,170 | Bjorn Haugseter | Skien, NO | 2 |

# INVENTORS

| # | Name | Location | Patents | # | Name | Location | Patents |
|---|---|---|---|---|---|---|---|
| 1,171 | Tom Henriksen | Skien, NO | 2 | 1,216 | Bum-Suk Lee | Daejeon, KR | 2 |
| 1,172 | Lars Ole Valøen | Porsgrunn, NO | 2 | 1,217 | Dong Gun Kim | Gunpo, KR | 2 |
| 1,173 | Akhilesh Kumar Srivastava | Skien, NO | 2 | 1,218 | Sa Heum Kim | Gwacheon, KR | 2 |
| 1,174 | Joon-Kil Son | Yongin-si, KR | 2 | 1,219 | Jeom Soo Kim | Hwaseong, KR | 2 |
| 1,175 | Ju-Hyeong Han | Yongin-si, KR | 2 | 1,220 | Sang-Woo Cho | Yongin-si, KR | 2 |
| 1,176 | Takashi Hattori | Yamaguchi, JP | 2 | 1,221 | Mamoru Nakashima | Yokohama, JP | 2 |
| 1,177 | Yasuo Matsumori | Yamaguchi, JP | 2 | 1,222 | Mikio Nakashima | Owariasahi, JP | 2 |
| 1,178 | Myung-Seop Kim | Yongin-si, KR | 2 | 1,223 | Iwao Fukuchi | Suwon-si, KR | 2 |
| 1,179 | Keisuke Nomura | Yokohama, JP | 2 | 1,224 | Byung-Hwa Kim | Busan, KR | 2 |
| 1,180 | Yasushi Tsuchida | Susono, JP | 2 | 1,225 | Masatsugu Kawakami | Gotenba, JP | 2 |
| 1,181 | Yukiyoshi Ueno | Gotenba, JP | 2 | 1,226 | Jae-Hun Kim | Yongin-si, KR | 2 |
| 1,182 | Helene Rouault | Le Versoud, FR | 2 | 1,227 | Sung-Man Lee | Chuncheon-si, KR | 2 |
| 1,183 | Dong-Jin Kim | Yongin-si, KR | 2 | 1,228 | Yoon-Soo Park | Chuncheon-si, KR | 2 |
| 1,184 | Jeon-Jin Choi | Yongin-si, KR | 2 | 1,229 | Yuri Matulevich | Yongin-si, KR | 2 |
| 1,185 | Gyu-Ran Jeon | Yongin-si, KR | 2 | 1,230 | Sun Sik Shin | Daejeon, KR | 2 |
| 1,186 | Zempachi Ogumi | Kyoto, JP | 2 | 1,231 | Sinyoung Park | Daejeon, KR | 2 |
| 1,187 | Takeshi Abe | Takatsuki, JP | 2 | 1,232 | Hyeyun Cha | Daejeon, KR | 2 |
| 1,188 | Won-il Park | Seoul, KR | 2 | 1,233 | Gueng Hyun Nam | Gwangju, KR | 2 |
| 1,189 | Jae-Hou Nah | Yongin, KR | 2 | 1,234 | Sang Min Jang | Gwangju, KR | 2 |
| 1,190 | Alexei Petrov | Walnut Creek, CA (US) | 2 | 1,235 | Seok Ho Kim | Gwangju, KR | 2 |
| 1,191 | Xiao-Liang Wang | Fremont, CA (US) | 2 | 1,236 | Dong Ho Baek | Gwangju, KR | 2 |
| 1,192 | Tung-Hsiu Shih | Cerrito, CA (US) | 2 | 1,237 | Min Ho Jang | Gwangju, KR | 2 |
| 1,193 | Victor Krasnov | Tarzana, CA (US) | 2 | 1,238 | Ki Tae Nam | Cambridge, MA (US) | 2 |
| 1,194 | Sung-man Lee | Chuncheon, KR | 2 | 1,239 | Chung-Yi Chiang | Cambridge, MA (US) | 2 |
| 1,195 | Jong-hyuk Lee | Namyangju-si, KR | 2 | 1,240 | Angela M Belcher | Lexington, MA (US) | 2 |
| 1,196 | Pierre Jost | Saint-Pierre de Mesage, FR | 2 | 1,241 | Chiaki Sotowa | Kanagawa, JP | 2 |
| 1,197 | Kyeong-Beom Cheong | Yongin-si, KR | 2 | 1,242 | Xueliang Sun | London, CA | 2 |
| 1,198 | Seon-Hong Lee | Yongin-si, KR | 2 | 1,243 | Xifei Li Li | London, CA | 2 |
| 1,199 | Ho-Gon You | Yongin-si, KR | 2 | 1,244 | Quanmin Yang | Mississauga, CA | 2 |
| 1,200 | Young-Jin Choi | Yongin-si, KR | 2 | 1,245 | Yoon-chul Son | Hwaseong-si, KR | 2 |
| 1,201 | Sang-Hyuck Ahn | Yongin-si, KR | 2 | 1,246 | Sung Soo Park | Yongin-si, KR | 2 |
| 1,202 | Won-sung Choi | Yongin-si, KR | 2 | 1,247 | Joon-Hyung Lee | Yongin-si, KR | 2 |
| 1,203 | Minsik Park | Hwaseong-si, KR | 2 | 1,248 | Su-Jin Kim | Yongin-si, KR | 2 |
| 1,204 | Gwi-ok Park | Suwon-si, KR | 2 | 1,249 | Yet-Ming Chiang | Framingham, MA (US) | 2 |
| 1,205 | Shigeto Okada | Fukuoka, JP | 2 | 1,250 | Jae-Bum Choo | Gyeonggi-do, KR | 2 |
| 1,206 | Su-Jin Yoon | Yongin-si, KR | 2 | 1,251 | Byung-Hee Han | Gyeonggi-do, KR | 2 |
| 1,207 | Tae-Ahn Kim | Yongin-si, KR | 2 | 1,252 | Khasanov Makhmut | Yongin-si, KR | 2 |
| 1,208 | Jiman Kim | Suwon-si, KR | 2 | 1,253 | William M Lamanna | Stillwater, MN (US) | 2 |
| 1,209 | Nobuhiro Nishiguchi | Tokyo, JP | 2 | 1,254 | Michael J Bulinski | Houlton, WI (US) | 2 |
| 1,210 | Nikolai Ignatyev | Duisburg, DE | 2 | 1,255 | Michael G Costello | Afton, MN (US) | 2 |
| 1,211 | Seok-Gyun Woo | Yongin-si, KR | 2 | 1,256 | Richard M Flynn | Mahtomedi, MN (US) | 2 |
| 1,212 | Sun-Hwa Yeon | Daejeon, KR | 2 | 1,257 | Yadong Wang | Hubei, CN | 2 |
| 1,213 | Kyu-Nam Jung | Daejeon, KR | 2 | 1,258 | Jing Li | Kensington, MD (US) | 2 |
| 1,214 | Sukeun Yoon | Daejeon, KR | 2 | 1,259 | Lee Moshurchak | Coquitlam, CA | 2 |
| 1,215 | Jung-Hoon Yang | Daejeon, KR | 2 | 1,260 | Seon-mi Yoon | Yongin-si, KR | 2 |

# INVENTORS

| # | Name | Location | Patents | # | Name | Location | Patents |
|---|---|---|---|---|---|---|---|
| 1,261 | Leif Christensen | Saint Paul, MN (US) | 2 | 1,306 | Won-Chull Han | Yongin-si, KR | 2 |
| 1,262 | Hye-Ran Lee | Yongin-si, KR | 2 | 1,307 | Keisuke Miyanohara | Takehara, JP | 2 |
| 1,263 | Yang-Soo Kim | Yongin, KR | 2 | 1,308 | Yasuhiro Ochi | Takehara, JP | 2 |
| 1,264 | Lise Daniel | Saint Marcellin, FR | 2 | 1,309 | Jiaxiang Wang | Chengdu, CN | 2 |
| 1,265 | Ji-Heon Ryu | Siheung-si, KR | 2 | 1,310 | Kaiping Wu | Chengdu, CN | 2 |
| 1,266 | Christian Neumann | Hungen, DE | 2 | 1,311 | Xiaobing You | Chengdu, CN | 2 |
| 1,267 | Sébastien Launois | Grenoble, FR | 2 | 1,312 | Pin Xu | Chengdu, CN | 2 |
| 1,268 | Alain Gourgue | Lincent, BE | 2 | 1,313 | Yu Wang | Chengdu, CN | 2 |
| 1,269 | Alain Germeau | Auderghem, BE | 2 | 1,314 | Yun Lu | Chengdu, CN | 2 |
| 1,270 | Isabelle Willems | Lesve, BE | 2 | 1,315 | Rulan Liao | Chengdu, CN | 2 |
| 1,271 | Fannie Alloin | Vizille, FR | 2 | 1,316 | Nitash Pervez Balsara | El Cerrito, CA (US) | 2 |
| 1,272 | In-Ho Jung | Yongin-si, KR | 2 | 1,317 | Gyeong-su Park | Suwon-si, KR | 2 |
| 1,273 | Jin-Hee Moon | Yongin-si, KR | 2 | 1,318 | Sung Heo | Suwon-si, KR | 2 |
| 1,274 | Chang-Keun Back | Yongin-si, KR | 2 | 1,319 | Dong-wook Kwak | Seongnam-si, KR | 2 |
| 1,275 | Seung-Hee Park | Yongin-si, KR | 2 | 1,320 | Hoon Young Cho | Seongnam-si, KR | 2 |
| 1,276 | Yong-Bum Lee | Yongin-si, KR | 2 | 1,321 | Kazuhiro Miyoshi | Ube, JP | 2 |
| 1,277 | Andrew M Beauchamp | Lancaster, CA (US) | 2 | 1,322 | Clay Kishiyama | Burbank, CA (US) | 2 |
| 1,278 | Jeong-Hee Lee | Yongin-si, KR | 2 | 1,323 | Mikito Nagata | Valencia, CA (US) | 2 |
| 1,279 | In-Taek Han | Yongin-si, KR | 2 | 1,324 | Hiroshi Nakahara | Santa Clarita, CA (US) | 2 |
| 1,280 | Ching-Yi Su | Yongkang, TW | 2 | 1,325 | Tiehua Piao | Valencia, CA (US) | 2 |
| 1,281 | Ya-Dong Li | Beijing, CN | 2 | 1,326 | Thomas J Dougherty | Waukesha, WI (US) | 2 |
| 1,282 | Xiao-Ling Xiao | Beijing, CN | 2 | 1,327 | Young-gyonn Ryu | Suwon-si, KR | 2 |
| 1,283 | Irina Profatilova | Suwon-si, KR | 2 | 1,328 | Michèle Van Thournout | Ellezelles, BE | 2 |
| 1,284 | Young-Hwan Kim | Yongin-si, KR | 2 | 1,329 | Laure Monconduit | Jacou, FR | 2 |
| 1,285 | Young-Jun Lee | Yongin-si, KR | 2 | 1,330 | Claire Villevieille | Marguerittes, FR | 2 |
| 1,286 | Bouziane Yebka | Apex, NC (US) | 2 | 1,331 | Jean-Claude Jumas | Jacou, FR | 2 |
| 1,287 | Joseph Anthony Holung | Wake Forest, NC (US) | 2 | 1,332 | Cécile Tessier | Bruges, FR | 2 |
| 1,288 | Tin-Lup Wong | Chapel Hill, NC (US) | 2 | 1,333 | Yongnam Ham | Ansan-si, KR | 2 |
| 1,289 | Tae-seup Song | Seoul, KR | 2 | 1,334 | Hiroshi Minami | Tokushima, JP | 2 |
| 1,290 | Ping-Yao Wu | Hsinchu County, TW | 2 | 1,335 | Katsunobu Sayama | Kobe, JP | 2 |
| 1,291 | Wen-Bing Chu | Hsinchu, TW | 2 | 1,336 | Kyoung-Han Ryu | Yongin-si, KR | 2 |
| 1,292 | Jen-Jeh Lee | Taipei, TW | 2 | 1,337 | Jaekook Kim | Naperville, IL (US) | 2 |
| 1,293 | Wenquan Lu | Darien, IL (US) | 2 | 1,338 | Do-yun Kim | Yongin-si, KR | 2 |
| 1,294 | Eun-Gi Shim | Seongnam-si, KR | 2 | 1,339 | Sang-hoon Song | Yongin-si, KR | 2 |
| 1,295 | Rachid Yazami | Singapore, SG | 2 | 1,340 | Sang-Woog Ryu | Yongin-si, KR | 2 |
| 1,296 | Donald L Foster | Laurel, MD (US) | 2 | 1,341 | Jaroslav Janik | Southbury, CT (US) | 2 |
| 1,297 | Hideaki Maeda | Osaka, JP | 2 | 1,342 | Kazuo Oki | Wakayama, JP | 2 |
| 1,298 | Hao-Xu Zhang | Beijing, CN | 2 | 1,343 | Masaya Ugaji | Osaka, JP | 2 |
| 1,299 | Vijaya Ramaraju Lakamraju | Longmeadow, MA (US) | 2 | 1,344 | Elena M Shembel | Coral Springs, FL (US) | 2 |
| 1,300 | John M Milton-Benoit | West Suffield, CT (US) | 2 | 1,345 | Lucile Gambut-Garel | Lyons, FR | 2 |
| 1,301 | Ganesan Nagasubramanian | Albuquerque, NM (US) | 2 | 1,346 | Catherine George | Saint Genis les Ollieres, FR | 2 |
| 1,302 | W Novis Smith | Philadelphia, PA (US) | 2 | 1,347 | Kirakoda S Nanjundaswamy | Ambler, PA (US) | 2 |
| 1,303 | Joel R McCloskey | Philadelphia, PA (US) | 2 | 1,348 | Takao Aradachi | Ibaraki, JP | 2 |
| 1,304 | Guorong Chen | Fairborn, OH (US) | 2 | 1,349 | Mariko Torimae | Kobe, JP | 2 |
| 1,305 | Weiwei Huang | Westlake, OH (US) | 2 | 1,350 | Atsushi Fukui | Tokushima, JP | 2 |

# INVENTORS

| # | Name | Location | Patents | # | Name | Location | Patents |
|---|---|---|---|---|---|---|---|
| 1,351 | Takashi Uemura | Itami, JP | 2 | 1,396 | Shizuo Ogura | Charlotte, NC (US) | 2 |
| 1,352 | Mitsuyasu Ogawa | Itami, JP | 2 | 1,397 | Hidehisa Mokudai | Kawasaki, JP | 2 |
| 1,353 | Young-su Chung | Yongin-si, KR | 2 | 1,398 | Makoto Murata | Tsurugashima, JP | 2 |
| 1,354 | Xi Shen | Shenzhen, CN | 2 | 1,399 | Barrie Linton Davies | Waxhaw, NC (US) | 2 |
| 1,355 | Chien-Chen Chen | Taipei County, TW | 2 | 1,400 | Arek Suszko | Lakewood, NJ (US) | 2 |
| 1,356 | Kaoru Inoue | Osaka, JP | 2 | 1,401 | Chun-hua Chen | Westmont, IL (US) | 2 |
| 1,357 | Pu Zhang | Ann Arbor, MI (US) | 2 | 1,402 | Masahiro Imanishi | Hyogo, JP | 2 |
| 1,358 | Suresh Mani | Ann Arbor, MI (US) | 2 | 1,403 | Andrew G Ritchie | Gosport, GB | 2 |
| 1,359 | Shih-Chieh Yin | Ann Arbor, MI (US) | 2 | 1,404 | Peter G Bowles | Gosport, GB | 2 |
| 1,360 | Brian Glomski | Ypsilanti, MI (US) | 2 | 1,405 | Alvin J Salkind | Princeton, NJ (US) | 2 |
| 1,361 | Hyo-Sug Lee | Yongin, KR | 2 | 1,406 | Tomoya Yamamoto | Nara, JP | 2 |
| 1,362 | In-sun Jung | Suwon-si, KR | 2 | 1,407 | Jie Shi | Acton, MA (US) | 2 |
| 1,363 | Jens Martin Paulsen | Ngatea, NZ | 2 | 1,408 | Churl Kyoung Lee | Daejeon, KR | 2 |
| 1,364 | Mun Ju Kim | Seoul, KR | 2 | 1,409 | Do Su Kim | Daejeon, KR | 2 |
| 1,365 | Jee Ho Kim | Daejeon, KR | 2 | 1,410 | Jung Soo Shon | Daejeon, KR | 2 |
| 1,366 | Ji Sang Yu | Daejeon, KR | 2 | 1,411 | Syuichi Izuchi | Osaka, JP | 2 |
| 1,367 | Michel Armand | Montréal, CA | 2 | 1,412 | Seijiro Ochiai | Osaka, JP | 2 |
| 1,368 | Michel Armand | Montreal, CA | 2 | 1,413 | Tokuo Suita | Yokkaichi, JP | 2 |
| 1,369 | Hiroyuki Hanawa | Hitachinaka, JP | 2 | 1,414 | John E Herrmann | Sugar Hill, GA (US) | 2 |
| 1,370 | Sebastien Martinet | Grenoble, FR | 2 | 1,415 | Sang-Won Lee | Cheonan, KR | 2 |
| 1,371 | Bo-Geum Choi | Suwon-si, KR | 2 | 1,416 | Do-young Seung | Seoul, KR | 2 |
| 1,372 | Helene Lignier | Saint-Laurent-du-Pont, FR | 2 | 1,417 | Erwin Holowick | Manitoba, CA | 2 |
| 1,373 | Luc Aymard | Amiens, FR | 2 | 1,418 | Robert L Turner | Woodbury, MN (US) | 2 |
| 1,374 | You-Mee Kim | Suwon-si, KR | 2 | 1,419 | Larry J Krause | Stillwater, MN (US) | 2 |
| 1,375 | Joon Sung Bae | Daejeon, KR | 2 | 1,420 | Ou Mao | New Milford, CT (US) | 2 |
| 1,376 | Hyun-Suk Jeong | Cheonan-si, KR | 2 | 1,421 | Martinus Jacobus Johannes Hack | Eindhoven, NL | 2 |
| 1,377 | Dong-Min Im | Gweohoon-si, KR | 2 | 1,422 | Yih-Song Jan | Taipei, TW | 2 |
| 1,378 | Peter Novak | Fort Lauderdale, FL (US) | 2 | 1,423 | Sheng-Feng Wu | Hsinchu Hsien, TW | 2 |
| 1,379 | Kenneth Greenslade | Mims, FL (US) | 2 | 1,424 | Juergen Besenhard | Graz, AT | 2 |
| 1,380 | Yong-nam Ham | Ansan-si, KR | 2 | 1,425 | Lars Henning Lie | Kornsjo, NO | 2 |
| 1,381 | Steve Buckingham | Decatur, GA (US) | 2 | 1,426 | Martin Winter | Seiersberg, AU | 2 |
| 1,382 | Sang-Mock Lee | Yongin-si, KR | 2 | 1,427 | Jay Nardi | Avon Lake, OH (US) | 2 |
| 1,383 | Yun-Suk Choi | Cheonan-si, KR | 2 | 1,428 | Frough K Shokoohi | Kirtland, OH (US) | 2 |
| 1,384 | Jong-ki Lee | Seoul, KR | 2 | 1,429 | Wanjun Fang | Mentor, OH (US) | 2 |
| 1,385 | Shiori Nakamizo | Amagasaki, JP | 2 | 1,430 | Meijie Zhang | Coquitlam, CA | 2 |
| 1,386 | Hyung-Gon Noh | Suwon, KR | 2 | 1,431 | Yu Wang | Coquitlam, CA | 2 |
| 1,387 | Kyoung-hee Lee | Cheonan, KR | 2 | 1,432 | Nobumichi Nishida | Tokushima, JP | 2 |
| 1,388 | Stephen W Moore | Fishers, IN (US) | 2 | 1,433 | Edmund O Schweitzer, Jr | Northbrook, IL (US) | 2 |
| 1,389 | Chang-Seob Kim | Cheonan, KR | 2 | 1,434 | Kazuaki Ado | Ikeda, JP | 2 |
| 1,390 | Toyoki Fujihara | Kobe, JP | 2 | 1,435 | Mitsuharu Tabuchi | Ikeda, JP | 2 |
| 1,391 | Masahiro Iyori | Hirakata, JP | 2 | 1,436 | Hiroyuki Kageyama | Ikeda, JP | 2 |
| 1,392 | Pankaj Arora | Chesterfield, VA (US) | 2 | 1,437 | K S Nanjundaswamy | Joplin, MO (US) | 2 |
| 1,393 | Ho-sung Kim | Yongin, KR | 2 | 1,438 | Jaekook Kim | Austin, TX (US) | 2 |
| 1,394 | Hee-young Sun | Yongin, KR | 2 | 1,439 | Junichi Maruta | Kyoto, JP | 2 |
| 1,395 | Arthur J Kahaian | Chicago, IL (US) | 2 | 1,440 | Mikio Takano | Kyoto, JP | 2 |

# INVENTORS

| # | Name | Location | Patents | # | Name | Location | Patents |
|---|---|---|---|---|---|---|---|
| 1,441 | Allen J Lakosky | Virginia, MN (US) | 2 | 1,486 | Toshiro Hirai | Mito, JP | 2 |
| 1,442 | Kouichi Satou | Itami, JP | 2 | 1,487 | Katsuki Miyauchi | Hino, JP | 2 |
| 1,443 | Kazunari Ookita | Moriguchi, JP | 2 | 1,488 | Yukio Ito | Sayama, JP | 2 |
| 1,444 | Yoshito Chikano | Katano, JP | 2 | 1,489 | Keiichi Kanehori | Sayama, JP | 2 |
| 1,445 | Mitsuzou Nogami | Itano-gun, JP | 2 | 1,490 | Fumiyoshi Kirino | Sugunami, JP | 2 |
| 1,446 | Ten-Chin Wen | Tainan, TW | 2 | 1,491 | Tetsuichi Kudo | Setagaya, JP | 2 |
| 1,447 | Tsung-Tien Cheng | Kaohsiung, TW | 2 | 1,492 | James A Stiles | Vancouver, CA | 2 |
| 1,448 | Yves Choquette | Ste-Julie, CA | 2 | 1,493 | Klaus Brandt | Vancouver, CA | 2 |
| 1,449 | Martin Simoneau | Montreal, CA | 2 | 1,494 | Richard C Saunders | Simi, CA (US) | 2 |
| 1,450 | Rene Gagnon | Boucherville, CA | 2 | 1,495 | Seyoung Oh | Yongin-si, KR | 1 |
| 1,451 | Andre Belanger | Ste-Julie, CA | 2 | 1,496 | Tobias Elwert | Clausthal-Zellerfeld, DE | 1 |
| 1,452 | Brian Michael Way | Coquitlam, CA | 2 | 1,497 | Lisa Brückner | Clausthal-Zellerfeld, DE | 1 |
| 1,453 | Shinya Mishina | Kawasaki, JP | 2 | 1,498 | Fabrizio Nanni | Sasso Marconi, IT | 1 |
| 1,454 | Boris Tsenter | Roswell, GA (US) | 2 | 1,499 | Jungmin Lee | Yongin-si, KR | 1 |
| 1,455 | Paul Beard | Milpitas, CA (US) | 2 | 1,500 | Ilkyong Kwon | Yongin-si, KR | 1 |
| 1,456 | Mark Capparella | Milford, MA (US) | 2 | 1,501 | Myungseop Kim | Yongin-si, KR | 1 |
| 1,457 | William L Bowden | Nashua, NH (US) | 2 | 1,502 | Yuhyun Kim | Yongin-si, KR | 1 |
| 1,458 | Radek Fooksa | Needham, MA (US) | 2 | 1,503 | Jing Gao | Rochester, MI (US) | 1 |
| 1,459 | Ji-Guang Zhang | Golden, CO (US) | 2 | 1,504 | Minho Cho | Yongin-si, KR | 1 |
| 1,460 | David K Benson | Golden, CO (US) | 2 | 1,505 | Hana Kim | Yongin-si, KR | 1 |
| 1,461 | Masatsugu Shioda | Fukushima, JP | 2 | 1,506 | Myungkook Park | Yongin-si, KR | 1 |
| 1,462 | Koichi Miyoda | Fukushima, JP | 2 | 1,507 | Byungmin Lee | Yongin-si, KR | 1 |
| 1,463 | Kazuhiro Araki | Wako, JP | 2 | 1,508 | Jungsue Jang | Yongin-si, KR | 1 |
| 1,464 | Shigeto Okada | Mito, JP | 2 | 1,509 | Basile Commarieu | Paris, FR | 1 |
| 1,465 | Yoji Sakurai | Mito, JP | 2 | 1,510 | Pierre-Michel Jalbert | Montréal, CA | 1 |
| 1,466 | Jeffrey R Dahn | British Columbia, CA | 2 | 1,511 | Gilles Lajoie | Varennes, CA | 1 |
| 1,467 | Gene Berghoff | Eden Prairie, MN (US) | 2 | 1,512 | Catherine Gagnon | Sainte-Julie, CA | 1 |
| 1,468 | Scott Latterell | Minneapolis both of, MN (US) | 2 | 1,513 | Michel Armand | Paris, FR | 1 |
| 1,469 | David H Shen | Arcadia, CA (US) | 2 | 1,514 | Jacqueline Leslie Brown | Lindley, NY (US) | 1 |
| 1,470 | Subbarao Surampudi | Glendora, CA (US) | 2 | 1,515 | Brent Daniel Conway | Lindley, NY (US) | 1 |
| 1,471 | Chen-Kuo Huang | South Pasadena, CA (US) | 2 | 1,516 | Aaron David DeGeorge | Painted Post, NY (US) | 1 |
| 1,472 | Dale R Shackle | Morgan Hill, CA (US) | 2 | 1,517 | Yinghong Chen | Painted Post, NY (US) | 1 |
| 1,473 | Alan I Attia | Needham, MA (US) | 2 | 1,518 | Jason Allen Brown | Elmira, NY (US) | 1 |
| 1,474 | Michel Duval | Montreal, CA | 2 | 1,519 | Mingkui Tong | Zhejiang, CN | 1 |
| 1,475 | Nobuyuki Kuroda | all Kanagawa, JP | 2 | 1,520 | Guozhen Wei | Xiamen, CN | 1 |
| 1,476 | Kuzhikalail M Abraham | Needham, MA (US) | 2 | 1,521 | Yaobin Ye | Xiamen, CN | 1 |
| 1,477 | Heinz P Fritz | Garching, DE | 2 | 1,522 | Jingren Wang | Xiamen, CN | 1 |
| 1,478 | Randall D Watkins | Albuquerque, NM (US) | 2 | 1,523 | Nengjian Xie | Xiamen, CN | 1 |
| 1,479 | Pamela P Keister | Clarence, NY (US) | 2 | 1,524 | Pengfeng Wang | Xiamen, CN | 1 |
| 1,480 | Ralph T Mead | Kenmore, NY (US) | 2 | 1,525 | Lin Lin | Xiamen, CN | 1 |
| 1,481 | Steven J Ebel | Tonawanda, NY (US) | 2 | 1,526 | Junfan Tong | Beijing, CN | 1 |
| 1,482 | Michael A Zelinsky | Lancaster, NY (US) | 2 | 1,527 | Yanbin Chen | Beijing, CN | 1 |
| 1,483 | John M Greenwood | Williamsville, NY (US) | 2 | 1,528 | Yuqiang Jin | Beijing, CN | 1 |
| 1,484 | Henry F Hope | Willow Grove, PA (US) | 2 | 1,529 | Wenbo Wang | Beijing, CN | 1 |
| 1,485 | Stephen F Hope | Willow Grove, PA (US) | 2 | 1,530 | Xuequan Zhang | Beijing, CN | 1 |

# INVENTORS

| # | Name | Location | Patents | # | Name | Location | Patents |
|---|---|---|---|---|---|---|---|
| 1,531 | Yafei Liu | Beijing, CN | 1 | 1,576 | Xiaohong Wu | Harbin, CN | 1 |
| 1,532 | Yun Lei | Shenzhen, CN | 1 | 1,577 | Songtao Lu | Harbin, CN | 1 |
| 1,533 | Donghua Chen | Liyang, CN | 1 | 1,578 | Wei Qin | Harbin, CN | 1 |
| 1,534 | Zhenhua Fan | Liyang, CN | 1 | 1,579 | Xin Jia | Harbin, CN | 1 |
| 1,535 | Tiancai Ma | Shanghai, CN | 1 | 1,580 | Yuan Yao | Harbin, CN | 1 |
| 1,536 | Yanbo Yang | Shanghai, CN | 1 | 1,581 | Yang Li | Harbin, CN | 1 |
| 1,537 | Kaihang Song | Shanghai, CN | 1 | 1,582 | Zhi Liu | Ningde, CN | 1 |
| 1,538 | Weikang Lin | Shanghai, CN | 1 | 1,583 | Dongyang Shi | Ningde, CN | 1 |
| 1,539 | Naiyuan Yao | Shanghai, CN | 1 | 1,584 | Haneol Kang | Yongin-si, KR | 1 |
| 1,540 | Jui-Min Tsai | Tainan, TW | 1 | 1,585 | Hoon Kim | Yongin-si, KR | 1 |
| 1,541 | Tsung-Yi Tsai | Tainan, TW | 1 | 1,586 | Moon Jeong Park | Yongin-si, KR | 1 |
| 1,542 | Kun-Miao Tsai | Tainan, TW | 1 | 1,587 | Hyunseok Kim | Suwon-si, KR | 1 |
| 1,543 | Wei-Dung Chang | Tainan, TW | 1 | 1,588 | Richard M DeKeuster | Racine, WI (US) | 1 |
| 1,544 | Barry O'Dell | Fort Worth, TX (US) | 1 | 1,589 | Robert J Mack | Milwaukee, WI (US) | 1 |
| 1,545 | Ronald Walkup | Palatine, IL (US) | 1 | 1,590 | Stephen D Cash | Cary, IL (US) | 1 |
| 1,546 | Mohammad Asadi | Chicago, IL (US) | 1 | 1,591 | Anhua Zheng | Guangdong, CN | 1 |
| 1,547 | Alireza Kondori | Chicago, IL (US) | 1 | 1,592 | Dexin Yu | Guangdong, CN | 1 |
| 1,548 | Mohammadreza Esmaeilirad | Chicago, IL (US) | 1 | 1,593 | Yongjun Yang | Guangdong, CN | 1 |
| 1,549 | Jinmao Jiang | Jiangsu, CN | 1 | 1,594 | Xinjie Zhang | Winchester, MA (US) | 1 |
| 1,550 | Jian Tan | Jiangsu, CN | 1 | 1,595 | Kuiyang Jiang | Winchester, MA (US) | 1 |
| 1,551 | Jihyun Seog | Yongin-si, KR | 1 | 1,596 | Arthur Dupuy | Compiègne, FR | 1 |
| 1,552 | Yuntaek Oh | Yongin-si, KR | 1 | 1,597 | Abderraouf Boucherif | Sherbrooke, CA | 1 |
| 1,553 | Jungwoo Son | Yongin-si, KR | 1 | 1,598 | Richard Ares | Sherbrooke, CA | 1 |
| 1,554 | Lianxiang Feng | Dezhou, CN | 1 | 1,599 | Peichao Ning | Guangdong, CN | 1 |
| 1,555 | Feng Hai | Dezhou, CN | 1 | 1,600 | You Zhou | Guangdong, CN | 1 |
| 1,556 | Mingtao Li | Dezhou, CN | 1 | 1,601 | Qiang Li | Guangdong, CN | 1 |
| 1,557 | Qinwei Zhou | Dezhou, CN | 1 | 1,602 | Dingshan Ruan | Guangdong, CN | 1 |
| 1,558 | Shuguang Qu | Dezhou, CN | 1 | 1,603 | Roland Trassl | Giessen, DE | 1 |
| 1,559 | Shunping Wang | Dezhou, CN | 1 | 1,604 | Pradeep Tolakanahalli Nagabhushanrao | Bengaluru, IN | 1 |
| 1,560 | Michael B Lane | Charlotte, NC (US) | 1 | 1,605 | Nagaraju Ingurthi | Bengaluru, IN | 1 |
| 1,561 | Insik Jeon | Ithaca, NY (US) | 1 | 1,606 | Pavan Kumar Gudipalli | Bengaluru, IN | 1 |
| 1,562 | Edward Kruger | Charlotte, NC (US) | 1 | 1,607 | Anurag Arjundas Jivanani | Groton, MA (US) | 1 |
| 1,563 | Xiang Yu | Indian Land, SC (US) | 1 | 1,608 | Himamshu V Prasad | Tewksbury, MA (US) | 1 |
| 1,564 | Junqing Ma | Charlotte, NC (US) | 1 | 1,609 | Jieming Zhao | Hunan, CN | 1 |
| 1,565 | Daniel R Alexander | Matthews, NC (US) | 1 | 1,610 | Qinxue Gong | Hunan, CN | 1 |
| 1,566 | Kitae Park | Seoul, KR | 1 | 1,611 | Junggyu Nam | Yongin-si, KR | 1 |
| 1,567 | Haijun Yu | Guangdong, CN | 1 | 1,612 | Jungyup Yang | Yongin-si, KR | 1 |
| 1,568 | Yingsheng Zhong | Guangdong, CN | 1 | 1,613 | Daun Han | Yongin-si, KR | 1 |
| 1,569 | Yinghao Xie | Guangdong, CN | 1 | 1,614 | Jandee Kim | Yongin-si, KR | 1 |
| 1,570 | Xuemei Zhang | Guangdong, CN | 1 | 1,615 | Haibing Cai | Changsha, CN | 1 |
| 1,571 | Qinglong Gao | Heilongjiang, CN | 1 | 1,616 | Kyoseon Koo | Yongin-si, KR | 1 |
| 1,572 | Rae Sung Kim | Hwaseong-si, KR | 1 | 1,617 | Esul Jung | Yongin-si, KR | 1 |
| 1,573 | Mike Zdilla | Wallingford, PA (US) | 1 | 1,618 | Xiaowei Li | Philadelphia, PA (US) | 1 |
| 1,574 | Stephanie Wunder | Chadds Ford, PA (US) | 1 | 1,619 | Yongwei Zheng | Philadelphia, PA (US) | 1 |
| 1,575 | Chen Ling | Troy, MI (US) | 1 | 1,620 | Christopher Li | Bala Cynwyd, PA (US) | 1 |

# INVENTORS

| # | Name | Location | Patents | # | Name | Location | Patents |
|---|---|---|---|---|---|---|---|
| 1,621 | James R Salvador | East Lansing, MI (US) | 1 | 1,666 | Jun Hu | Ningde, CN | 1 |
| 1,622 | Nan-Hung Yeh | Taipei, TW | 1 | 1,667 | Tushar Kanti Sen | Al-Ahsa, SA | 1 |
| 1,623 | Laurien Merinda | Taipei, TW | 1 | 1,668 | Chi Phan | Al-Ahsa, SA | 1 |
| 1,624 | Xing-Chun Wang | Taipei, TW | 1 | 1,669 | Philippe Bernardo | Quimper, FR | 1 |
| 1,625 | Suk Jun Kim | Cheonan-si, KR | 1 | 1,670 | Mathieu Dru | Briec, FR | 1 |
| 1,626 | Jun Ho Lee | Osan-si, KR | 1 | 1,671 | Dongsu Ko | Seoul, KR | 1 |
| 1,627 | Yukinobu Yura | Nagoya, JP | 1 | 1,672 | Kyoungmin Min | Suwon-si, KR | 1 |
| 1,628 | Toshihiro Yoshida | Nagoya, JP | 1 | 1,673 | Chun-Chen Yang | New Taipei, TW | 1 |
| 1,629 | Mingrui Liu | Dayton, OH (US) | 1 | 1,674 | Yi-Shiuan Wu | New Taipei, TW | 1 |
| 1,630 | Ryo Oe | Hachioji, JP | 1 | 1,675 | Kumlachew Zelalem Walle | New Taipei, TW | 1 |
| 1,631 | Jian Yang | Zhejiang, CN | 1 | 1,676 | Guangxu Zhou | Shandong, CN | 1 |
| 1,632 | Jianhua Lv | Zhejiang, CN | 1 | 1,677 | Dongdong Hou | Shandong, CN | 1 |
| 1,633 | Guode Ying | Zhejiang, CN | 1 | 1,678 | Mengmei Zhu | Shandong, CN | 1 |
| 1,634 | Zuofu Jiang | Zhejiang, CN | 1 | 1,679 | Ningran Song | Shandong, CN | 1 |
| 1,635 | Xin Wang | Zhejiang, CN | 1 | 1,680 | Yuan Liu | Shandong, CN | 1 |
| 1,636 | Haohua Wu | Zhejiang, CN | 1 | 1,681 | Jia Gao | Shandong, CN | 1 |
| 1,637 | Yongling Li | Zhejiang, CN | 1 | 1,682 | Yongyun Mu | Shandong, CN | 1 |
| 1,638 | Jianjun Zhu | Zhejiang, CN | 1 | 1,683 | Kun Guo | Shandong, CN | 1 |
| 1,639 | Daojian Hong | Zhejiang, CN | 1 | 1,684 | Anguang Zhao | Jiangxi, CN | 1 |
| 1,640 | Haili Liang | Zhejiang, CN | 1 | 1,685 | Fengshu Yue | Jiangxi, CN | 1 |
| 1,641 | Huiqi Chen | Zhejiang, CN | 1 | 1,686 | Jun Yao | Jiangxi, CN | 1 |
| 1,642 | Qingxi Cai | Zhejiang, CN | 1 | 1,687 | Jinhyuk Lee | Walnut Creek, CA (US) | 1 |
| 1,643 | Baorong Liu | Zhejiang, CN | 1 | 1,688 | Dong-Hwa Seo | Cambridge, MA (US) | 1 |
| 1,644 | Yiting Hu | Zhejiang, CN | 1 | 1,689 | Lin Chen | Chicago, IL (US) | 1 |
| 1,645 | Xingbai Wang | Zhejiang, CN | 1 | 1,690 | David Peralta | Grenoble, FR | 1 |
| 1,646 | Chuhang Xu | Zhejiang, CN | 1 | 1,691 | Carole Bourbon | Saint Michel de Saint-Geoirs, FR | 1 |
| 1,647 | Lijun Zhu | Zhejiang, CN | 1 | 1,692 | Jean-François Colin | Meylan, FR | 1 |
| 1,648 | Qiang Gao | Zhejiang, CN | 1 | 1,693 | Sangjae Park | Yongin-si, KR | 1 |
| 1,649 | Xinghui Jiang | Zhejiang, CN | 1 | 1,694 | Yongbeom Lee | Yongin-si, KR | 1 |
| 1,650 | Xiaofei Wang | Zhejiang, CN | 1 | 1,695 | Guanglei Cui | Shandong, CN | 1 |
| 1,651 | Yin Lin | Zhejiang, CN | 1 | 1,696 | Huanrui Zhang | Shandong, CN | 1 |
| 1,652 | Xun Ma | Zhejiang, CN | 1 | 1,697 | Peng Wang | Shandong, CN | 1 |
| 1,653 | Nicole Ellison | Madison Heights, MI (US) | 1 | 1,698 | Hongxia Xu | Shandong, CN | 1 |
| 1,654 | Shang-En Liu | Taoyuan, TW | 1 | 1,699 | Rongxiang Hu | Shandong, CN | 1 |
| 1,655 | Tien-Hsiang Hsueh | Taoyuan, TW | 1 | 1,700 | Albert L Lipson | Oak Park, IL (US) | 1 |
| 1,656 | Min-Chuan Wang | Taoyuan, TW | 1 | 1,701 | Daehyun Hong | Suwon-si, KR | 1 |
| 1,657 | Ali Sadeghi | Atherton, CA (US) | 1 | 1,702 | Taejoon Park | Suwon-si, KR | 1 |
| 1,658 | Yuri Vorobyev | San Carlos, CA (US) | 1 | 1,703 | Imhyuck Bae | Suwon-si, KR | 1 |
| 1,659 | Gene Kristul | San Francisco, CA (US) | 1 | 1,704 | Suna Lee | Suwon-si, KR | 1 |
| 1,660 | Leonid Velikov | San Carlos, CA (US) | 1 | 1,705 | Ying Shao | Ningde, CN | 1 |
| 1,661 | Yitai Guo | Ningde, CN | 1 | 1,706 | Li Xiang | Ningde, CN | 1 |
| 1,662 | Zhihua Wen | Ningde, CN | 1 | 1,707 | Bin Wang | Ningde, CN | 1 |
| 1,663 | Keqiang Li | Ningde, CN | 1 | 1,708 | Qiaoshu Hu | Ningde, CN | 1 |
| 1,664 | Cong Zhang | Ningde, CN | 1 | 1,709 | Jin Liu | Novi, MI (US) | 1 |
| 1,665 | Yunru Shi | Ningde, CN | 1 | 1,710 | Jiazhi Hu | Troy, MI (US) | 1 |

# INVENTORS

| # | Name | Location | Patents | # | Name | Location | Patents |
|---|---|---|---|---|---|---|---|
| 1,711 | Raffaello Ardanese | Bloomfield Hills, MI (US) | 1 | 1,756 | Shuli Lu | Shenzhen, CN | 1 |
| 1,712 | Ryan C Sekol | Grosse Pointe Woods, MI (US) | 1 | 1,757 | Yajun Li | Shenzhen, CN | 1 |
| 1,713 | Lei Wang | Rochester Hills, MI (US) | 1 | 1,758 | Qingyi Wang | Shenzhen, CN | 1 |
| 1,714 | Michael P Balogh | Novi, MI (US) | 1 | 1,759 | Jin Zhang | Shenzhen, CN | 1 |
| 1,715 | Yuki Fujita | Nagoya, JP | 1 | 1,760 | Yangqing Luo | Shenzhen, CN | 1 |
| 1,716 | Chiori Suzuki | Nagoya, JP | 1 | 1,761 | Yongchang Tang | Shenzhen, CN | 1 |
| 1,717 | Claudiu B Bucur | Sunrise, FL (US) | 1 | 1,762 | Bainong Zhu | Shenzhen, CN | 1 |
| 1,718 | Chi-Cheng Hsiao | Taipei, TW | 1 | 1,763 | Fazuan Le | Shenzhen, CN | 1 |
| 1,719 | Yi-Kuan Liao | Taipei, TW | 1 | 1,764 | Thomas Hackner | Greding, DE | 1 |
| 1,720 | Michael Albert Alkier | Liberty Hill, TX (US) | 1 | 1,765 | Pilsang Yun | Yongin-si, KR | 1 |
| 1,721 | Taehee Kwak | Yongin-si, KR | 1 | 1,766 | Hyunbeom Kim | Yongin-si, KR | 1 |
| 1,722 | Jeuk Ha | Yongin-si, KR | 1 | 1,767 | Sangin Park | Yongin-si, KR | 1 |
| 1,723 | Eunok Oh | Yongin-si, KR | 1 | 1,768 | Rohan Gokhale | Northville, MI (US) | 1 |
| 1,724 | Nikhilendra Singh | Ann Arbor, MI (US) | 1 | 1,769 | Jun-mo Kang | Ann Arbor, MI (US) | 1 |
| 1,725 | Rana Mohtadi | Northville, MI (US) | 1 | 1,770 | Insu Chang | Troy, MI (US) | 1 |
| 1,726 | Oscar Tutusaus | Ann Arbor, MI (US) | 1 | 1,771 | Wu Xu | Richland, WA (US) | 1 |
| 1,727 | Pasqualino Alongi | Modena, IT | 1 | 1,772 | Ji-Guang Zhang | Richland, WA (US) | 1 |
| 1,728 | Massimiliano Sale | Sasso Marconi, IT | 1 | 1,773 | Hao Jia | Richland, WA (US) | 1 |
| 1,729 | Atsushi Ohma | Kanagawa, JP | 1 | 1,774 | Xianhui Zhang | Richland, WA (US) | 1 |
| 1,730 | Xin Yang | Palo Alto, CA (US) | 1 | 1,775 | Xia Cao | Richland, WA (US) | 1 |
| 1,731 | Najamuddin Mirza Baig | San Jose, CA (US) | 1 | 1,776 | Sujong Chae | Richland, WA (US) | 1 |
| 1,732 | Mohit Rakesh Mehta | Santa Clara, CA (US) | 1 | 1,777 | Ran Yi | Richland, WA (US) | 1 |
| 1,733 | Anthony Keiran Burrell | Golden, CO (US) | 1 | 1,778 | Qiuyan Li | Richland, WA (US) | 1 |
| 1,734 | Ji Woo Ahn | Yongin-si, KR | 1 | 1,779 | Won-Jin Kwak | Richland, WA (US) | 1 |
| 1,735 | Dongwoo Kim | Yongin-si, KR | 1 | 1,780 | Xiaolin Li | Richland, WA (US) | 1 |
| 1,736 | Bumjin Chang | Yongin-si, KR | 1 | 1,781 | Hoyong An | Yongin-si, KR | 1 |
| 1,737 | Ilyoung Choi | Yongin-si, KR | 1 | 1,782 | Won Kyung Shin | Daejeon, KR | 1 |
| 1,738 | Hao Jiang | Guangdong, CN | 1 | 1,783 | Kyoung Ho Ahn | Daejeon, KR | 1 |
| 1,739 | Feng Lin | Guangdong, CN | 1 | 1,784 | Jeong Woo Oh | Daejeon, KR | 1 |
| 1,740 | Won Seok Chang | Mountain View, CA (US) | 1 | 1,785 | Min Jung Kim | Daejeon, KR | 1 |
| 1,741 | Zachary Hood | Cambridge, MA (US) | 1 | 1,786 | Yi Huang | Shenzhen, CN | 1 |
| 1,742 | Jennifer Rupp | Cambridge, MA (US) | 1 | 1,787 | Xiangjun Zhou | Shenzhen, CN | 1 |
| 1,743 | Harald Oosterhof | Westerlo, BE | 1 | 1,788 | Yi Xie | Shenzhen, CN | 1 |
| 1,744 | Jean Scoyer | Herentals, BE | 1 | 1,789 | Serena Carella | Parabiago, IT | 1 |
| 1,745 | Lennart Scheunis | Olen, BE | 1 | 1,790 | Alessandro Ghielmi | Frankfurt am Main, DE | 1 |
| 1,746 | Bart Klaasen | Olen, BE | 1 | 1,791 | Mirko Mazzola | Milan, IT | 1 |
| 1,747 | Willem Callebaut | Hoboken, BE | 1 | 1,792 | Elena Molena | Bollate, IT | 1 |
| 1,748 | Kaihua Xu | Guangdong, CN | 1 | 1,793 | Jianxin Xie | Xiamen, CN | 1 |
| 1,749 | Zhenkang Jiang | Guangdong, CN | 1 | 1,794 | Mingshu Xu | Xiamen, CN | 1 |
| 1,750 | Qinxiang Li | Hubei, CN | 1 | 1,795 | Tian Lan | Xiamen, CN | 1 |
| 1,751 | Kun Zhang | Hubei, CN | 1 | 1,796 | Narae Kim | Yongin-si, KR | 1 |
| 1,752 | Wenjie Wang | Hubei, CN | 1 | 1,797 | Sunil Park | Yongin-si, KR | 1 |
| 1,753 | Jun Wang | Hubei, CN | 1 | 1,798 | Yuguo Guo | Beijing, CN | 1 |
| 1,754 | Shihong Wen | Hubei, CN | 1 | 1,799 | Linbo Huang | Beijing, CN | 1 |
| 1,755 | Mei Cai | Bloomfield Hills, MI (US) | 1 | 1,800 | Quan Xu | Beijing, CN | 1 |

# INVENTORS

| # | Name | Location | Patents | # | Name | Location | Patents |
|---|---|---|---|---|---|---|---|
| 1,801 | Yaxia Yin | Beijing, CN | 1 | 1,846 | Jee Hwan Jeon | Seoul, KR | 1 |
| 1,802 | Fengshu Yue | Beijing, CN | 1 | 1,847 | Hyun Jong Oh | Seoul, KR | 1 |
| 1,803 | Jun Yao | Beijing, CN | 1 | 1,848 | Sung Jin Park | Seoul, KR | 1 |
| 1,804 | Anguang Zhao | Beijing, CN | 1 | 1,849 | Min Gyu Park | Daejeon, KR | 1 |
| 1,805 | Jiasheng Wu | Reading, MA (US) | 1 | 1,850 | Jin He | Chengdu, CN | 1 |
| 1,806 | Jaeho Choi | Yongin-si, KR | 1 | 1,851 | Haidong Guo | Chengdu, CN | 1 |
| 1,807 | Jongmin Won | Yongin-si, KR | 1 | 1,852 | Han Zhang | Chengdu, CN | 1 |
| 1,808 | Dae-Hyeok Lee | Yongin-si, KR | 1 | 1,853 | Junjun Liu | Chengdu, CN | 1 |
| 1,809 | Jaemyung Kim | Yongin-si, KR | 1 | 1,854 | Lun Zhou | Chengdu, CN | 1 |
| 1,810 | Guodong Zhan | Dhahran, SA | 1 | 1,855 | Zejiang Zhang | Chengdu, CN | 1 |
| 1,811 | Timothy E Moellendick | Dhahran, SA | 1 | 1,856 | Yousheng Wang | Guangdong, CN | 1 |
| 1,812 | Abdulwahab S Aljohar | Dhahran, SA | 1 | 1,857 | Chaoyang Ding | Guangdong, CN | 1 |
| 1,813 | Chinthaka Pasan Gooneratne | Dhahran, SA | 1 | 1,858 | Kun Ding | Guangdong, CN | 1 |
| 1,814 | Jianhui Xu | Dhahran, SA | 1 | 1,859 | Huijun Yuan | Guangdong, CN | 1 |
| 1,815 | Renjie Chen | Beijing, CN | 1 | 1,860 | Guomin Zhang | Guangdong, CN | 1 |
| 1,816 | Nan Chen | Beijing, CN | 1 | 1,861 | Xiang Long | Guangdong, CN | 1 |
| 1,817 | Feng Wu | Beijing, CN | 1 | 1,862 | Haitao Dang | Guangdong, CN | 1 |
| 1,818 | Lili Wang | Beijing, CN | 1 | 1,863 | Aijun Jian | Guangdong, CN | 1 |
| 1,819 | Yujuan Dai | Beijing, CN | 1 | 1,864 | Xiaolin Wang | Guangdong, CN | 1 |
| 1,820 | Lionel Picard | Grenoble, FR | 1 | 1,865 | Yin Zhang | Guangdong, CN | 1 |
| 1,821 | Laurent Bernard | Grenoble, FR | 1 | 1,866 | Gleb Yushin | Atlanta, GA (US) | 1 |
| 1,822 | Sandrine Lyonnard | Grenoble, FR | 1 | 1,867 | Laura Gerber | Oakland, CA (US) | 1 |
| 1,823 | Hakima Mendil | Grenoble, FR | 1 | 1,868 | Matthew Clark | Oakland, CA (US) | 1 |
| 1,824 | Melvin Arias | Santo Domingo, DO | 1 | 1,869 | Dylan Francis Vandemark | Hiram, ME (US) | 1 |
| 1,825 | Lorenzo Caputi | Cosenza, IT | 1 | 1,870 | Matthew Lloyd Vandemark | Hiram, ME (US) | 1 |
| 1,826 | Isaias Martinez | Santo Domingo Oeste, DO | 1 | 1,871 | Yongbo Li | Zhejiang, CN | 1 |
| 1,827 | Parra Santana | Santo Domingo, DO | 1 | 1,872 | Hyunki Park | Yongin-si, KR | 1 |
| 1,828 | Noel Upia | Santo Domingo, DO | 1 | 1,873 | Uisong Do | Yongin-si, KR | 1 |
| 1,829 | Myeong Gyun Nam | Yongin-si, KR | 1 | 1,874 | Sangeun Park | Yongin-si, KR | 1 |
| 1,830 | Pil Jin Yoo | Yongin-si, KR | 1 | 1,875 | Sungsu Kim | Yongin-si, KR | 1 |
| 1,831 | Gwan Hyun Choi | Yongin-si, KR | 1 | 1,876 | Jeong In Yu | Daejeon, KR | 1 |
| 1,832 | Yungchiang Lee | Beijing, CN | 1 | 1,877 | Akihiro Kushima | Orlando, FL (US) | 1 |
| 1,833 | Changhong Ko | Suwon-si, KR | 1 | 1,878 | Supriya Koul | Orlando, FL (US) | 1 |
| 1,834 | YangSeob Kim | Suwon-si, KR | 1 | 1,879 | Kun Liang | Orlando, FL (US) | 1 |
| 1,835 | Guolong Shi | Hubei, CN | 1 | 1,880 | Yang Yang | Orlando, FL (US) | 1 |
| 1,836 | Chaolong Zhang | Hubei, CN | 1 | 1,881 | Yuan-Li Chiang | Taoyuan, TW | 1 |
| 1,837 | Alexander Epstein | Berkeley, CA (US) | 1 | 1,882 | Ying Ye | Chino Hills, CA (US) | 1 |
| 1,838 | Liangbing Hu | Rockville, MD (US) | 1 | 1,883 | Guoxing Zhong | Jiangsu, CN | 1 |
| 1,839 | Eric D Wachsman | Fulton, MD (US) | 1 | 1,884 | Ou Mao | Jiangsu, CN | 1 |
| 1,840 | Boyang Liu | Columbia, MD (US) | 1 | 1,885 | Meijie Zhang | Jiangsu, CN | 1 |
| 1,841 | Lei Zhang | Berwyn Heights, MD (US) | 1 | 1,886 | Tao Zheng | Jiangsu, CN | 1 |
| 1,842 | Shaomao Xu | College Park, MD (US) | 1 | 1,887 | Renaud Bouchet | La Tronche, FR | 1 |
| 1,843 | Dennis McOwen | Washington, DC (US) | 1 | 1,888 | Julien Rolland | Lille, FR | 1 |
| 1,844 | Chunpeng Yang | Berwyn Heights, MD (US) | 1 | 1,889 | Yang Shao-Horn | Newton, MA (US) | 1 |
| 1,845 | Seung Won Kang | Anyang-si, KR | 1 | 1,890 | Jeremiah Johnson | Boston, MA (US) | 1 |

# INVENTORS

| # | Name | Location | Patents | # | Name | Location | Patents |
|---|---|---|---|---|---|---|---|
| 1,891 | Wenxu Zhang | Belmont, MA (US) | 1 | 1,936 | Peizhi Fan | Guangdong, CN | 1 |
| 1,892 | Mingjun Huang | Everett, MA (US) | 1 | 1,937 | Laurent Castro | Brussels, BE | 1 |
| 1,893 | Shuting Feng | Cambridge, MA (US) | 1 | 1,938 | Fanny Barde | Brussels, BE | 1 |
| 1,894 | Slobodan Petrovic | Happy Valley, OR (US) | 1 | 1,939 | Jijeesh Ravi Nair | Turin, IT | 1 |
| 1,895 | Seung Joon Lee | Yongin-si, KR | 1 | 1,940 | Marisa Falco | Turin, IT | 1 |
| 1,896 | Yong Yang | Fujian, CN | 1 | 1,941 | Federico Bella | Turin, IT | 1 |
| 1,897 | Liangfan Xu | Fujian, CN | 1 | 1,942 | Claudio Gerbaldi | Turin, IT | 1 |
| 1,898 | Yixiao Li | Fujian, CN | 1 | 1,943 | Dae-Seop Lim | Yongin-si, KR | 1 |
| 1,899 | Jun Gao | Fujian, CN | 1 | 1,944 | Jung-Wook Cha | Yongin-si, KR | 1 |
| 1,900 | Huajin He | Fujian, CN | 1 | 1,945 | Kunli Wang | Zunyi, CN | 1 |
| 1,901 | Kelly Burrows | Beach Park, IL (US) | 1 | 1,946 | Kei Tanaka | Nagoya, JP | 1 |
| 1,902 | Brian Mangubat | Grayslake, IL (US) | 1 | 1,947 | Miyuki Kojima | Nagoya, JP | 1 |
| 1,903 | Scottie Johnson | Knoxville, TN (US) | 1 | 1,948 | Keita Miyanishi | Nagoya, JP | 1 |
| 1,904 | Eric C Ricker | Knoxville, TN (US) | 1 | 1,949 | Ilias Belharouak | Knoxville, TN (US) | 1 |
| 1,905 | Robert J Wood, Sr | Oneonta, NY (US) | 1 | 1,950 | Ethan C Self | Oak Ridge, TN (US) | 1 |
| 1,906 | Chad E Hall | Oneonta, NY (US) | 1 | 1,951 | Devendrasinh Udaisinh Darbar | Cookeville, TN (US) | 1 |
| 1,907 | Bryce Gregory | Oneonta, NY (US) | 1 | 1,952 | Freidoon Rastegar | Pico Riveria, CA (US) | 1 |
| 1,908 | Luke Yetto | Oneonta, NY (US) | 1 | 1,953 | Wei Fan Kuan | Pico Riveria, CA (US) | 1 |
| 1,909 | Daniel A Patsos | Oneonta, NY (US) | 1 | 1,954 | Zhuocheng Jia | Fujian, CN | 1 |
| 1,910 | Joseph Agrelo | Oneonta, NY (US) | 1 | 1,955 | Kanzhu Huang | Fujian, CN | 1 |
| 1,911 | Young Min Lim | Daejeon, KR | 1 | 1,956 | Seungyeon Lee | Seoul, KR | 1 |
| 1,912 | Ling Huang | Xiamen, CN | 1 | 1,957 | Chenghao Wang | Changzhou, CN | 1 |
| 1,913 | Qiong Wang | Xiamen, CN | 1 | 1,958 | Zhenglin Li | Changzhou, CN | 1 |
| 1,914 | Ying Lei | Xiamen, CN | 1 | 1,959 | Wenbin Shang | Changzhou, CN | 1 |
| 1,915 | Chenguang Shi | Xiamen, CN | 1 | 1,960 | Libin Zhang | Changzhou, CN | 1 |
| 1,916 | Shigang Sun | Xiamen, CN | 1 | 1,961 | Masashi Nakamura | Utsunomiya, JP | 1 |
| 1,917 | Rachel Lévesque-Bélanger | Québec, CA | 1 | 1,962 | Kazuki Kato | Utsunomiya, JP | 1 |
| 1,918 | Andrea Paolella | Québec, CA | 1 | 1,963 | Akiyoshi Kanazawa | Utsunomiya, JP | 1 |
| 1,919 | Basile Commarieu | Québec, CA | 1 | 1,964 | Satoshi Enomoto | Utsunomiya, JP | 1 |
| 1,920 | Wentao Li | Cookeville, TN (US) | 1 | 1,965 | Raymond Hsu | Shenzhen, CN | 1 |
| 1,921 | Jianbo Ye | Changzhou, CN | 1 | 1,966 | Youngsun Kong | Yongin-si, KR | 1 |
| 1,922 | Xuyi Shan | Luoyang, CN | 1 | 1,967 | Jinyoung Kim | Yongin-si, KR | 1 |
| 1,923 | Zhimin Wang | Luoyang, CN | 1 | 1,968 | Sung Ho Choo | Yongin-si, KR | 1 |
| 1,924 | Jinwei Cao | New Hudson, MI (US) | 1 | 1,969 | Shiyou Zheng | Shanghai, CN | 1 |
| 1,925 | Yunhui Gong | Farmington Hills, MI (US) | 1 | 1,970 | Yuepeng Pang | Shanghai, CN | 1 |
| 1,926 | Zhenji Han | Amagasaki, JP | 1 | 1,971 | Xinxin Shi | Shanghai, CN | 1 |
| 1,927 | Takeo Fukuzumi | Amagasaki, JP | 1 | 1,972 | Xitong Wang | Shanghai, CN | 1 |
| 1,928 | Eri Sawada | Amagasaki, JP | 1 | 1,973 | Yufang Wang | Shanghai, CN | 1 |
| 1,929 | Martin Schulz-Dobrick | Heidelberg, DE | 1 | 1,974 | Zhengfang Nie | Shanghai, CN | 1 |
| 1,930 | Jinbum Kim | Amagasaki, JP | 1 | 1,975 | Kyoung Soo Kim | Yongin-si, KR | 1 |
| 1,931 | Jun Yin | Miamisburg, OH (US) | 1 | 1,976 | Sun-Joo Choi | Yongin-si, KR | 1 |
| 1,932 | Xinjiang Chen | Suzhou, CN | 1 | 1,977 | Graham Speier Hausler | Bend, OR (US) | 1 |
| 1,933 | Marvin S Keshner | Sonora, CA (US) | 1 | 1,978 | Eunji Kang | Yongin-si, KR | 1 |
| 1,934 | Erik Garth Vaaler | Redwood City, CA (US) | 1 | 1,979 | Jooyong Song | Daejeon, KR | 1 |
| 1,935 | Cheng Long | Guangdong, CN | 1 | 1,980 | In Chul Kim | Daejeon, KR | 1 |

# INVENTORS

| # | Name | Location | Patents | # | Name | Location | Patents |
|---|---|---|---|---|---|---|---|
| 1,981 | Juri Kim | Daejeon, KR | 1 | 2,026 | Soo Jin Kim | Yongin-si, KR | 1 |
| 1,982 | Hyun Min Kim | Daejeon, KR | 1 | 2,027 | Si Young Cha | Yongin-si, KR | 1 |
| 1,983 | Jian-ping Zheng | Tallahassee, FL (US) | 1 | 2,028 | Woo Cheol Shin | Yongin-si, KR | 1 |
| 1,984 | Chao Shen | Tallahassee, FL (US) | 1 | 2,029 | Ha Rim Lee | Yongin-si, KR | 1 |
| 1,985 | Silvia Rita Petricci | Bresso, IT | 1 | 2,030 | Hongsheng Wei | Nanjing, CN | 1 |
| 1,986 | Patrizia Serenella Maccone | Milan, IT | 1 | 2,031 | Kai Chen | Shenzhen, CN | 1 |
| 1,987 | Libero Damen | Cesate, IT | 1 | 2,032 | Kitae Park | Seoul, KR | 1 |
| 1,988 | Christine Hamon | Bollate, IT | 1 | 2,033 | Wangda Li | Austin, TX (US) | 1 |
| 1,989 | Lei Cheng | Santa Clara, CA (US) | 1 | 2,034 | Steven Lee | Austin, TX (US) | 1 |
| 1,990 | Saravanan Kuppan | Sunnyvale, CA (US) | 1 | 2,035 | Seungwook Ryu | Yongin-si, KR | 1 |
| 1,991 | Michael Metzger | Sunnyvale, CA (US) | 1 | 2,036 | Sungho Lee | Yongin-si, KR | 1 |
| 1,992 | Yiqing Huang | San Leandro, CA (US) | 1 | 2,037 | Dongdong Yi | Lishui, CN | 1 |
| 1,993 | Kulwinder Dhindsa | Westland, MI (US) | 1 | 2,038 | Miyuki Nakai | Osaka, JP | 1 |
| 1,994 | Ruei-Chang Hsiao | New Taipei, TW | 1 | 2,039 | Xiaozhong Du | Shanxi, CN | 1 |
| 1,995 | Ying-Chi Wang | New Taipei, TW | 1 | 2,040 | Rongjun Wang | Shanxi, CN | 1 |
| 1,996 | Songjiao Wu | Fuzhou, CN | 1 | 2,041 | Jinpeng Wang | Shanxi, CN | 1 |
| 1,997 | Dominik Weber | Braunschweig, DE | 1 | 2,042 | Yanjie Zhang | Shanxi, CN | 1 |
| 1,998 | Andreas Lemke | Ummendorf, DE | 1 | 2,043 | Yang Tong | Shanxi, CN | 1 |
| 1,999 | Sylke Schilde | Vordorf, DE | 1 | 2,044 | Yiling Yue | Shanxi, CN | 1 |
| 2,000 | Wolfgang Zipprich | Isenbüttel, DE | 1 | 2,045 | Jiamin Zhang | Shanxi, CN | 1 |
| 2,001 | Taehwan Yu | Seoul, KR | 1 | 2,046 | Yuan-Feng Liu | Beijing, CN | 1 |
| 2,002 | Venkataramani Anandan | Farmington Hills, MI (US) | 1 | 2,047 | Ze-Cheng Hou | Beijing, CN | 1 |
| 2,003 | Jiyeon Jang | Yongin-si, KR | 1 | 2,048 | Lu Chen | Beijing, CN | 1 |
| 2,004 | Mona Shirpour | Sunnyvale, CA (US) | 1 | 2,049 | Lin Zhu | Beijing, CN | 1 |
| 2,005 | Tetsuya Ishikawa | San Jose, CA (US) | 1 | 2,050 | Ji Cao | Hangzhou, CN | 1 |
| 2,006 | Sally S Lou | San Jose, CA (US) | 1 | 2,051 | Zheng Cao | Hangzhou, CN | 1 |
| 2,007 | Juchuan Li | San Jose, CA (US) | 1 | 2,052 | Wei Liu | Hangzhou, CN | 1 |
| 2,008 | Shawn William Snyder | Santa Clara, CA (US) | 1 | 2,053 | Weijun Zeng | Shenzhen, CN | 1 |
| 2,009 | Ram Subbaraman | Sunnyvale, CA (US) | 1 | 2,054 | Manseok Han | Yongin-si, KR | 1 |
| 2,010 | Abdul-Kader Srouji | San Francisco, CA (US) | 1 | 2,055 | Chun-Yu Wu | Taichung, TW | 1 |
| 2,011 | Ingo Kerkamm | Stuttgart-Rohr, DE | 1 | 2,056 | Frederick Francois Chesneau | St. Leon-Rot, DE | 1 |
| 2,012 | Ronghua Chen | Guangzhou, CN | 1 | 2,057 | Stefano Meini | Ludwigshafen, DE | 1 |
| 2,013 | Dexi Wang | Guangzhou, CN | 1 | 2,058 | Denis Schroeder | Schwetzingen, DE | 1 |
| 2,014 | Xiaojun Sun | Guang Dong, CN | 1 | 2,059 | Patrick Krieg | Ludwigshafen, DE | 1 |
| 2,015 | Jeong-Ju Cho | Lexington, MA (US) | 1 | 2,060 | Christian Karcher | Boehl-Iggelheim, DE | 1 |
| 2,016 | Heechul Jung | Gunpo-si, KR | 1 | 2,061 | Janina Stier | Buerstadt, DE | 1 |
| 2,017 | Hironori Mizuta | Saitama, JP | 1 | 2,062 | Wolfgang Klaus | Ludwigshafen, DE | 1 |
| 2,018 | Kazuki Takimoto | Saitama, JP | 1 | 2,063 | Corinna Tag | Ludwigshafen, DE | 1 |
| 2,019 | Hiromi Watahiki | Saitama, JP | 1 | 2,064 | Wen Y Chiu | Taipei, TW | 1 |
| 2,020 | Kaho Sugimoto | Saitama, JP | 1 | 2,065 | Jin-Hwa Kim | Yongin-si, KR | 1 |
| 2,021 | Takatoshi Matsuura | Saitama, JP | 1 | 2,066 | Caoping Lin | Ningbo, CN | 1 |
| 2,022 | Kuniaki Okamoto | Saitama, JP | 1 | 2,067 | Zuhua Ma | Ningbo, CN | 1 |
| 2,023 | Nobutaka Shimamura | Saitama, JP | 1 | 2,068 | Ruirui Liu | Ningbo, CN | 1 |
| 2,024 | Shingo Ohta | Susono, JP | 1 | 2,069 | Binghong Han | Westmont, IL (US) | 1 |
| 2,025 | Myung Heui Woo | Yongin-si, KR | 1 | 2,070 | Baris Key | Lisle, IL (US) | 1 |

# INVENTORS

| # | Name | Location | Patents | # | Name | Location | Patents |
|---|---|---|---|---|---|---|---|
| 2,071 | Fulya Dogan Key | Lisle, IL (US) | 1 | 2,116 | Nicolas Mariage | Voiron, FR | 1 |
| 2,072 | Irina Wolf | Malsch, DE | 1 | 2,117 | Léo Merchat | Grenoble, FR | 1 |
| 2,073 | Margret Wohlfahrt-Mehrens | Illertissen-Tiefenbach, DE | 1 | 2,118 | Kamyab Amouzegar | Mont-Royal, CA | 1 |
| 2,074 | Serife Kaymaksiz Tost | Salzgitter, DE | 1 | 2,119 | Nancy Turcotte | St-Tite, CA | 1 |
| 2,075 | Florian Wilhelm | Holzheim, DE | 1 | 2,120 | Bastian Westphal | Braunschweig, DE | 1 |
| 2,076 | Mario Wachtler | Strängnäs, SE | 1 | 2,121 | Wolfgang Haselrieder | Braunschweig, DE | 1 |
| 2,077 | Yeqing Zhang | Changzhou, CN | 1 | 2,122 | Martin Schoenitz | Braunschweig, DE | 1 |
| 2,078 | Xingxing Weng | Changzhou, CN | 1 | 2,123 | Franck Ferreira Gomes | Joué-lès-Tours, FR | 1 |
| 2,079 | Cheng Jin | Changzhou, CN | 1 | 2,124 | Delphine Guy-Bouyssou | Luynes, FR | 1 |
| 2,080 | Zhaohui Chen | Changzhou, CN | 1 | 2,125 | Yaw Yuh Ko | Taipei, TW | 1 |
| 2,081 | Michael Folger Grosso | Summerville, SC (US) | 1 | 2,126 | Kitae Kim | Yongin-si, KR | 1 |
| 2,082 | Adam P Tornheim | Darien, IL (US) | 1 | 2,127 | Hyerim Lee | Yongin-si, KR | 1 |
| 2,083 | Rudolf Supe-Dienes | Overath, DE | 1 | 2,128 | Jungjin Moon | Yongin-si, KR | 1 |
| 2,084 | Belen Levenfeld Laredo | Leganes, ES | 1 | 2,129 | Xiaohua Ma | Woodbury, MN (US) | 1 |
| 2,085 | Maria Eugenia Sotomayor Lozano | Leganes, ES | 1 | 2,130 | Mark N Obrovac | Nova Scotia, CA | 1 |
| 2,086 | Wilmer Oswaldo Bucheli Erazo | Leganes, ES | 1 | 2,131 | Yoonsoo Park | Yongin-si, KR | 1 |
| 2,087 | Jean Yves Sanchez | Leganes, ES | 1 | 2,132 | Taesik Kim | Yongin-si, KR | 1 |
| 2,088 | Alejandro Varez Alvarez | Leganes, ES | 1 | 2,133 | Jae-Hyeon Eom | Yongin-si, KR | 1 |
| 2,089 | Jose Manuel Amarilla Alvarez | Leganes, ES | 1 | 2,134 | Yuki Takeuchi | Komaki, JP | 1 |
| 2,090 | Joonseon Jeong | Seoul, KR | 1 | 2,135 | Hirofumi Ando | Nishio, JP | 1 |
| 2,091 | Michael Linley Fripp | Carrollton, TX (US) | 1 | 2,136 | Daisuke Shishihara | Kounan, JP | 1 |
| 2,092 | Zachary William Walton | Carrollton, TX (US) | 1 | 2,137 | Hidetoshi Mizutani | Ama, JP | 1 |
| 2,093 | Matthew James Merron | Carrollton, TX (US) | 1 | 2,138 | Hepeng Zhang | Zhejiang, CN | 1 |
| 2,094 | Paulus Willibrordus George Poodt | Deest, NL | 1 | 2,139 | Ishrat Khan | Marietta, GA (US) | 1 |
| 2,095 | Philippe Vereecken | Luik, BE | 1 | 2,140 | Ahmed Alzharani | Glen Allen, VA (US) | 1 |
| 2,096 | Sebastien Paul Norbert Moitzheim | The Hague, NL | 1 | 2,141 | Amal Al-abdulrahman | Atlanta, GA (US) | 1 |
| 2,097 | Antonius Maria Bernardus van Mol | Eindhoven, NL | 1 | 2,142 | Rasha Alshahrani | Abha, SA | 1 |
| 2,098 | Qingsong Tu | Berkeley, CA (US) | 1 | 2,143 | Suyoun Yoon | Yongin-si, KR | 1 |
| 2,099 | Tan Shi | Berkeley, CA (US) | 1 | 2,144 | Han-Chang Huang | Taoyuan, TW | 1 |
| 2,100 | Eun-Hyung Choi | Yongin-si, KR | 1 | 2,145 | Yi-Yen Tsou | Nantou County, TW | 1 |
| 2,101 | Joerg Ziegler | Rutesheim, DE | 1 | 2,146 | Meng-Kwei Hsu | Taichung, TW | 1 |
| 2,102 | Olivier Cois | Kernen, DE | 1 | 2,147 | Ajay Kochhar | Oakville, CA | 1 |
| 2,103 | Thomas Dufaux | Stuttgart, DE | 1 | 2,148 | Timothy George Johnston | Toronto, CA | 1 |
| 2,104 | Ulrich Lange | Aichtal, DE | 1 | 2,149 | Dewen Kong | Shanghai, CN | 1 |
| 2,105 | Ulrich Hasenkox | Ditzingen, DE | 1 | 2,150 | Meiyuan Wu | Shanghai, CN | 1 |
| 2,106 | Inoh Cha | Yongin-si, KR | 1 | 2,151 | Asma Sharafi | Ypsilanti, MI (US) | 1 |
| 2,107 | Jinhee Lee | Yongin-si, KR | 1 | 2,152 | Jun Zhang | Gongan County, CN | 1 |
| 2,108 | Seungjae Lee | Yongin-si, KR | 1 | 2,153 | Shintaro Kitajima | Hwaseong-si, KR | 1 |
| 2,109 | Da-Un Han | Yongin-si, KR | 1 | 2,154 | Dong-Su Ko | Seoul, KR | 1 |
| 2,110 | Cristina Iojoiu | Vourey, FR | 1 | 2,155 | Junho Lee | Seongnam-si, KR | 1 |
| 2,111 | Yannick Molmeret | Grenoble, FR | 1 | 2,156 | Rene Schmitz | Stuttgart, DE | 1 |
| 2,112 | Claire Antonelli | Madrid, ES | 1 | 2,157 | Thomas Pack | Boca Raton, FL (US) | 1 |
| 2,113 | Willy Porcher | Grenoble, FR | 1 | 2,158 | Ricardo Raimondo | Lauderhill, FL (US) | 1 |
| 2,114 | Frédéric Barbier | Saint Martin d'Heres, FR | 1 | 2,159 | Santiago Contreras | Plantation, FL (US) | 1 |
| 2,115 | Sophie Chazelle | Vourey, FR | 1 | 2,160 | Junbing Yang | Fullerton, CA (US) | 1 |

# INVENTORS

| # | Name | Location | Patents | # | Name | Location | Patents |
|---|---|---|---|---|---|---|---|
| 2,161 | Atsushi Kajita | Yokohama, JP | 1 | 2,206 | Maenghyo Cho | Seoul, KR | 1 |
| 2,162 | Su An Choi | Seongnam-si, KR | 1 | 2,207 | Kyeong-jae Cho | Seoul, KR | 1 |
| 2,163 | Sang Hoon Jeon | Daegu, KR | 1 | 2,208 | Jun Hyeok Kim | Ulsan, KR | 1 |
| 2,164 | Chang Min Choi | Miryang-si, KR | 1 | 2,209 | Hyun Su Ma | Ulsan, KR | 1 |
| 2,165 | Su Youn Kwon | Gyeongsangbuk-do, KR | 1 | 2,210 | Tomoyuki Okuyama | Chino, JP | 1 |
| 2,166 | Jeong A Gu | Daegu, KR | 1 | 2,211 | Patrick J Bonnick | Ann Arbor, MI (US) | 1 |
| 2,167 | Bong Jun Jeong | Daegu, KR | 1 | 2,212 | Erika Nagai | Ann Arbor, MI (US) | 1 |
| 2,168 | Yogesh Kumar Anguchamy | Newark, CA (US) | 1 | 2,213 | Chia-Wei Wang | Ypsilanti, MI (US) | 1 |
| 2,169 | Yongbong Han | San Francisco, CA (US) | 1 | 2,214 | Steve Buckingham | Ann Arbor, MI (US) | 1 |
| 2,170 | Charan Masarapu | Fremont, CA (US) | 1 | 2,215 | Harvey Kalweit | Burnsville, MN (US) | 1 |
| 2,171 | Herman A Lopez | Sunnyvale, CA (US) | 1 | 2,216 | Satya Ajjarapu | Apple Valley, MN (US) | 1 |
| 2,172 | Natasha Bugna Teran | Foster City, CA (US) | 1 | 2,217 | Jean-Christophe Giron | Edina, MN (US) | 1 |
| 2,173 | Nian Liu | Stanford, CA (US) | 1 | 2,218 | Claudiu B Bucur | Ypsilanti, MI (US) | 1 |
| 2,174 | Zhenda Lu | Stanford, CA (US) | 1 | 2,219 | Adrian Lita | Columbus, OH (US) | 1 |
| 2,175 | Jie Zhao | Stanford, CA (US) | 1 | 2,220 | Jae-Won Choi | Yongin-si, KR | 1 |
| 2,176 | Jan D Miller | Salt Lake City, UT (US) | 1 | 2,221 | Jae-Hong Lim | Yongin-si, KR | 1 |
| 2,177 | Xuming Wang | Salt Lake City, UT (US) | 1 | 2,222 | Zhongwei Chen | Waterloo, CA | 1 |
| 2,178 | Yue Lin | Salt Lake City, UT (US) | 1 | 2,223 | Aiping Yu | Waterloo, CA | 1 |
| 2,179 | Jin Liu | Salt Lake City, UT (US) | 1 | 2,224 | Fathy Mohamed Hassan | Waterloo, CA | 1 |
| 2,180 | Sin Ho Choi | Busan, KR | 1 | 2,225 | Satoshi Hori | Tokyo, JP | 1 |
| 2,181 | Ji Hyun Yoon | Ulsan, KR | 1 | 2,226 | Mi-Young Son | Yongin-si, KR | 1 |
| 2,182 | Byoung Man Bang | Gyeongsan-si, KR | 1 | 2,227 | Hyun-Bong Choi | Yongin-si, KR | 1 |
| 2,183 | Shihui Xu | Fangzhuang, CN | 1 | 2,228 | Gen-Yuan Chang | New Taipei, TW | 1 |
| 2,184 | Bo-Hyun Kim | Yongin-si, KR | 1 | 2,229 | Jen-Kai Huang | New Taipei, TW | 1 |
| 2,185 | Hong-Jeong Kim | Yongin-si, KR | 1 | 2,230 | Tak Wah Shum | Hong Kong, CN | 1 |
| 2,186 | Yu-Jin Han | Yongin-si, KR | 1 | 2,231 | Mitsutoshi Otaki | Susono, JP | 1 |
| 2,187 | Brieuc Guillerm | Montreal, CA | 1 | 2,232 | Norihiro Ose | Susono, JP | 1 |
| 2,188 | Jaehong Lim | Yongin-si, KR | 1 | 2,233 | Jinwoo Kim | Suwon-si, KR | 1 |
| 2,189 | Dong-Hyun Shin | Yongin-si, KR | 1 | 2,234 | Sangho Lee | Suwon-si, KR | 1 |
| 2,190 | Yu Zhu | Copley, OH (US) | 1 | 2,235 | Yasuhiro Harada | Isehara, JP | 1 |
| 2,191 | Nathan Taylor | Ann Arbor, MI (US) | 1 | 2,236 | Tomoe Kusama | Kawasaki, JP | 1 |
| 2,192 | Lain-Jong Li | Thuwal, SA | 1 | 2,237 | Norio Takami | Yokohama, JP | 1 |
| 2,193 | Feng-Yu Wu | Thuwal, SA | 1 | 2,238 | Kazuomi Yoshima | Yokohama, JP | 1 |
| 2,194 | Pushpendra Kumar | Thuwal, SA | 1 | 2,239 | Hyung-Sik Kim | Yongin-si, KR | 1 |
| 2,195 | Jun Ming | Thuwal, SA | 1 | 2,240 | Duk-Jung Kim | Yongin-si, KR | 1 |
| 2,196 | Kefei Wang | Ningde, CN | 1 | 2,241 | Zin Park | Yongin-si, KR | 1 |
| 2,197 | Kuan-Ching Lee | Taichung, TW | 1 | 2,242 | Tomoyuki Fukatani | Yokohama, JP | 1 |
| 2,198 | Hui-Ping Yang | Taichung, TW | 1 | 2,243 | Isaac Johnson | Fort Lauderdale, FL (US) | 1 |
| 2,199 | Tadayoshi Tanaka | Yokohama, JP | 1 | 2,244 | Irek Gora | Fort Lauderdale, FL (US) | 1 |
| 2,200 | Kevin W Brew | White Plains, NY (US) | 1 | 2,245 | Dongxu Li | Hunan, CN | 1 |
| 2,201 | Oki Gunawan | Westwood, NY (US) | 1 | 2,246 | Dezhan Li | Hunan, CN | 1 |
| 2,202 | Singh Saurabh | Albany, NY (US) | 1 | 2,247 | Jianwen Liu | Hunan, CN | 1 |
| 2,203 | Teodor K Todorov | Yorktown Heights, NY (US) | 1 | 2,248 | Changping Yin | Hunan, CN | 1 |
| 2,204 | Jin-Myoung Lim | Osan-si, KR | 1 | 2,249 | Peng Zhao | Hunan, CN | 1 |
| 2,205 | Duho Kim | Seoul, KR | 1 | 2,250 | Fubiao Yang | Hunan, CN | 1 |

# INVENTORS

| # | Name | Location | Patents | # | Name | Location | Patents |
|---|---|---|---|---|---|---|---|
| 2,251 | Sean Christopher Laughery | Vicksburg, MI (US) | 1 | 2,296 | Chao-Yang Wang | State College, PA (US) | 1 |
| 2,252 | Andrew William Esper | Kalamazoo, MI (US) | 1 | 2,297 | Yan Ji | State College, PA (US) | 1 |
| 2,253 | Yoshiaki Aiki | Akaiwa, JP | 1 | 2,298 | Tianren Xu | State College, PA (US) | 1 |
| 2,254 | Koji Tanoue | Okayama, JP | 1 | 2,299 | Takuya Muraki | Tokyo, JP | 1 |
| 2,255 | Hamid G Kia | Bloomfield Hills, MI (US) | 1 | 2,300 | Tomohiko Yamazaki | Tokyo, JP | 1 |
| 2,256 | Dongjin Kim | Yongin-si, KR | 1 | 2,301 | Philip E Rogren | Half Moon Bay, CA (US) | 1 |
| 2,257 | Young Jin Park | Yongin-si, KR | 1 | 2,302 | Jari Liimatainen | Oulu, FI | 1 |
| 2,258 | Ilseok Kim | Yongin-si, KR | 1 | 2,303 | Ville Kekkonen | Jyväskylä, FI | 1 |
| 2,259 | Santhanam Raman | Foster City, CA (US) | 1 | 2,304 | Aleksey Zolotukhin | Oulu, FI | 1 |
| 2,260 | Shoufen Yang | Daly City, CA (US) | 1 | 2,305 | Premanand Ramadass | Charlotte, NC (US) | 1 |
| 2,261 | Jingjing Wu | Shanghai, CN | 1 | 2,306 | Paul M Halmo | Denver, NC (US) | 1 |
| 2,262 | Kechuang Lin | Xiamen, CN | 1 | 2,307 | Hyunuk Cho | Yongin-si, KR | 1 |
| 2,263 | Yi-Jui Huang | Xiamen, CN | 1 | 2,308 | Byoung Dong Kim | Yongin-si, KR | 1 |
| 2,264 | Matthew Y Lu | North Brunswick, NJ (US) | 1 | 2,309 | Eun Jung Kim | Yongin-si, KR | 1 |
| 2,265 | Fadwa Badway | Old Bridge, NJ (US) | 1 | 2,310 | Wu Bi | Southfield, MI (US) | 1 |
| 2,266 | Changwook Kim | Yongin-si, KR | 1 | 2,311 | Christian Fau | Marysville, OH (US) | 1 |
| 2,267 | Sooyoun Park | Yongin-si, KR | 1 | 2,312 | Wentian Gu | Atlanta, GA (US) | 1 |
| 2,268 | Kyouyoon Sheem | Yongin-si, KR | 1 | 2,313 | Alice Yue Hou | Ann Arbor, MI (US) | 1 |
| 2,269 | Hyunjoo Je | Yongin-si, KR | 1 | 2,314 | Zhenhua Li | Ningde, CN | 1 |
| 2,270 | Jeung-Gi Moon | Yongin-si, KR | 1 | 2,315 | Zhenxing Pei | Ningde, CN | 1 |
| 2,271 | Young-San Ko | Yongin-si, KR | 1 | 2,316 | Wuyuan Zou | Ningde, CN | 1 |
| 2,272 | Ming-Goo Chien | Taichung, TW | 1 | 2,317 | Yuki Inoue | Tokyo, JP | 1 |
| 2,273 | Junliang Wang | Shanghai, CN | 1 | 2,318 | Vince T Nguyen | Liverpool, NY (US) | 1 |
| 2,274 | Sung-Soo Park | Yongin-si, KR | 1 | 2,319 | Changui Jeong | Yongin-si, KR | 1 |
| 2,275 | Jungho Lee | Yongin-si, KR | 1 | 2,320 | Byoungsun Lee | Seoul, KR | 1 |
| 2,276 | Trevor L Dzwiniel | Carol Stream, IL (US) | 1 | 2,321 | Woongryeol Yu | Seoul, KR | 1 |
| 2,277 | Krzysztof Pupek | Plainfield, IL (US) | 1 | 2,322 | Hosung Yang | Busan, KR | 1 |
| 2,278 | Gregory K Krumdick | Homer Glen, IL (US) | 1 | 2,323 | Jihyun Yoon | Anyang-si, KR | 1 |
| 2,279 | Max Tsao | Springboro, OH (US) | 1 | 2,324 | Vera Nickel | Haiger, DE | 1 |
| 2,280 | Chun-Chuen Yang | Chung Li, TW | 1 | 2,325 | Thorsten Buhrmester | Darmstadt, DE | 1 |
| 2,281 | Yung-Hsiang Tung | Chung Li, TW | 1 | 2,326 | Steffen Haber | Bad Soden, DE | 1 |
| 2,282 | Irish Valerie Buiser Maggay | Chung Li, TW | 1 | 2,327 | Gerd Krämer | Bad Vilbel, DE | 1 |
| 2,283 | Cheng-Wei Kao | Chung Li, TW | 1 | 2,328 | Hong-Ying Fu | Beijing, CN | 1 |
| 2,284 | Tung-Chi Tsai | Chung Li, TW | 1 | 2,329 | Ting-Ju Yeh | Taipei, TW | 1 |
| 2,285 | Jérôme Chauveau | Evreux, FR | 1 | 2,330 | Chia-Ming Chang | Hsinchu, TW | 1 |
| 2,286 | Grégory Schmidt | Mormant, FR | 1 | 2,331 | Chia-Erh Liu | Zhudong Township, TW | 1 |
| 2,287 | Stéphane Bizet | Barc, FR | 1 | 2,332 | Min Xu | Wenzhou, CN | 1 |
| 2,288 | Stefan Reinhold | Zwickau, DE | 1 | 2,333 | Zhonglai Pan | Sichuan, CN | 1 |
| 2,289 | Edward D Franco | San Mateo, CA (US) | 1 | 2,334 | Lu Wang | Sichuan, CN | 1 |
| 2,290 | Youngsan Ko | Yongin-si, KR | 1 | 2,335 | Jiandong Gao | Sichuan, CN | 1 |
| 2,291 | Minjae Kim | Yongin-si, KR | 1 | 2,336 | Rengui Li | Sichuan, CN | 1 |
| 2,292 | Junsik Lee | Yongin-si, KR | 1 | 2,337 | Hongchang Du | Sichuan, CN | 1 |
| 2,293 | Youngjin Park | Yongin-si, KR | 1 | 2,338 | Jiamin Deng | Sichuan, CN | 1 |
| 2,294 | Sanghyun Kim | Yongin-si, KR | 1 | 2,339 | Zhenghua Deng | Sichuan, CN | 1 |
| 2,295 | Jeongchull Ahn | Yongin-si, KR | 1 | 2,340 | Jang Wook Choi | Daejeon, KR | 1 |

# INVENTORS

| # | Name | Location | Patents | # | Name | Location | Patents |
|---|---|---|---|---|---|---|---|
| 2,341 | Byung Gon Kim | Busan, KR | 1 | 2,386 | Julien Ladroue | Monnaie, FR | 1 |
| 2,342 | Joo Seong Kim | Yongin-si, KR | 1 | 2,387 | Fabien Pierre | Charentilly, FR | 1 |
| 2,343 | John Simontacchi | San Rafael, CA (US) | 1 | 2,388 | Yigang He | Anhui, CN | 1 |
| 2,344 | Bruno Tapolsky | Tiburon, CA (US) | 1 | 2,389 | Chaolong Zhang | Anhui, CN | 1 |
| 2,345 | Gregory Walker Johnson | Dayton, OH (US) | 1 | 2,390 | Lei Zuo | Anhui, CN | 1 |
| 2,346 | Yu Ogihara | Tokyo, JP | 1 | 2,391 | Sheng Xiang | Anhui, CN | 1 |
| 2,347 | Yen-Ming Chen | Tainan, TW | 1 | 2,392 | Baiqiang Yin | Anhui, CN | 1 |
| 2,348 | Te-Fu Yeh | Tainan, TW | 1 | 2,393 | Winfried Gaugler | Ellwangen, DE | 1 |
| 2,349 | Shih-Ting Hsu | Tainan, TW | 1 | 2,394 | Zaifeng Zheng | Shanghai, CN | 1 |
| 2,350 | Hsisheng Teng | Tainan, TW | 1 | 2,395 | Dein-Run Fung | Taipei, TW | 1 |
| 2,351 | Sheng-Shu Hou | Tainan, TW | 1 | 2,396 | Ying-Ying Su | Kaohsiung, TW | 1 |
| 2,352 | Jeng-Shiung Jan | Tainan, TW | 1 | 2,397 | Chan-Tien Chen | Hsinchu County, TW | 1 |
| 2,353 | Ji-Yeon Jang | Yongin-si, KR | 1 | 2,398 | Rong-Ruey Jeng | Taoyuan, TW | 1 |
| 2,354 | Soon-Kie Hong | Yongin-si, KR | 1 | 2,399 | Kun-Fung Lin | Taipei, TW | 1 |
| 2,355 | Kyu-Suk Han | Yongin-si, KR | 1 | 2,400 | Naoto Kawaguchi | Tokyo, JP | 1 |
| 2,356 | Jong Hu Yoon | Jeollanam-do, KR | 1 | 2,401 | Takashi Terashima | Tokyo, JP | 1 |
| 2,357 | Mi Ok Kim | Gyeonggi-do, KR | 1 | 2,402 | Yoshikuni Sato | Tokyo, JP | 1 |
| 2,358 | Beom Gyu Kim | Gyeonggi-Do, KR | 1 | 2,403 | Yasuaki Wakizaka | Tokyo, JP | 1 |
| 2,359 | Pablo Valencia, Jr | Northville, MI (US) | 1 | 2,404 | Gary Lee Gray | West Dundee, IL (US) | 1 |
| 2,360 | Ivana Krkljus | Ludwigshafen, DE | 1 | 2,405 | Ju Young Kim | Daejeon, KR | 1 |
| 2,361 | Aleksei Volkov | Ludwigshafen, DE | 1 | 2,406 | Tomonobu Mizumo | Osaka, JP | 1 |
| 2,362 | Carsten Sueling | Frankenthal, DE | 1 | 2,407 | Jinkyu Kim | Yongin-si, KR | 1 |
| 2,363 | Jaechul Kim | Cambridge, MA (US) | 1 | 2,408 | Dong Sub Jung | Daejeon, KR | 1 |
| 2,364 | William Richards | Cambridge, MA (US) | 1 | 2,409 | Chih-Tsung Hu | Taoyuan, TW | 1 |
| 2,365 | Ciro A Spigno | Waterford, MI (US) | 1 | 2,410 | Wen-Chang Chiang | Taoyuan, TW | 1 |
| 2,366 | Ryan B Moulliet | Farmington Hills, MI (US) | 1 | 2,411 | Nai-Yuan Liu | Taoyuan, TW | 1 |
| 2,367 | Xiaowang Wu | Zhejiang, CN | 1 | 2,412 | Ernest Ndzebet | Joplin, MO (US) | 1 |
| 2,368 | Jung Woo An | Yongin-si, KR | 1 | 2,413 | Joshua Dean | Joplin, MO (US) | 1 |
| 2,369 | Jungyeon Won | Yongin-si, KR | 1 | 2,414 | Mario Destephen | Joplin, MO (US) | 1 |
| 2,370 | Jungwook Cha | Yongin-si, KR | 1 | 2,415 | Umamaheswari Janakiraman | Webb City, MO (US) | 1 |
| 2,371 | Brian Alan Kent | Horseheads, NY (US) | 1 | 2,416 | Gregory Miller | Diamond, MO (US) | 1 |
| 2,372 | Randall Eugene Youngman | Horseheads, NY (US) | 1 | 2,417 | Min Qi Yang | Webb City, MO (US) | 1 |
| 2,373 | Junghun Choi | Daejeon, KR | 1 | 2,418 | Chi-Hsun Tsai | Miaoli County, TW | 1 |
| 2,374 | Minchul Jang | Daejeon, KR | 1 | 2,419 | Joykumar S Thokchom | Atlanta, GA (US) | 1 |
| 2,375 | Kiyoung Kwon | Daejeon, KR | 1 | 2,420 | Davorin Babic | Marietta, GA (US) | 1 |
| 2,376 | Byoungkuk Son | Daejeon, KR | 1 | 2,421 | Lazbourne Alanzo Allie | McDonough, GA (US) | 1 |
| 2,377 | Seong Ho Lee | Daejeon, KR | 1 | 2,422 | David Ketema Johnson | Smyrna, GA (US) | 1 |
| 2,378 | Intae Park | Daejeon, KR | 1 | 2,423 | William Rauch | Douglasville, GA (US) | 1 |
| 2,379 | Changhun Park | Daejeon, KR | 1 | 2,424 | Mokwon Kim | Suwon-si, KR | 1 |
| 2,380 | Jaehyun Shim | Yongin-si, KR | 1 | 2,425 | Chengdu Liang | Knoxville, TN (US) | 1 |
| 2,381 | Jeongho Lee | Yongin-si, KR | 1 | 2,426 | Ezhiylmurugan Rangasamy | San Jose, CA (US) | 1 |
| 2,382 | Myoungseok Lee | Yongin-si, KR | 1 | 2,427 | Gayatri Sahu | Knoxville, TN (US) | 1 |
| 2,383 | Jeongmin Han | Yongin-si, KR | 1 | 2,428 | Sven Albrecht | Goslar, DE | 1 |
| 2,384 | Kihong Kim | Asan-si, KR | 1 | 2,429 | Michael Kruft | Rheinbrohl, DE | 1 |
| 2,385 | Chang Ui Jeong | Yongin-si, KR | 1 | 2,430 | Stefan Malcus | Goslar, DE | 1 |

# INVENTORS

| # | Name | Location | Patents | # | Name | Location | Patents |
|---|---|---|---|---|---|---|---|
| 2,431 | Xiaohong Q Gayden | West Bloomfield, MI (US) | 1 | 2,476 | Deokhyun Kim | Yongin-si, KR | 1 |
| 2,432 | Neslihan Yuca | Istanbul, TR | 1 | 2,477 | Yasuhiko Ohsawa | Kanagawa, JP | 1 |
| 2,433 | Murat Ferhat Dogdu | Istanbul, TR | 1 | 2,478 | Hajime Satou | Kanagawa, JP | 1 |
| 2,434 | Omer Suat Taskin | Istanbul, TR | 1 | 2,479 | Hiroshi Akama | Kanagawa, JP | 1 |
| 2,435 | Mehmet Emre Cetintasoglu | Istanbul, TR | 1 | 2,480 | Hideaki Horie | Kanagawa, JP | 1 |
| 2,436 | Jeong-Doo Yi | Yongin-si, KR | 1 | 2,481 | Yusuke Mizuno | Kanagawa, JP | 1 |
| 2,437 | Bryan T Yonemoto | Westmont, IL (US) | 1 | 2,482 | Hiroshi Fukumoto | Kanagawa, JP | 1 |
| 2,438 | Amber Bonner | New York, NY (US) | 1 | 2,483 | Masatoshi Okura | Kanagawa, JP | 1 |
| 2,439 | Michelle D Davis | Simi Valley, CA (US) | 1 | 2,484 | Yasuhiro Shindo | Kanagawa, JP | 1 |
| 2,440 | Bo Yuan | Suzhou, CN | 1 | 2,485 | Yasuhiro Tsudo | Kanagawa, JP | 1 |
| 2,441 | Guanghui Yuan | Suzhou, CN | 1 | 2,486 | Masashi Kodama | Hadano, JP | 1 |
| 2,442 | Keun Soo Eun | Seoul, KR | 1 | 2,487 | Yuki Matsushita | Atsugi, JP | 1 |
| 2,443 | Byoungchul Ko | Osan-si, KR | 1 | 2,488 | Kouichi Sugiura | Susono, JP | 1 |
| 2,444 | Sungki Seo | Hwaseong-si, KR | 1 | 2,489 | Hyo-Rim Bak | Yongin-si, KR | 1 |
| 2,445 | Yongmun Yoon | Suwon-si, KR | 1 | 2,490 | TaeRi Kwon | Yongin-si, KR | 1 |
| 2,446 | Kyutae Kim | Pohang-si, KR | 1 | 2,491 | ILKyoung Kwon | Yongin-si, KR | 1 |
| 2,447 | Hyejung Kim | Ulsan, KR | 1 | 2,492 | Charles J Dubois | Orange, TX (US) | 1 |
| 2,448 | Il-Seok Kim | Yongin-si, KR | 1 | 2,493 | George K Kodokian | Kennett Square, PA (US) | 1 |
| 2,449 | Jongsoo Cho | Seoul, KR | 1 | 2,494 | Ilhan A Aksay | Princeton, NJ (US) | 1 |
| 2,450 | Soonho Hong | Yongin-si, KR | 1 | 2,495 | Daniel Dabbs | Princeton, NJ (US) | 1 |
| 2,451 | Chansoon Kang | Seoul, KR | 1 | 2,496 | Michael A Pope | Kitchener, CA | 1 |
| 2,452 | Kyuhwan Oh | Seoul, KR | 1 | 2,497 | Yajie Zhang | Ningde, CN | 1 |
| 2,453 | Ji Hyun Um | Seoul, KR | 1 | 2,498 | Ping He | Ningde, CN | 1 |
| 2,454 | Myounggeun Choi | Gyeonggi-do, KR | 1 | 2,499 | Liqing Lin | Ningde, CN | 1 |
| 2,455 | Yong-Hun Cho | Kyunggi-do, KR | 1 | 2,500 | Jiali Dong | Ningde, CN | 1 |
| 2,456 | Yung-Eun Sung | Kyunggi-do, KR | 1 | 2,501 | Jean Fanous | Pfullingen, DE | 1 |
| 2,457 | Hirokazu Sakai | Okegawa, JP | 1 | 2,502 | Martin Tenzer | Nuertingen, DE | 1 |
| 2,458 | Katsuo Sugahara | Okegawa, JP | 1 | 2,503 | Xiaobing Zhang | Suzhou, CN | 1 |
| 2,459 | Sung June Youn | Busan, KR | 1 | 2,504 | Franco Ciampolini | Corbetta, IT | 1 |
| 2,460 | Sang Hyuk Lee | Busan, KR | 1 | 2,505 | Rosanna Suglia | Corbetta, IT | 1 |
| 2,461 | Yun-Hee Lee | Yongin-si, KR | 1 | 2,506 | Danilo Pritelli | Corbetta, IT | 1 |
| 2,462 | Yu Otsuka | Osaka, JP | 1 | 2,507 | Gianluca Aurilio | Corbetta, IT | 1 |
| 2,463 | Nobuhiko Hojo | Osaka, JP | 1 | 2,508 | Ga-Young Jo | Yongin-si, KR | 1 |
| 2,464 | Jun-ichi Yoshida | Osaka, JP | 1 | 2,509 | Nobuo Yamamoto | Kariya, JP | 1 |
| 2,465 | Toshiki Nokami | Tottori, JP | 1 | 2,510 | Yoshinori Satou | Kariya, JP | 1 |
| 2,466 | Akihiro Shimizu | Kyoto, JP | 1 | 2,511 | Shigeki Komine | Kariya, JP | 1 |
| 2,467 | Hitoshi Oomuro | Tokyo, JP | 1 | 2,512 | Daisuke Mori | Tokyo, JP | 1 |
| 2,468 | Noboru Taguchi | Ikeda, JP | 1 | 2,513 | Pin-Shiuan Li | Taoyuan, TW | 1 |
| 2,469 | John Carberry | Talbott, TN (US) | 1 | 2,514 | Tsung-Tien Cheng | Taoyuan, TW | 1 |
| 2,470 | Tim Wilson | Lafayette, CA (US) | 1 | 2,515 | Chung-Chih Hung | Taichung, TW | 1 |
| 2,471 | Qianli Ma | Juelich, DE | 1 | 2,516 | Chun-Yen Chiang | Taichung, TW | 1 |
| 2,472 | Frank Tietz | Monschau, DE | 1 | 2,517 | Paul Rohrbach | Hamburg, DE | 1 |
| 2,473 | Olivier Guillon | Juelich, DE | 1 | 2,518 | Nadine Gomm | Hamburg, DE | 1 |
| 2,474 | Sanghyuck Ahn | Yongin-si, KR | 1 | 2,519 | Jan-Dee Kim | Yongin-si, KR | 1 |
| 2,475 | Sukyung Lee | Yongin-si, KR | 1 | 2,520 | Touta Mizuta | Osaka, JP | 1 |

# INVENTORS

| # | Name | Location | Patents | # | Name | Location | Patents |
|---|---|---|---|---|---|---|---|
| 2,521 | Shinichi Kawaguchi | Osaka, JP | 1 | 2,566 | Yuki Matsuoka | Menlo Park, CA (US) | 1 |
| 2,522 | Takao Uyama | Osaka, JP | 1 | 2,567 | Zhihui Wang | Menlo Park, CA (US) | 1 |
| 2,523 | Song Li | Shenzhen, CN | 1 | 2,568 | Alexander Zaderko | Brovary, UA | 1 |
| 2,524 | Dae-Hyun Kim | Cheonan, KR | 1 | 2,569 | Vasyl Prusov | Kyiv, UA | 1 |
| 2,525 | Timothy Joshua Parrish | Templeton, CA (US) | 1 | 2,570 | Vitaliy Diyuk | Kyiv, UA | 1 |
| 2,526 | Min-Seo Kim | Yongin-si, KR | 1 | 2,571 | Yian Tai | Taipei, TW | 1 |
| 2,527 | Russell M Sylvia | South Dartmouth, MA (US) | 1 | 2,572 | Kuei-Hsien Chen | Taipei, TW | 1 |
| 2,528 | Martin C Lewis | Plymouth, MA (US) | 1 | 2,573 | Jian-Ming Chiu | Taipei, TW | 1 |
| 2,529 | Dong-Hee Han | Yongin-si, KR | 1 | 2,574 | Li-Chyong Chen | Taipei, TW | 1 |
| 2,530 | Jitendra Kumar | Beavercreek, OH (US) | 1 | 2,575 | Bernd Kreidler | Ellwangen, DE | 1 |
| 2,531 | Guru Subramanyam | Dayton, OH (US) | 1 | 2,576 | Moonsung Kim | Yongin-si, KR | 1 |
| 2,532 | Fahima Ouchen | Beavercreek, OH (US) | 1 | 2,577 | Jeonghye Lee | Yongin-si, KR | 1 |
| 2,533 | James G Grote | Yellow Springs, OH (US) | 1 | 2,578 | Peter B Hallac | Milwaukee, WI (US) | 1 |
| 2,534 | Jingjuan Liu | Jiangsu, CN | 1 | 2,579 | Sung-Jin Cho | Whitefish Bay, WI (US) | 1 |
| 2,535 | Stephane Cadra | Saint Avertin, FR | 1 | 2,580 | Frederic C Bonhomme | Thiensville, WI (US) | 1 |
| 2,536 | Charlotte Beord | Saint Avertin, FR | 1 | 2,581 | Mohamed Taggougui | Bayside, WI (US) | 1 |
| 2,537 | Nathalie Pierre | Monts, FR | 1 | 2,582 | David R Boone | Waukesha, WI (US) | 1 |
| 2,538 | Herve Galiano | La Ville aux Dames, FR | 1 | 2,583 | Qingfang Shi | Brookfield, WI (US) | 1 |
| 2,539 | Xiangjun Li | Beijing, CN | 1 | 2,584 | Alexandre Ndedi Ntepe | Mequon, WI (US) | 1 |
| 2,540 | Dong Hui | Beijing, CN | 1 | 2,585 | Yao Li | Shenzhen, CN | 1 |
| 2,541 | Xuecui Jia | Beijing, CN | 1 | 2,586 | Jehwon Choi | Suwon-si, KR | 1 |
| 2,542 | Xiaokang Lai | Beijing, CN | 1 | 2,587 | Dahye Park | Hwaseong-si, KR | 1 |
| 2,543 | Yinming Wang | Beijing, CN | 1 | 2,588 | Mi-Jung Noh | Ulsan, KR | 1 |
| 2,544 | Si Zhu | Beijing, CN | 1 | 2,589 | Yong Hee Cho | Seoul, KR | 1 |
| 2,545 | Jean-Michel Vinassa | Gradignan, FR | 1 | 2,590 | Seong Woon Booh | Yongin-si, KR | 1 |
| 2,546 | Akram Eddahech | Talence, FR | 1 | 2,591 | Eun Seog Cho | Yongin-si, KR | 1 |
| 2,547 | Olivier Briat | Bordeaux, FR | 1 | 2,592 | Daisuke Washida | Takehara, JP | 1 |
| 2,548 | Patrick Soudan | Mouzell, FR | 1 | 2,593 | Yuji Hoshi | Takehara, JP | 1 |
| 2,549 | Joel Gaubicher | Nantes, FR | 1 | 2,594 | Hua Duan | Tianjin, CN | 1 |
| 2,550 | Chi-Kyun Park | San Jose, CA (US) | 1 | 2,595 | Shiyong Wang | Tianjin, CN | 1 |
| 2,551 | Li-Hsiang Perng | Kaohsiung, TW | 1 | 2,596 | Zongyou Li | Tianjin, CN | 1 |
| 2,552 | Chen-Chun Chuang | Taipei, TW | 1 | 2,597 | Yinghua Hu | Tianjin, CN | 1 |
| 2,553 | Chih-Chan Lin | Tainan, TW | 1 | 2,598 | Jing Wang | Tianjin, CN | 1 |
| 2,554 | Detlef Busch | Saarlouis, DE | 1 | 2,599 | Wei Tian | Tianjin, CN | 1 |
| 2,555 | Bertram Schmitz | Sarreguemines, FR | 1 | 2,600 | Martin Koebler | Davidson, NC (US) | 1 |
| 2,556 | Dominic Klein | Bexbach, DE | 1 | 2,601 | Yonggao Xia | Zhejiang, CN | 1 |
| 2,557 | Xiaoxiong Xu | Tsukuba, JP | 1 | 2,602 | Zhaoping Liu | Zhejiang, CN | 1 |
| 2,558 | Tsuyoshi Ohnishi | Tsukuba, JP | 1 | 2,603 | Yaletu Saixi | Zhejiang, CN | 1 |
| 2,559 | Isao Sakaguchi | Tsukuba, JP | 1 | 2,604 | Michael Reger | Jupiter, FL (US) | 1 |
| 2,560 | Ken Watanabe | Tsukuba, JP | 1 | 2,605 | Qiang Wei | Zhejiang, CN | 1 |
| 2,561 | Hassan Srour | Villeurbanne, FR | 1 | 2,606 | Hajime Hasegawa | Susono, JP | 1 |
| 2,562 | Catherine Santini | Collonges Mont D'or, FR | 1 | 2,607 | Akihito Shigematsu | Ichihara, JP | 1 |
| 2,563 | Ho Kim | Yongin-si, KR | 1 | 2,608 | Gen Miyata | Ichihara, JP | 1 |
| 2,564 | Yoon-Hee Lee | Yongin-si, KR | 1 | 2,609 | Giuseppe Resnati | Monza, IT | 1 |
| 2,565 | Tatsunori Suzuki | Menlo Park, CA (US) | 1 | 2,610 | Pierangelo Metrangolo | Pioltello, IT | 1 |

# INVENTORS

| # | Name | Location | Patents | # | Name | Location | Patents |
|---|---|---|---|---|---|---|---|
| 2,611 | Antonio Abate | Milan, IT | 1 | 2,656 | Jae Hyun Lee | Daejeon, KR | 1 |
| 2,612 | Francesco Matteucci | Ravenna, IT | 1 | 2,657 | Jihyun Kim | Daejeon, KR | 1 |
| 2,613 | Arnd Garsuch | Ludwigshafen, DE | 1 | 2,658 | Guoyou Deng | Huzhou, CN | 1 |
| 2,614 | Karolin Geyer | Ludwigshafen, DE | 1 | 2,659 | Yang Wu | Huzhou, CN | 1 |
| 2,615 | Martin Merger | Frankenthal, DE | 1 | 2,660 | Feng Guo | Huzhou, CN | 1 |
| 2,616 | Nicole Holub | Mannheim, DE | 1 | 2,661 | Seung Bum Suh | Yongin-si, KR | 1 |
| 2,617 | Mingke Li | Sichuan, CN | 1 | 2,662 | Maeng-Eun Lee | Yongin-si, KR | 1 |
| 2,618 | Zi Liang | Sichuan, CN | 1 | 2,663 | Jee-Won Kang | Yongin-si, KR | 1 |
| 2,619 | Rui Wang | Sichuan, CN | 1 | 2,664 | Alexey Kashaev | Yongin-si, KR | 1 |
| 2,620 | Michael Geier | Berkeley, CA (US) | 1 | 2,665 | Sang-Pil Kim | Yongin-si, KR | 1 |
| 2,621 | Ilan Gur | Washington, DC (US) | 1 | 2,666 | Sung-Won Jung | Yongin-si, KR | 1 |
| 2,622 | Yoshiko Kuwajima | Settsu, JP | 1 | 2,667 | Sang-bok Ma | Suwon-si, KR | 1 |
| 2,623 | Meiten Koh | Settsu, JP | 1 | 2,668 | Junyoung Mun | Seoul, KR | 1 |
| 2,624 | Akiyoshi Yamauchi | Settsu, JP | 1 | 2,669 | Hiroshi Tamura | Nagoya, JP | 1 |
| 2,625 | Hideo Sakata | Settsu, JP | 1 | 2,670 | Teruhiko Kameoka | Okazaki, JP | 1 |
| 2,626 | Hitomi Miyawaki | Decatur, AL (US) | 1 | 2,671 | Takao Suenaga | Oobu, JP | 1 |
| 2,627 | Akinori Tani | Settsu, JP | 1 | 2,672 | Atsushi Imai | Gamagoori, JP | 1 |
| 2,628 | Shinichi Kinoshita | Settsu, JP | 1 | 2,673 | Shigenori Saito | Nukata-gun, JP | 1 |
| 2,629 | Uwe Nieberlein | Roth, DE | 1 | 2,674 | Ayuko Kitajou | Kasuga, JP | 1 |
| 2,630 | Dennis Stuhlmacher | Bad Kreuznach, DE | 1 | 2,675 | Ryuichi Tsuji | Toyota, JP | 1 |
| 2,631 | Jeffrey W Elam | Elmhurst, IL (US) | 1 | 2,676 | Jun Yoshida | Suntou-gun, JP | 1 |
| 2,632 | Xiangbo Meng | Naperville, IL (US) | 1 | 2,677 | Byung Min Lee | Suwon-si, KR | 1 |
| 2,633 | Vitaliy Nimon | San Francisco, CA (US) | 1 | 2,678 | Bo Kyung Jung | Yongin-si, KR | 1 |
| 2,634 | Ian Wogan | Oakland, CA (US) | 1 | 2,679 | Yeon-Hee Yoon | Yongin-si, KR | 1 |
| 2,635 | Steven Lam | San Jose, CA (US) | 1 | 2,680 | Soo-Jung Kim | Yuseong-gu, KR | 1 |
| 2,636 | Natsumi Shibamura | Takehara, JP | 1 | 2,681 | In-Hyun Lee | Yongin-si, KR | 1 |
| 2,637 | Wen-Hung Huang | New Taipei, TW | 1 | 2,682 | Seung-Ju Oh | Yongin-si, KR | 1 |
| 2,638 | Wei Lu | Ann Arbor, MI (US) | 1 | 2,683 | Yasuo Takano | Yokohama, JP | 1 |
| 2,639 | Thomas Brian Olson | Allen, TX (US) | 1 | 2,684 | Kuntae Kwon | Suwon-si, KR | 1 |
| 2,640 | Alan Robert Ladd | The Colony, TX (US) | 1 | 2,685 | Moonseok Kwon | Hwaseong-si, KR | 1 |
| 2,641 | Mark Lynn Shipley | Richardson, TX (US) | 1 | 2,686 | Gwiok Park | Pyeongtaek-si, KR | 1 |
| 2,642 | Olivier Masson | Grenoble, FR | 1 | 2,687 | Ae-Ran Kim | Yongin-si, KR | 1 |
| 2,643 | Frédéric Dewulf | Voiron, FR | 1 | 2,688 | Héctor D Abruña | Ithaca, NY (US) | 1 |
| 2,644 | Come-Emmanuel Leys | Grenoble, FR | 1 | 2,689 | Jie Gao | Ithaca, NY (US) | 1 |
| 2,645 | Qingyuan Chen | Yueqing, CN | 1 | 2,690 | Michael A Lowe | Ithaca, NY (US) | 1 |
| 2,646 | Byong-Chul Woo | Yongin-si, KR | 1 | 2,691 | Yoshie Fujita | Tottori, JP | 1 |
| 2,647 | Yi-Seop Ahn | Yongin-si, KR | 1 | 2,692 | Satoshi Sunada | Tottori, JP | 1 |
| 2,648 | Dong-Hyuk Chang | Yongin-si, KR | 1 | 2,693 | Takahide Kobashi | Tottori, JP | 1 |
| 2,649 | Jung-Jin Moon | Suwon-si, KR | 1 | 2,694 | Guenter Semrau | Kefenrod, DE | 1 |
| 2,650 | Chan-Jung Kim | Suwon-si, KR | 1 | 2,695 | Walter Frank | Wuppertal, DE | 1 |
| 2,651 | Yun-Kyung Jo | Suwon-si, KR | 1 | 2,696 | Peter Barthen | Rheinberg, DE | 1 |
| 2,652 | Suk-Jung Son | Suwon-si, KR | 1 | 2,697 | Christoph Breitenstein | Muelheim, DE | 1 |
| 2,653 | George Demopoulos | Outremont, CA | 1 | 2,698 | Jae-Sung Gu | Yongin-si, KR | 1 |
| 2,654 | Hsien-Chieh Chiu | Montreal, CA | 1 | 2,699 | Ji-Hong Lim | Yongin-si, KR | 1 |
| 2,655 | Soo Hyun Lim | Daejeon, KR | 1 | 2,700 | Woon-Sun Rheu | Yongin-si, KR | 1 |

# INVENTORS

| # | Name | Location | Patents | # | Name | Location | Patents |
|---|---|---|---|---|---|---|---|
| 2,701 | Kyoung-Hee Shin | Daejeon, KR | 1 | 2,746 | Atsushi Shirasawa | Sunto-gun, JP | 1 |
| 2,702 | Chang-Soo Jin | Daejeon, KR | 1 | 2,747 | Young-Hwan Park | Busan, KR | 1 |
| 2,703 | Jae-Deok Jeon | Daejeon, KR | 1 | 2,748 | Seon-Yeong Kang | Yongin-si, KR | 1 |
| 2,704 | Joonmok Shim | Daejeon, KR | 1 | 2,749 | Hisatsugu Yamasaki | Gotenba, JP | 1 |
| 2,705 | Myung Seok Jeon | Daejeon, KR | 1 | 2,750 | Peide Liu | Shenzhen, CN | 1 |
| 2,706 | Wook Ahn | Daejeon, KR | 1 | 2,751 | Darui Wang | Shenzhen, CN | 1 |
| 2,707 | Zhengzhong Lv | Guangdong, CN | 1 | 2,752 | Baozhong Liu | Shenzhen, CN | 1 |
| 2,708 | Fanfen Liu | Guangdong, CN | 1 | 2,753 | Zhixian Zhang | Shenzhen, CN | 1 |
| 2,709 | Zhongzhi Yuan | Guangdong, CN | 1 | 2,754 | Zhefeng Su | Shenzhen, CN | 1 |
| 2,710 | Jincheng Liu | Guangdong, CN | 1 | 2,755 | Lin-Shu Du | Lansdale, PA (US) | 1 |
| 2,711 | Myunghoon Kim | Seoul, KR | 1 | 2,756 | David Moureau | Hatfield, PA (US) | 1 |
| 2,712 | Ed Franco | San Mateo, CA (US) | 1 | 2,757 | Nelly Martin | Montaud, FR | 1 |
| 2,713 | Dong Jin Kim | Namyangju Gyeonggi-Do, KR | 1 | 2,758 | Jong Hyeok Park | Suwon-si, KR | 1 |
| 2,714 | Gregory Douglade | Grenoble, FR | 1 | 2,759 | Zhang Kan | Suwon-si, KR | 1 |
| 2,715 | Jean-Frederic Martin | Grenoble, FR | 1 | 2,760 | Geewoo Jang | Suwon-si, KR | 1 |
| 2,716 | Naoaki Nishimura | Tokyo, JP | 1 | 2,761 | Jung-Je Woo | Naperville, IL (US) | 1 |
| 2,717 | Yuki Ochiai | Tokyo, JP | 1 | 2,762 | In-hyuk Son | Yongin-si, KR | 1 |
| 2,718 | Haruhiko Satake | Tokyo, JP | 1 | 2,763 | Yuan Dao | Phoenix, AZ (US) | 1 |
| 2,719 | Katia Guerin Araujo Da Silva | Pont-du-Chateau, FR | 1 | 2,764 | William Jeffrey Schlanger | Flagstaff, AZ (US) | 1 |
| 2,720 | Marc Denis Alphonse Dubois | Metz, FR | 1 | 2,765 | Frederic Fouda Onana | Bollate, IT | 1 |
| 2,721 | Andre Hamwi | Clermont-Ferrand, FR | 1 | 2,766 | Riccardo Pieri | Milan, IT | 1 |
| 2,722 | Berthold Theo Hoge | Bielefeld, DE | 1 | 2,767 | Marco Apostolo | Senago, IT | 1 |
| 2,723 | Simon Sebastian Steinhauer | Bielefeld, DE | 1 | 2,768 | Hans Edouard Miltner | Rhode-St-Genese, IT | 1 |
| 2,724 | Michael Schulte | Bischofsheim, DE | 1 | 2,769 | Anne-Lise Goffin | Ath, BE | 1 |
| 2,725 | En-Yu Pan | Kaohsiung, TW | 1 | 2,770 | Shilei Chen | Brussels, BE | 1 |
| 2,726 | Chun-Wei Su | New Taipei, TW | 1 | 2,771 | Myunghoon Kim | Yongin-si, KR | 1 |
| 2,727 | Chyi-Ming Leu | Hsinchu County, TW | 1 | 2,772 | Sung-Su Kim | Yongin-si, KR | 1 |
| 2,728 | Jen-Chih Lo | Changhua County, TW | 1 | 2,773 | Oleg Leonidovith Andreev | Ekaterinburg, RU | 1 |
| 2,729 | Yuich Aihara | Yokohama, JP | 1 | 2,774 | Evgeniya Matulevich | Yongin-si, KR | 1 |
| 2,730 | Nobuya Machida | Hyogo, JP | 1 | 2,775 | Hyo-Jin Kim | Gyeongsangbuk-do, KR | 1 |
| 2,731 | Seitaro Ito | Yokohama, JP | 1 | 2,776 | Hye-Ri Eom | Yongin-si, KR | 1 |
| 2,732 | Yeong Kil Song | Seoul, KR | 1 | 2,777 | Gil-Won Lee | Yongin-si, KR | 1 |
| 2,733 | Duane D Kruger | Fishers, IN (US) | 1 | 2,778 | Nandagopal Venkataramani | Bengaluru, IN | 1 |
| 2,734 | Robert C Beer | Noblesville, IN (US) | 1 | 2,779 | Gautham Ramamurthy | Bengaluru, IN | 1 |
| 2,735 | Brad Hanauer | Muncie, IN (US) | 1 | 2,780 | Shine Hari | Tiruvalla, IN | 1 |
| 2,736 | Robert T Wendling | Pendleton, IN (US) | 1 | 2,781 | Mohan Sreenivasan | Bengaluru, IN | 1 |
| 2,737 | June Park | Suwon-si, KR | 1 | 2,782 | Sang-won Kim | Seoul, KR | 1 |
| 2,738 | Takahiro Endo | Suwon-si, KR | 1 | 2,783 | Jong-jin Park | Hwaseong-si, KR | 1 |
| 2,739 | Hyukjae Kwon | Suwon-si, KR | 1 | 2,784 | Hyung-wook Ha | Seoul, KR | 1 |
| 2,740 | Eun-Jung Kim | Yongin-si, KR | 1 | 2,785 | Jong-heun Lee | Seoul, KR | 1 |
| 2,741 | Sang-Woon Yang | Yongin-si, KR | 1 | 2,786 | Jee-hyun Ahn | Seoul, KR | 1 |
| 2,742 | Young-Eun Kim | Yongin-si, KR | 1 | 2,787 | Jaemyung Lee | Seoul, KR | 1 |
| 2,743 | Jae-Kyung Kim | Yongin-si, KR | 1 | 2,788 | Stephen Shapiro | Bedford, MA (US) | 1 |
| 2,744 | Tsunehisa Hirashita | Nagoya, JP | 1 | 2,789 | James K Lynch | Bedford, MA (US) | 1 |
| 2,745 | Shuki Araki | Nagoya, JP | 1 | 2,790 | Ian Nicholson Whitehead | Bedford, MA (US) | 1 |

# INVENTORS

| # | Name | Location | Patents | # | Name | Location | Patents |
|---|---|---|---|---|---|---|---|
| 2,791 | Jeom-Soo Kim | Hwaseong-si, KR | 1 | 2,836 | Richard K Holman | Belmont, MA (US) | 1 |
| 2,792 | Jun Sung Lee | Suwon-si, KR | 1 | 2,837 | Wei-Ting Yeh | Taoyuan County, TW | 1 |
| 2,793 | Jin Hwa Kim | Seongnam-si, KR | 1 | 2,838 | Kang-Ming Peng | Taoyuan County, TW | 1 |
| 2,794 | Kyoung Joon Lee | Seoul, KR | 1 | 2,839 | Yong-Sun Won | Yongin-si, KR | 1 |
| 2,795 | Marianne Chami | Fontaine, FR | 1 | 2,840 | Jae-Hak Lee | Yongin-si, KR | 1 |
| 2,796 | Severine Jouanneau-si Larbi | Sillans, FR | 1 | 2,841 | Chi Paik | Brownstown Township, MI (US) | 1 |
| 2,797 | Yuhai Hu | London, CA | 1 | 2,842 | Feng Li | Troy, MI (US) | 1 |
| 2,798 | Ruying Li | London, CA | 1 | 2,843 | Yong-Seon Kim | Yongin-si, KR | 1 |
| 2,799 | Jong-Man Kim | Yongin-si, KR | 1 | 2,844 | Do-Yu Kim | Yongin-si, KR | 1 |
| 2,800 | Ho-Yul Baek | Yongin-si, KR | 1 | 2,845 | Min-Ju Lee | Yongin-si, KR | 1 |
| 2,801 | Jae-Rok Kim | Yongin-si, KR | 1 | 2,846 | Hyeon-jin Shin | Suwon-si, KR | 1 |
| 2,802 | Ishida Sumihito | Yongin-si, JP | 1 | 2,847 | Ho-bum Park | Seoul, KR | 1 |
| 2,803 | Sebastian Lang | Griesheim, DE | 1 | 2,848 | Jian Dong | Sun Prairie, WI (US) | 1 |
| 2,804 | Sang-Hun Lee | Yongin-si, KR | 1 | 2,849 | Satoshi Nishikawa | Tokyo, JP | 1 |
| 2,805 | Su-Bin Song | Yongin-si, KR | 1 | 2,850 | Yoon Seok Jung | Ulsan, KR | 1 |
| 2,806 | Dongho Son | Yongin-si, KR | 1 | 2,851 | Bum Ryong Shin | Pohang-si, KR | 1 |
| 2,807 | Junkyu Cha | Yongin-si, KR | 1 | 2,852 | Sung-jin Ahn | Anyang-si, KR | 1 |
| 2,808 | Nari Seo | Yongin-si, KR | 1 | 2,853 | Hirofumi Iisaka | Nagoya, JP | 1 |
| 2,809 | Stephan Hueffer | Ludwigshafen, DE | 1 | 2,854 | Takeaki Kishimoto | Chiba, JP | 1 |
| 2,810 | Andreas Kramer | Friedelsheim, DE | 1 | 2,855 | Loic Simonin | Grenoble, FR | 1 |
| 2,811 | Frank Dietsche | Schriesheim, DE | 1 | 2,856 | Sebastien Patoux | Saint Nicolas de Macherin, FR | 1 |
| 2,812 | Chong-Gi Hong | Yongin-si, KR | 1 | 2,857 | Woon-jung Paek | Busan, KR | 1 |
| 2,813 | Mi Ryeong Lee | Sejong, KR | 1 | 2,858 | Sami Oukassi | Saint-Egreve, FR | 1 |
| 2,814 | Heon Young Lee | Cheonan-si, KR | 1 | 2,859 | Samir Guerroudj | Saint-Etienne, FR | 1 |
| 2,815 | Kyoung Muk Lee | Sejong, KR | 1 | 2,860 | Michaël Roffat | Chateauroux, FR | 1 |
| 2,816 | Pierre Blanc | Morges, CH | 1 | 2,861 | Masutaka Shinmen | Sanyoonoda, JP | 1 |
| 2,817 | Karl-Heinz Pettinger | Garching, DE | 1 | 2,862 | Tetsu Taroura | Iruma-gun, JP | 1 |
| 2,818 | Sylvia Ayu Pradanawati | Taipei, TW | 1 | 2,863 | Keiji Sato | Ube, JP | 1 |
| 2,819 | Abraham Anapolsky | San Mateo, CA (US) | 1 | 2,864 | Takayoshi Morinaka | Ube, JP | 1 |
| 2,820 | Minh Huu Le | San Jose, CA (US) | 1 | 2,865 | Joa-Young Jeong | Yongin, KR | 1 |
| 2,821 | Jeroen Van Duren | Palo Alto, CA (US) | 1 | 2,866 | Gwang-Jin Lee | Seoul, KR | 1 |
| 2,822 | Sophie Madray | Quimper, FR | 1 | 2,867 | Jong-Uk Kim | Gunsan-si, KR | 1 |
| 2,823 | Stéphane Kerdranvat | Quimper, FR | 1 | 2,868 | Ryuji Yamamoto | Tokyo, JP | 1 |
| 2,824 | Erik K Koep | Pittsburgh, PA (US) | 1 | 2,869 | Yuusuke Yamada | Tokyo, JP | 1 |
| 2,825 | Wen-Han Li | Kaohsiung, TW | 1 | 2,870 | Takeshi Nakamura | Tokyo, JP | 1 |
| 2,826 | Ting-Keng Lin | Taichung, TW | 1 | 2,871 | Jun-hwan Ku | Seoul, KR | 1 |
| 2,827 | Satoru Taniguchi | Takehara, JP | 1 | 2,872 | Yun Ho Chul | East Amherst, NY (US) | 1 |
| 2,828 | Paul Albertus | Mountain View, CA (US) | 1 | 2,873 | In-Sung Uhm | Yongin-si, KR | 1 |
| 2,829 | Timm Lohman | Stuttgart, DE | 1 | 2,874 | Bo-Ra Shin | Yongin-si, KR | 1 |
| 2,830 | Jens Grimminger | Senden, DE | 1 | 2,875 | Richard Laucournet | La Buisse, FR | 1 |
| 2,831 | Jasim Ahmed | Mountain View, CA (US) | 1 | 2,876 | Sandrine Barthelemy | Saint Marcellin, FR | 1 |
| 2,832 | Jean-François Labrecque | Montreal, CA | 1 | 2,877 | Nathalie Diaferia | Livet et Gavet, FR | 1 |
| 2,833 | Martin Dontigny | Varennes, CA | 1 | 2,878 | Min-Ho Seo | Daegu, KR | 1 |
| 2,834 | Patrick Charest | Sante-Julie, CA | 1 | 2,879 | Mi-Hee Park | Gyeongsangnam-do, KR | 1 |
| 2,835 | Shen J Dillon | Champaign, IL (US) | 1 | 2,880 | Hye-Jung Kim | Ulsan-si, KR | 1 |

# INVENTORS

| # | Name | Location | Patents | # | Name | Location | Patents |
|---|---|---|---|---|---|---|---|
| 2,881 | Sang-Young Lee | Chuncheon-si, KR | 1 | 2,926 | Li-Duan Tsai | Hsinchu, TW | 1 |
| 2,882 | Eun-Hye Kil | Namyangju-si, KR | 1 | 2,927 | Chih-Ching Chang | Hsinchu, TW | 1 |
| 2,883 | Keunho Choi | Gangneung-si, KR | 1 | 2,928 | Chia-Chen Fang | Taipei, TW | 1 |
| 2,884 | Hirokazu Murata | Tokyo, JP | 1 | 2,929 | Wei-Hsin Wu | Kaohsiung, TW | 1 |
| 2,885 | Nobuaki Ishii | Tokyo, JP | 1 | 2,930 | Chun-Lung Li | Taoyuan County, TW | 1 |
| 2,886 | Mohit Jain | East Brunswick, NJ (US) | 1 | 2,931 | Yueh-Wei Lin | Hsinchu County, TW | 1 |
| 2,887 | Nader M Hagh | Franklin Park, NJ (US) | 1 | 2,932 | Kyung-Hee Shin | Seoul, KR | 1 |
| 2,888 | Farid Badway | Old Bridge, NJ (US) | 1 | 2,933 | Chang soo Jin | Daejeon, KR | 1 |
| 2,889 | Krista Martin | Edgewater, NJ (US) | 1 | 2,934 | Myung-seok Jeon | Daejeon, KR | 1 |
| 2,890 | Joerg Becker | Niddatal, DE | 1 | 2,935 | Jae-Deok Joen | Daejeon, KR | 1 |
| 2,891 | Ken Egan | Austin, TX (US) | 1 | 2,936 | Jun-Mook Shim | Daejeon, KR | 1 |
| 2,892 | Jim Kitchen | Austin, TX (US) | 1 | 2,937 | Myung-Hyun Ryu | Daejeon, KR | 1 |
| 2,893 | Joa-Yong Jeong | Yongin, KR | 1 | 2,938 | Jun Akedo | Tsukuba, JP | 1 |
| 2,894 | Li-Han Chung | Miaoli County, TW | 1 | 2,939 | Daniel Popovici | Tsukuba, JP | 1 |
| 2,895 | Dan-Cheng Kong | Hsinchu, TW | 1 | 2,940 | Hideyuki Nagai | Numazu, JP | 1 |
| 2,896 | Ming-Cheng Feng | Tainan County, TW | 1 | 2,941 | Sang Min Kim | Seoul, KR | 1 |
| 2,897 | Chih-Hung Lee | Taipei, TW | 1 | 2,942 | Young-Gyu Kim | Geumjeong-gu, KR | 1 |
| 2,898 | In-Beom Hwang | Seoul, KR | 1 | 2,943 | Seon-Hye Kim | Yongin-si, KR | 1 |
| 2,899 | Sung-Tae Ko | Chungcheongnam-do, KR | 1 | 2,944 | Richard J Marshall | Carstairs, CA | 1 |
| 2,900 | Yoon-Jeong Heo | Chungcheongnam-do, KR | 1 | 2,945 | Robert Yetman | West Roxbury, MA (US) | 1 |
| 2,901 | David Keogh | San Diego, CA (US) | 1 | 2,946 | Michael Roffat | Chateauroux, FR | 1 |
| 2,902 | Steven Kaye | San Diego, CA (US) | 1 | 2,947 | So-La Lee | Yongin, KR | 1 |
| 2,903 | Wei Tong | San Diego, CA (US) | 1 | 2,948 | Jeong-Ki Ha | Yongin-si, KR | 1 |
| 2,904 | Jörg Becker | Niddatal, DE | 1 | 2,949 | Chan-ho Pak | Seoul, KR | 1 |
| 2,905 | Seong-Ah Park | Yongin-si, KR | 1 | 2,950 | Jeong-kuk Sohn | Cheonan-si, KR | 1 |
| 2,906 | Hyun-Jun Shin | Yongin-si, KR | 1 | 2,951 | Soo-sung Kong | Gimje-si, KR | 1 |
| 2,907 | Suk-Chul Jung | Yongin-si, KR | 1 | 2,952 | Jun Lu | Beijing, CN | 1 |
| 2,908 | Young-Chul You | Yongin-si, KR | 1 | 2,953 | Seoung-jae Im | Seoul, KR | 1 |
| 2,909 | Hak-Seok Kang | Yongin-si, KR | 1 | 2,954 | Sang-ho Park | Yongin-si, KR | 1 |
| 2,910 | Heung-Min Oh | Yongin-si, KR | 1 | 2,955 | Hao Du | Nanjing, CN | 1 |
| 2,911 | Young-Hoon Do | Yongin-si, KR | 1 | 2,956 | Jianjun Shuang | Yuhua District, CN | 1 |
| 2,912 | Tae-Jin Jung | Yongin-si, KR | 1 | 2,957 | Jin-Hyuk Lim | Su-won-si, KR | 1 |
| 2,913 | Qichao Hu | Somerville, MA (US) | 1 | 2,958 | Shigeru Hirano | Yamaguchi, JP | 1 |
| 2,914 | Antonio Caputo | Woodbridge, CA | 1 | 2,959 | Tae-Geun Kim | Yongin-si, KR | 1 |
| 2,915 | Donald R Sadoway | Cambridge, MA (US) | 1 | 2,960 | Seung-Ho Na | Yongin-si, KR | 1 |
| 2,916 | Lee Se-Hee | Louisville, CO (US) | 1 | 2,961 | Ung-Kuk Heo | Yongin-si, KR | 1 |
| 2,917 | Steven M George | Boulder, CO (US) | 1 | 2,962 | Deuk-Hwa Lee | Yongin-si, KR | 1 |
| 2,918 | Andrew S Cavanagh | Boulder, CO (US) | 1 | 2,963 | Nelly Giroud | Saint Etienne, FR | 1 |
| 2,919 | Jung Yoon Seok | Seoul, KR | 1 | 2,964 | Sebastien Solan | Seyssinet-Pariset, FR | 1 |
| 2,920 | Anne C Dillon | Boulder, CO (US) | 1 | 2,965 | Toru Inagaki | Osaka, JP | 1 |
| 2,921 | In-Seop Byun | Yongin-si, KR | 1 | 2,966 | Hong-Wen Hwang | Hsinchu, TW | 1 |
| 2,922 | Young-Bae Sohn | Yongin-si, KR | 1 | 2,967 | Matulevich Yuri | Yongin-si, KR | 1 |
| 2,923 | David W Firsich | Dayton, OH (US) | 1 | 2,968 | Leonidovith Andreev Oleg | Ekaterinburg, RU | 1 |
| 2,924 | Mi Hee Park | Miryang-si, KR | 1 | 2,969 | Soo-an Song | Seoul, KR | 1 |
| 2,925 | Shunhui Lei | Wuxi, CN | 1 | 2,970 | Jae-hyung Kim | Cheonan-si, KR | 1 |

# INVENTORS

| # | Name | Location | Patents | # | Name | Location | Patents |
|---|---|---|---|---|---|---|---|
| 2,971 | Ji-yong Eom | Daejeon, KR | 1 | 3,016 | Shota Kumazaki | Hamamatsu, JP | 1 |
| 2,972 | Seung-goo Baek | Suwon-si, KR | 1 | 3,017 | Murugan Ramaswamy | Hamamatsu, JP | 1 |
| 2,973 | Ulrich Peter Wietelmann, I | Friedrichsdorf, DE | 1 | 3,018 | Yutaka Hirose | Susono, JP | 1 |
| 2,974 | Yu-Min Peng | Hsinchu, TW | 1 | 3,019 | Murali Ramasubramanian | Fremont, CA (US) | 1 |
| 2,975 | Kenichi Morigaki | Hyogo, JP | 1 | 3,020 | Ashok Lahiri | Cupertino, CA (US) | 1 |
| 2,976 | Sukenori Ichikawa | Suwa, JP | 1 | 3,021 | Young-Mi Park | Yongin-si, KR | 1 |
| 2,977 | Jong-Hyun Lee | Seongnam-si, KR | 1 | 3,022 | Min-Sook Sung | Yongin-si, KR | 1 |
| 2,978 | Jong-Su Kim | Seongnam-si, KR | 1 | 3,023 | Dongsheng Geng | London, CA | 1 |
| 2,979 | Joung-won Park | Seongnam-si, KR | 1 | 3,024 | Sheng Dai | Knoxville, TN (US) | 1 |
| 2,980 | Lynn Trahey | Clarendon Hills, IL (US) | 1 | 3,025 | Pasquale Fernando Fulvio | Knoxville, TN (US) | 1 |
| 2,981 | Jeffery Wolfenstine | Silver Spring, MD (US) | 1 | 3,026 | Richard T Mayes | Knoxville, TN (US) | 1 |
| 2,982 | Jeffery A Read | West Friendship, MD (US) | 1 | 3,027 | Xiqing Wang | Mason, OH (US) | 1 |
| 2,983 | Na-Rae Won | Suwon-si, KR | 1 | 3,028 | Xiao-Guang Sun | Knoxville, TN (US) | 1 |
| 2,984 | Stewart Kaiser | Boca Raton, FL (US) | 1 | 3,029 | Bingkun Guo | Knoxville, TN (US) | 1 |
| 2,985 | Takuhiro Miyuki | Ikeda, JP | 1 | 3,030 | Deng Zhongyi | Valley View, OH (US) | 1 |
| 2,986 | Tetsuo Sakai | Ikeda, JP | 1 | 3,031 | Bolomey Pascal | Solon, OH (US) | 1 |
| 2,987 | Junichi Niwa | Kariya, JP | 1 | 3,032 | Brian Elliot Hayden | Hampshire, GB | 1 |
| 2,988 | Hitotoshi Murase | Kariya, JP | 1 | 3,033 | Haydn N G Wadley | Keswick, VA (US) | 1 |
| 2,989 | Myung-Hun Bae | Yongin-si, KR | 1 | 3,034 | Yoon Gu Kim | Charlottesville, VA (US) | 1 |
| 2,990 | Masaki Koike | Osaka, JP | 1 | 3,035 | Sang-wan Jin | Charlottesville, VA (US) | 1 |
| 2,991 | Shu-Heng Wen | Hsinchu County, TW | 1 | 3,036 | Su-Ho Song | Yongin-si, KR | 1 |
| 2,992 | Chung-Liang Chang | Hsinchu, TW | 1 | 3,037 | Jonathan Maeyer | Haddonfield, NJ (US) | 1 |
| 2,993 | Ce Jin | Seoul, KR | 1 | 3,038 | David Ayme-Perrot | Huningue, FR | 1 |
| 2,994 | Hun-Gi Jung | Busan, KR | 1 | 3,039 | Marie Dieudonné | Laguiole, FR | 1 |
| 2,995 | Jean Yamanis | South Glastonbury, CT (US) | 1 | 3,040 | Philippe Sonntag | Hericy, FR | 1 |
| 2,996 | Ulf J Jonsson | South Windsor, CT (US) | 1 | 3,041 | Anne-Caroline Pasquier | Bures sur Yvette, FR | 1 |
| 2,997 | Ritesh Khire | East Hartford, CT (US) | 1 | 3,042 | Zhenning Yu | Fairborn, OH (US) | 1 |
| 2,998 | Jinliang Wang | Ellington, CT (US) | 1 | 3,043 | Sung Man Lee | Chuncheon-si, KR | 1 |
| 2,999 | Young-Seak Lee | Yongin-si, KR | 1 | 3,044 | Byoung-Hoon Ahn | Sokcho-si, KR | 1 |
| 3,000 | GuiShu Zhou | Shenzhen, CN | 1 | 3,045 | Jae-Yun Min | Yongin-si, KR | 1 |
| 3,001 | Lei Si | Shenzhen, CN | 1 | 3,046 | Inseop Byun | Yongin-si, KR | 1 |
| 3,002 | Yong Wang | Shenzhen, CN | 1 | 3,047 | Krishnan Palanichamy | Portage, MI (US) | 1 |
| 3,003 | YiWei Fan | Shenzhen, CN | 1 | 3,048 | Suresh G Advani | Newark, DE (US) | 1 |
| 3,004 | Kwang-Soo Kim | Yongin-si, KR | 1 | 3,049 | Ajay K Prasad | Newark, DE (US) | 1 |
| 3,005 | Joong-Woo Nam | Yongin-si, KR | 1 | 3,050 | Jeremy Robert Carlson | Cary, NC (US) | 1 |
| 3,006 | Jae-Dong Byun | Seoul, KR | 1 | 3,051 | Kenneth Scott Seethaler | Wake Forest, NC (US) | 1 |
| 3,007 | Sun-Youn Ryou | Cheonan-si, KR | 1 | 3,052 | Brian L Bischoff | Knoxville, TN (US) | 1 |
| 3,008 | Jon Ihlefeld | Albuquerque, NM (US) | 1 | 3,053 | Ramesh R Bhave | Knoxville, TN (US) | 1 |
| 3,009 | Paul G Clem | Albuquerque, NM (US) | 1 | 3,054 | Ashoutosh Panday | Berkeley, CA (US) | 1 |
| 3,010 | Cynthia Edney | Sandia Park, NM (US) | 1 | 3,055 | Enrique Daniel Gomez | Princeton, NJ (US) | 1 |
| 3,011 | David Ingersoll | Albuquerque, NM (US) | 1 | 3,056 | Thomas Barbarich | Fishers, IN (US) | 1 |
| 3,012 | Kyle Ross Fenton | Albuquerque, NM (US) | 1 | 3,057 | Mary Patterson | Carmel, IN (US) | 1 |
| 3,013 | Jae Won Jo | Incheon, KR | 1 | 3,058 | Chun-Mo Yang | Suwon-si, KR | 1 |
| 3,014 | Seung-Taek Myung | Gwangju, KR | 1 | 3,059 | Kasai Masahiro | Suwon-si, KR | 1 |
| 3,015 | Yasutoshi Iriyama | Hamamatsu, JP | 1 | 3,060 | Kenji Sasaki | Takehara, JP | 1 |

# INVENTORS

| # | Name | Location | Patents | # | Name | Location | Patents |
|---|---|---|---|---|---|---|---|
| 3,061 | Raphaël Salot | Lans-en-Vercors, FR | 1 | 3,106 | Richard J Paholsky | Rocky Hill, CT (US) | 1 |
| 3,062 | Benjamin Laforge | Grenoble, FR | 1 | 3,107 | John J Calabrese | Plantsville, CT (US) | 1 |
| 3,063 | Henri Boucher | Meylan, FR | 1 | 3,108 | Wen-Jia Zhang | Beijing, CN | 1 |
| 3,064 | Ming C Wang | Fairborn, OH (US) | 1 | 3,109 | Wei-Hua Pu | Beijing, CN | 1 |
| 3,065 | Sampath K Vanimisetti | Bengaluru, IN | 1 | 3,110 | Takuyuki Okano | Osaka, JP | 1 |
| 3,066 | Ramakrishnan Narayanrao | Bengaluru, IN | 1 | 3,111 | Toshihiko Ikehata | Osaka, JP | 1 |
| 3,067 | Carole Pagano | Saint-Ismier, FR | 1 | 3,112 | Hyun-Uk Jo | Yongin-si, KR | 1 |
| 3,068 | Lucas Sannier | Calais, FR | 1 | 3,113 | Anna Esmeralda K Javier | Berkeley, CA (US) | 1 |
| 3,069 | Jung Sik Yun | Daejeon, KR | 1 | 3,114 | Shrayesh Naran Patel | Berkeley, CA (US) | 1 |
| 3,070 | Jeon Keun Oh | Daejeon, KR | 1 | 3,115 | Daniel T Hallinan, Jr | Walnut Creek, CA (US) | 1 |
| 3,071 | Yu Rim Do | Daejeon, KR | 1 | 3,116 | Sean Do | Yongin-si, KR | 1 |
| 3,072 | James S Symanski | Greenfield, WI (US) | 1 | 3,117 | Kan Kitagawa | Hitachi, JP | 1 |
| 3,073 | Joerg A Kuempers | Wedemark, DE | 1 | 3,118 | Toyotaka Yuasa | Hitachi, JP | 1 |
| 3,074 | Uwe Koehler | Kassel, DE | 1 | 3,119 | Tatsuya Tooyama | Hitachi, JP | 1 |
| 3,075 | Ronald C Miles | Whitefish Bay, WI (US) | 1 | 3,120 | Tae-sung Kim | Suwon-Si, KR | 1 |
| 3,076 | Scott A Hansen | Holland, MI (US) | 1 | 3,121 | Kwang-su Kim | Suwon-Si, KR | 1 |
| 3,077 | Nels R Smith | Zeeland, MI (US) | 1 | 3,122 | Won-seok Chang | Namyangju-si, KR | 1 |
| 3,078 | Majid Taghikhani | Franklin, WI (US) | 1 | 3,123 | Hee-chul Jung | Gunpo-si, KR | 1 |
| 3,079 | Edward N Mrotek | Grafton, WI (US) | 1 | 3,124 | Ji-Yong Eom | Yongin-si, KR | 1 |
| 3,080 | Michael G Andrew | Menomonee Falls, WI (US) | 1 | 3,125 | Sun-Young Kim | Yongin-si, KR | 1 |
| 3,081 | Nobuhiro Sakitani | Kobe, JP | 1 | 3,126 | Bo-Ra Lee | Yongin-si, KR | 1 |
| 3,082 | Hélène Lignier | Saint Laurent du Pont, FR | 1 | 3,127 | Sin-Young Park | Yongin-si, KR | 1 |
| 3,083 | Masato Kamiya | Susono, JP | 1 | 3,128 | Chang-Hong Liu | Bei-Jing, CN | 1 |
| 3,084 | Hiroshi Nagase | Susono, JP | 1 | 3,129 | Stéphane Levasseur | Brussels, BE | 1 |
| 3,085 | Kyung Yoon Chung | Seoul, KR | 1 | 3,130 | Costana Ionica-Bousquet | Montpellier, FR | 1 |
| 3,086 | Byung Won Cho | Seoul, KR | 1 | 3,131 | Yasutoshi Iriyama | Kyoto, JP | 1 |
| 3,087 | Seong-rae Lee | Seoul, KR | 1 | 3,132 | Chihiro Yada | Kyoto, JP | 1 |
| 3,088 | Hwa Young Lee | Seoul, KR | 1 | 3,133 | Qing Gong | Guangdong, CN | 1 |
| 3,089 | Ji-Ae Choi | Seoul, KR | 1 | 3,134 | Xinping Lin | Guangdong, CN | 1 |
| 3,090 | Minjung Ryu | Seoul, KR | 1 | 3,135 | Longfei Zhou | Guangdong, CN | 1 |
| 3,091 | Young-Min Kim | Daejeon, KR | 1 | 3,136 | Weifeng Zhang | Guangdong, CN | 1 |
| 3,092 | Eun-Suok Oh | Daejeon, KR | 1 | 3,137 | Chang-Yu Ho | Hsinchu County, TW | 1 |
| 3,093 | SeungRim Yang | Daejeon, KR | 1 | 3,138 | Sebastian Lienkamp | Budenheim, DE | 1 |
| 3,094 | Juhyun Kim | Seoul, KR | 1 | 3,139 | Stephen Raiser | Wiesbaden, DE | 1 |
| 3,095 | Ki Woo Chun | Daejeon, KR | 1 | 3,140 | Sook-Soo Lee | Yongin-si, KR | 1 |
| 3,096 | ChanHong Lee | Daejeon, KR | 1 | 3,141 | Jian-Gang Li | Beijing, CN | 1 |
| 3,097 | Ki-Young Lee | Daejeon, KR | 1 | 3,142 | Minoru Sawai | Wakayama, JP | 1 |
| 3,098 | Seo-Jae Lee | Daejeon, KR | 1 | 3,143 | Hiroaki Kitayama | Wakayama, JP | 1 |
| 3,099 | JongMoon Jin | Seoul, KR | 1 | 3,144 | Takamitsu Saito | Kawasaki, JP | 1 |
| 3,100 | Taeyeon Kim | Jeonju-si, KR | 1 | 3,145 | Tamaki Miura | Yamata, JP | 1 |
| 3,101 | Fabien Gaben | Ecully, FR | 1 | 3,146 | Kyoichi Watanabe | Ebina, JP | 1 |
| 3,102 | Kazuyuki Kawabe | Yamaguchi, JP | 1 | 3,147 | Joung-wok Park | Seongnam-si, KR | 1 |
| 3,103 | Hyun-Seok Kim | Yongin-si, KR | 1 | 3,148 | Junya Duan | Nanjing, CN | 1 |
| 3,104 | Heon-Cheol Shin | Yongin-si, KR | 1 | 3,149 | Hidekazu Mori | Tokyo, JP | 1 |
| 3,105 | Ulf J Paholsky | South Windsor, CT (US) | 1 | 3,150 | Masahiro Yamakawa | Tokyo, JP | 1 |

# INVENTORS

| # | Name | Location | Patents | # | Name | Location | Patents |
|---|---|---|---|---|---|---|---|
| 3,151 | Crístina Iojoiu | Grenoble, FR | 1 | 3,196 | Kenji Kubo | Hitachi, JP | 1 |
| 3,152 | Régis Mercier | Irigny, FR | 1 | 3,197 | Ryoko Kanda | Itami, JP | 1 |
| 3,153 | Nadia El Kissi | Grenoble, FR | 1 | 3,198 | Kentaro Yoshida | Itami, JP | 1 |
| 3,154 | France Chabert | Paris, FR | 1 | 3,199 | Hiroshi Haruna | Fukaya, JP | 1 |
| 3,155 | Jérèmie Salomon | Ampuis, FR | 1 | 3,200 | Kazushige Kohno | Hitachi, JP | 1 |
| 3,156 | Taisuke Yamamoto | Nara, JP | 1 | 3,201 | Eiji Seki | Hitachi, JP | 1 |
| 3,157 | Prapan Paul Tinaphong | Westfield, IN (US) | 1 | 3,202 | Yoshiaki Kumashiro | Mito, JP | 1 |
| 3,158 | Jong-won Lee | Seoul, KR | 1 | 3,203 | Jiang Zhu | Guangdong, CN | 1 |
| 3,159 | Yurim Do | Seoul, KR | 1 | 3,204 | Chen-Chung Chen | Wuqi Town, TW | 1 |
| 3,160 | Jeonkeun Oh | Seoul, KR | 1 | 3,205 | Kuo Feng Chiu | Taichung, TW | 1 |
| 3,161 | Jae-Myoung Lee | Seoul, KR | 1 | 3,206 | All Abouimrane | Gatineau, CA | 1 |
| 3,162 | Brett Lucht | Wakefield, RI (US) | 1 | 3,207 | Isobel Davidson | Orleans, CA | 1 |
| 3,163 | Ang Xiao | Kingston, RI (US) | 1 | 3,208 | Chanho Pak | Seoul, KR | 1 |
| 3,164 | Li Yang | Kingston, RI (US) | 1 | 3,209 | Soosung Kong | Gimje-si, KR | 1 |
| 3,165 | Mengqing Xu | Kingston, RI (US) | 1 | 3,210 | Ky-sung Park | Yongin-si, KR | 1 |
| 3,166 | Tatyana B Zheltonozhskaya | Kiev, UA | 1 | 3,211 | Fuzhong Pan | Shenzhen, CN | 1 |
| 3,167 | Larisa R Kunitskaya | Kiev, UA | 1 | 3,212 | Caimin Wan | Shenzhen, CN | 1 |
| 3,168 | Svetlana A Berkova | Kiev, UA | 1 | 3,213 | Shengping You | Shenzhen, CN | 1 |
| 3,169 | Timofiy V Pastushkin | Ft. Lauderdale, FL (US) | 1 | 3,214 | Oleg Yuliyovych Posudievsky | Kiev, UA | 1 |
| 3,170 | Volodymyr I Redko | Coral Springs, FL (US) | 1 | 3,215 | Olga Andriyvna Goncharuk | Kiev, UA | 1 |
| 3,171 | Irina M Maksyuta | Dnipropetrovsk, UA | 1 | 3,216 | Vyacheslav Stepanovych Dyadyun | Kiev, UA | 1 |
| 3,172 | Nataliya M Permyakova | Kiev, UA | 1 | 3,217 | Vyacheslav Grygorovych Koshechko | Ukraine, UA | 1 |
| 3,173 | Alexei YU Kolendo | Kiev, UA | 1 | 3,218 | Scott W Jorgensen | Bloomfield Township, MI (US) | 1 |
| 3,174 | Young-Jun Kim | Daejeon, KR | 1 | 3,219 | Vitaly Dmytrovych Pokhodenko | Kiev, UA | 1 |
| 3,175 | Surajit Sengupta | Waterloo, CA | 1 | 3,220 | Rosario Del Rosauro | Danbury, CT (US) | 1 |
| 3,176 | Ding-Sheng Wang | Beijing, CN | 1 | 3,221 | Ri-Zhu Yin | Suwon-si, KR | 1 |
| 3,177 | Thomas Lau | Edmonton, CA | 1 | 3,222 | Su-keun Yoon | Gwangmyoung-si, KR | 1 |
| 3,178 | Jean-Marc Pujol | Rilleux, FR | 1 | 3,223 | Sung-Il Lee | Seoul, KR | 1 |
| 3,179 | Yu-Ta Tu | Taipei, TW | 1 | 3,224 | Satoshi Shibutani | Osaka, JP | 1 |
| 3,180 | Dai-kyu Kim | Seoul, KR | 1 | 3,225 | Yuko Ogawa | Osaka, JP | 1 |
| 3,181 | Hajime Matsumoto | Ikeda, JP | 1 | 3,226 | Kazuyoshi Honda | Osaka, JP | 1 |
| 3,182 | Zhi-Bin Zhou | Ikeda, JP | 1 | 3,227 | Chien-Fang Lee | Kaohsiung County, TW | 1 |
| 3,183 | Yasuhisa Fukumoto | Wakayama, JP | 1 | 3,228 | Po-Kun Chen | Kaohsiung, TW | 1 |
| 3,184 | Ryuichi Akagi | Wakayama, JP | 1 | 3,229 | Takayuki Shirane | Osaka, JP | 1 |
| 3,185 | Kenichi Nishimura | Wakayama, JP | 1 | 3,230 | Pei-Lun Wei | Nantou, TW | 1 |
| 3,186 | Shouichirou Sawa | Tokushima, JP | 1 | 3,231 | Domitille Esnard | Biot, FR | 1 |
| 3,187 | Byung-Won Cho | Seoul, KR | 1 | 3,232 | John Walley | Ladera Ranch, CA (US) | 1 |
| 3,188 | Kyung-Yoon Chung | Seoul, KR | 1 | 3,233 | Young-Il Jang | Newtonville, MA (US) | 1 |
| 3,189 | Joong-Kee Lee | Seoul, KR | 1 | 3,234 | Christopher Silkowski | Livonia, MI (US) | 1 |
| 3,190 | Akihiko Emori | Hitachi, JP | 1 | 3,235 | Kenneth R Peoppelmeier | Evanston, IL (US) | 1 |
| 3,191 | Youhei Kawahara | Hitachi, JP | 1 | 3,236 | Frederic Sauvage | Gumefens, CH | 1 |
| 3,192 | Kei Sakabe | Hitachi, JP | 1 | 3,237 | Vincent Bodenez | Ploudern, FR | 1 |
| 3,193 | Mutsumi Kikuchi | Mito, JP | 1 | 3,238 | Doo-Yeon Lee | Yongin, KR | 1 |
| 3,194 | Tatsumi Yamauchi | Hitachiota, JP | 1 | 3,239 | Monique Richard | Ann Arbor, MI (US) | 1 |
| 3,195 | Akihiko Kudo | Hitachinaka, JP | 1 | 3,240 | Kimber L Stamm | Ann Arbor, MI (US) | 1 |

# INVENTORS

| # | Name | Location | Patents | # | Name | Location | Patents |
|---|---|---|---|---|---|---|---|
| 3,241 | Liya Wang | Ann Arbor, MI (US) | 1 | 3,286 | Nae-Lih Wu | Taipei, TW | 1 |
| 3,242 | Junqing Ma | Ann Arbor, MI (US) | 1 | 3,287 | Kevin D Chambers | Fort Mill, SC (US) | 1 |
| 3,243 | Munetoshi Yamaguchi | Hiroshima, JP | 1 | 3,288 | Juergen Drews | Pirna, DE | 1 |
| 3,244 | Mi-jeong Song | Suwon-si, KR | 1 | 3,289 | Gerd Fehrmann | Pirna, DE | 1 |
| 3,245 | Hong Kyu Park | Daejeon, KR | 1 | 3,290 | Thomas Fischer | Pirna, DE | 1 |
| 3,246 | Yoshikatsu Seino | Sodegaura, JP | 1 | 3,291 | Thomas Hucke | Dresden, DE | 1 |
| 3,247 | Masatoshi Shibata | Sodegaura, JP | 1 | 3,292 | Roland Staub | Berggießhübel, DE | 1 |
| 3,248 | Phillip E Partin | Grafton, MA (US) | 1 | 3,293 | Tim Traulsen | Pirna, DE | 1 |
| 3,249 | Yanning Song | Shrewsbury, MA (US) | 1 | 3,294 | Pierre-Emmanuel Lippens | Sant Aunes, FR | 1 |
| 3,250 | Jeong Hee Choi | Busan, KR | 1 | 3,295 | Laurent Aldon | Montpellier, FR | 1 |
| 3,251 | Narumi Ohta | Ibaraki, JP | 1 | 3,296 | Aurélie Picard | Sète, FR | 1 |
| 3,252 | Lianqi Zhang | Ibaraki, JP | 1 | 3,297 | Pierre Kubiak | Montpellier, FR | 1 |
| 3,253 | Takayoshi Sasaki | Ibaraki, JP | 1 | 3,298 | Gilles Gauthier | Bilieu, FR | 1 |
| 3,254 | Kirakadu S Nanjundaswamy | Ambler, PA (US) | 1 | 3,299 | Jean-Louis Gabelle | Crolles, FR | 1 |
| 3,255 | Eleston Maxie | Marietta, GA (US) | 1 | 3,300 | Joykumar Singh Thokchom | Dayton, OH (US) | 1 |
| 3,256 | Eiji Nakayama | Hitachinaka, JP | 1 | 3,301 | Yoshinobu Morita | Hirakata, JP | 1 |
| 3,257 | Atsushi Sumi | Hitachinaka, JP | 1 | 3,302 | Yutaka Hongo | Takatsuki, JP | 1 |
| 3,258 | Keita Saitou | Hitachinaka, JP | 1 | 3,303 | Yassine Oumellal | Amiens, FR | 1 |
| 3,259 | Andrea Sani | Ferrara, IT | 1 | 3,304 | Aline Rougier | Amiens, FR | 1 |
| 3,260 | Michele Benedetti | Eugene, OR (US) | 1 | 3,305 | Takaki Mori | Suwon-si, KR | 1 |
| 3,261 | Francis M Gobright, IV | Howell, MI (US) | 1 | 3,306 | Jeon-keun Oh | Yuseong-Gu, KR | 1 |
| 3,262 | Soon Ki Woo | Youngin-si, KR | 1 | 3,307 | Clemence Siret | Bruges, FR | 1 |
| 3,263 | Young Taek Kim | Youngin-si, KR | 1 | 3,308 | Cecile Teissier | Bruges, FR | 1 |
| 3,264 | Kwan Sic Chun | Youngin-si, KR | 1 | 3,309 | Frederic Castaing | Gradignan, FR | 1 |
| 3,265 | Erik R Scott | Maple Grove, MN (US) | 1 | 3,310 | Philippe Biensan | Carignan de Bordeaux, FR | 1 |
| 3,266 | Carl D Wahlstrand | Saint Paul, MN (US) | 1 | 3,311 | Kwang-Sup Kim | Suwon-si, KR | 1 |
| 3,267 | Mark J Conroy | St. Louis Park, MN (US) | 1 | 3,312 | Tae-Shik Earmme | Suwon-si, KR | 1 |
| 3,268 | John Kast | Hugo, MN (US) | 1 | 3,313 | Aninda Bhattacharryya | Stuttgart, DE | 1 |
| 3,269 | Tetsuo Tokita | Minoh, JP | 1 | 3,314 | Joachim Maier | Wiernsheim, DE | 1 |
| 3,270 | Michiyuki Kono | Neyagawa, JP | 1 | 3,315 | Ki Young Lee | Daejeon, KR | 1 |
| 3,271 | Eriko Ishiko | Kyoto, JP | 1 | 3,316 | Séverine Jouanneau-Si-Larbi | Sillans, FR | 1 |
| 3,272 | Sebastien Launois | Grenoble, FR | 1 | 3,317 | Djamel Mourzagh | Fontaine, FR | 1 |
| 3,273 | Hua-Hsin Tsai | Linnei Township, Yunlin County, TW | 1 | 3,318 | Hélène Rouault | Le Versoud, FR | 1 |
| 3,274 | Jianhua Zhu | Shenzhen, CN | 1 | 3,319 | Antoine Lachau-Durand | Bourges, FR | 1 |
| 3,275 | Qing Lai | Shenzhen, CN | 1 | 3,320 | Olivier Nicolas | Arcay, FR | 1 |
| 3,276 | Qingzheng Wang | San Jose, CA (US) | 1 | 3,321 | Youn-Han Chang | Hwaseong-si, KR | 1 |
| 3,277 | Georges Barrandon | Mornant, FR | 1 | 3,322 | Jin-Young Kim | Gumi-si, KR | 1 |
| 3,278 | Yves Giraud | Sainte Foy les Lyon, FR | 1 | 3,323 | Yoo-Jung Kim | Daegu, KR | 1 |
| 3,279 | James J Gormley | Ardsley, PA (US) | 1 | 3,324 | Hae-Suk Hwang | Gumi-si, KR | 1 |
| 3,280 | Gerhard Hörpel | Nottuln, DE | 1 | 3,325 | Tai-Li An | ShenZhen, CN | 1 |
| 3,281 | Jung Kang Oh | Gumi-si, KR | 1 | 3,326 | Zhongyi Deng | Valley View, OH (US) | 1 |
| 3,282 | Young Jai Cho | Gumi-si, KR | 1 | 3,327 | Vaikunth S Prabhu | Morgantown, WV (US) | 1 |
| 3,283 | Ho Seok Yang | Daejeon, KR | 1 | 3,328 | Pascal Bolomey | Solon, OH (US) | 1 |
| 3,284 | Kab Youl Lee | Gumi-si, KR | 1 | 3,329 | Dae Joon Kang | Suwon-si, KR | 1 |
| 3,285 | Yu-Chan Yen | Taipei, TW | 1 | 3,330 | Donald P H Wu | Sinfong Township, Hsinchu County, TW | 1 |

# INVENTORS

| # | Name | Location | Patents | # | Name | Location | Patents |
|---|---|---|---|---|---|---|---|
| 3,331 | Damien Djian | Fontenay, FR | 1 | 3,376 | Kazuya Ohtani | Kyoto, JP | 1 |
| 3,332 | Phil Lafleur | Gloucester, CA | 1 | 3,377 | Takeaki Yamaguchi | Kyoto, JP | 1 |
| 3,333 | Robert Fry | Ottawa, CA | 1 | 3,378 | Youji Fujiura | Kyoto, JP | 1 |
| 3,334 | Kelly Gravelle | Poway, CA (US) | 1 | 3,379 | Sergei V Ivanov | Schnecksville, PA (US) | 1 |
| 3,335 | Andrew C Schweitzer | Syracuse, NY (US) | 1 | 3,380 | William J Casteel, Jr | Emmaus, PA (US) | 1 |
| 3,336 | David J Hine | Skaneateles, NY (US) | 1 | 3,381 | Wade H Bailey, III | Emmaus, PA (US) | 1 |
| 3,337 | Scott W Osiecki | Skaneateles, NY (US) | 1 | 3,382 | Ungyu Paik | Seoul, KR | 1 |
| 3,338 | Mark A Ferguson | Memphis, NY (US) | 1 | 3,383 | Teresa E Dunbar | Chantilly, VA (US) | 1 |
| 3,339 | Katsuji Emura | Itami, JP | 1 | 3,384 | Seong-Mo Oh | Seoul, KR | 1 |
| 3,340 | Yevgen Kalynushkin | Pompano Beach, FL (US) | 1 | 3,385 | Masato Fujikawa | Osaka, JP | 1 |
| 3,341 | Aleksander Markevich | Dnipropetrovsk, UA | 1 | 3,386 | Kohei Suzuki | Osaka, JP | 1 |
| 3,342 | Aleksander Balakin | Dnipropetrovsk, UA | 1 | 3,387 | Mikinari Shimada | Kyoto, JP | 1 |
| 3,343 | Hyun Suk Choo | Seoul, KR | 1 | 3,388 | Nobuyuki Okuda | Itami, JP | 1 |
| 3,344 | Galing Myachina | Irkuisk, RU | 1 | 3,389 | Hiryoyuki Ueki | Itami, JP | 1 |
| 3,345 | Rob MacNutt | Okotoks, CA | 1 | 3,390 | Tomohiko Ihara | Itami, JP | 1 |
| 3,346 | Gary Gunthorpe | Calgary, CA | 1 | 3,391 | Floris Y Tsang | Walnut Creek, CA (US) | 1 |
| 3,347 | Wei-Chen Wu | Tao-Yuan, TW | 1 | 3,392 | Galina Myachina | Irkutsk, RU | 1 |
| 3,348 | Steven Hou | Tao-Yuan, TW | 1 | 3,393 | Doo-yeon Lee | Yongin-si, KR | 1 |
| 3,349 | Samual Chen | Tao-Yuan, TW | 1 | 3,394 | Séverine Jouanneau | Saint Barthélémy d'Anjou, FR | 1 |
| 3,350 | Sorin S Georgescu | San Jose, CA (US) | 1 | 3,395 | Annie Le Gal La Salle | La Chapelle sur Erdre, FR | 1 |
| 3,351 | Anthony G Russell | San Jose, CA (US) | 1 | 3,396 | Alain Verbaere | La Chapelle sur Erdre, FR | 1 |
| 3,352 | Chris B Bartholomeusz | Santa Clara, CA (US) | 1 | 3,397 | Stéphane Lascaud | Fontainebleau, FR | 1 |
| 3,353 | Vladimir E Guterman | Suwon-si, KR | 1 | 3,398 | Nelly Bourgeon | Saint-Herblain, FR | 1 |
| 3,354 | Sang-Mock Lee | Suwon-si, KR | 1 | 3,399 | Marc D Andelman | Worcester, MA (US) | 1 |
| 3,355 | Masayuki Ogura | Hitachinaka, JP | 1 | 3,400 | Jon Zulkiewicz | Palmer, MA (US) | 1 |
| 3,356 | Wen Li | Ann Arbor, MI (US) | 1 | 3,401 | Munju Kim | Seoul, KR | 1 |
| 3,357 | Jun-ichi Yamaki | Kasuga, JP | 1 | 3,402 | Jaeup Jang | Daejeon, KR | 1 |
| 3,358 | Yike Chen | Qunzhou, CN | 1 | 3,403 | Min-seuk Kim | Seoul, KR | 1 |
| 3,359 | Takafumi Yamamoto | Kasuga, JP | 1 | 3,404 | Duck-young Yoo | Suwon, KR | 1 |
| 3,360 | Naoki Hatta | Ichihara, JP | 1 | 3,405 | Wolfgang Kollmann | Veitsch, AT | 1 |
| 3,361 | Albina Mikhalev | Irkutsk, RU | 1 | 3,406 | Helga Kollmann | Veitsch, AT | 1 |
| 3,362 | Vasily Tarnopolsky | Suwon-si, KR | 1 | 3,407 | Chien-Te Hsieh | Taichung, TW | 1 |
| 3,363 | Wei-Liang Wan | Longtan Township, Taoyuan County 325, TW | 1 | 3,408 | Hsiu-Wen Huang | Hsinchu, TW | 1 |
| 3,364 | Chih-Min Hsu | Hsinchu, TW | 1 | 3,409 | Yue-Hao Huang | Kaohsiung, TW | 1 |
| 3,365 | Dar-Cherng Su | Hsinchu, TW | 1 | 3,410 | Hung-Hsiao Lin | Miaoli, TW | 1 |
| 3,366 | Albert Chen | Hsinchu, TW | 1 | 3,411 | Mao-Huang Liu | Taipei, TW | 1 |
| 3,367 | Cheng-Chieh Ku | Hsinchu, TW | 1 | 3,412 | Han-Chang Shih | Taipei, TW | 1 |
| 3,368 | Jui-Liang Wang | Hsinchu, TW | 1 | 3,413 | Jeom-Soo Kim | Naperville, IL (US) | 1 |
| 3,369 | Charles Huang | Hsinchu, TW | 1 | 3,414 | Kyung-Ho Kim | Cheonan, KR | 1 |
| 3,370 | Anthony Frank Hollenkamp | Camberwell, AU | 1 | 3,415 | Hee-Young Sun | Cheonan, KR | 1 |
| 3,371 | Patrick Craig Howlett | Bentleigh, AU | 1 | 3,416 | Naichao Li | Croton on Hudson, NY (US) | 1 |
| 3,372 | Douglas Robert MacFarlane | East Brighton, AU | 1 | 3,417 | Paul A Christian | Norton, MA (US) | 1 |
| 3,373 | Stewart Alexander Forsyth | Belfast, GB | 1 | 3,418 | Cahit Eylem | Bellingham, MA (US) | 1 |
| 3,374 | Maria Forsyth | Ashburton, AU | 1 | 3,419 | Kirakodu S Nanjundaswamy | Sharon, MA (US) | 1 |
| 3,375 | Takashi Sumiya | Kyoto, JP | 1 | 3,420 | Fan Zhang | Needham, MA (US) | 1 |

# INVENTORS

| # | Name | Location | Patents | # | Name | Location | Patents |
|---|---|---|---|---|---|---|---|
| 3,421 | Xiandong Wang | Acton, MA (US) | 1 | 3,466 | Yong-Rae Kim | Taejeon, KR | 1 |
| 3,422 | Yuichi Hirai | Tokyo-To, JP | 1 | 3,467 | Shih-Hsiung Weng | Taipei, TW | 1 |
| 3,423 | Youichi Mochiduki | Tokyo-To, JP | 1 | 3,468 | Kok-Aun Ong | Penang, MY | 1 |
| 3,424 | Takanori Yamashita | Tokyo-To, JP | 1 | 3,469 | Simon Frisk | Richmond, VA (US) | 1 |
| 3,425 | Hitoshi Sekino | Tokyo-To, JP | 1 | 3,470 | Lu Zhang | Midlothian, VA (US) | 1 |
| 3,426 | Jun Fukuda | Tokyo-To, JP | 1 | 3,471 | Jun-Ho Kim | Asan, KR | 1 |
| 3,427 | Kouichi Mikami | Tokyo-To, JP | 1 | 3,472 | Ken J Harleson | Fort Mill, SC (US) | 1 |
| 3,428 | Hiroki Nakagawa | Tokyo-To, JP | 1 | 3,473 | Ta-Hua Yu | Nanuet, NY (US) | 1 |
| 3,429 | Miho Miyahara | Tokyo-To, JP | 1 | 3,474 | Rolf Huelss | Hockenheim, DE | 1 |
| 3,430 | Chie Kawai | Tokyo-To, JP | 1 | 3,475 | Giselle Sandi-Tapia | Glen Ellyn, IL (US) | 1 |
| 3,431 | Hideki Arao | Tokyo-To, JP | 1 | 3,476 | Kathleen Carrado Gregar | Naperville, IL (US) | 1 |
| 3,432 | Takakazu Goto | Tokyo-To, JP | 1 | 3,477 | Kwang-Chun Kim | Seoul, KR | 1 |
| 3,433 | Deok-Geun Kim | Suwon-si, KR | 1 | 3,478 | Min-Ho Song | Cheonan-si, KR | 1 |
| 3,434 | Milos Cernik | Brno, CZ | 1 | 3,479 | Jang-Ho Yoon | Cheonan-si, KR | 1 |
| 3,435 | Antonin Ruzicka | Olomucany, CZ | 1 | 3,480 | Teak-Hyen Kwon | Gangneung-si, KR | 1 |
| 3,436 | Zdirad Zak | Brno, CZ | 1 | 3,481 | Jin-Uk Lee | Asan-si, KR | 1 |
| 3,437 | Virginie Pevere | Lyons, FR | 1 | 3,482 | Petrus Henricus Laurentius Notten | Eindhoven, NL | 1 |
| 3,438 | Raffaele La Ferla | Redondo Beach, CA (US) | 1 | 3,483 | Petra Elisabeth De Jongh | Eindhoven, NL | 1 |
| 3,439 | Larisa V Malinovskaya | Torrance, CA (US) | 1 | 3,484 | Carl E Fabian | Miami Shores, FL (US) | 1 |
| 3,440 | Toshikazu Yoshida | Kobe, JP | 1 | 3,485 | Dave Narasimhan | Flemington, NJ (US) | 1 |
| 3,441 | Kyoung-Hee Lee | Seoul, KR | 1 | 3,486 | Dennis W Dees | Downers Grove, IL (US) | 1 |
| 3,442 | Cheol-soo Jung | Cheonan, KR | 1 | 3,487 | Yoo Eup Hyung | Lisle, IL (US) | 1 |
| 3,443 | Eui-hwan Song | Cheonan, KR | 1 | 3,488 | Hideto Horikoshi | Sagamihara, JP | 1 |
| 3,444 | Doo-kyung Yang | Daejeon Metropolitan, KR | 1 | 3,489 | Mitsuhiro Yamazaki | Aoba-ku, JP | 1 |
| 3,445 | Hyun-jeong Lim | Incheon Metropolitan, KR | 1 | 3,490 | Jun Tanaka | Zama, JP | 1 |
| 3,446 | Young-gu Jin | Kyungki-do, KR | 1 | 3,491 | Gregory Charles Garabedian | Warren, MI (US) | 1 |
| 3,447 | Kwon Sun Roh | Cheonan, KR | 1 | 3,492 | Xiaoguang Sun | Tempe, AZ (US) | 1 |
| 3,448 | Jong Hyuk Choi | Seoul, KR | 1 | 3,493 | Young Sik Hong | Daejeon, KR | 1 |
| 3,449 | Chi Kyun Park | Montville, NJ (US) | 1 | 3,494 | Young Gi Lee | Daejeon, KR | 1 |
| 3,450 | Jon Ha Lee | Daejeon, KR | 1 | 3,495 | Kyungho Kim | Cheonan, KR | 1 |
| 3,451 | Shih-Nan Hsieh | Taipei, TW | 1 | 3,496 | Hyunsook Jung | Seoul, KR | 1 |
| 3,452 | Jae-il Han | Seoul, KR | 1 | 3,497 | Sunghwan Na | Asan, KR | 1 |
| 3,453 | Han-soo Kim | Seoul, KR | 1 | 3,498 | Marcello Coluccia | Zurich, CH | 1 |
| 3,454 | Francois Cardarelli | St-Leonard, CA | 1 | 3,499 | Reinhard Nesper | Kilchberg, CH | 1 |
| 3,455 | Jonathan Dube | Laprairie, CA | 1 | 3,500 | Petr Novak | Brugg, CH | 1 |
| 3,456 | Steven K Lei | Burnaby, CA | 1 | 3,501 | Ronald B Goldner | Lexington, MA (US) | 1 |
| 3,457 | Ju-Hyung Kim | Busan, KR | 1 | 3,502 | Te-Yang Liu | Arlington, MA (US) | 1 |
| 3,458 | Un-Sick Park | Seongnam, KR | 1 | 3,503 | Mark A Goldner | Boston, MA (US) | 1 |
| 3,459 | Chung-kun Cho | Kyungki-do, KR | 1 | 3,504 | Alexandra Gerouki | Medford, MA (US) | 1 |
| 3,460 | Jea-woan Lee | Kyungki-do, KR | 1 | 3,505 | Terry E Haas | Southborough, MA (US) | 1 |
| 3,461 | T Richard Jow | Potomac, MD (US) | 1 | 3,506 | Joseph Michael Bennett | Gallatin, TN (US) | 1 |
| 3,462 | Kang Xu | North Potomac, MD (US) | 1 | 3,507 | Jeong-Joon Park | Cheonan, KR | 1 |
| 3,463 | Soo-Ryoung Kim | Taejeon, KR | 1 | 3,508 | Tetsuya Kobayashi | Anjo, JP | 1 |
| 3,464 | Jee-Ho Kim | Taejeon, KR | 1 | 3,509 | Masaya Itou | Toyota, JP | 1 |
| 3,465 | Ho-Kyung Byun | Taejeon, KR | 1 | 3,510 | Chandrasekaran Ramasamy | Karaikudi, IN | 1 |

# INVENTORS

| # | Name | Location | Patents | # | Name | Location | Patents |
|---|---|---|---|---|---|---|---|
| 3,511 | Vasudevan Thiagarajan | Karaikudi, IN | 1 | 3,556 | Daniel Georgiadis | Panama City, FL (US) | 1 |
| 3,512 | Mani Ariyanan | Karaikudi, IN | 1 | 3,557 | Joseph Papciak | Lynn Haven, FL (US) | 1 |
| 3,513 | Gangadharan Ramaiyer | Karaikudi, IN | 1 | 3,558 | Kyu Seung Han | Busan, KR | 1 |
| 3,514 | Young-min Choi | Daejeon, KR | 1 | 3,559 | Hiroya Umeyama | Toyota, JP | 1 |
| 3,515 | Byoung-hyun Kang | Cheonan, KR | 1 | 3,560 | Priscilla Reale | Latina, IT | 1 |
| 3,516 | Jin-kyoung Kim | Cheonan, KR | 1 | 3,561 | Ilyeong-gon Noh | Geoul, KR | 1 |
| 3,517 | Laure Monconduit-Jegou | Jacou, FR | 1 | 3,562 | James K Chun | Santa Clara, CA (US) | 1 |
| 3,518 | Frédéric Gillot | La Calmette, FR | 1 | 3,563 | Sung-soo Kim | Cheonan-si, KR | 1 |
| 3,519 | Marie-Liesse Doublet | Draveil, FR | 1 | 3,564 | Jang-Chung Fang | Taipei, TW | 1 |
| 3,520 | Takahito Ito | Tsu, JP | 1 | 3,565 | Seung-Kee Kim | Cheonan-si, KR | 1 |
| 3,521 | Osamu Yamamoto | Ichinomiya, JP | 1 | 3,566 | Sang-Moon Hwang | Cheonan-si, KR | 1 |
| 3,522 | Tatsuo Fujinami | Hamamatsu, JP | 1 | 3,567 | Young-Bae Roh | Cheonan-si, KR | 1 |
| 3,523 | Genaro Texidor | Augusta, GA (US) | 1 | 3,568 | Chin Lung Chang | Taipei, TW | 1 |
| 3,524 | Christina Lampe-Onnerud | Framingham, MA (US) | 1 | 3,569 | Robert Scott Morris | Fairhaven, MA (US) | 1 |
| 3,525 | Per Onnerud | Framingham, MA (US) | 1 | 3,570 | Brian Gilbert Dixon | Sandwich, MA (US) | 1 |
| 3,526 | Sharon Dalton | Malden, MA (US) | 1 | 3,571 | Shinji Nakanishi | Hirakata, JP | 1 |
| 3,527 | Tomoyoshi Koizumi | Iwaki, JP | 1 | 3,572 | Hiroyuki Murai | Hirakata, JP | 1 |
| 3,528 | Aisaku Nagai | Iwaki, JP | 1 | 3,573 | Kiyomi Kato | Moriguchi, JP | 1 |
| 3,529 | Vadim Gorchkov | Coral Springs, FL (US) | 1 | 3,574 | Yukishige Inaba | Higashiosaka, JP | 1 |
| 3,530 | Oleg Volkov | Coral Springs, FL (US) | 1 | 3,575 | Shoichiro Watanabe | Ikoma-gun, JP | 1 |
| 3,531 | Byung-Woo Park | Seoul, KR | 1 | 3,576 | Hizuru Koshina | Neyagawa, JP | 1 |
| 3,532 | Yong-Jeong Kim | Seoul, KR | 1 | 3,577 | Brian D Fredericksen | Watertown, MN (US) | 1 |
| 3,533 | Tae-Jun Kim | Seoul, KR | 1 | 3,578 | Dominique C Larcher | Amiens, FR | 1 |
| 3,534 | Young-Sik Hong | Daejeon, KR | 1 | 3,579 | Ian A Courtney | St. Francis, MN (US) | 1 |
| 3,535 | Akiko Ishida | Moriguchi, JP | 1 | 3,580 | Bente Adriaan Bordes | Eindhoven, NL | 1 |
| 3,536 | Ken Nishimura | Moriguchi, JP | 1 | 3,581 | Jan Brink | Eindhoven, NL | 1 |
| 3,537 | Masahiko Ogawa | Takarazuka, JP | 1 | 3,582 | Jien-Chang Chen | Miaoli Hsien, TW | 1 |
| 3,538 | Nobuo Eda | Hirakata, JP | 1 | 3,583 | Mishima Ryoji | Yokohamasi, JP | 1 |
| 3,539 | Masaki Kitagawa | Katano, JP | 1 | 3,584 | Tsuno Toshiaki | Kawasakisi, JP | 1 |
| 3,540 | Tetsuhisa Sakai | Moriguchi, JP | 1 | 3,585 | Matsubara Keiko | Yokohamasi, JP | 1 |
| 3,541 | Hee Dong Jang | Daejeon, KR | 1 | 3,586 | Nathalie Pereira | New York, NY (US) | 1 |
| 3,542 | Hiroe Nakagawa | Osaka, JP | 1 | 3,587 | Sara Nordlinder | Uppsala, SE | 1 |
| 3,543 | Toshiyuki Watanabe | Kanagawa, JP | 1 | 3,588 | Kristina Edström | Vänge, SE | 1 |
| 3,544 | Takaaki Kishi | Osaka, JP | 1 | 3,589 | Torbjörn Gustafson | Vänge, SE | 1 |
| 3,545 | Kenzi Kataoka | Yokkaichi, JP | 1 | 3,590 | M Zaraf A Munshi | Missouri City, TX (US) | 1 |
| 3,546 | Hiroko Sanda | Kobe, JP | 1 | 3,591 | Peter Arnold Morken | Wilmington, DE (US) | 1 |
| 3,547 | Robert C West | Madison, WI (US) | 1 | 3,592 | Paul R Resnick | Cary, NC (US) | 1 |
| 3,548 | Sumit M Pathak | Tamarac, FL (US) | 1 | 3,593 | Lin Wang | Hockessin, DE (US) | 1 |
| 3,549 | Do-Young Seung | Yongin, KR | 1 | 3,594 | Sung-Kyun Jang | Suwon, KR | 1 |
| 3,550 | Won-cheol Jung | Daejeon, KR | 1 | 3,595 | Young-Uk Kwon | Suwon, KR | 1 |
| 3,551 | Chil-hoon Do | Changwon, KR | 1 | 3,596 | Wan-Seog Oh | Chungcheongnam-do, KR | 1 |
| 3,552 | Sung-in Moon | Changwon, KR | 1 | 3,597 | Jerry Bessa | Ojai, CA (US) | 1 |
| 3,553 | Jin-young Lee | Suwon, KR | 1 | 3,598 | Omkarnath K Gupta | Ventura, CA (US) | 1 |
| 3,554 | William C Bohne | Lawrenceville, GA (US) | 1 | 3,599 | Robert Schilken | Ventura, CA (US) | 1 |
| 3,555 | Thomas Pruitt | Panama City, FL (US) | 1 | 3,600 | Mark Kollman | Oxnard, CA (US) | 1 |

# INVENTORS

| # | Name | Location | Patents | # | Name | Location | Patents |
|---|---|---|---|---|---|---|---|
| 3,601 | John Skoumpris | Amherst, NY (US) | 1 | 3,646 | Shirley A Craanen | Madison, WI (US) | 1 |
| 3,602 | Nam-Gyu Park | Taejon, KR | 1 | 3,647 | Daniel A Schneider | Madison, WI (US) | 1 |
| 3,603 | Kwang-Man Kim | Taejon, KR | 1 | 3,648 | Joseph P Nestler | Verona, WI (US) | 1 |
| 3,604 | Kwang-Sun Ryu | Taejon, KR | 1 | 3,649 | Kirk S Thomas | Kenosha, WI (US) | 1 |
| 3,605 | Yong-Joon Park | Seoul, KR | 1 | 3,650 | Calogero Ribellino | Gravina Di Catania, IT | 1 |
| 3,606 | Soon-Ho Chang | Taejon, KR | 1 | 3,651 | Patrizia Milazzo | Messina, IT | 1 |
| 3,607 | Yasushi Nakagiri | Kyotanabe, JP | 1 | 3,652 | Francesco Pulvirenti | Acireale, IT | 1 |
| 3,608 | Yasuhiko Bito | Osaka, JP | 1 | 3,653 | Heinz-Dieter Eichholz | Iserlohn, DE | 1 |
| 3,609 | Hiromu Matsuda | Hyogo, JP | 1 | 3,654 | Hyeonsik M Cheong | Seoul, KR | 1 |
| 3,610 | Tadashi Sotomura | Kashiwara, JP | 1 | 3,655 | Jeong-Ju Cho | Chungcheongnam-do, KR | 1 |
| 3,611 | Yoshinori Toyoguchi | Yao, JP | 1 | 3,656 | Hironori Kobayashi | Ikeda, JP | 1 |
| 3,612 | Kenichiro Yamashita | Chiba, JP | 1 | 3,657 | Steven R Taylor | Salt Lake City, UT (US) | 1 |
| 3,613 | Takeshi Ishitoku | Yokohama, JP | 1 | 3,658 | Thomas D Stout | Salt Lake City, UT (US) | 1 |
| 3,614 | Masaharu Shindo | Tokyo, JP | 1 | 3,659 | Jae-phil Cho | Kyungki-do, KR | 1 |
| 3,615 | Hidenobu Nogi | Sodegaura, JP | 1 | 3,660 | Geun-bae Kim | Kyungki-do, KR | 1 |
| 3,616 | Chan-Soo Kim | Seoul, KR | 1 | 3,661 | Yong-chul Park | Seoul, KR | 1 |
| 3,617 | Sang-Im Yoo | Seoul, KR | 1 | 3,662 | Akshaya K Pahdi | LaSalle, IL (US) | 1 |
| 3,618 | Louis E Branovich | Howell, NJ (US) | 1 | 3,663 | Hiroyuki Inagaki | Ohi-machi, JP | 1 |
| 3,619 | Anthony G Pellegrino | Middletown, NJ (US) | 1 | 3,664 | Satoshi Asano | Asaka, JP | 1 |
| 3,620 | Sergey V Sazhin | Chungcheongnam-do, KR | 1 | 3,665 | Masatoshi Horii | Yokohama, JP | 1 |
| 3,621 | Mikhail Yu Khimchenko | Chungcheongnam-do, KR | 1 | 3,666 | Hiroshi Furukawa | Kawagoe, JP | 1 |
| 3,622 | Yevgeniy N Tritenichenko | Chungcheongnam-do, KR | 1 | 3,667 | Tadashi Niwa | Kamifukuoka, JP | 1 |
| 3,623 | Keith D Kepler | Mountain View, CA (US) | 1 | 3,668 | Tadashi Teranishi | Sumoto, JP | 1 |
| 3,624 | Yun-seok Choi | Cheonan, KE | 1 | 3,669 | Antoine Capel | Goyrans, FR | 1 |
| 3,625 | Jin-soo Lee | Cheonan, KR | 1 | 3,670 | Noam Hadas | Tel Aviv, IL | 1 |
| 3,626 | Se-jong Han | Cheonan, KR | 1 | 3,671 | Jack Ou | Nan-Kang District, Taipei City, TW | 1 |
| 3,627 | Kyoo-Yoon Shim | Choongcheongnam-do, KR | 1 | 3,672 | Wan-Uk Choi | Cheonan-si, KR | 1 |
| 3,628 | Sang-Jim Kim | Choongcheongnam-do, KR | 1 | 3,673 | Jae-Yul Ryu | Cheonan-si, KR | 1 |
| 3,629 | Wong-Il Jung | Chungcheongnam-do, KR | 1 | 3,674 | Petrus H L Notten | Eindhoven, NL | 1 |
| 3,630 | Reinhard P Hemmer | Illertissen, DE | 1 | 3,675 | Francois P R Orsini | Anthony, FR | 1 |
| 3,631 | Margret Wohlfahrt-Mehrens | Illertissen, DE | 1 | 3,676 | Jean M Tarascon | Amiens, FR | 1 |
| 3,632 | Giesela Arnold | Ulm, DE | 1 | 3,677 | Satoshi Yamaguchi | Takasago, JP | 1 |
| 3,633 | Christian Vogler | Ulm, DE | 1 | 3,678 | Satoshi Nakagawa | Takasago, JP | 1 |
| 3,634 | Michael Gee | Vancouver, CA | 1 | 3,679 | Sunao Mitsui | Takasago, JP | 1 |
| 3,635 | Jun Xu | Minneapolis, MN (US) | 1 | 3,680 | Susumu Ohno | Takasago, JP | 1 |
| 3,636 | Boone B Owens | Wrightsville Beach, NC (US) | 1 | 3,681 | Akihisa Kajiyama | Hiroshima-ken, JP | 1 |
| 3,637 | William H Smyrl | New Brighton, MN (US) | 1 | 3,682 | Hiromitsu Miyazaki | Yokkaichi, JP | 1 |
| 3,638 | Youn-han Chang | Kyungki-do, KR | 1 | 3,683 | Tetsuya Yamamoto | Iwata, JP | 1 |
| 3,639 | Jung-ho Kim | Cheonan, KR | 1 | 3,684 | Mitsuyoshi Nagao | Fujieda, JP | 1 |
| 3,640 | Ella F Spiegel | Louisville, CO (US) | 1 | 3,685 | Hidenori Sato | Fujieda, JP | 1 |
| 3,641 | Anthony F Sammells | Boulder, CO (US) | 1 | 3,686 | Yoshihiro Fujikawa | Toyota, JP | 1 |
| 3,642 | Kresimir Adamic | Boulder, CO (US) | 1 | 3,687 | Khalil Amine | Downers Grove, IL (US) | 1 |
| 3,643 | Jackson C Ma | Middleton, WI (US) | 1 | 3,688 | Christopher Greedy | Liberty Hill, TX (US) | 1 |
| 3,644 | El-Sayed Megahed | Madison, WI (US) | 1 | 3,689 | Jong-Ming Lin | Hsinchu, TW | 1 |
| 3,645 | Timothy J Stachoviak | Madison, WI (US) | 1 | 3,690 | Mei-Hui Wang | Taipei, TW | 1 |

# INVENTORS

| # | Name | Location | Patents | # | Name | Location | Patents |
|---|---|---|---|---|---|---|---|
| 3,691 | Erik M Kelder | Nootdorp, NL | 1 | 3,736 | Randall E Winans | Downers Grove, IL (US) | 1 |
| 3,692 | Michiel J Jak | Nienwerkerk Aan den Lissel, NL | 1 | 3,737 | K Carrado Gregar | Naperville, IL (US) | 1 |
| 3,693 | Johannes Schooman | Wassenaak, NL | 1 | 3,738 | Jun Sugiyama | Aichi, JP | 1 |
| 3,694 | Michael S Sink | Boone, NC (US) | 1 | 3,739 | Tsuyoshi Sasaki | Aichi, JP | 1 |
| 3,695 | Glen V Bowling | New Milford, CT (US) | 1 | 3,740 | Tatsuya Hatanaka | Aichi, JP | 1 |
| 3,696 | John Wendell Oglesbee | Watkinsville, GA (US) | 1 | 3,741 | Tatsuo Noritake | Aichi, JP | 1 |
| 3,697 | Martin Hague Ramsden | Lawrenceville, GA (US) | 1 | 3,742 | Tatsumi Hioki | Aichi, JP | 1 |
| 3,698 | Toshiyuki Nohma | Hirakata, JP | 1 | 3,743 | Huanyu Mao | Maple Ridge, CA | 1 |
| 3,699 | Wilmont Frederick Howard, Jr | Edmond, OK (US) | 1 | 3,744 | Hideyuki Noguchi | Saga-Pref., JP | 1 |
| 3,700 | Stephen Wilfred Sheargold | Edmond, OK (US) | 1 | 3,745 | Hiroyuki Tabata | Fukuoka-Pref., JP | 1 |
| 3,701 | Monte Sean Jordan | Oklahoma City, OK (US) | 1 | 3,746 | Noriko Anan | Fukuoka-Pref., JP | 1 |
| 3,702 | Joe Lane Bledsoe | Oklahoma City, OK (US) | 1 | 3,747 | Florence Disma | Amiens, FR | 1 |
| 3,703 | Hiroaki Yoshida | Kyoto, JP | 1 | 3,748 | Steven J Hamrock | Saint Paul, MN (US) | 1 |
| 3,704 | Takefumi Inoue | Kyoto, JP | 1 | 3,749 | Phat T Pham | Little Canada, MN (US) | 1 |
| 3,705 | Naozumi Miyanaga | Kyoto, JP | 1 | 3,750 | Lars Andersson | Ymervagen, SE | 1 |
| 3,706 | Nobutaka Imamura | Kyoto, JP | 1 | 3,751 | David M Demuro | Snellville, GA (US) | 1 |
| 3,707 | David R Smith | Clarkston, MI (US) | 1 | 3,752 | Mikhail Golod | Roswell, GA (US) | 1 |
| 3,708 | Arthur J Szafarak | Clarkston, MI (US) | 1 | 3,753 | Osamu Nakamura | Ikeda, JP | 1 |
| 3,709 | Koichi Kono | Kawasaki, JP | 1 | 3,754 | Pierre Vidaillac | Quebec, CA | 1 |
| 3,710 | Kotaro Takita | Kawasaki, JP | 1 | 3,755 | Ginette Lessard | Longueuil, CA | 1 |
| 3,711 | Norimitsu Kaimai | Kawasaki, JP | 1 | 3,756 | Guy Vassort | Longueuil, CA | 1 |
| 3,712 | Michael Cohnitz Olshausen | Bristol, PA (US) | 1 | 3,757 | Michel Perrier | Montreal, CA | 1 |
| 3,713 | Joachim Baumann | München, DE | 1 | 3,758 | Katsuhiro Mizoguchi | Tokyo, JP | 1 |
| 3,714 | Hans Leysieffer | Taufkirchen, DE | 1 | 3,759 | Taizou Tanaka | Tokyo, JP | 1 |
| 3,715 | Andreas Volz | München, DE | 1 | 3,760 | Robert P Wierzbicki | Worcester, MA (US) | 1 |
| 3,716 | George Wing Au | Fair Haven, NJ (US) | 1 | 3,761 | Paul Whitcher | Hoptkinton, MA (US) | 1 |
| 3,717 | Fee Chan Leung | Hazlet, NJ (US) | 1 | 3,762 | Leonid I Boguslavsky | Tucson, AZ (US) | 1 |
| 3,718 | Andrew N Jansen | Bolingbrook, IL (US) | 1 | 3,763 | Alexei B Gavrilov | Tucson, AZ (US) | 1 |
| 3,719 | Akihito Yokohata | Urawa, JP | 1 | 3,764 | Ravindra Shenoy | Santa Barbara, CA (US) | 1 |
| 3,720 | Donald J McClure | Shoreview, MN (US) | 1 | 3,765 | Jurgen Otto Besenhard | Graz, AT | 1 |
| 3,721 | Mary M Buckett | Woodbury, MN (US) | 1 | 3,766 | Konrad Von Werner | Garching, DE | 1 |
| 3,722 | Jeffery R Dahn | Hubley, CA | 1 | 3,767 | Martin Winter | Neuseiersberg, AT | 1 |
| 3,723 | Daryl Clerc | Dexter, MI (US) | 1 | 3,768 | Kevin D Scott | Lawrenceville, GA (US) | 1 |
| 3,724 | Matthew Fay | Ypsilanti, MI (US) | 1 | 3,769 | Richard K Clingempeel | Lanexa, VA (US) | 1 |
| 3,725 | Levi Thompson | Northville, MI (US) | 1 | 3,770 | Toshiyuki Ohsawa | Kawasaki, JP | 1 |
| 3,726 | Koji Hattori | Shiga-ken, JP | 1 | 3,771 | Toshiyuki Kabata | Machida, JP | 1 |
| 3,727 | Yasuhisa Yamashita | Shiga-ken, JP | 1 | 3,772 | Yoshiko Kurosawa | Yokohama, JP | 1 |
| 3,728 | Yukio Sakabe | Kyoto, JP | 1 | 3,773 | Okitoshi Kimura | Yokohama, JP | 1 |
| 3,729 | Bernd J Neudecker | Knoxville, TN (US) | 1 | 3,774 | Toshishige Fujii | Yokohama, JP | 1 |
| 3,730 | Han-Cheng Kuo | Taoyuan Hsien, TW | 1 | 3,775 | Nobuo Katagiri | Yokohama, JP | 1 |
| 3,731 | Akihiro Mabuchi | Amagasaki, JP | 1 | 3,776 | Yoshitaka Hayashi | Tokyo, JP | 1 |
| 3,732 | Hiroyuki Fujimoto | Sakurai, JP | 1 | 3,777 | Toshiyuki Kitazawa | Tokyo, JP | 1 |
| 3,733 | Takahiro Kasuh | Kobe, JP | 1 | 3,778 | Yutaka Ohsawa | Tokyo, JP | 1 |
| 3,734 | Katsuhisa Tokumitsu | Hirakata, JP | 1 | 3,779 | Hiroharu Ikeda | Machida, JP | 1 |
| 3,735 | Giselle Sandi | Wheaton, IL (US) | 1 | 3,780 | Robert Hoch | Hensonville, NY (US) | 1 |

# INVENTORS

| # | Name | Location | Patents | # | Name | Location | Patents |
|---|---|---|---|---|---|---|---|
| 3,781 | Robert Hausslein | Lexington, MA (US) | 1 | 3,826 | James P Buckley | Cupertino, CA (US) | 1 |
| 3,782 | Yung-Yun Wang | Taipei, TW | 1 | 3,827 | Martin Van Buren | Chelmsford, MA (US) | 1 |
| 3,783 | Chi-Chao Wan | Taipei, TW | 1 | 3,828 | Stan D Berry | Carlsbad, CA (US) | 1 |
| 3,784 | Hsi-Yueh Sung | Taichung Hsien, TW | 1 | 3,829 | Frank Bis | Mt. Airy, MD (US) | 1 |
| 3,785 | Sergey V Sazhin | Suwon, KR | 1 | 3,830 | Dave T Edelstein | Fredericksburg, VA (US) | 1 |
| 3,786 | Mikhail Yu Khimchenko | Suwon, KR | 1 | 3,831 | Arpad E Torma | Rio Rancho, CA (US) | 1 |
| 3,787 | Yevgeniy N Tritenichenko | Suwon, KR | 1 | 3,832 | George T Fey | Tao-Yuan, TW | 1 |
| 3,788 | Yoshio Oka | Osaka, JP | 1 | 3,833 | Yingjeng J Li | Pingtung, TW | 1 |
| 3,789 | Takafumi Uemiya | Osaka, JP | 1 | 3,834 | Weir-Mirn Hurng | Hsinchu, TW | 1 |
| 3,790 | Takeshi Sakamoto | Osaka, JP | 1 | 3,835 | M Stanley Whittingham | Vestal, NY (US) | 1 |
| 3,791 | Akira Harada | Osaka, JP | 1 | 3,836 | Ulf Rothman | Skanor, SE | 1 |
| 3,792 | Tibor Kalnoki-kis | Westlake, OH (US) | 1 | 3,837 | Jesper Malling | Odense, DK | 1 |
| 3,793 | Eisuke Komazawa | Wako, JP | 1 | 3,838 | Antoni S Gozdz | Tinton Falls, NJ (US) | 1 |
| 3,794 | Sung Kwang Byon | Seoul, KR | 1 | 3,839 | Caroline N Schmutz | Eatontown, NJ (US) | 1 |
| 3,795 | Soji Nishiyama | Osaka, JP | 1 | 3,840 | Paul C Warren | Far Hills, NJ (US) | 1 |
| 3,796 | Hiroyuki Higuchi | Osaka, JP | 1 | 3,841 | Eric W Fuller | Coquitlam, CA | 1 |
| 3,797 | Kiichiro Matsushita | Osaka, JP | 1 | 3,842 | Monique N Richard | Grand Sault, CA | 1 |
| 3,798 | Yutaka Kishii | Osaka, JP | 1 | 3,843 | Benjamin Chaloner-Gill | Santa Clara, CA (US) | 1 |
| 3,799 | Ryoichi Matsushima | Osaka, JP | 1 | 3,844 | Paul Monroe | Janesville, WI (US) | 1 |
| 3,800 | Morinobu Endo | Suzaka, JP | 1 | 3,845 | Charles H Winter | Grosse Pointe Park, MI (US) | 1 |
| 3,801 | Myoung-Jun Kal | Seoul, KR | 1 | 3,846 | T Suren Lewkebandara | Farminton, MI (US) | 1 |
| 3,802 | David O Hobson | Oak Ridge, TN (US) | 1 | 3,847 | Guy St-Amant | Trois-Rivieres West, CA | 1 |
| 3,803 | Sung-Kwang Byon | Seoul, KR | 1 | 3,848 | Claude Carignan | Shawinigan-South, CA | 1 |
| 3,804 | Didier Bloch | St Ismier, FR | 1 | 3,849 | Mohammed Z Munshi | Missouri City, TX (US) | 1 |
| 3,805 | Pierre Strobel | Saint-Egreve, FR | 1 | 3,850 | Ashok P Nedungadi | Lake Jackson, TX (US) | 1 |
| 3,806 | Yuan Gao | Delta, CA | 1 | 3,851 | Emmanuel Peled | Even Yehuda, IL | 1 |
| 3,807 | Hajime Arai | Mito, JP | 1 | 3,852 | Masanobu Suga | all Kanagawa, JP | 1 |
| 3,808 | Howard L McCollister | Albuquerque, NM (US) | 1 | 3,853 | Seiichi Akita | all Kanagawa, JP | 1 |
| 3,809 | Carol C Phifer | Albuquerque, NM (US) | 1 | 3,854 | William J Taylor | Anoka, MN (US) | 1 |
| 3,810 | Delbert E Day | Rolla, MO (US) | 1 | 3,855 | Douglas J Weiss | Plymouth, MN (US) | 1 |
| 3,811 | Dora K Derzon | Albuquerque, NM (US) | 1 | 3,856 | Joseph Lessar | Coon Rapids, MN (US) | 1 |
| 3,812 | Charles Arnold, Jr | Albuquerque, NM (US) | 1 | 3,857 | Jennifer P Miller | Elk River, MN (US) | 1 |
| 3,813 | Tsung-Wei Huang | Taipei, TW | 1 | 3,858 | Robert E Kraska | Minneapolis, MN (US) | 1 |
| 3,814 | Pia Tonder | Esbjerg, DE | 1 | 3,859 | Theodore P Adams | Edina, MN (US) | 1 |
| 3,815 | Jinshan Zhang | Duluth, GA (US) | 1 | 3,860 | Wishvender K Behl | Ocean, NJ (US) | 1 |
| 3,816 | Anaba A Anani | Norcross, GA (US) | 1 | 3,861 | John Frankum | Lake Mary, FL (US) | 1 |
| 3,817 | Jae-Gu Yoon | Seoul, KR | 1 | 3,862 | Kohichi Miyashita | Wako, JP | 1 |
| 3,818 | Arman Bonakdarpour | Vancouver, CA | 1 | 3,863 | Hiroyuki Asai | Chiba, JP | 1 |
| 3,819 | Masahiro Kamauchi | Amagasaki, JP | 1 | 3,864 | Yoshiharu Matsuda | Yamaguchi, JP | 1 |
| 3,820 | Yoshinori Takada | Amagasaki, JP | 1 | 3,865 | Takashi Nakamura | Chiba, JP | 1 |
| 3,821 | Arthur A Massucco | Natick, MA (US) | 1 | 3,866 | Hiromori Tsutsumi | Yamaguchi, JP | 1 |
| 3,822 | Ib I Olsen | Henderson, NV (US) | 1 | 3,867 | Shin-Ichi Tobishima | Vancouver, CA | 1 |
| 3,823 | Dora K Derzon | Albuquerque, Bernalillo County, NM (US) | 1 | 3,868 | Kunio Moriya | Vancouver, CA | 1 |
| 3,824 | Charles Arnold, Jr | Albuquerque, Bernalillo County, NM (US) | 1 | 3,869 | Kenichi Takata | Hirakata, JP | 1 |
| 3,825 | Kim A Weatherspoon | Oak Ridge, TN (US) | 1 | 3,870 | Nobuharu Koshiba | Nara, JP | 1 |

# INVENTORS

| # | Name | Location | Patents | # | Name | Location | Patents |
|---|---|---|---|---|---|---|---|
| 3,871 | Atsushi Ohtsuka | Hirakata, JP | 1 | 3,916 | Loring C Hall | Middleton, WI (US) | 1 |
| 3,872 | Tatsuo Mori | Hirakata, JP | 1 | 3,917 | Robert J Bosben | Madison, WI (US) | 1 |
| 3,873 | Mohamed Alamgir | Dedham, MA (US) | 1 | 3,918 | Tomohiko Noda | Takatsuki, JP | 1 |
| 3,874 | Yves Giguere | Ste-Julie, CA | 1 | 3,919 | Youetsu Yoshihisa | Takatsuki, JP | 1 |
| 3,875 | Brian G Bagley | Warren, NJ (US) | 1 | 3,920 | Haakon T Magnussen, Jr | Orinda, CA (US) | 1 |
| 3,876 | Brian W Jones | Garland, TX (US) | 1 | 3,921 | Roy P Moeller | Hayward, CA (US) | 1 |
| 3,877 | Albert M Bates | Southampton, PA (US) | 1 | 3,922 | Phillip S Palmer | Oakland, CA (US) | 1 |
| 3,878 | Klaus Stein | Unterschleissheim, DE | 1 | 3,923 | Gary L Smith | Walnut Creek, CA (US) | 1 |
| 3,879 | Frank D McCaleb | Loxahatchee, FL (US) | 1 | 3,924 | Ester S Takeuchi | Snyder, NY (US) | 1 |
| 3,880 | Basil Pagones | Fort Lauderdale, FL (US) | 1 | 3,925 | Robert L Bone | Mission Viejo, CA (US) | 1 |
| 3,881 | William R Sutton | Pleasanton, CA (US) | 1 | 3,926 | Gholamabbas Nazri | Bloomfield Hills, MI (US) | 1 |
| 3,882 | Scott L Noble | San Jose, CA (US) | 1 | 3,927 | Mark Salomon | Fairhaven, NJ (US) | 1 |
| 3,883 | Carroll H Bush | Jackson, MI (US) | 1 | 3,928 | Vincent W Bakos | Rochester, NY (US) | 1 |
| 3,884 | James L Vanderpool | Kettering, OH (US) | 1 | 3,929 | David J Steklenski | Rochester, NY (US) | 1 |
| 3,885 | James M Bain | Xenia, OH (US) | 1 | 3,930 | Shin-ichi Tobishima | Mito, JP | 1 |
| 3,886 | Hiroshi Wada | Nara, JP | 1 | 3,931 | Masayasu Arakawa | Mito, JP | 1 |
| 3,887 | Yoshikazu Yoshimoto | Tenri, JP | 1 | 3,932 | Otto C Wagner | Long Branch, NJ (US) | 1 |
| 3,888 | Masaru Yoshida | Ikoma, JP | 1 | 3,933 | Emanuel Peled | Even Yehuda, IL | 1 |
| 3,889 | Shigeo Nakajima | Nara, JP | 1 | 3,934 | Herzel Yamin | Kiron, IL | 1 |
| 3,890 | Hans-Jorg Hubner | Dortmund, DE | 1 | 3,935 | Israel Reshef | Givatayim, IL | 1 |
| 3,891 | Heribert Rische | Dortmund, DE | 1 | 3,936 | David Kelrich | Ramat-Hasharon, IL | 1 |
| 3,892 | Osamu Watanabe | Toyonaka, JP | 1 | 3,937 | Shlomo Rozen | Herzliya, IL | 1 |
| 3,893 | Osamu Kajii | Kashiwara, JP | 1 | 3,938 | Peter S Clark | Penfield, NY (US) | 1 |
| 3,894 | Toshiyuki Edamoto | Suita, JP | 1 | 3,939 | Richard T Cataldi | Webster, NY (US) | 1 |
| 3,895 | Tomio Kitamura | Suita, JP | 1 | 3,940 | Leopold J Johnson | Valley Center, CA (US) | 1 |
| 3,896 | Kaoru Hisatomi | Takatsuki, JP | 1 | 3,941 | Hsueh S Tung | Williamsville, NY (US) | 1 |
| 3,897 | Hiroshi Yoshida | Suita, JP | 1 | 3,942 | David J Friedland | Snyder, NY (US) | 1 |
| 3,898 | Yoshiki Somatomo | Osaka, JP | 1 | 3,943 | Bernard Sukornick | Williamsville, NY (US) | 1 |
| 3,899 | Esam Kronfli | Swindon, GB | 1 | 3,944 | Lynn E McCurry | Los Alamos, NM (US) | 1 |
| 3,900 | Keith V Lovell | Swindon, GB | 1 | 3,945 | Richard E Eibeck | Orchard Park, NY (US) | 1 |
| 3,901 | Alan Hooper | Faringdon, GB | 1 | 3,946 | George D Lockyer | Clarence Center, NY (US) | 1 |
| 3,902 | Robin J Neat | Marston, GB | 1 | 3,947 | Takeshi Okada | Mito, JP | 1 |
| 3,903 | Glenn DeMichele | Chicago, IL (US) | 1 | 3,948 | Hideaki Ohtsuka | Mito, JP | 1 |
| 3,904 | Josef Nelles | Meschede, DE | 1 | 3,949 | Rolin K Stutes | Carson City, NV (US) | 1 |
| 3,905 | Clive D Tuck | Banbury, GB | 1 | 3,950 | Nikola Marincic | Winchester, MA (US) | 1 |
| 3,906 | Steven M Slane | Neptune, NJ (US) | 1 | 3,951 | Radek Fuksa | Boston, MA (US) | 1 |
| 3,907 | Walter Bleszinski, Jr | Andover, MA (US) | 1 | 3,952 | Terry L Pitt | Rochester, NY (US) | 1 |
| 3,908 | Hiroshi Kobayashi | Yokohama, JP | 1 | 3,953 | Masahiko Hiratani | Kokubunji, JP | 1 |
| 3,909 | Kazuo Matsuura | Tokyo, JP | 1 | 3,954 | Michel Matteau | Gloucester, CA | 1 |
| 3,910 | Esther S Takeuchi | Snyder, NY (US) | 1 | 3,955 | Howard R Braun | Almonte, CA | 1 |
| 3,911 | Robert C Lyons | Aberdeen, MD (US) | 1 | 3,956 | Christopher L Gardner | Dunrobin, CA | 1 |
| 3,912 | Toshihiro Mori | Tokyo, JP | 1 | 3,957 | James E Brule | South Windsor, CT (US) | 1 |
| 3,913 | Kazuyuki Tsunoda | Tokyo, JP | 1 | 3,958 | Benjamin Bowsky | Maineville, OH (US) | 1 |
| 3,914 | David R Schaller | Janesville, WI (US) | 1 | 3,959 | Keith C Lee | Vancouver, CA | 1 |
| 3,915 | George R Menkart | Forest, VA (US) | 1 | 3,960 | Philippe Touzain | St. Ismier, FR | 1 |

# INVENTORS

| # | Name | Location | Patents |
|---|---|---|---|
| 3,961 | Rachid Yazami | Domene, FR | 1 |
| 3,962 | Jacques Maire | Paris, FR | 1 |
| 3,963 | Shiao-Ping S Yen | Altadena, CA (US) | 1 |
| 3,964 | Boyd J Carter | S. San Gabriel, CA (US) | 1 |
| 3,965 | Robert B Somoano | LaCanada, CA (US) | 1 |
| 3,966 | Jurgen O Besenhard | Neusass, DE | 1 |
| 3,967 | Erich Wudy | Garching, DE | 1 |
| 3,968 | Damon Germanton | Kinnelon, NJ (US) | 1 |
| 3,969 | Charles Germanton | Summit, NJ (US) | 1 |
| 3,970 | Donald Weiss | Englewood, NJ (US) | 1 |
| 3,971 | Wen H Ko | Cleveland, OH (US) | 1 |
| 3,972 | Albert M Leung | Kitchener, CA | 1 |
| 3,973 | Raymond O Colbert | Oaklandon, IN (US) | 1 |
| 3,974 | Bengt H Hellman | Indianapolis, IN (US) | 1 |
| 3,975 | S Barry Brummer | Waltham, MA (US) | 1 |
| 3,976 | Joseph S Foos | Waltham, MA (US) | 1 |
| 3,977 | Mario Lazzari | Pavia, IT | 1 |
| 3,978 | Bruno Scrosati | Rome, IT | 1 |
| 3,979 | Samar Basu | Somerset, NJ (US) | 1 |
| 3,980 | John S Shambaugh | Holliston, MA (US) | 1 |
| 3,981 | Robert G Yetman | Carlisle, MA (US) | 1 |
| 3,982 | Hyman Zeltzer | Needham, MA (US) | 1 |
| 3,983 | Franz J Kruger | Wiesbaden, DE | 1 |
| 3,984 | Hironosuke Ikeda | Hirakata, JP | 1 |
| 3,985 | Satoshi Narukawa | Kobe, JP | 1 |
| 3,986 | Shigehiro Nakaido | Kobe, JP | 1 |
| 3,987 | Matsuo Ichinose | Suwa, JP | 1 |
| 3,988 | Hiroyuki Chihara | Suwa, JP | 1 |
| 3,989 | Hisashi Kawahara | Tanashi, JP | 1 |
| 3,990 | Lee F Athearn | Fridley, MN (US) | 1 |
| 3,991 | Louis R Giattino | Monterey County, CA (US) | 1 |
| 3,992 | Shigeru Morokawa | Higashiyamato, JP | 1 |
| 3,993 | Victor R Koch | Framingham, MA (US) | 1 |
| 3,994 | James R Sullivan | Nanuet, NY (US) | 1 |
| 3,995 | Singo Ichikawa | Sayama, JP | 1 |
| 3,996 | Rudolph R Haering | Vancouver, CA | 1 |
| 3,997 | Matthew J Faust | Norristown, PA (US) | 1 |
| 3,998 | James R Picozzi | Hatfield, PA (US) | 1 |
| 3,999 | Yves Jumel | Poitiers, FR | 1 |
| 4,000 | Eugene L Stogryn | Edison, NJ (US) | 1 |

# ASSIGNEES

| # | Name | Patents |
|---|---|---|
| 1 | Samsung Sdi Co., Inc. | 812 |
| 2 | Samsung Electronics Co., Ltd. | 166 |
| 3 | Global Graphene Group, Inc. | 55 |
| 4 | Uchicago Argonne, LLC | 52 |
| 5 | Sanyo Electric Co., Ltd. | 35 |
| 6 | Toyota Jidosha Kabushiki Kaisha | 31 |
| 7 | Valence Technology, Inc. | 26 |
| 8 | Celgard Inc. | 25 |
| 9 | Toyota Motor Engineering & Manufacturing North America, Inc. | 24 |
| 10 | Robert Bosch G.m.b.h. | 24 |
| 11 | Seeo, Inc. | 21 |
| 12 | Gm Global Technology Operations LLC | 20 |
| 13 | Industrial Technology Research Institute | 19 |
| 14 | Canon Kabushiki Kaisha | 19 |
| 15 | Lg Chem, Ltd | 18 |
| 16 | University of Maryland, College Park | 17 |
| 17 | Hydro-quebec | 17 |
| 18 | Sion Power Corporation | 16 |
| 19 | Tsinghua University | 16 |
| 20 | Hon Hai Precision Industry Co., Ltd. | 16 |
| 21 | Nanotek Instruments, Inc. | 15 |
| 22 | Umicore | 14 |
| 23 | The United States of America As Represented by the Secretary of the Army | 14 |
| 24 | Textron Innovations Inc. | 13 |
| 25 | Centre National De La Recherche Scientifique | 13 |
| 26 | Japan Storage Battery Co., Ltd. | 13 |
| 27 | National Taiwan University of Science and Technology | 10 |
| 28 | Commissariat a L'energie Atomique Et Aux Energies Alternatives | 10 |
| 29 | The Gillette Company | 10 |
| 30 | Matsushita Electric Industrial Co., Ltd. | 10 |
| 31 | University of Texas System | 9 |
| 32 | Industry-university Cooperation Foundation Hanyang University | 9 |
| 33 | Electronics and Telecommunications Research Institute | 9 |
| 34 | Lg Energy Solution, Ltd. | 8 |
| 35 | Blue Solutions | 8 |
| 36 | Soteria Battery Innovation Group, Inc. | 8 |
| 37 | Eveready Battery Company, Inc. | 8 |
| 38 | Commissariat a L'energie Atomique | 8 |
| 39 | Excellatron Solid State LLC | 8 |
| 40 | Massachusetts Institute of Technology | 7 |
| 41 | Seiko Epson Corporation | 7 |
| 42 | Unist(ulsan National Institute of Science and Technology) | 7 |
| 43 | Mitsui Mining & Smelting Company, Ltd. | 7 |
| 44 | Hrl Laboratories, LLC | 7 |
| 45 | Evonik Degussa Gmbh | 7 |
| 46 | University of Chicago | 7 |
| 47 | Polaroid Corporation | 7 |
| 48 | Honeycomb Battery Company | 6 |
| 49 | Nissan North America, Inc. | 6 |
| 50 | Leland Stanford Junior University | 6 |
| 51 | Hyundai Motor Company | 6 |
| 52 | Ut-battelle, Inc. | 6 |
| 53 | Optodot Corporation | 6 |
| 54 | Panasonic Corporation | 6 |
| 55 | Electrovaya Inc. | 6 |
| 56 | Ube Industries, Inc. | 6 |
| 57 | Motorola Corporation | 6 |
| 58 | Samsung Display Devices Co., Ltd. | 6 |
| 59 | Wilson Greatbatch Ltd. | 6 |
| 60 | Moli Energy (1990) Limited | 6 |
| 61 | Prologium Technology Co., Ltd. | 5 |
| 62 | Prologium Holding Inc. | 5 |
| 63 | Nanjing Chervon Industry Co., Ltd. | 5 |
| 64 | Ningde Amperex Technology Limited | 5 |
| 65 | Basf Se Corporation | 5 |
| 66 | Toyota Motor Europe | 5 |
| 67 | Blue Solutions Canada Inc. | 5 |
| 68 | International Business Machines Corporation | 5 |
| 69 | Showa Denko K.k. | 5 |
| 70 | A123 Systems LLC | 5 |
| 71 | 3m Innovative Properties Company | 5 |
| 72 | Byd Company Limited | 5 |
| 73 | Hitachi, Ltd. | 5 |
| 74 | Hitachi Koki Co., Ltd. | 5 |
| 75 | Cardiac Pacemakers, Inc. | 5 |
| 76 | Electrofuel Inc. | 5 |
| 77 | Bell Communications Research, Inc. | 5 |
| 78 | Corning Incorporated | 4 |
| 79 | Schumacher Electric Corporation | 4 |
| 80 | Guangdong Brunp Recycling Technology Co., Ltd | 4 |
| 81 | Hunan Brunp Recycling Technology Co. Ltd. | 4 |
| 82 | Contemporary Amperex Technology Co., Ltd. | 4 |
| 83 | Cellmobility, Inc. | 4 |
| 84 | Amita Technologies Inc Ltd. | 4 |
| 85 | Idemitsu Kosan Company, Limited | 4 |
| 86 | Guizhou Zhenhua E-chem Inc. | 4 |
| 87 | Commissariat À L'energie Atomique Et Aux Energies Alternatives | 4 |
| 88 | Nederlandse Organisatie Voor Toegepast-natuurwetenschappelijk Onderzoek Tno | 4 |
| 89 | Greatbatch Ltd. | 4 |
| 90 | Sakti3, Inc. | 4 |

# ASSIGNEES

| # | Name | Patents |
|---|---|---|
| 91 | Eocell Limited | 4 |
| 92 | Nan Ya Plastics Corporation | 4 |
| 93 | National Institute of Advanced Industrial Science and Technology | 4 |
| 94 | Front Edge Technology, Inc. | 4 |
| 95 | Polyplus Battery Company, Inc. | 4 |
| 96 | Aekyung Chemical Co., Ltd. | 4 |
| 97 | Korea Electronics Technology Institute | 4 |
| 98 | Enerdel, Inc. | 4 |
| 99 | Samya Technology Co., Ltd. | 4 |
| 100 | Sandia Corporation | 4 |
| 101 | Quallion LLC | 4 |
| 102 | Universite De Montpellier | 4 |
| 103 | Phostech Lithium Inc. | 4 |
| 104 | Le Centre National De La Recherche Scientifique | 4 |
| 105 | Sumitomo Electric Industries, Limited | 4 |
| 106 | Degussa Aktiengesellschaft | 4 |
| 107 | E-one Moli Energy (canada) Limited | 4 |
| 108 | Koninklijke Philips Electronics Nv | 4 |
| 109 | Nec Moli Energy (canada) Limited | 4 |
| 110 | Daewoo Electronics Co., Ltd. | 4 |
| 111 | Dallas Semiconductor Corporation | 4 |
| 112 | Exxon Research and Engineering Company | 4 |
| 113 | Postech Academy-industry Foundation | 3 |
| 114 | Shenzhen Carku Technology Co., Limited | 3 |
| 115 | Ngk Insulators, Inc. | 3 |
| 116 | Cornell University | 3 |
| 117 | Umicore Korea, Ltd. | 3 |
| 118 | National Technology & Engineering Solutions of Sandia, LLC | 3 |
| 119 | Florida State University Research Foundation, Inc. | 3 |
| 120 | Solvay Specialty Polymers Italy S.p.a. | 3 |
| 121 | Kia Motors Corporation | 3 |
| 122 | Panasonic Intellectual Property Management Co., Ltd. | 3 |
| 123 | Gotion, Inc. | 3 |
| 124 | Albemarle Germany Gmbh | 3 |
| 125 | University of California | 3 |
| 126 | University of Michigan | 3 |
| 127 | Sf Motors, Inc. | 3 |
| 128 | Seoul National University R&db Foundation | 3 |
| 129 | Oned Material, Inc. | 3 |
| 130 | Changs-ascending Enterprise Co | 3 |
| 131 | Toda Kogyo Corporation | 3 |
| 132 | Iucf-hyu (industry-university Cooperation Foundation Hanyang University) | 3 |
| 133 | Dai Nippon Printing Co., Ltd. | 3 |
| 134 | Denso Corporation | 3 |
| 135 | The Gakushuin School Corporation | 3 |

| # | Name | Patents |
|---|---|---|
| 136 | Renault S.a.s. | 3 |
| 137 | Johnson Controls Technology Company | 3 |
| 138 | Saes Getters S.p.a. | 3 |
| 139 | Infineon Technologies Austria Ag | 3 |
| 140 | Rockwood Lithium Gmbh | 3 |
| 141 | Dow Global Technologies LLC | 3 |
| 142 | Unist-academy Industry Research Corporation | 3 |
| 143 | California Institute of Technology | 3 |
| 144 | Centre National De La Recherche Scientifique (cnrs) | 3 |
| 145 | Rhodia Chimie | 3 |
| 146 | Universite De Montreal | 3 |
| 147 | Medtronic, Inc. | 3 |
| 148 | University of Dayton | 3 |
| 149 | Nanogram Corporation | 3 |
| 150 | Moltech Corporation | 3 |
| 151 | The United States of America, As Represented by the Secretary of the Navy | 3 |
| 152 | Minrad Inc. | 3 |
| 153 | Midwest Research Institute | 3 |
| 154 | Honda Giken Kogyo Kabushiki Kaisha | 3 |
| 155 | Nippon Telegraph and Telephone Corporation | 3 |
| 156 | The United States of America As Represented by the United States | 3 |
| 157 | Varta Batterie Aktiengesellschaft | 3 |
| 158 | Moli Energy Limited | 3 |
| 159 | Citizen Watch Company, Ltd. | 3 |
| 160 | Manz Italy S.r.l. | 2 |
| 161 | Korea Institute of Carbon Convergence Technology | 2 |
| 162 | Hydro-quÉbec | 2 |
| 163 | Green Cubes Technology Corporation | 2 |
| 164 | Hunan Brunp Ev Recycling Co., Ltd. | 2 |
| 165 | University of Colorado | 2 |
| 166 | Commissariat À L'Énergie Atomique Et Aux Énergies Alternatives | 2 |
| 167 | Boe Technology Group Co., Ltd. | 2 |
| 168 | Alliance for Sustainable Energy, LLC | 2 |
| 169 | Lithium Power Inc. | 2 |
| 170 | Wuhan University | 2 |
| 171 | Vissers Battery Corporation | 2 |
| 172 | Innosense LLC | 2 |
| 173 | Research & Business Foundation Sungkyunkwan University | 2 |
| 174 | The Florida International University Board of Trustees | 2 |
| 175 | Xiamen University | 2 |
| 176 | Shenzhen Oriental Willing New Energy Co., Ltd | 2 |
| 177 | Jiangsu Horizon New Energy Tech Co., Ltd. | 2 |
| 178 | Ford Global Technologies, LLC | 2 |
| 179 | Johnson Controls Fire Protection LP | 2 |
| 180 | Avertronics Inc. | 2 |

# ASSIGNEES

| # | Name | Patents |
|---|---|---|
| 181 | Stmicroelectronics(tours) Sas | 2 |
| 182 | Ngk Spark Plug Company, Limited | 2 |
| 183 | Auo Crystal Corporation | 2 |
| 184 | Sharetronic Data Technology (hong Kong) Limited | 2 |
| 185 | Acr Electronics, Inc. | 2 |
| 186 | L&f Co., Ltd. | 2 |
| 187 | Verily Life Sciences LLC | 2 |
| 188 | Tokyo Institute of Technology | 2 |
| 189 | Archimedes Controls Corp. | 2 |
| 190 | Chung Yuan Christian University | 2 |
| 191 | Rapiscan Systems, Inc. | 2 |
| 192 | Toppan Printing Co., Ltd. | 2 |
| 193 | S2 Batteries | 2 |
| 194 | Varta Microbattery Gmbh | 2 |
| 195 | Geltech Solutions, Inc. | 2 |
| 196 | Kerties International Co., Ltd | 2 |
| 197 | Jsyoungtech Co., Ltd | 2 |
| 198 | Central Glass Company, Limited | 2 |
| 199 | Solvay Sa | 2 |
| 200 | Ovonic Battery Company, Inc. | 2 |
| 201 | Iljin Materials Co., Ltd. | 2 |
| 202 | National Institute for Materials Science | 2 |
| 203 | Kyoto University | 2 |
| 204 | Fdk Corporation | 2 |
| 205 | Korea Institute of Energy Research | 2 |
| 206 | Toho Titanium Co., Ltd. | 2 |
| 207 | Nakashima Sangyo Co., Ltd. | 2 |
| 208 | Knu-industry Cooperation Foundation | 2 |
| 209 | Global Battery Co., Ltd. | 2 |
| 210 | Springpower International Inc. | 2 |
| 211 | Heraeus Quarzglas Gmbh & Co. Kg | 2 |
| 212 | Prayon | 2 |
| 213 | Alevo Research Ag | 2 |
| 214 | Kokam Co., Ltd. | 2 |
| 215 | United States of America As Represented by the Secretary of the Air Force | 2 |
| 216 | The United States of America As Represented by the Secretary of the Air | 2 |
| 217 | Panax Etec Co., Ltd. | 2 |
| 218 | Lenovo (singapore) Pte. Ltd. | 2 |
| 219 | Utc Fire and Security Corporation | 2 |
| 220 | Chengdu Jingyuan New Materials Technology Co., Ltd. | 2 |
| 221 | Dongguk University Industry-academic Cooperation Foundation | 2 |
| 222 | Sk Energy Co., Ltd. | 2 |
| 223 | Saft Groupe Sa | 2 |
| 224 | Korea Institute of Science and Technology | 2 |
| 225 | Batscap | 2 |

| # | Name | Patents |
|---|---|---|
| 226 | Kao Corporation | 2 |
| 227 | Seoul National University Industry Foundation | 2 |
| 228 | Enerize Corporation | 2 |
| 229 | Inventec Appliances Corporation | 2 |
| 230 | Hydro-québec | 2 |
| 231 | T/j Technologies, Inc. | 2 |
| 232 | Rutgers, the State University | 2 |
| 233 | Knights Armament Company | 2 |
| 234 | Arizona Board of Regents for and on Behalf of Arizona State University | 2 |
| 235 | Rutgers University Foundation | 2 |
| 236 | E.i. Dupont De Nemours and Company | 2 |
| 237 | Celanese Ventures Gmbh | 2 |
| 238 | General Motors Corporation | 2 |
| 239 | Qinetiq Limited | 2 |
| 240 | Korea Institute of Geoscience and Mineral Resources | 2 |
| 241 | Ishihara Sangyo Kaisha, Ltd. | 2 |
| 242 | Datamatic, Inc. | 2 |
| 243 | Solvay Fluor Und Derivate Gmbh | 2 |
| 244 | Telcordia Technologies, Inc. | 2 |
| 245 | U.S. Philips Corporation | 2 |
| 246 | Agency of Industrial Science and Technology | 2 |
| 247 | The Board of Regents of the University of Texas Systems | 2 |
| 248 | Alcatel | 2 |
| 249 | Lockheed Martin Energy Research Corporation | 2 |
| 250 | Hoechst Research & Technology Gmbh & Co. Kg | 2 |
| 251 | Total Battery Management, Inc. | 2 |
| 252 | Nec Corporation | 2 |
| 253 | Duracell Inc. | 2 |
| 254 | Sony Corporation | 2 |
| 255 | Martin Marietta Energy Systems, Inc. | 2 |
| 256 | Angeion Corporation | 2 |
| 257 | The United States of America As Represented by the National Aeronautics | 2 |
| 258 | Nippon Oil Company | 2 |
| 259 | Eastman-kodak Company | 2 |
| 260 | Combustion Engineering, Inc. | 2 |
| 261 | Kabushiki Kaisha Suwa Seikosha | 2 |
| 262 | Electric Power Research Institute Incorporated | 2 |
| 263 | Dusenfeld Gmbh | 1 |
| 264 | Ningbo Zhongxin Electronic Technology Co., Ltd. | 1 |
| 265 | Xtc New Energy Materials (xiamen) Co., Ltd. | 1 |
| 266 | Beijing Easpring Material Technology Co., Ltd. | 1 |
| 267 | Jiangsu Katop Automation Co., Ltd | 1 |
| 268 | Tongji University | 1 |
| 269 | E-one Moli Energy Corp. | 1 |
| 270 | Illinois Institute of Technology | 1 |

# ASSIGNEES

| # | Name | Patents |
|---|---|---|
| 271 | Suzhou Xysemi Electronic Technology Co., Limited | 1 |
| 272 | Samsung Sdi.co., Ltd. | 1 |
| 273 | Qihe Leahou Chemical Co., Ltd. | 1 |
| 274 | Hunan Brunp Vehicles Recycling Co., Ltd. | 1 |
| 275 | Temple University—of the Commonwealth System of Higher Education | 1 |
| 276 | Harbin Institute of Technology | 1 |
| 277 | Chongqing Research Institute of Harbin Institute of Technology | 1 |
| 278 | Cps Technology Holdings LLC | 1 |
| 279 | Guangdong Kaijin New Energy Technology Co., Ltd. | 1 |
| 280 | Novarials Corporation | 1 |
| 281 | Applied Materials, Inc. | 1 |
| 282 | Schneider Electric It Corporation | 1 |
| 283 | Hunan Brunp Ev Reycling Co., Ltd. | 1 |
| 284 | Drexel University | 1 |
| 285 | Korea University of Technology and Education Industry-university Cooperation Foundation | 1 |
| 286 | Casio Computer Co., Ltd. | 1 |
| 287 | State Grid Zhejiang Electric Power Co., Ltd. Taizhou Power Supply Company | 1 |
| 288 | Institute of Nuclear Energy Research, Atomic Energy Council, Executive Yuan, R.o.c | 1 |
| 289 | King Faisal University | 1 |
| 290 | Ming Chi University of Technology | 1 |
| 291 | Institute of Automation, Shandong Academy of Sciences | 1 |
| 292 | Jiangxi Iametal New Energy Technology Co., Ltd | 1 |
| 293 | Shenzhen Xworld Technology Limited | 1 |
| 294 | Qingdao Institute of Bioenergy and Bioprocess Technology, Chinese Academy of Sciences | 1 |
| 295 | Meta Materials Inc. | 1 |
| 296 | Piersica Inc. | 1 |
| 297 | Inventec (pudong) Technology Corporation | 1 |
| 298 | Inventec Corp. | 1 |
| 299 | Mccoy Global Inc. | 1 |
| 300 | Piasecki Aircraft Corporation | 1 |
| 301 | Shenzhen Ajazz Tongchuang Electronic Technology Co., Ltd. | 1 |
| 302 | Jingmen Gem Co., Ltd | 1 |
| 303 | Gem Co., Ltd. | 1 |
| 304 | Shenzhen Greensun Technology Co., Ltd. | 1 |
| 305 | Audi Ag | 1 |
| 306 | Battelle Memorial Institute | 1 |
| 307 | Aputure Imaging Industries Co., Ltd. | 1 |
| 308 | Xiamen Eco Lighting Co. Ltd. | 1 |
| 309 | Beijing Iametal New Energy Technology Co., Ltd | 1 |
| 310 | Saudi Arabian Oil Company | 1 |
| 311 | Beijing Institute of Technology | 1 |
| 312 | Instituto Tecnologico De Santo Domingo | 1 |
| 313 | Hongik University Industry-academia Cooperation Foundation | 1 |
| 314 | Sichuan Fire Research Institute of Mem | 1 |
| 315 | Changzhou Red Fairy Precision Technology Co., Ltd. | 1 |
| 316 | Betterpower Battery Co., Ltd. | 1 |
| 317 | Jiangxi Betterpower New Energy Co., Ltd. | 1 |
| 318 | Sila Nanotechnologies, Inc. | 1 |
| 319 | Cellblock Fcs, LLC | 1 |
| 320 | Ningbo Haojia Electrical Appliances Co., Ltd. | 1 |
| 321 | United States of America As Represented by the Administrator of Nasa | 1 |
| 322 | University of Central Florida Research Foundation, Inc. | 1 |
| 323 | Avant Enterprises, Inc. | 1 |
| 324 | Jiangsu Cnano Technology Co., Ltd. | 1 |
| 325 | Systematic Power Manufacturing, LLC | 1 |
| 326 | Libama, LLC | 1 |
| 327 | Calb Technology Co., Ltd. | 1 |
| 328 | Calb Co., Ltd. | 1 |
| 329 | Suzhou Hanano Materials Technology Ltd. | 1 |
| 330 | Solid State Battery Incorporated | 1 |
| 331 | Yazaki Corporation | 1 |
| 332 | University of Shanghai for Science and Technology | 1 |
| 333 | Yau Fu Industry Co., Ltd. | 1 |
| 334 | Volkswagen Ag | 1 |
| 335 | Apple Inc. | 1 |
| 336 | Guangzhou Kaijie Power Supply Industrial Co., Ltd. | 1 |
| 337 | Shanghai Sinceretek Microelectronics Technology Co., Ltd. | 1 |
| 338 | Dong Guan Technomate Metal Ware Manufactory Ltd | 1 |
| 339 | Fujifilm Wako Pure Chemical Corporation | 1 |
| 340 | Shanghai Sinceretek Microelectronics Technology Co , Ltd. | 1 |
| 341 | Jinyun Reypu Electronic Technology Co., Ltd. | 1 |
| 342 | Taiyuan University of Science and Technology | 1 |
| 343 | Zhejiang Hangke Technology Incorporated Company | 1 |
| 344 | Godox Photo Equipment Co., Ltd. | 1 |
| 345 | University of Maryland | 1 |
| 346 | Zhongyin (ningbo) Battery Co., Ltd. | 1 |
| 347 | Textron Corporation | 1 |
| 348 | Dienes Werke Für Maschinenteile Gmbh & Co. Kg | 1 |
| 349 | Universidad Carlos Iii De Madrid | 1 |
| 350 | Halliburton Energy Services, Inc. | 1 |
| 351 | Institut Polytechnique De Grenoble | 1 |
| 352 | Centre National De La Recherche Scientifique—cnrs | 1 |
| 353 | Duesenfeld Gmbh | 1 |
| 354 | Johnson Matthey Public Limited Company | 1 |
| 355 | Ningbo Zhongpeng Lithium Energy Technology Co., Ltd. | 1 |
| 356 | Clark Atlanta University, Inc. | 1 |
| 357 | Li-cycle Corp. | 1 |
| 358 | Shenzhen Yilian Youchuang Network Co., Ltd | 1 |
| 359 | Clb Americas, Inc. | 1 |
| 360 | Mie University | 1 |

# ASSIGNEES

| # | Name | Patents |
|---|---|---|
| 361 | Zenlabs Energy, Inc. | 1 |
| 362 | University of Utah Research Foundation | 1 |
| 363 | Sj Materials Co., Ltd. | 1 |
| 364 | Beijing China Base Startrade Co., Ltd. | 1 |
| 365 | University of Akron | 1 |
| 366 | King Abdullah University of Science and Technology | 1 |
| 367 | Sage Electrochromics, Inc. | 1 |
| 368 | Innolith Assets Ag | 1 |
| 369 | Cheng Uei Precision Industry Co., Ltd. | 1 |
| 370 | Nissin Industries Ltd. | 1 |
| 371 | Kabushiki Kaisha Toshiba | 1 |
| 372 | Sateria Battery Innovation Group, Inc. | 1 |
| 373 | National University of Defense Technology | 1 |
| 374 | Stryker Corporation | 1 |
| 375 | Dowa Holdings Co., Ltd. | 1 |
| 376 | Chongqing Jinkang Energy Vehicle Co., Ltd. | 1 |
| 377 | Rutgers, the State University of New Jersey | 1 |
| 378 | Apaq Technology Co., Ltd. | 1 |
| 379 | Intradin (shanghai) Machinery Co., Ltd. | 1 |
| 380 | Arkema France | 1 |
| 381 | Hoppecke Advanced Battery Technology Gmbh | 1 |
| 382 | Universite De Nantes | 1 |
| 383 | Ec Power, LLC | 1 |
| 384 | Keracel, Inc. | 1 |
| 385 | Pulsedeon Oy | 1 |
| 386 | Honda Motor Co., Ltd. | 1 |
| 387 | Tokyo Jidosha Kabushiki Kaisha | 1 |
| 388 | Chengdu Zhongke Laifang Power Science & Technology Co., Ltd. | 1 |
| 389 | Korea Advanced Institute of Science and Technology | 1 |
| 390 | Firefree Coatings, Inc. | 1 |
| 391 | National Cheng-kung University | 1 |
| 392 | Hefei University of Technology | 1 |
| 393 | Shanghai Teammax Furniture Co., Ltd. | 1 |
| 394 | Liion, LLC | 1 |
| 395 | Eaglepicher Technologies, LLC | 1 |
| 396 | Smasung Sdi Co., Ltd. | 1 |
| 397 | Johnson IP Holding, LLC | 1 |
| 398 | Enwair Enerji Teknolojileri A.s. | 1 |
| 399 | Ebull Power Innovations Ltd | 1 |
| 400 | Mk Electron Co., Ltd. | 1 |
| 401 | Hitachi Metals, Ltd. | 1 |
| 402 | Mossey Creek Technologies Inc. | 1 |
| 403 | Forschungszentrum Juelich Gmbh | 1 |
| 404 | Nissan Motor Company Limited | 1 |
| 405 | Suzhou Crosstec Co., Ltd. | 1 |

| # | Name | Patents |
|---|---|---|
| 406 | Magneti Marelli S.p.a. | 1 |
| 407 | Winbond Electronics Corporation | 1 |
| 408 | Airbus Operations Gmbh | 1 |
| 409 | Shenzhen Maigesong Electrical Technology Co. Ltd | 1 |
| 410 | Lockheed Martin Corporation | 1 |
| 411 | Jiangsu Tianwang Solar Technology Co., Ltd | 1 |
| 412 | Zhangjiakou Wind and Solar Power Energy Demonstration Station Co. Ltd., State Grid Xin Yuan Company | 1 |
| 413 | China Electric Power Research Institute | 1 |
| 414 | State Grid Corporation of China | 1 |
| 415 | Universite De Bordeaux | 1 |
| 416 | Institut Polytechnique De Bordeaux | 1 |
| 417 | Silver H-plus Technology Co., Ltd. | 1 |
| 418 | Treofan Germany Gmbh & Co. Kg | 1 |
| 419 | Universite Claude Bernard Lyon 1 | 1 |
| 420 | Cpe Lyon | 1 |
| 421 | Zeptor Corporation | 1 |
| 422 | Optimum Battery Co., Ltd. | 1 |
| 423 | Alevo International S.a. | 1 |
| 424 | Aima Technology Group Co., Ltd. | 1 |
| 425 | Ningbo Institute of Materials Technology & Engineering, Chinese Academy of Sciences | 1 |
| 426 | Hubei Wanrun New Energy Technology Development Co. Ltd | 1 |
| 427 | Hangzhou Shuangwanyue Electronic Technology Co., Ltd. | 1 |
| 428 | Mitsui Chemicals, Inc. | 1 |
| 429 | Daunia Solar Cell S.r.l. | 1 |
| 430 | Dongfang Electric Corporation | 1 |
| 431 | Daikin Industries, Ltd. | 1 |
| 432 | Diehl Aerospace Gmbh | 1 |
| 433 | Dijiya Energy Saving Technology Inc. | 1 |
| 434 | Texas Instruments Corporation | 1 |
| 435 | Yueqing Chuangyi Photography Equipment Co., Ltd. | 1 |
| 436 | Mcgill University | 1 |
| 437 | Microvast Power Systems Co., Ltd. | 1 |
| 438 | Kyushu University National University Corporation | 1 |
| 439 | Eve Energy Co., Ltd. | 1 |
| 440 | Universite Blaise Pascal-clermont-ferrand Ii | 1 |
| 441 | Nagoya Institute of Technology | 1 |
| 442 | Maxpower, Inc. | 1 |
| 443 | Elite Power Solutions, LLC | 1 |
| 444 | Honeywell International Inc. | 1 |
| 445 | Nantek Instuments, Inc. | 1 |
| 446 | Korea University Research and Business Foundation | 1 |
| 447 | Schawbel Technologies LLC | 1 |
| 448 | Energizer Brands, LLC | 1 |
| 449 | Posco Chemtech Co., Ltd. | 1 |
| 450 | Leclanché Sa | 1 |

# ASSIGNEES

| # | Name | Patents |
|---|---|---|
| 451 | Intermolecular, Inc. | 1 |
| 452 | Benq Materials Corporation | 1 |
| 453 | 3m Innovation Properties Company | 1 |
| 454 | Kangwon National University University-industry Cooperation Foundation | 1 |
| 455 | Nisshinbo Holdings Inc. | 1 |
| 456 | Ulsan National Institute of Science and Technology | 1 |
| 457 | Icontrol Networks, Inc. | 1 |
| 458 | Csmc Technologies Fab1 Co., Ltd. | 1 |
| 459 | Csmc Technologies Fab2 Co., Ltd. | 1 |
| 460 | Chemetall Gmbh | 1 |
| 461 | Engineered Power Ltd. | 1 |
| 462 | Chervon (hk) Limited | 1 |
| 463 | Tosoh Corporation | 1 |
| 464 | Soulbrain Co., Ltd. | 1 |
| 465 | Chervon Intellectual Property Limited | 1 |
| 466 | Plexaire, LLC | 1 |
| 467 | Kabushiki Kaisha Toyota Jidoshokki | 1 |
| 468 | National University Corporation Shizuoka University | 1 |
| 469 | Enovix Corporation | 1 |
| 470 | Basf Corporation | 1 |
| 471 | University of Virginia Patent Foundation | 1 |
| 472 | Technische Universitaet Graz | 1 |
| 473 | Retriev Technologies Incorporated | 1 |
| 474 | Hitchinson | 1 |
| 475 | University of Delaware | 1 |
| 476 | Commissariat à L'Énergie Atomique | 1 |
| 477 | Dow Kokam France Sas | 1 |
| 478 | Samsung Electronics Co., Ltd. and Sungkyunkwan University Foundation for Corporate Collaboration | 1 |
| 479 | Snur & Db Foundation | 1 |
| 480 | Shenzhen Byd Auto R&d Company Limited | 1 |
| 481 | Neotec Semiconductor Ltd. | 1 |
| 482 | 3m Innovative Properties Counsel | 1 |
| 483 | Chervon Limited | 1 |
| 484 | Techno Semichem Co., Ltd. | 1 |
| 485 | Zeon Corporation | 1 |
| 486 | Audiovox Corporation | 1 |
| 487 | Sk Innovation Co., Ltd. | 1 |
| 488 | Board of Governors for Higher Education, State of Rhode Island and Providence Plantations | 1 |
| 489 | Vista Advance Technology Co., Ltd. | 1 |
| 490 | The Université De Montréal | 1 |
| 491 | Hitachi Vehicle Energy, Ltd. | 1 |
| 492 | National Research Council of Canada | 1 |
| 493 | Stl Technology Co., Ltd. | 1 |
| 494 | Broadcom Corporation | 1 |
| 495 | Northwestern University | 1 |

| # | Name | Patents |
|---|---|---|
| 496 | Boston-power, Inc. | 1 |
| 497 | Datalogic Scanning Group S.r.l. | 1 |
| 498 | Elexcel Corporation Ltd. | 1 |
| 499 | Biotronik Crm Patent Ag | 1 |
| 500 | Universite De Picardie Jules Verne | 1 |
| 501 | Saft | 1 |
| 502 | Max-planck-gesellschaft Zur Forderung Der Wissenschaften E.v. | 1 |
| 503 | Shenzhen Meiouya Power Supply Technology Co., Ltd. | 1 |
| 504 | Novolyte Technologies, Inc. | 1 |
| 505 | Energy Control Limited | 1 |
| 506 | Le Centre National De La Rocherche Scientifique | 1 |
| 507 | Transcore Link Logistics Corporation | 1 |
| 508 | Platinum Energy Services Corp. | 1 |
| 509 | Catalyst Semiconductor, Inc. | 1 |
| 510 | Kokam Engineering Co., Ltd. | 1 |
| 511 | Japan As Represented by President of the University of Kyusyu | 1 |
| 512 | Mitsui Engineering and Shipbuilding Company Limited | 1 |
| 513 | Integrated Systems Solution Corp. | 1 |
| 514 | Commonwealth Scientific and Industrial Research Organisation | 1 |
| 515 | Monash University | 1 |
| 516 | Santo Electric Co., Ltd. | 1 |
| 517 | Sanyo Chemical Industries, Ltd. | 1 |
| 518 | Air Products and Chemicals, Inc. | 1 |
| 519 | Biosource, Incorporated | 1 |
| 520 | Caleb Technology Corporation | 1 |
| 521 | Skc Co., Ltd. | 1 |
| 522 | Lightak Electronics Corp. | 1 |
| 523 | Avestor Limited Partnership | 1 |
| 524 | Inventec Multimedia & Telecom Corporation | 1 |
| 525 | Dialog Semiconductor Gmbh | 1 |
| 526 | Arizona Board of Regents Acting for and on Behalf of Arizona State University | 1 |
| 527 | Eagelpicher Kokam Co., Ltd. | 1 |
| 528 | Ferro Corporation | 1 |
| 529 | Tufts College | 1 |
| 530 | Council of Scientific & Industrial Research | 1 |
| 531 | Genesis Research Institute, Incorporated | 1 |
| 532 | Kureha Chemical Industry Company, Limited | 1 |
| 533 | Enerl Battery Company | 1 |
| 534 | Samsung Sde Co., Ltd. | 1 |
| 535 | Yuasa Corporation | 1 |
| 536 | Rutgers University | 1 |
| 537 | Pacific Energytech. Co., Ltd. | 1 |
| 538 | Phoenix Innovation, Inc. | 1 |
| 539 | Telefonaktiebolaget Lm Ericsson (publ) | 1 |
| 540 | Lithium Power Technologies, Inc. | 1 |

# ASSIGNEES

| # | Name | Patents |
|---|---|---|
| 541 | Genesis Electronics LLC | 1 |
| 542 | Merck Patent Gesellschaft MIT Beschrankter Haftung | 1 |
| 543 | University of Minnesota | 1 |
| 544 | Eltron Research, Inc. | 1 |
| 545 | Koninklijke Phillips Electronics N.v. | 1 |
| 546 | E.o. Schweitzer Mfg. Co. | 1 |
| 547 | Stmicroelectronics S.r.l. | 1 |
| 548 | Merit Medical Systems, Inc. | 1 |
| 549 | Tonen Corporation | 1 |
| 550 | S.l.p. Ltd. | 1 |
| 551 | Toyo Kasei Kogyo Company Limited | 1 |
| 552 | Murakami Corporation | 1 |
| 553 | Ntk Powerdex, Inc. | 1 |
| 554 | Snow Glow, Incorporated | 1 |
| 555 | Kerr-mcgee Chemical, LLC | 1 |
| 556 | Daimlerchrysler Corporation | 1 |
| 557 | Tonen Chemical Company | 1 |
| 558 | Implex Aktiengesellschaft Hearing Technology | 1 |
| 559 | Murata Manufacturing Co., Ltd. | 1 |
| 560 | Delphi Technologies, Inc. | 1 |
| 561 | Osaka Gas Company Limited | 1 |
| 562 | Kabushiki Kaisha Toyota Chuo Kenkyusho | 1 |
| 563 | Kyushu Ceramics Industry Co., Ltd. | 1 |
| 564 | Alfa Laval Agri Ab | 1 |
| 565 | Nec Moli Energy Corp. | 1 |
| 566 | E.o. Schweitzer Manufacturing Company, Inc. | 1 |
| 567 | Data General Corporation | 1 |
| 568 | Intermec IP Corporation | 1 |
| 569 | Hoechst Aktiengesellschaft | 1 |
| 570 | Ricoh Company, Ltd. | 1 |
| 571 | Asahi Kogaku Kogyo Kabushiki Kaisha | 1 |
| 572 | Hyperion Catalysis International, Inc. | 1 |
| 573 | Norand Corporation | 1 |
| 574 | Gould Electronics Inc. | 1 |
| 575 | Nitto-denko Corporation | 1 |
| 576 | Mitsubishi Chemical Corporation | 1 |
| 577 | Electricite De France - Service National | 1 |
| 578 | Bollore Technologies S.a. | 1 |
| 579 | Sadacem, S.a. | 1 |
| 580 | Mitsubishi Cable Industries, Ltd. | 1 |
| 581 | Arthur D. Little, Inc. | 1 |
| 582 | National Technical Systems | 1 |
| 583 | Inclusion Ab | 1 |
| 584 | The United States of America As Represented by the Administrator of the | 1 |
| 585 | Wayne State University | 1 |
| 586 | Intermedics Inc. | 1 |
| 587 | Dow Corning Toray Silicone Company Limited | 1 |
| 588 | Advanced Energy Technologies LLC | 1 |
| 589 | Eic Laboratories, Inc. | 1 |
| 590 | Sparton Corporation | 1 |
| 591 | Monarch Marking Systems, Inc. | 1 |
| 592 | Sharp Kabushiki Kaisha Corporation | 1 |
| 593 | Gesellschaft Fur Geratebau Mbh | 1 |
| 594 | Hitachi Maxell, Limited | 1 |
| 595 | United Kingdom Atomic Energy Authority | 1 |
| 596 | Accumulatorenwerke Hoppecke Carl Zoellner & Sohn Gmbh & Co. Kg | 1 |
| 597 | Alcan International Limited | 1 |
| 598 | Rayovac Corporation | 1 |
| 599 | Yuasa Battery Co., Ltd. | 1 |
| 600 | Rainin Instrument Co., Inc. | 1 |
| 601 | Hughes Aircraft Company | 1 |
| 602 | Ramot University Authority for Applied Research and Industrial Development Limited | 1 |
| 603 | Allied Corporation | 1 |
| 604 | Battery Engineering, Inc. | 1 |
| 605 | Her Majesty the Queen in Right of Canada, As Represented by the Minister | 1 |
| 606 | Emerson Electric Company | 1 |
| 607 | Le Carbone Lorraine, S.a. | 1 |
| 608 | Case Western Reserve University | 1 |
| 609 | At&t Bell Laboratories | 1 |
| 610 | Consiglio Nazionale Delle Ricerche | 1 |
| 611 | Bell Telephone Laboratories | 1 |
| 612 | Altus Corporation | 1 |
| 613 | Eic Corporation | 1 |
| 614 | Power Conversion, Inc. | 1 |
| 615 | Honeywell G.m.b.h. | 1 |
| 616 | Saft-societe Des Accumulateurs Fixes Et De Traction | 1 |

# ATTORNEYS

| # | Name | Patents |
|---|---|---|
| 1 | Christie, Parker & Hale, LLP | 187 |
| 2 | Cantor Colburn LLP | 160 |
| 3 | Lewis Roca Rothgerber Christie LLP | 159 |
| 4 | Knobbe, Martens, Olson & Bear, LLP | 138 |
| 5 | Lee & Morse, P.C. | 84 |
| 6 | Robert E. Bushnell, Esq. | 60 |
| 7 | Lee IP Law, P.C. | 59 |
| 8 | Foley & Lardner LLP | 44 |
| 9 | Oblon, McClelland, Maier & Neustadt, L.L.P. | 37 |
| 10 | Oliff PLC | 34 |
| 11 | Oblon, Spivak, McClelland, Maier & Neustadt, L.L.P. | 30 |
| 12 | Olson & Cepuritis, Ltd. | 26 |
| 13 | Sughrue Mion, PLLC | 23 |
| 14 | Hammer & Associates, P.C. | 22 |
| 15 | H.C. Park & Associates, PLC | 21 |
| 16 | Brooks Kushman P.C. | 20 |
| 17 | Lerner, David, Littenberg, Krumholz & Mentlik, LLP | 20 |
| 18 | Kubovcik & Kubovcik | 20 |
| 19 | Stein, McEwen & Bui, LLP | 20 |
| 20 | Buchanan Ingersoll & Rooney PC | 18 |
| 21 | Fitzpatrick, Cella, Harper & Scinto | 18 |
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| 563 | Pitney, Hardin, Kipp & Szuch LLP | 1 |
| 564 | Mark M. Friedman | 1 |
| 565 | Wenderoth, Lind & Ponack, L.L.P. | 1 |
| 566 | Armstrong Westerman Hattori McLeland & Naughton, LLP | 1 |
| 567 | Michael J. Striker | 1 |
| 568 | Jeffrey D. Myers | 1 |
| 569 | Freilich, Hornbaker & Rosen | 1 |
| 570 | Mark Kusner | 1 |
| 571 | Dougherty, Jr.; C. Clark | 1 |
| 572 | Coughlin; William J. | 1 |
| 573 | Flynn, Thiel, Boutell & Tanis, P.C. | 1 |
| 574 | Gifford, Krass, Groh, Sprinkle, Anderson & Citkowski, PC | 1 |
| 575 | Margaret A. Dobrowitsky | 1 |
| 576 | Young & Basile, P.C. | 1 |
| 577 | Daniel C. Schulte | 1 |
| 578 | Hovey, Williams, Timmons & Collins | 1 |
| 579 | Nikaido Marmelstein Murray & Oram LLP | 1 |
| 580 | James Anglehart | 1 |
| 581 | Lockwood, Alex, Fitzgibbon & Cummings | 1 |
| 582 | Kriegsman & Kriegsman | 1 |
| 583 | Panitch Schwarze Jacobs & Nadel, P.C. | 1 |
| 584 | Connolly & Hutz | 1 |
| 585 | Arnold White & Durkee | 1 |

| # | Name | Patents |
|---|---|---|
| 586 | Nelson; Wallace J. | 1 |
| 587 | Barry Evans, Esq. | 1 |
| 588 | Boyd, Esq.; John E. | 1 |
| 589 | Hill & Simpson | 1 |
| 590 | Michael A. Centanni | 1 |
| 591 | Edna M. O'Connor | 1 |
| 592 | Joseph A. Marasco | 1 |
| 593 | Beveridge, DeGrandi, Weilacher & Young, LLP | 1 |
| 594 | John P. Hohimer | 1 |
| 595 | Olsen; Kurt C. | 1 |
| 596 | Bacon&Thomas, PLLC | 1 |
| 597 | Perkins; Karen | 1 |
| 598 | Massaroni; Kenneth M. | 1 |
| 599 | Hill, Steadman & Simpson | 1 |
| 600 | Varndell Legal Group | 1 |
| 601 | Charles Jew, Jr. | 1 |
| 602 | Cone; Gregory A. | 1 |
| 603 | Adams; H. W. | 1 |
| 604 | Jenkins & Gilchrist | 1 |
| 605 | Brown; Laurence R. | 1 |
| 606 | Brooks & Kushman PC | 1 |
| 607 | Markling; John R. | 1 |
| 608 | Kasmiss; John H. | 1 |
| 609 | Latham; Daniel W. | 1 |
| 610 | Patton; Harold R. | 1 |
| 611 | Allen, Dyer, Doppelt, Franjola & Milbrath | 1 |
| 612 | Burgess, Ryan & Wayne | 1 |
| 613 | Gobrogge; Roger E. | 1 |
| 614 | Browdy and Neimark, PLLC | 1 |
| 615 | Deschire; Linda M. | 1 |
| 616 | Ratner & Prestia | 1 |
| 617 | McMillan; Armand | 1 |
| 618 | Worsham, Forsythe, Sampels & Wooldridge | 1 |
| 619 | James V. Tura | 1 |
| 620 | Bechtel; James B. | 1 |
| 621 | Verona; Susan E. | 1 |
| 622 | Juliana Agon | 1 |
| 623 | Berry; Thomas G. | 1 |
| 624 | Richard B. Main | 1 |
| 625 | Reising, Ethington, Barnard, Perry & Milton | 1 |
| 626 | Mason, Kolehmainen, Rathburn & Wyss | 1 |
| 627 | David G. Conlin | 1 |
| 628 | Linek; Ernest V. | 1 |
| 629 | Nils H. Ljungman & Associates | 1 |
| 630 | Wallenstein, Wagner & Hattis | 1 |

# ATTORNEYS

| # | Name | Patents |
|---|---|---|
| 631 | Robert W Becker & Associates | 1 |
| 632 | Cooper & Dunham LLP | 1 |
| 633 | Bean, Jr.; Edwin T. | 1 |
| 634 | Linihan; Martin G. | 1 |
| 635 | John C. Thompson | 1 |
| 636 | Lane; Anthony T. | 1 |
| 637 | Michael C-Sachs | 1 |
| 638 | Watson, Cole Grindle & Watson | 1 |
| 639 | Robert R. Meads | 1 |
| 640 | Christel, Bean & Linihan | 1 |
| 641 | Terje Gudmestad | 1 |
| 642 | Kenneth W. Float | 1 |
| 643 | Karambelas; A. W. | 1 |
| 644 | Plant; Lawrence B. | 1 |
| 645 | Everett; John R. | 1 |
| 646 | Barish; Benjamin J. | 1 |
| 647 | Schaper; Donald D. | 1 |
| 648 | Beers; Robert F. | 1 |
| 649 | Ervin F. Johnston | 1 |
| 650 | Keough; Thomas Glenn | 1 |
| 651 | Friedenson; Jay P. | 1 |
| 652 | Pahl, Lorusso & Loud | 1 |
| 653 | Habelt; William W. | 1 |
| 654 | Brumbaugh, Graves, Donohue & Raymond | 1 |
| 655 | Polster, Polster and Lucchesi | 1 |
| 656 | McDougall, Hersh & Scott | 1 |
| 657 | Marvin E. Jacobs | 1 |
| 658 | Plevy; Arthur L. | 1 |
| 659 | Watts Hoffmann Fisher & Heinke | 1 |
| 660 | Morra; M. A. | 1 |
| 661 | Bucknam and Archer | 1 |
| 662 | Birnbaum; Lester H. | 1 |
| 663 | Singer; Donald J. | 1 |
| 664 | Collier; Stanton E. | 1 |
| 665 | Darby & Darby | 1 |
| 666 | Salzman; Robert S. | 1 |
| 667 | Schroeder, Siegfried, Ryan, Vidas, Steffey & Arrett | 1 |
| 668 | Flehr Hohbach Test | 1 |
| 669 | Hopgood, Calimafde, Kalil, Blaustein & Lieberman | 1 |
| 670 | Sherman & Shalloway | 1 |
| 671 | Munday; John S | 1 |

# LOCATIONS

| # | Location | Patents |
|---|---|---|
| 1 | Yongin-si, KR | 2,567 |
| 2 | Suwon-si, KR | 545 |
| 3 | Seoul, KR | 426 |
| 4 | Daejeon, KR | 169 |
| 5 | Seongnam-si, KR | 145 |
| 6 | Hwaseong-si, KR | 145 |
| 7 | Beijing, CN | 99 |
| 8 | Centerville, OH (US) | 91 |
| 9 | Yokohama, JP | 86 |
| 10 | Cheonan, KR | 86 |
| 11 | Ann Arbor, MI (US) | 75 |
| 12 | Taipei, TW | 74 |
| 13 | Naperville, IL (US) | 70 |
| 14 | Yongin, KR | 69 |
| 15 | Osaka, JP | 68 |
| 16 | Hirakata, JP | 67 |
| 17 | Kobe, JP | 64 |
| 18 | Tucson, AZ (US) | 61 |
| 19 | Cheonan-si, KR | 53 |
| 20 | Kyoto, JP | 51 |
| 21 | Springboro, OH (US) | 44 |
| 22 | Dayton, OH (US) | 43 |
| 23 | Guangdong, CN | 42 |
| 24 | Fremont, CA (US) | 42 |
| 25 | Susono, JP | 41 |
| 26 | Tokyo, JP | 40 |
| 27 | Oakland, CA (US) | 39 |
| 28 | Shenzhen, CN | 38 |
| 29 | San Jose, CA (US) | 36 |
| 30 | Toronto, CA | 34 |
| 31 | Knoxville, TN (US) | 31 |
| 32 | Nara, JP | 31 |
| 33 | Zhejiang, CN | 30 |
| 34 | Hsinchu, TW | 30 |
| 35 | Guiyang, CN | 30 |
| 36 | Shanghai, CN | 29 |
| 37 | Charlotte, NC (US) | 29 |
| 38 | Cambridge, MA (US) | 28 |
| 39 | Chungcheongnam-do, KR | 28 |
| 40 | Taichung, TW | 27 |
| 41 | Nanjing, CN | 26 |
| 42 | Takehara, JP | 26 |
| 43 | Amiens, FR | 26 |
| 44 | Grenoble, FR | 24 |
| 45 | Stanford, CA (US) | 24 |

| # | Location | Patents |
|---|---|---|
| 46 | Taoyuan, TW | 23 |
| 47 | Troy, MI (US) | 23 |
| 48 | Montréal, CA | 23 |
| 49 | Gyeonggi-do, KR | 23 |
| 50 | Austin, TX (US) | 21 |
| 51 | Ikeda, JP | 21 |
| 52 | Kyungki-do, KR | 21 |
| 53 | Ningde, CN | 20 |
| 54 | Augusta, GA (US) | 20 |
| 55 | Berkeley, CA (US) | 20 |
| 56 | Chengdu, CN | 20 |
| 57 | Santa Clara, CA (US) | 19 |
| 58 | Albuquerque, NM (US) | 19 |
| 59 | Tokushima, JP | 19 |
| 60 | Suwon, KR | 19 |
| 61 | Henderson, NV (US) | 19 |
| 62 | Kanagawa, JP | 18 |
| 63 | Montreal, CA | 18 |
| 64 | Eindhoven, NL | 18 |
| 65 | Fulton, MD (US) | 17 |
| 66 | Nagoya, JP | 17 |
| 67 | San Mateo, CA (US) | 17 |
| 68 | Anyang-si, KR | 17 |
| 69 | Sodegaura, JP | 17 |
| 70 | Xiamen, CN | 16 |
| 71 | Hubei, CN | 16 |
| 72 | Bolingbrook, IL (US) | 16 |
| 73 | Coquitlam, CA | 16 |
| 74 | Mito, JP | 16 |
| 75 | Wako, JP | 16 |
| 76 | Quimper, FR | 15 |
| 77 | New Taipei, TW | 15 |
| 78 | Fujian, CN | 15 |
| 79 | Hsinchu County, TW | 15 |
| 80 | Villach, AT | 15 |
| 81 | Irkutsk, RU | 15 |
| 82 | Downers Grove, IL (US) | 15 |
| 83 | Sumoto, JP | 15 |
| 84 | Matthews, NC (US) | 14 |
| 85 | Ulsan, KR | 14 |
| 86 | Yamaguchi, JP | 14 |
| 87 | Yongin-Si, KR | 14 |
| 88 | Itami, JP | 14 |
| 89 | Vancouver, CA | 14 |
| 90 | Tainan, TW | 13 |

# LOCATIONS

| # | Location | Patents |
|---|---|---|
| 91 | Chicago, IL (US) | 13 |
| 92 | Beech Island, SC (US) | 13 |
| 93 | Shandong, CN | 13 |
| 94 | Sunnyvale, CA (US) | 13 |
| 95 | Westmont, IL (US) | 13 |
| 96 | Atlanta, GA (US) | 13 |
| 97 | Tokyo-To, JP | 13 |
| 98 | College Park, MD (US) | 12 |
| 99 | Greenbelt, MD (US) | 12 |
| 100 | Carrollton, TX (US) | 12 |
| 101 | Busan, KR | 12 |
| 102 | Beavercreek, OH (US) | 12 |
| 103 | Hunan, CN | 11 |
| 104 | Plainfield, IL (US) | 11 |
| 105 | Hyogo, JP | 11 |
| 106 | Williamsville, NY (US) | 11 |
| 107 | Oakbrook, IL (US) | 11 |
| 108 | Incheon, KR | 11 |
| 109 | Gwangju, KR | 11 |
| 110 | Ohsan, KR | 11 |
| 111 | Bei-Jing, CN | 11 |
| 112 | Ibaraki, JP | 11 |
| 113 | Hitachinaka, JP | 11 |
| 114 | Rhede, DE | 11 |
| 115 | Danbury, CT (US) | 11 |
| 116 | Waxhaw, NC (US) | 10 |
| 117 | Evans, GA (US) | 10 |
| 118 | Golden, CO (US) | 10 |
| 119 | San Francisco, CA (US) | 10 |
| 120 | Richland, WA (US) | 10 |
| 121 | Brussels, BE | 10 |
| 122 | Pleasanton, CA (US) | 10 |
| 123 | Sichuan, CN | 10 |
| 124 | Framingham, MA (US) | 10 |
| 125 | Nishinomiya, JP | 10 |
| 126 | New Milford, CT (US) | 10 |
| 127 | Nottuln, DE | 10 |
| 128 | Katano, JP | 10 |
| 129 | Ikoma, JP | 10 |
| 130 | Longueuil, CA | 9 |
| 131 | Rock Hill, SC (US) | 9 |
| 132 | Burlington, MA (US) | 9 |
| 133 | Osan-si, KR | 9 |
| 134 | Greenville, SC (US) | 9 |
| 135 | Mountain View, CA (US) | 9 |

| # | Location | Patents |
|---|---|---|
| 136 | Daegu, KR | 9 |
| 137 | Boston, MA (US) | 9 |
| 138 | Changzhou, CN | 9 |
| 139 | Amagasaki, JP | 9 |
| 140 | Mishima, JP | 9 |
| 141 | Coral Springs, FL (US) | 9 |
| 142 | Ludwigshafen, DE | 9 |
| 143 | Friedrichsdorf, DE | 9 |
| 144 | Ypsilanti, MI (US) | 9 |
| 145 | Kawasaki, JP | 9 |
| 146 | Southampton, GB | 9 |
| 147 | Fairborn, OH (US) | 9 |
| 148 | Hitachi, JP | 9 |
| 149 | Brookfield, CT (US) | 9 |
| 150 | Kiev, UA | 9 |
| 151 | Duelmen, DE | 9 |
| 152 | LaSalle, IL (US) | 9 |
| 153 | Moriguchi, JP | 9 |
| 154 | Pohang-si, KR | 8 |
| 155 | Varennes, CA | 8 |
| 156 | Ithaca, NY (US) | 8 |
| 157 | Bengaluru, IN | 8 |
| 158 | Fort Mill, SC (US) | 8 |
| 159 | Taylors, SC (US) | 8 |
| 160 | Bloomfield Hills, MI (US) | 8 |
| 161 | Matsumoto, JP | 8 |
| 162 | Elmhurst, IL (US) | 8 |
| 163 | Stuttgart, DE | 8 |
| 164 | Karlsruhe, DE | 8 |
| 165 | Kaohsiung, TW | 8 |
| 166 | Tsukuba, JP | 8 |
| 167 | Gotenba, JP | 8 |
| 168 | Mississauga, CA | 8 |
| 169 | Minoh, JP | 8 |
| 170 | Taoyuan County, TW | 8 |
| 171 | Jacou, FR | 8 |
| 172 | Ambler, PA (US) | 8 |
| 173 | Boulogne, FR | 8 |
| 174 | Kelkheim, DE | 8 |
| 175 | Paris, FR | 7 |
| 176 | Jiangsu, CN | 7 |
| 177 | Farmington Hills, MI (US) | 7 |
| 178 | Palo Alto, CA (US) | 7 |
| 179 | Santa Fe, NM (US) | 7 |
| 180 | Oak Ridge, TN (US) | 7 |

# LOCATIONS

| # | Location | Patents |
|---|---|---|
| 181 | Saitama, JP | 7 |
| 182 | Shanxi, CN | 7 |
| 183 | Boucherville, CA | 7 |
| 184 | Tonawanda, NY (US) | 7 |
| 185 | Woodridge, IL (US) | 7 |
| 186 | Gumi-si, KR | 7 |
| 187 | Takatsuki, JP | 7 |
| 188 | Fontaine, FR | 7 |
| 189 | Graz, AT | 7 |
| 190 | London, CA | 7 |
| 191 | Westlake, OH (US) | 7 |
| 192 | Hampshire, GB | 7 |
| 193 | Southbury, CT (US) | 7 |
| 194 | Wakayama, JP | 7 |
| 195 | Needham, MA (US) | 7 |
| 196 | Burnaby, CA | 7 |
| 197 | Redmond, WA (US) | 7 |
| 198 | Madison, WI (US) | 7 |
| 199 | Braunschweig, DE | 6 |
| 200 | Uiwang-si, KR | 6 |
| 201 | Boxborough, MA (US) | 6 |
| 202 | Exeter, NH (US) | 6 |
| 203 | Kokomo, IN (US) | 6 |
| 204 | Dezhou, CN | 6 |
| 205 | Harbin, CN | 6 |
| 206 | San Diego, CA (US) | 6 |
| 207 | Philadelphia, PA (US) | 6 |
| 208 | Walnut Creek, CA (US) | 6 |
| 209 | Tallahassee, FL (US) | 6 |
| 210 | Kyunggi-do, KR | 6 |
| 211 | Miami, FL (US) | 6 |
| 212 | Oneonta, NY (US) | 6 |
| 213 | Fort Lauderdale, FL (US) | 6 |
| 214 | Leganes, ES | 6 |
| 215 | Gyeongsangnam-do, KR | 6 |
| 216 | East Amherst, NY (US) | 6 |
| 217 | Marietta, GA (US) | 6 |
| 218 | Dongguan, CN | 6 |
| 219 | Salt Lake City, UT (US) | 6 |
| 220 | Chung Li, TW | 6 |
| 221 | Nantes, FR | 6 |
| 222 | Horseheads, NY (US) | 6 |
| 223 | Skien, NO | 6 |
| 224 | Menlo Park, CA (US) | 6 |
| 225 | Tianjin, CN | 6 |

| # | Location | Patents |
|---|---|---|
| 226 | Settsu, JP | 6 |
| 227 | Daejeon-si, KR | 6 |
| 228 | Irvine, CA (US) | 6 |
| 229 | Chuncheon-si, KR | 6 |
| 230 | Avon, OH (US) | 6 |
| 231 | Alden, NY (US) | 6 |
| 232 | Shizuoka, JP | 6 |
| 233 | Shoreview, MN (US) | 6 |
| 234 | Lockport, NY (US) | 6 |
| 235 | Painted Post, NY (US) | 5 |
| 236 | Grovetown, GA (US) | 5 |
| 237 | Changsha, CN | 5 |
| 238 | Novi, MI (US) | 5 |
| 239 | Combrit, FR | 5 |
| 240 | Milan, IT | 5 |
| 241 | Frankfurt am Main, DE | 5 |
| 242 | Dhahran, SA | 5 |
| 243 | Québec, CA | 5 |
| 244 | Lexington, MA (US) | 5 |
| 245 | Waban, MA (US) | 5 |
| 246 | Tsu, JP | 5 |
| 247 | Columbus, OH (US) | 5 |
| 248 | Kettering, OH (US) | 5 |
| 249 | Anhui, CN | 5 |
| 250 | Joplin, MO (US) | 5 |
| 251 | Oak Brook, IL (US) | 5 |
| 252 | Tottori, JP | 5 |
| 253 | Princeton, NJ (US) | 5 |
| 254 | Kariya, JP | 5 |
| 255 | Seongnam, KR | 5 |
| 256 | Garching, DE | 5 |
| 257 | Boulder, CO (US) | 5 |
| 258 | Cupertino, CA (US) | 5 |
| 259 | La Prairie, CA | 5 |
| 260 | Brienon sur Armancon, FR | 5 |
| 261 | Shelton, CT (US) | 5 |
| 262 | Norwalk, CT (US) | 5 |
| 263 | Oxford, CT (US) | 5 |
| 264 | Hiroshima, JP | 5 |
| 265 | Shijyonawate, JP | 5 |
| 266 | Skaneateles, NY (US) | 5 |
| 267 | Tao-Yuan, TW | 5 |
| 268 | Kyotanabe, JP | 5 |
| 269 | Acton, MA (US) | 5 |
| 270 | Choongcheongnam-do, KR | 5 |

# LOCATIONS

| # | Location | Patents |
|---|---|---|
| 271 | Maple Ridge, CA | 5 |
| 272 | Chungcheongnam, KR | 5 |
| 273 | Ste-Julie, CA | 5 |
| 274 | Aichi, JP | 5 |
| 275 | Lancaster, NY (US) | 5 |
| 276 | Sayama, JP | 5 |
| 277 | Dallas, TX (US) | 4 |
| 278 | St. Charles, IL (US) | 4 |
| 279 | Louisville, CO (US) | 4 |
| 280 | Northville, MI (US) | 4 |
| 281 | Lincoln, MA (US) | 4 |
| 282 | Hong Kong, CN | 4 |
| 283 | Glendora, CA (US) | 4 |
| 284 | Orlando, FL (US) | 4 |
| 285 | Suzhou, CN | 4 |
| 286 | Willowbrook, IL (US) | 4 |
| 287 | Turin, IT | 4 |
| 288 | Utsunomiya, JP | 4 |
| 289 | Corning, NY (US) | 4 |
| 290 | Chino, JP | 4 |
| 291 | Woodbury, MN (US) | 4 |
| 292 | 's-Gravenhage, NL | 4 |
| 293 | Foster City, CA (US) | 4 |
| 294 | Thuwal, SA | 4 |
| 295 | Yorktown Heights, NY (US) | 4 |
| 296 | Waterloo, CA | 4 |
| 297 | Mothern, FR | 4 |
| 298 | Pfinztal, DE | 4 |
| 299 | Dublin, CA (US) | 4 |
| 300 | Miyoshi, JP | 4 |
| 301 | Peapack, NJ (US) | 4 |
| 302 | Sautron, FR | 4 |
| 303 | Ellwangen, DE | 4 |
| 304 | Istanbul, TR | 4 |
| 305 | Lafayette, CA (US) | 4 |
| 306 | Corbetta, IT | 4 |
| 307 | Hacienda Heights, CA (US) | 4 |
| 308 | Danville, CA (US) | 4 |
| 309 | Moraga, CA (US) | 4 |
| 310 | Namyangju-si, KR | 4 |
| 311 | Toyota, JP | 4 |
| 312 | Fishers, IN (US) | 4 |
| 313 | Huber Heights, OH (US) | 4 |
| 314 | Stillwater, MN (US) | 4 |
| 315 | Saint Paul, MN (US) | 4 |

| # | Location | Patents |
|---|---|---|
| 316 | Chiba, JP | 4 |
| 317 | Ube, JP | 4 |
| 318 | Taiping, TW | 4 |
| 319 | Hamamatsu, JP | 4 |
| 320 | Valencia, CA (US) | 4 |
| 321 | Bruges, FR | 4 |
| 322 | Lier, BE | 4 |
| 323 | Woodbridge, CT (US) | 4 |
| 324 | Neyagawa, JP | 4 |
| 325 | Uji, JP | 4 |
| 326 | Pirna, DE | 4 |
| 327 | Tempe, AZ (US) | 4 |
| 328 | Taejeon, KR | 4 |
| 329 | North Plainfield, NJ (US) | 4 |
| 330 | Karaikudi, IN | 4 |
| 331 | Yokkaichi, JP | 4 |
| 332 | Sakai, JP | 4 |
| 333 | Taejon, KR | 4 |
| 334 | Takasago, JP | 4 |
| 335 | Fukushima, JP | 4 |
| 336 | Surrey, CA | 4 |
| 337 | Garland, TX (US) | 4 |
| 338 | Willow Grove, PA (US) | 4 |
| 339 | Westfield, NJ (US) | 4 |
| 340 | Jeonju-si, KR | 3 |
| 341 | Changwon-si, KR | 3 |
| 342 | Brossard, CA | 3 |
| 343 | Buffalo Grove, IL (US) | 3 |
| 344 | Huntersville, NC (US) | 3 |
| 345 | Winchester, MA (US) | 3 |
| 346 | Jiangxi, CN | 3 |
| 347 | Sunrise, FL (US) | 3 |
| 348 | Tijeras, NM (US) | 3 |
| 349 | McAllen, TX (US) | 3 |
| 350 | Edinburg, TX (US) | 3 |
| 351 | Bollate, IT | 3 |
| 352 | Wheaton, IL (US) | 3 |
| 353 | Champaign, IL (US) | 3 |
| 354 | Torrance, CA (US) | 3 |
| 355 | Los Angeles, CA (US) | 3 |
| 356 | Santo Domingo, DO | 3 |
| 357 | Newton, MA (US) | 3 |
| 358 | San Leandro, CA (US) | 3 |
| 359 | Vail, AZ (US) | 3 |
| 360 | Gunpo-si, KR | 3 |

# LOCATIONS

| # | Location | Patents |
|---|---|---|
| 361 | Hangzhou, CN | 3 |
| 362 | Zurich, CH | 3 |
| 363 | Saint-Egreve, FR | 3 |
| 364 | Ningbo, CN | 3 |
| 365 | Lisle, IL (US) | 3 |
| 366 | Darien, IL (US) | 3 |
| 367 | Changhua County, TW | 3 |
| 368 | Newark, CA (US) | 3 |
| 369 | Zenhai, CN | 3 |
| 370 | Andover, MA (US) | 3 |
| 371 | State College, PA (US) | 3 |
| 372 | Penghu County, TW | 3 |
| 373 | Griesheim, DE | 3 |
| 374 | Suwon-Si, KR | 3 |
| 375 | Tokyo-to, JP | 3 |
| 376 | Owariasahi, JP | 3 |
| 377 | Le Versoud, FR | 3 |
| 378 | Monrovia, CA (US) | 3 |
| 379 | Waukesha, WI (US) | 3 |
| 380 | Ichihara, JP | 3 |
| 381 | Monza, IT | 3 |
| 382 | Huzhou, CN | 3 |
| 383 | Kasuga, JP | 3 |
| 384 | Yuseong-gu, KR | 3 |
| 385 | Bedford, MA (US) | 3 |
| 386 | Feffernitz, AT | 3 |
| 387 | Venice, CA (US) | 3 |
| 388 | Santa Monica, CA (US) | 3 |
| 389 | Saint Marcellin, FR | 3 |
| 390 | Vizille, FR | 3 |
| 391 | Springfield, OH (US) | 3 |
| 392 | Sijhih, TW | 3 |
| 393 | Hsinchu Hsien, TW | 3 |
| 394 | Su-won-si, KR | 3 |
| 395 | Wake Forest, NC (US) | 3 |
| 396 | Suwa, JP | 3 |
| 397 | Olney, MD (US) | 3 |
| 398 | South Windsor, CT (US) | 3 |
| 399 | Saugus, CA (US) | 3 |
| 400 | Ansan-si, KR | 3 |
| 401 | Montpellier, FR | 3 |
| 402 | Halifax, CA | 3 |
| 403 | Saint Ismier, FR | 3 |
| 404 | Kingston, RI (US) | 3 |
| 405 | Dnipropetrovsk, UA | 3 |

| # | Location | Patents |
|---|---|---|
| 406 | Lyons, FR | 3 |
| 407 | Saint Baudille de la Tour, FR | 3 |
| 408 | Ober-Ramstadt, DE | 3 |
| 409 | Youngin-si, KR | 3 |
| 410 | Gumi, KR | 3 |
| 411 | Mesa, AZ (US) | 3 |
| 412 | Nonsan-si, KR | 3 |
| 413 | Souraku-gun, JP | 3 |
| 414 | Shipton-Under-Wychwood, GB | 3 |
| 415 | Oxfordshire, GB | 3 |
| 416 | Shinjuku-ku, JP | 3 |
| 417 | Lawrenceville, GA (US) | 3 |
| 418 | Parma, OH (US) | 3 |
| 419 | Richmond Heights, OH (US) | 3 |
| 420 | Howell, NJ (US) | 3 |
| 421 | Minneapolis, MN (US) | 3 |
| 422 | LeRoy, NY (US) | 3 |
| 423 | Martinsville, NJ (US) | 3 |
| 424 | New Fairfield, CT (US) | 3 |
| 425 | Corinth, TX (US) | 3 |
| 426 | Pasadena, CA (US) | 3 |
| 427 | all Kanagawa, JP | 3 |
| 428 | Suita, JP | 3 |
| 429 | Snyder, NY (US) | 3 |
| 430 | Rochester, NY (US) | 3 |
| 431 | Millington, NJ (US) | 3 |
| 432 | Somerville, NJ (US) | 3 |
| 433 | Clausthal-Zellerfeld, DE | 2 |
| 434 | Sasso Marconi, IT | 2 |
| 435 | Jeollabuk-do, KR | 2 |
| 436 | Flower Mound, TX (US) | 2 |
| 437 | Berkley, MI (US) | 2 |
| 438 | Lindley, NY (US) | 2 |
| 439 | Huazhou, CN | 2 |
| 440 | Liyang, CN | 2 |
| 441 | Hampshire, IL (US) | 2 |
| 442 | Milwaukee, WI (US) | 2 |
| 443 | Sherbrooke, CA | 2 |
| 444 | Elk Grove Village, IL (US) | 2 |
| 445 | Des Plaines, IL (US) | 2 |
| 446 | Lancaster, SC (US) | 2 |
| 447 | York, SC (US) | 2 |
| 448 | San Carlos, CA (US) | 2 |
| 449 | Al-Ahsa, SA | 2 |
| 450 | Orinda, CA (US) | 2 |

# LOCATIONS

| # | Location | Patents |
|---|---|---|
| 451 | Saint Michel de Saint-Geoirs, FR | 2 |
| 452 | Meylan, FR | 2 |
| 453 | Liberty Hill, TX (US) | 2 |
| 454 | Meadowbrook, PA (US) | 2 |
| 455 | Yokosuka, JP | 2 |
| 456 | Greenwood Village, CO (US) | 2 |
| 457 | Olen, BE | 2 |
| 458 | Jinan, CN | 2 |
| 459 | Brookline, MA (US) | 2 |
| 460 | Kyeonggi-do, KR | 2 |
| 461 | Hyattsville, MD (US) | 2 |
| 462 | Riverside, CA (US) | 2 |
| 463 | West Palm Beach, FL (US) | 2 |
| 464 | Miami Beach, FL (US) | 2 |
| 465 | Berwyn Heights, MD (US) | 2 |
| 466 | Washington, DC (US) | 2 |
| 467 | Hiram, ME (US) | 2 |
| 468 | Belmont, MA (US) | 2 |
| 469 | Cookeville, TN (US) | 2 |
| 470 | Luoyang, CN | 2 |
| 471 | Pico Riveria, CA (US) | 2 |
| 472 | Louvain-la-Neuve, BE | 2 |
| 473 | Bresso, IT | 2 |
| 474 | Guangzhou, CN | 2 |
| 475 | Vatilieu, FR | 2 |
| 476 | Alsbach-Haehnlein, DE | 2 |
| 477 | Brighton, MA (US) | 2 |
| 478 | Veldhoven, NL | 2 |
| 479 | Gyeonggi-Do, KR | 2 |
| 480 | Wheatfield, NY (US) | 2 |
| 481 | Buffalo, NY (US) | 2 |
| 482 | Saint-Ismier, FR | 2 |
| 483 | Vourey, FR | 2 |
| 484 | Voiron, FR | 2 |
| 485 | Boca Raton, FL (US) | 2 |
| 486 | Miryang-si, KR | 2 |
| 487 | Gyeongsangbuk-do, KR | 2 |
| 488 | Rohnert Park, CA (US) | 2 |
| 489 | Union City, CA (US) | 2 |
| 490 | Saline, MI (US) | 2 |
| 491 | Edina, MN (US) | 2 |
| 492 | Old Bridge, NJ (US) | 2 |
| 493 | Hanam-si, KR | 2 |
| 494 | Treillieres, FR | 2 |
| 495 | Groveland, MA (US) | 2 |

| # | Location | Patents |
|---|---|---|
| 496 | North Palm Beach, FL (US) | 2 |
| 497 | Houston, TX (US) | 2 |
| 498 | Oulu, FI | 2 |
| 499 | Dali, TW | 2 |
| 500 | Zhudong Township, TW | 2 |
| 501 | Frankenthal, DE | 2 |
| 502 | Eppstein, DE | 2 |
| 503 | Asan-si, KR | 2 |
| 504 | Webb City, MO (US) | 2 |
| 505 | Miaoli County, TW | 2 |
| 506 | Palm Beach Gardens, FL (US) | 2 |
| 507 | Goslar, DE | 2 |
| 508 | New York, NY (US) | 2 |
| 509 | Okegawa, JP | 2 |
| 510 | Juelich, DE | 2 |
| 511 | Kitchener, CA | 2 |
| 512 | Iksan-si, KR | 2 |
| 513 | Jindo-gun, KR | 2 |
| 514 | Porsgrunn, NO | 2 |
| 515 | Hamburg, DE | 2 |
| 516 | Saint Avertin, FR | 2 |
| 517 | Gradignan, FR | 2 |
| 518 | Kyiv, UA | 2 |
| 519 | Whitefish Bay, WI (US) | 2 |
| 520 | Cerrito, CA (US) | 2 |
| 521 | Tarzana, CA (US) | 2 |
| 522 | Chuncheon, KR | 2 |
| 523 | Fukuoka, JP | 2 |
| 524 | Pyeongtaek-si, KR | 2 |
| 525 | Duisburg, DE | 2 |
| 526 | Carnago, IT | 2 |
| 527 | Fiume Veneto, IT | 2 |
| 528 | Cornaredo, IT | 2 |
| 529 | Gunpo, KR | 2 |
| 530 | Gwacheon, KR | 2 |
| 531 | Namyangju, KR | 2 |
| 532 | Hwaseong, KR | 2 |
| 533 | Bielefeld, DE | 2 |
| 534 | Hatfield, PA (US) | 2 |
| 535 | Ekaterinburg, RU | 2 |
| 536 | Yongin-si, JP | 2 |
| 537 | Sillans, FR | 2 |
| 538 | Sejong, KR | 2 |
| 539 | Lausanne, CH | 2 |
| 540 | Houlton, WI (US) | 2 |

# LOCATIONS

| # | Location | Patents |
|---|---|---|
| 541 | Afton, MN (US) | 2 |
| 542 | Mahtomedi, MN (US) | 2 |
| 543 | Sterling, VA (US) | 2 |
| 544 | Boves, FR | 2 |
| 545 | Chateauroux, FR | 2 |
| 546 | Iruma-gun, JP | 2 |
| 547 | Siheung-si, KR | 2 |
| 548 | Gangneung-si, KR | 2 |
| 549 | East Brunswick, NJ (US) | 2 |
| 550 | Hungen, DE | 2 |
| 551 | Niddatal, DE | 2 |
| 552 | St. Quentin/Isère, FR | 2 |
| 553 | Lincent, BE | 2 |
| 554 | Auderghem, BE | 2 |
| 555 | Lesve, BE | 2 |
| 556 | Lancaster, CA (US) | 2 |
| 557 | Geumjeong-gu, KR | 2 |
| 558 | Jhubei, TW | 2 |
| 559 | Yongkang, TW | 2 |
| 560 | Gimje-si, KR | 2 |
| 561 | Apex, NC (US) | 2 |
| 562 | Chapel Hill, NC (US) | 2 |
| 563 | Longmeadow, MA (US) | 2 |
| 564 | West Suffield, CT (US) | 2 |
| 565 | Broadview Heights, OH (US) | 2 |
| 566 | Valley View, OH (US) | 2 |
| 567 | Solon, OH (US) | 2 |
| 568 | Charlottesville, VA (US) | 2 |
| 569 | Newark, DE (US) | 2 |
| 570 | Cary, NC (US) | 2 |
| 571 | El Cerrito, CA (US) | 2 |
| 572 | Burbank, CA (US) | 2 |
| 573 | Santa Clarita, CA (US) | 2 |
| 574 | Marguerittes, FR | 2 |
| 575 | Saint Laurent du Pont, FR | 2 |
| 576 | Wiesbaden, DE | 2 |
| 577 | Saint-Michel de Saint-Geoirs, FR | 2 |
| 578 | Ft. Lauderdale, FL (US) | 2 |
| 579 | Saint Genis les Ollieres, FR | 2 |
| 580 | Taipei County, TW | 2 |
| 581 | Ngatea, NZ | 2 |
| 582 | Gwanak-gu, KR | 2 |
| 583 | Gloucester, CA | 2 |
| 584 | Irkuisk, RU | 2 |
| 585 | Mims, FL (US) | 2 |

| # | Location | Patents |
|---|---|---|
| 586 | Emmaus, PA (US) | 2 |
| 587 | La Chapelle sur Erdre, FR | 2 |
| 588 | Worcester, MA (US) | 2 |
| 589 | Veitsch, AT | 2 |
| 590 | Brno, CZ | 2 |
| 591 | Yawata, JP | 2 |
| 592 | Kanagawak-en, JP | 2 |
| 593 | Gunma, JP | 2 |
| 594 | Asan, KR | 2 |
| 595 | Itano-gun, JP | 2 |
| 596 | Nanuet, NY (US) | 2 |
| 597 | Tsurugashima, JP | 2 |
| 598 | Lakewood, NJ (US) | 2 |
| 599 | Gosport, GB | 2 |
| 600 | Arlington, MA (US) | 2 |
| 601 | Iwaki, JP | 2 |
| 602 | Changwon, KR | 2 |
| 603 | Panama City, FL (US) | 2 |
| 604 | Manitoba, CA | 2 |
| 605 | Hubley, CA | 2 |
| 606 | Kornsjo, NO | 2 |
| 607 | Yokohamasi, JP | 2 |
| 608 | Vänge, SE | 2 |
| 609 | Tsuzuki-gun, JP | 2 |
| 610 | Missouri City, TX (US) | 2 |
| 611 | Ventura, CA (US) | 2 |
| 612 | Kashiwara, JP | 2 |
| 613 | Avon Lake, OH (US) | 2 |
| 614 | Kirtland, OH (US) | 2 |
| 615 | Mentor, OH (US) | 2 |
| 616 | Bellevue, WA (US) | 2 |
| 617 | Illertissen, DE | 2 |
| 618 | Ulm, DE | 2 |
| 619 | Middleton, WI (US) | 2 |
| 620 | Northbrook, IL (US) | 2 |
| 621 | Boulogne Billancourt, FR | 2 |
| 622 | Toyonaka, JP | 2 |
| 623 | Hiroshima-ken, JP | 2 |
| 624 | Fujieda, JP | 2 |
| 625 | Virginia, MN (US) | 2 |
| 626 | Edmond, OK (US) | 2 |
| 627 | Oklahoma City, OK (US) | 2 |
| 628 | Clarkston, MI (US) | 2 |
| 629 | München, DE | 2 |
| 630 | Dexter, MI (US) | 2 |

# LOCATIONS

| # | Location | Patents |
|---|---|---|
| 631 | Shiga-ken, JP | 2 |
| 632 | Fukuoka-Pref., JP | 2 |
| 633 | Auburn, NY (US) | 2 |
| 634 | Roswell, GA (US) | 2 |
| 635 | Milpitas, CA (US) | 2 |
| 636 | Machida, JP | 2 |
| 637 | Milford, MA (US) | 2 |
| 638 | Nashua, NH (US) | 2 |
| 639 | Albuquerque, Bernalillo County, NM (US) | 2 |
| 640 | Eatontown, NJ (US) | 2 |
| 641 | Eden Prairie, MN (US) | 2 |
| 642 | Janesville, WI (US) | 2 |
| 643 | South Pasadena, CA (US) | 2 |
| 644 | Morgan Hill, CA (US) | 2 |
| 645 | Even Yehuda, IL | 2 |
| 646 | Dortmund, DE | 2 |
| 647 | Swindon, GB | 2 |
| 648 | Clarence, NY (US) | 2 |
| 649 | Kenmore, NY (US) | 2 |
| 650 | Hino, JP | 2 |
| 651 | Setagaya, JP | 2 |
| 652 | Waltham, MA (US) | 2 |
| 653 | Simi, CA (US) | 2 |
| 654 | Rochester, MI (US) | 1 |
| 655 | St-Bruno-de-Montarville, CA | 1 |
| 656 | Sainte-Julie, CA | 1 |
| 657 | Campbell, NY (US) | 1 |
| 658 | Elmira, NY (US) | 1 |
| 659 | Fort Worth, TX (US) | 1 |
| 660 | Palatine, IL (US) | 1 |
| 661 | Indian Land, SC (US) | 1 |
| 662 | Heilongjiang, CN | 1 |
| 663 | Wallingford, PA (US) | 1 |
| 664 | Chadds Ford, PA (US) | 1 |
| 665 | Racine, WI (US) | 1 |
| 666 | Cary, IL (US) | 1 |
| 667 | Compiègne, FR | 1 |
| 668 | Giessen, DE | 1 |
| 669 | Groton, MA (US) | 1 |
| 670 | Tewksbury, MA (US) | 1 |
| 671 | Bala Cynwyd, PA (US) | 1 |
| 672 | East Lansing, MI (US) | 1 |
| 673 | Hachioji, JP | 1 |
| 674 | Madison Heights, MI (US) | 1 |
| 675 | Atherton, CA (US) | 1 |

| # | Location | Patents |
|---|---|---|
| 676 | Saint Yvi, FR | 1 |
| 677 | Briec, FR | 1 |
| 678 | Oak Park, IL (US) | 1 |
| 679 | Grosse Pointe Woods, MI (US) | 1 |
| 680 | Rochester Hills, MI (US) | 1 |
| 681 | Modena, IT | 1 |
| 682 | Westerlo, BE | 1 |
| 683 | Herentals, BE | 1 |
| 684 | Hoboken, BE | 1 |
| 685 | Greding, DE | 1 |
| 686 | Parabiago, IT | 1 |
| 687 | Reading, MA (US) | 1 |
| 688 | Cosenza, IT | 1 |
| 689 | Santo Domingo Oeste, DO | 1 |
| 690 | Beijjing, CN | 1 |
| 691 | Rockville, MD (US) | 1 |
| 692 | Columbia, MD (US) | 1 |
| 693 | Chino Hills, CA (US) | 1 |
| 694 | La Tronche, FR | 1 |
| 695 | Lille, FR | 1 |
| 696 | Yongín-si, KR | 1 |
| 697 | Everett, MA (US) | 1 |
| 698 | Happy Valley, OR (US) | 1 |
| 699 | Beach Park, IL (US) | 1 |
| 700 | Grayslake, IL (US) | 1 |
| 701 | New Hudson, MI (US) | 1 |
| 702 | Heidelberg, DE | 1 |
| 703 | Miamisburg, OH (US) | 1 |
| 704 | Sonora, CA (US) | 1 |
| 705 | Redwood City, CA (US) | 1 |
| 706 | Zunyi, CN | 1 |
| 707 | Bend, OR (US) | 1 |
| 708 | Cesate, IT | 1 |
| 709 | Westland, MI (US) | 1 |
| 710 | Fuzhou, CN | 1 |
| 711 | Ummendorf, DE | 1 |
| 712 | Vordorf, DE | 1 |
| 713 | Isenbüttel, DE | 1 |
| 714 | East Palo Alto, CA (US) | 1 |
| 715 | Stuttgart-Rohr, DE | 1 |
| 716 | Elk Grove, CA (US) | 1 |
| 717 | Guang Dong, CN | 1 |
| 718 | Lishui, CN | 1 |
| 719 | St. Leon-Rot, DE | 1 |
| 720 | Schwetzingen, DE | 1 |

# LOCATIONS

| # | Location | Patents |
|---|---|---|
| 721 | Boehl-Iggelheim, DE | 1 |
| 722 | Buerstadt, DE | 1 |
| 723 | Malsch, DE | 1 |
| 724 | Illertissen-Tiefenbach, DE | 1 |
| 725 | Salzgitter, DE | 1 |
| 726 | Holzheim, DE | 1 |
| 727 | Strängnäs, SE | 1 |
| 728 | Summerville, SC (US) | 1 |
| 729 | Overath, DE | 1 |
| 730 | Deest, NL | 1 |
| 731 | Luik, BE | 1 |
| 732 | The Hague, NL | 1 |
| 733 | Rutesheim, DE | 1 |
| 734 | Kernen, DE | 1 |
| 735 | Aichtal, DE | 1 |
| 736 | Ditzingen, DE | 1 |
| 737 | Madrid, ES | 1 |
| 738 | Saint Martin d'Heres, FR | 1 |
| 739 | Mont-Royal, CA | 1 |
| 740 | Shawinigan, CA | 1 |
| 741 | St-Tite, CA | 1 |
| 742 | Joué-lès-Tours, FR | 1 |
| 743 | Luynes, FR | 1 |
| 744 | Nova Scotia, CA | 1 |
| 745 | Fulton, MO (US) | 1 |
| 746 | Shunntou-gun, JP | 1 |
| 747 | Komaki, JP | 1 |
| 748 | Nishio, JP | 1 |
| 749 | Kounan, JP | 1 |
| 750 | Ama, JP | 1 |
| 751 | Glen Allen, VA (US) | 1 |
| 752 | Abha, SA | 1 |
| 753 | Nantou County, TW | 1 |
| 754 | Oakville, CA | 1 |
| 755 | Gongan County, CN | 1 |
| 756 | Lauderhill, FL (US) | 1 |
| 757 | Plantation, FL (US) | 1 |
| 758 | Fullerton, CA (US) | 1 |
| 759 | Sterling Heights, MI (US) | 1 |
| 760 | Gyeongsan-si, KR | 1 |
| 761 | Fangzhuang, CN | 1 |
| 762 | Copley, OH (US) | 1 |
| 763 | White Plains, NY (US) | 1 |
| 764 | Westwood, NY (US) | 1 |
| 765 | Albany, NY (US) | 1 |

| # | Location | Patents |
|---|---|---|
| 766 | Utrecht, NL | 1 |
| 767 | Herten, NL | 1 |
| 768 | Burnsville, MN (US) | 1 |
| 769 | Apple Valley, MN (US) | 1 |
| 770 | Isehara, JP | 1 |
| 771 | Vicksburg, MI (US) | 1 |
| 772 | Kalamazoo, MI (US) | 1 |
| 773 | Akaiwa, JP | 1 |
| 774 | Okayama, JP | 1 |
| 775 | Daly City, CA (US) | 1 |
| 776 | North Brunswick, NJ (US) | 1 |
| 777 | Carol Stream, IL (US) | 1 |
| 778 | Homer Glen, IL (US) | 1 |
| 779 | Seongnam, JP | 1 |
| 780 | Evreux, FR | 1 |
| 781 | Mormant, FR | 1 |
| 782 | Barc, FR | 1 |
| 783 | Zwickau, DE | 1 |
| 784 | Half Moon Bay, CA (US) | 1 |
| 785 | Jyväskylä, FI | 1 |
| 786 | Denver, NC (US) | 1 |
| 787 | Southfield, MI (US) | 1 |
| 788 | Marysville, OH (US) | 1 |
| 789 | Liverpool, NY (US) | 1 |
| 790 | Haiger, DE | 1 |
| 791 | Darmstadt, DE | 1 |
| 792 | Bad Soden, DE | 1 |
| 793 | Bad Vilbel, DE | 1 |
| 794 | Wenzhou, CN | 1 |
| 795 | PoSuwon-si, KR | 1 |
| 796 | San Rafael, CA (US) | 1 |
| 797 | Tiburon, CA (US) | 1 |
| 798 | Jeollanam-do, KR | 1 |
| 799 | Waterford, MI (US) | 1 |
| 800 | Monnaie, FR | 1 |
| 801 | Charentilly, FR | 1 |
| 802 | West Dundee, IL (US) | 1 |
| 803 | Diamond, MO (US) | 1 |
| 804 | McDonough, GA (US) | 1 |
| 805 | Smyrna, GA (US) | 1 |
| 806 | Douglasville, GA (US) | 1 |
| 807 | Rheinbrohl, DE | 1 |
| 808 | West Bloomfield, MI (US) | 1 |
| 809 | Simi Valley, CA (US) | 1 |
| 810 | Talbott, TN (US) | 1 |

# LOCATIONS

| # | Location | Patents |
|---|---|---|
| 811 | Monschau, DE | 1 |
| 812 | Hadano, JP | 1 |
| 813 | Atsugi, JP | 1 |
| 814 | Orange, TX (US) | 1 |
| 815 | Kennett Square, PA (US) | 1 |
| 816 | Saint-Egrève, FR | 1 |
| 817 | Pfullingen, DE | 1 |
| 818 | Nuertingen, DE | 1 |
| 819 | Nishitokyo, JP | 1 |
| 820 | Templeton, CA (US) | 1 |
| 821 | South Dartmouth, MA (US) | 1 |
| 822 | Plymouth, MA (US) | 1 |
| 823 | Yellow Springs, OH (US) | 1 |
| 824 | Monts, FR | 1 |
| 825 | La Ville aux Dames, FR | 1 |
| 826 | Talence, FR | 1 |
| 827 | Bordeaux, FR | 1 |
| 828 | Mouzell, FR | 1 |
| 829 | Saarlouis, DE | 1 |
| 830 | Sarreguemines, FR | 1 |
| 831 | Bexbach, DE | 1 |
| 832 | Villeurbanne, FR | 1 |
| 833 | Collonges Mont D'or, FR | 1 |
| 834 | Brovary, UA | 1 |
| 835 | Thiensville, WI (US) | 1 |
| 836 | Bayside, WI (US) | 1 |
| 837 | Brookfield, WI (US) | 1 |
| 838 | Mequon, WI (US) | 1 |
| 839 | Davidson, NC (US) | 1 |
| 840 | Jupiter, FL (US) | 1 |
| 841 | Seto, JP | 1 |
| 842 | Pioltello, IT | 1 |
| 843 | Ravenna, IT | 1 |
| 844 | Mannheim, DE | 1 |
| 845 | Belmont, CA (US) | 1 |
| 846 | Decatur, AL (US) | 1 |
| 847 | Roth, DE | 1 |
| 848 | Bad Kreuznach, DE | 1 |
| 849 | Allen, TX (US) | 1 |
| 850 | The Colony, TX (US) | 1 |
| 851 | Richardson, TX (US) | 1 |
| 852 | Saint-Pierre de Mesage, FR | 1 |
| 853 | Yueqing, CN | 1 |
| 854 | Outremont, CA | 1 |
| 855 | Okazaki, JP | 1 |

| # | Location | Patents |
|---|---|---|
| 856 | Oobu, JP | 1 |
| 857 | Gamagoori, JP | 1 |
| 858 | Nukata-gun, JP | 1 |
| 859 | Suntou-gun, JP | 1 |
| 860 | Seeheim-Jugenheim, DE | 1 |
| 861 | Kefenrod, DE | 1 |
| 862 | Wuppertal, DE | 1 |
| 863 | Rheinberg, DE | 1 |
| 864 | Muelheim, DE | 1 |
| 865 | Namyangju Gyeonggi-Do, KR | 1 |
| 866 | Pont-du-Chateau, FR | 1 |
| 867 | Metz, FR | 1 |
| 868 | Clermont-Ferrand, FR | 1 |
| 869 | Bischofsheim, DE | 1 |
| 870 | Noblesville, IN (US) | 1 |
| 871 | Muncie, IN (US) | 1 |
| 872 | Pendleton, IN (US) | 1 |
| 873 | Sunto-gun, JP | 1 |
| 874 | Lansdale, PA (US) | 1 |
| 875 | Montaud, FR | 1 |
| 876 | Villenave d'Ornon, FR | 1 |
| 877 | Phoenix, AZ (US) | 1 |
| 878 | Flagstaff, AZ (US) | 1 |
| 879 | Senago, IT | 1 |
| 880 | Rhode-St-Genese, IT | 1 |
| 881 | Ath, BE | 1 |
| 882 | Tiruvalla, IN | 1 |
| 883 | Friedelsheim, DE | 1 |
| 884 | Schriesheim, DE | 1 |
| 885 | Morges, CH | 1 |
| 886 | Pittsburgh, PA (US) | 1 |
| 887 | Senden, DE | 1 |
| 888 | Sante-Julie, CA | 1 |
| 889 | Brownstown Township, MI (US) | 1 |
| 890 | Upper Tantallon, CA | 1 |
| 891 | Kensington, MD (US) | 1 |
| 892 | Sun Prairie, WI (US) | 1 |
| 893 | Saint Michel de Geoirs, FR | 1 |
| 894 | Saint Nicolas de Macherin, FR | 1 |
| 895 | Saint-Etienne, FR | 1 |
| 896 | Sanyoonoda, JP | 1 |
| 897 | Gunsan-si, KR | 1 |
| 898 | La Buisse, FR | 1 |
| 899 | Livet et Gavet, FR | 1 |
| 900 | Ulsan-si, KR | 1 |

# LOCATIONS

| # | Location | Patents |
|---|---|---|
| 901 | Franklin Park, NJ (US) | 1 |
| 902 | Edgewater, NJ (US) | 1 |
| 903 | Lyndhurst, GB | 1 |
| 904 | Bitterne Park, GB | 1 |
| 905 | Saint Nicholas de Macherin, FR | 1 |
| 906 | Tainan County, TW | 1 |
| 907 | Somerville, MA (US) | 1 |
| 908 | Woodbridge, CA | 1 |
| 909 | Wuxi, CN | 1 |
| 910 | Numazu, JP | 1 |
| 911 | Carstairs, CA | 1 |
| 912 | West Roxbury, MA (US) | 1 |
| 913 | Chiayi, TW | 1 |
| 914 | Magong, TW | 1 |
| 915 | Vinay, FR | 1 |
| 916 | Yuhua District, CN | 1 |
| 917 | Saint Etienne, FR | 1 |
| 918 | Seyssinet-Pariset, FR | 1 |
| 919 | Seoul, KP | 1 |
| 920 | Clarendon Hills, IL (US) | 1 |
| 921 | Singapore, SG | 1 |
| 922 | Laurel, MD (US) | 1 |
| 923 | Silver Spring, MD (US) | 1 |
| 924 | West Friendship, MD (US) | 1 |
| 925 | South Glastonbury, CT (US) | 1 |
| 926 | East Hartford, CT (US) | 1 |
| 927 | Ellington, CT (US) | 1 |
| 928 | Sandia Park, NM (US) | 1 |
| 929 | Napeville, IL (US) | 1 |
| 930 | Mason, OH (US) | 1 |
| 931 | Keswick, VA (US) | 1 |
| 932 | Haddonfield, NJ (US) | 1 |
| 933 | Huningue, FR | 1 |
| 934 | Laguiole, FR | 1 |
| 935 | Hericy, FR | 1 |
| 936 | Bures sur Yvette, FR | 1 |
| 937 | Sokcho-si, KR | 1 |
| 938 | Portage, MI (US) | 1 |
| 939 | Carmel, IN (US) | 1 |
| 940 | Notre Dame De L'Osier, FR | 1 |
| 941 | Lans-en-Vercors, FR | 1 |
| 942 | Hilliard, OH (US) | 1 |
| 943 | Calais, FR | 1 |
| 944 | Daaejeon, KR | 1 |
| 945 | Greenfield, WI (US) | 1 |

| # | Location | Patents |
|---|---|---|
| 946 | Wedemark, DE | 1 |
| 947 | Kassel, DE | 1 |
| 948 | Holland, MI (US) | 1 |
| 949 | Zeeland, MI (US) | 1 |
| 950 | Franklin, WI (US) | 1 |
| 951 | Grafton, WI (US) | 1 |
| 952 | Menomonee Falls, WI (US) | 1 |
| 953 | Ellezelles, BE | 1 |
| 954 | Ecully, FR | 1 |
| 955 | Rocky Hill, CT (US) | 1 |
| 956 | Plantsville, CT (US) | 1 |
| 957 | Carnago VA, IT | 1 |
| 958 | Fiume Veneto PN, IT | 1 |
| 959 | Monza MI, IT | 1 |
| 960 | Carnaredo MI, IT | 1 |
| 961 | Budenheim, DE | 1 |
| 962 | Wuhan, CN | 1 |
| 963 | Fairfax, VA (US) | 1 |
| 964 | Waldkirch, DE | 1 |
| 965 | Yamata, JP | 1 |
| 966 | Ebina, JP | 1 |
| 967 | Gongju-si, KR | 1 |
| 968 | Irigny, FR | 1 |
| 969 | Ampuis, FR | 1 |
| 970 | Westfield, IN (US) | 1 |
| 971 | Wakefield, RI (US) | 1 |
| 972 | Edmonton, CA | 1 |
| 973 | Rilleux, FR | 1 |
| 974 | La Salle, IL (US) | 1 |
| 975 | Le Prairie, CA | 1 |
| 976 | Hitachiota, JP | 1 |
| 977 | Fukaya, JP | 1 |
| 978 | Wuqi Town, TW | 1 |
| 979 | Gatineau, CA | 1 |
| 980 | Orleans, CA | 1 |
| 981 | Ukraine, UA | 1 |
| 982 | Bloomfield Township, MI (US) | 1 |
| 983 | Gwangmyoung-si, KR | 1 |
| 984 | Kaohsiung County, TW | 1 |
| 985 | Nantou, TW | 1 |
| 986 | Biot, FR | 1 |
| 987 | Ladera Ranch, CA (US) | 1 |
| 988 | Newtonville, MA (US) | 1 |
| 989 | Livonia, MI (US) | 1 |
| 990 | Evanston, IL (US) | 1 |

# LOCATIONS

| # | Location | Patents |
|---|---|---|
| 991 | Gumefens, CH | 1 |
| 992 | Ploudern, FR | 1 |
| 993 | Mennecy, FR | 1 |
| 994 | Grafton, MA (US) | 1 |
| 995 | Shrewsbury, MA (US) | 1 |
| 996 | Gwancheon-si, KR | 1 |
| 997 | Gwangju Metropolitan, KR | 1 |
| 998 | Ferrara, IT | 1 |
| 999 | Eugene, OR (US) | 1 |
| 1,000 | Howell, MI (US) | 1 |
| 1,001 | Maple Grove, MN (US) | 1 |
| 1,002 | St. Louis Park, MN (US) | 1 |
| 1,003 | Hugo, MN (US) | 1 |
| 1,004 | Notre Dame de l'Osier, FR | 1 |
| 1,005 | Linnei Township, Yunlin County, TW | 1 |
| 1,006 | Rossdorf, DE | 1 |
| 1,007 | Mornant, FR | 1 |
| 1,008 | Sainte Foy les Lyon, FR | 1 |
| 1,009 | Ardsley, PA (US) | 1 |
| 1,010 | Dülmen, DE | 1 |
| 1,011 | Dorsten, DE | 1 |
| 1,012 | Chutung Chen, TW | 1 |
| 1,013 | Lakeland, FL (US) | 1 |
| 1,014 | Dresden, DE | 1 |
| 1,015 | Berggießhübel, DE | 1 |
| 1,016 | Sant Aunes, FR | 1 |
| 1,017 | Sète, FR | 1 |
| 1,018 | Bilieu, FR | 1 |
| 1,019 | Notre Dame-de-l'Osier, FR | 1 |
| 1,020 | Saint-Laurent-du-Pont, FR | 1 |
| 1,021 | Crolles, FR | 1 |
| 1,022 | Yuseong-Gu, KR | 1 |
| 1,023 | Carignan de Bordeaux, FR | 1 |
| 1,024 | Wiernsheim, DE | 1 |
| 1,025 | Bourges, FR | 1 |
| 1,026 | Arcay, FR | 1 |
| 1,027 | Gyeongju-si, KR | 1 |
| 1,028 | ShenZhen, CN | 1 |
| 1,029 | Morgantown, WV (US) | 1 |
| 1,030 | Sinfong Township, Hsinchu County, TW | 1 |
| 1,031 | Nuttuln, DE | 1 |
| 1,032 | Fontenay, FR | 1 |
| 1,033 | Ottawa, CA | 1 |
| 1,034 | Poway, CA (US) | 1 |
| 1,035 | Syracuse, NY (US) | 1 |

| # | Location | Patents |
|---|---|---|
| 1,036 | Memphis, NY (US) | 1 |
| 1,037 | Gweohoon-si, KR | 1 |
| 1,038 | Pompano Beach, FL (US) | 1 |
| 1,039 | Okotoks, CA | 1 |
| 1,040 | Calgary, CA | 1 |
| 1,041 | Decatur, GA (US) | 1 |
| 1,042 | Gwacheon-si, KR | 1 |
| 1,043 | Qunzhou, CN | 1 |
| 1,044 | Longtan Township, Taoyuan County 325, TW | 1 |
| 1,045 | Camberwell, AU | 1 |
| 1,046 | Bentleigh, AU | 1 |
| 1,047 | East Brighton, AU | 1 |
| 1,048 | Belfast, GB | 1 |
| 1,049 | Ashburton, AU | 1 |
| 1,050 | Schnecksville, PA (US) | 1 |
| 1,051 | Chantilly, VA (US) | 1 |
| 1,052 | Seocho-gu, KR | 1 |
| 1,053 | Folcroft, PA (US) | 1 |
| 1,054 | Saint Barthélémy d'Anjou, FR | 1 |
| 1,055 | Fontainebleau, FR | 1 |
| 1,056 | Saint-Herblain, FR | 1 |
| 1,057 | Palmer, MA (US) | 1 |
| 1,058 | Miaoli, TW | 1 |
| 1,059 | Chungli, TW | 1 |
| 1,060 | Croton on Hudson, NY (US) | 1 |
| 1,061 | Norton, MA (US) | 1 |
| 1,062 | Bellingham, MA (US) | 1 |
| 1,063 | Sharon, MA (US) | 1 |
| 1,064 | Olomucany, CZ | 1 |
| 1,065 | Redondo Beach, CA (US) | 1 |
| 1,066 | Incheon-si, KR | 1 |
| 1,067 | Daejeon Metropolitan, KR | 1 |
| 1,068 | Incheon Metropolitan, KR | 1 |
| 1,069 | Montville, NJ (US) | 1 |
| 1,070 | Gyeonggi do, KR | 1 |
| 1,071 | Raritan, NJ (US) | 1 |
| 1,072 | St-Leonard, CA | 1 |
| 1,073 | Laprairie, CA | 1 |
| 1,074 | Potomac, MD (US) | 1 |
| 1,075 | North Potomac, MD (US) | 1 |
| 1,076 | Ohsan, JP | 1 |
| 1,077 | Penang, MY | 1 |
| 1,078 | Chesterfield, VA (US) | 1 |
| 1,079 | Richmond, VA (US) | 1 |
| 1,080 | Midlothian, VA (US) | 1 |

# LOCATIONS

| # | Location | Patents |
|---|---|---|
| 1,081 | Hockenheim, DE | 1 |
| 1,082 | Glen Ellyn, IL (US) | 1 |
| 1,083 | Miami Shores, FL (US) | 1 |
| 1,084 | Flemington, NJ (US) | 1 |
| 1,085 | Sagamihara, JP | 1 |
| 1,086 | Aoba-ku, JP | 1 |
| 1,087 | Zama, JP | 1 |
| 1,088 | Warren, MI (US) | 1 |
| 1,089 | Deajeon, KR | 1 |
| 1,090 | Kilchberg, CH | 1 |
| 1,091 | Brugg, CH | 1 |
| 1,092 | Medford, MA (US) | 1 |
| 1,093 | Southborough, MA (US) | 1 |
| 1,094 | Gallatin, TN (US) | 1 |
| 1,095 | Anjo, JP | 1 |
| 1,096 | La Calmette, FR | 1 |
| 1,097 | Draveil, FR | 1 |
| 1,098 | Ichinomiya, JP | 1 |
| 1,099 | Malden, MA (US) | 1 |
| 1,100 | Takarazuka, JP | 1 |
| 1,101 | Shepton-Under-Wychwoo, GB | 1 |
| 1,102 | Tamarac, FL (US) | 1 |
| 1,103 | Sugar Hill, GA (US) | 1 |
| 1,104 | Lynn Haven, FL (US) | 1 |
| 1,105 | Newnan, GA (US) | 1 |
| 1,106 | Latina, IT | 1 |
| 1,107 | Mihara-gun, JP | 1 |
| 1,108 | Geoul, KR | 1 |
| 1,109 | Fairhaven, MA (US) | 1 |
| 1,110 | Sandwich, MA (US) | 1 |
| 1,111 | Shipton-under-Wychwood, GB | 1 |
| 1,112 | Higashiosaka, JP | 1 |
| 1,113 | Ikoma-gun, JP | 1 |
| 1,114 | Oxforshire, GB | 1 |
| 1,115 | Watertown, MN (US) | 1 |
| 1,116 | St. Francis, MN (US) | 1 |
| 1,117 | Miaoli Hsien, TW | 1 |
| 1,118 | Seiersberg, AU | 1 |
| 1,119 | Kawasakisi, JP | 1 |
| 1,120 | Uppsala, SE | 1 |
| 1,121 | Wilmington, DE (US) | 1 |
| 1,122 | Hockessin, DE (US) | 1 |
| 1,123 | Yokahama, JP | 1 |
| 1,124 | Ojai, CA (US) | 1 |
| 1,125 | Oxnard, CA (US) | 1 |

| # | Location | Patents |
|---|---|---|
| 1,126 | Amherst, NY (US) | 1 |
| 1,127 | Yao, JP | 1 |
| 1,128 | Middletown, NJ (US) | 1 |
| 1,129 | Cheonan, KE | 1 |
| 1,130 | Chungcheognam-do, KR | 1 |
| 1,131 | Weiterstadt, DE | 1 |
| 1,132 | Seiersberg, AT | 1 |
| 1,133 | Wrightsville Beach, NC (US) | 1 |
| 1,134 | New Brighton, MN (US) | 1 |
| 1,135 | Verona, WI (US) | 1 |
| 1,136 | Scottsville, NY (US) | 1 |
| 1,137 | Kenosha, WI (US) | 1 |
| 1,138 | Amiens Cedex, FR | 1 |
| 1,139 | Gravina Di Catania, IT | 1 |
| 1,140 | Messina, IT | 1 |
| 1,141 | Acireale, IT | 1 |
| 1,142 | Iserlohn, DE | 1 |
| 1,143 | Illinois, IL (US) | 1 |
| 1,144 | Lakewood, CO (US) | 1 |
| 1,145 | Ohi-machi, JP | 1 |
| 1,146 | Asaka, JP | 1 |
| 1,147 | Kawagoe, JP | 1 |
| 1,148 | Kamifukuoka, JP | 1 |
| 1,149 | Goyrans, FR | 1 |
| 1,150 | Tel Aviv, IL | 1 |
| 1,151 | Nan-Kang District, Taipei City, TW | 1 |
| 1,152 | Anthony, FR | 1 |
| 1,153 | Iwata, JP | 1 |
| 1,154 | Nootdorp, NL | 1 |
| 1,155 | Nienwerkerk Aan den Lissel, NL | 1 |
| 1,156 | Wassenaak, NL | 1 |
| 1,157 | Boone, NC (US) | 1 |
| 1,158 | Watkinsville, GA (US) | 1 |
| 1,159 | Dacula, GA (US) | 1 |
| 1,160 | Bristol, PA (US) | 1 |
| 1,161 | Taufkirchen, DE | 1 |
| 1,162 | Fair Haven, NJ (US) | 1 |
| 1,163 | Hazlet, NJ (US) | 1 |
| 1,164 | Urawa, JP | 1 |
| 1,165 | Taoyuan Hsien, TW | 1 |
| 1,166 | Sakurai, JP | 1 |
| 1,167 | Saga-Pref., JP | 1 |
| 1,168 | Little Canada, MN (US) | 1 |
| 1,169 | Ymervagen, SE | 1 |
| 1,170 | Snellville, GA (US) | 1 |

# LOCATIONS

| # | Location | Patents |
|---|---|---|
| 1,171 | Quebec, CA | 1 |
| 1,172 | Hoptkinton, MA (US) | 1 |
| 1,173 | Santa Barbara, CA (US) | 1 |
| 1,174 | Neuseiersberg, AT | 1 |
| 1,175 | Lanexa, VA (US) | 1 |
| 1,176 | Hensonville, NY (US) | 1 |
| 1,177 | Taichung Hsien, TW | 1 |
| 1,178 | St-Martin d'Uriage, FR | 1 |
| 1,179 | Rosswell, GA (US) | 1 |
| 1,180 | Suzaka, JP | 1 |
| 1,181 | St Ismier, FR | 1 |
| 1,182 | L'Isle D'Abeau, FR | 1 |
| 1,183 | Delta, CA | 1 |
| 1,184 | Rolla, MO (US) | 1 |
| 1,185 | Kyoto-fu, JP | 1 |
| 1,186 | Esbjerg, DE | 1 |
| 1,187 | Duluth, GA (US) | 1 |
| 1,188 | Norcross, GA (US) | 1 |
| 1,189 | Natick, MA (US) | 1 |
| 1,190 | Chelmsford, MA (US) | 1 |
| 1,191 | Carlsbad, CA (US) | 1 |
| 1,192 | Mt. Airy, MD (US) | 1 |
| 1,193 | Fredericksburg, VA (US) | 1 |
| 1,194 | Rio Rancho, CA (US) | 1 |
| 1,195 | British Columbia, CA | 1 |
| 1,196 | Pingtung, TW | 1 |
| 1,197 | Vestal, NY (US) | 1 |
| 1,198 | Skanor, SE | 1 |
| 1,199 | Odense, DK | 1 |
| 1,200 | Tinton Falls, NJ (US) | 1 |
| 1,201 | Far Hills, NJ (US) | 1 |
| 1,202 | Grand Sault, CA | 1 |
| 1,203 | Minneapolis both of, MN (US) | 1 |
| 1,204 | Arcadia, CA (US) | 1 |
| 1,205 | Grosse Pointe Park, MI (US) | 1 |
| 1,206 | Farminton, MI (US) | 1 |
| 1,207 | Trois-Rivieres West, CA | 1 |
| 1,208 | Shawinigan-South, CA | 1 |
| 1,209 | Lake Jackson, TX (US) | 1 |
| 1,210 | La Crescenta, CA (US) | 1 |
| 1,211 | Anoka, MN (US) | 1 |
| 1,212 | Plymouth, MN (US) | 1 |
| 1,213 | Coon Rapids, MN (US) | 1 |
| 1,214 | Elk River, MN (US) | 1 |
| 1,215 | Ocean, NJ (US) | 1 |

| # | Location | Patents |
|---|---|---|
| 1,216 | Lake Mary, FL (US) | 1 |
| 1,217 | Dedham, MA (US) | 1 |
| 1,218 | Warren, NJ (US) | 1 |
| 1,219 | Southampton, PA (US) | 1 |
| 1,220 | Unterschleissheim, DE | 1 |
| 1,221 | Loxahatchee, FL (US) | 1 |
| 1,222 | Jackson, MI (US) | 1 |
| 1,223 | Xenia, OH (US) | 1 |
| 1,224 | Tenri, JP | 1 |
| 1,225 | Faringdon, GB | 1 |
| 1,226 | Marston, GB | 1 |
| 1,227 | Meschede, DE | 1 |
| 1,228 | Banbury, GB | 1 |
| 1,229 | Neptune, NJ (US) | 1 |
| 1,230 | Aberdeen, MD (US) | 1 |
| 1,231 | Forest, VA (US) | 1 |
| 1,232 | Hayward, CA (US) | 1 |
| 1,233 | Mission Viejo, CA (US) | 1 |
| 1,234 | Freehold, NJ (US) | 1 |
| 1,235 | Fairhaven, NJ (US) | 1 |
| 1,236 | Long Branch, NJ (US) | 1 |
| 1,237 | Kiron, IL | 1 |
| 1,238 | Givatayim, IL | 1 |
| 1,239 | Ramat-Hasharon, IL | 1 |
| 1,240 | Herzliya, IL | 1 |
| 1,241 | Penfield, NY (US) | 1 |
| 1,242 | Webster, NY (US) | 1 |
| 1,243 | Valley Center, CA (US) | 1 |
| 1,244 | Los Alamos, NM (US) | 1 |
| 1,245 | Orchard Park, NY (US) | 1 |
| 1,246 | Clarence Center, NY (US) | 1 |
| 1,247 | Carson City, NV (US) | 1 |
| 1,248 | Kokubunji, JP | 1 |
| 1,249 | Sugunami, JP | 1 |
| 1,250 | Almonte, CA | 1 |
| 1,251 | Dunrobin, CA | 1 |
| 1,252 | Maineville, OH (US) | 1 |
| 1,253 | St. Ismier, FR | 1 |
| 1,254 | Domene, FR | 1 |
| 1,255 | Suginami, JP | 1 |
| 1,256 | Altadena, CA (US) | 1 |
| 1,257 | S. San Gabriel, CA (US) | 1 |
| 1,258 | Rosemead, CA (US) | 1 |
| 1,259 | LaCanada, CA (US) | 1 |
| 1,260 | Neusass, DE | 1 |

# LOCATIONS

| # | Location | Patents |
|---|---|---|
| 1,261 | Kinnelon, NJ (US) | 1 |
| 1,262 | Summit, NJ (US) | 1 |
| 1,263 | Englewood, NJ (US) | 1 |
| 1,264 | Cleveland, OH (US) | 1 |
| 1,265 | Oaklandon, IN (US) | 1 |
| 1,266 | Indianapolis, IN (US) | 1 |
| 1,267 | Needham Heights, MA (US) | 1 |
| 1,268 | Pavia, IT | 1 |
| 1,269 | Rome, IT | 1 |
| 1,270 | Somerset, NJ (US) | 1 |
| 1,271 | Holliston, MA (US) | 1 |
| 1,272 | Carlisle, MA (US) | 1 |
| 1,273 | Tanashi, JP | 1 |
| 1,274 | Fridley, MN (US) | 1 |
| 1,275 | Monterey County, CA (US) | 1 |
| 1,276 | Higashiyamato, JP | 1 |
| 1,277 | Norristown, PA (US) | 1 |
| 1,278 | Poitiers, FR | 1 |
| 1,279 | Edison, NJ (US) | 1 |

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# PATENT APPLICATION PUBLICATIONS

| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 1 | 20240213766 | 2024-03-07 | CIRCUIT-BREAKER, CIRCUIT-BREAKER ABNORMALITY DIAGNOSIS METHOD, AND LITHIUM BATTERY SYSTEM | Junlin LI; Changlai LIU; Shizhong XIA; Huan JIANG; Nian CHEN; Che LIU; | |
| 2 | 20240204303 | 2024-02-28 | SOLID-STATE ELECTROLYTE FOR LITHIUM AIR BATTERIES | Mohammad ASADI; Alireza KONDORI; Mohammadreza ESMAEILIRAD; | ILLINOIS INSTITUTE OF TECHNOLOGY; |
| 3 | 20240207913 | 2024-02-21 | Waste Battery Thermal Desorption Treatment System | Hongfa CHEN; Xuekong YU; Yang LIU; | JEREH ENVIRONMENTAL PROTECTION TECHNOLOGY CO., LTD.; |
| 4 | 20240178375 | 2024-02-08 | SILICON-CARBON COMPOSITE ANODES FOR LITHIUM-ION BATTERIES AND METHOD OF MAKING THE SAME | Vilas Pol; Jialiang Tang; | Purdue Research Foundation; |
| 5 | 20240178471 | 2024-02-01 | Lithium Battery Recycling Method | Qun YU; Xuekong YU; Rongjie YAN; Meng LI; | JEREH ENVIRONMENTAL PROTECTION TECHNOLOGY CO., LTD.; |
| 6 | 20240164255 | 2024-01-30 | ELECTRIC RIDING LAWN MOWER | Qian Liu; Toshinari Yamaoka; Zhen Wang; Fangjie Nie; | |
| 7 | 20240164256 | 2024-01-30 | ELECTRIC RIDING LAWN MOWER | Qian Liu; Toshinari Yamaoka; Zhen Wang; Fangjie Nie; | |
| 8 | 20240178379 | 2024-01-29 | LITHIUM ANTIMONIDE SULFIDE AS LI CONDUCTIVE COMPOUNDS FOR THE APPLICATION OF THICK COATING LAYER IN LI METAL BATTERY AND SOLID ELECTROLYTE IN ALL-SOLID-STATE LITHIUM BATTERIES | Chen LING; | TOYOTA MOTOR ENGINEERING & MANUFACTURING NORTH AMERICA, INC.; |
| 9 | 20240154186 | 2024-01-11 | LOW-VOLTAGE LITHIUM BATTERY CIRCUITRY AND PROTECTION METHOD FOR LOW-VOLTAGE LITHIUM BATTERY | Huan JIANG; Changlai LIU; Shizhong XIA; Nian CHEN; | |
| 10 | 20240136660 | 2023-12-29 | COMPOSITE SEPARATOR, LITHIUM BATTERY INCLUDING THE SAME, AND METHOD OF PREPARING THE COMPOSITE SEPARATOR | Minho CHO; Byungmin LEE; Kyoseon KOO; Esul JUNG; | |
| 11 | 20240145760 | 2023-12-28 | LITHIUM BATTERY AND PREPARATION METHOD THEREFOR, CHARGING METHOD, AND POWER VEHICLE | Yi PAN; Yongjun MA; Zizhu GUO; Liangjun WANG; Huajun SUN; | |
| 12 | 20240128785 | 2023-12-20 | Compact Multifunctional Battery Booster | Brian Butler; Linh Nguyen; Patrick Clarke; Shenzhong Zhu; Xiao Chen; | |
| 13 | 20240178432 | 2023-12-20 | LITHIUM BATTERY WINDING NEEDLE | Shengke SI; | |
| 14 | 20240136596 | 2023-12-15 | LITHIUM BATTERY STRUCTURE AND ELECTRODE LAYER THEREOF | Szu-Nan YANG; | PROLOGIUM TECHNOLOGY CO., LTD.; Prologium Holding Inc.; |
| 15 | 20240204558 | 2023-12-15 | REPLACEMENT OF LEAD BATTERIES WITH LITHIUM BATTERIES | Tareq ALNEJAILI; | |
| 16 | 20240204353 | 2023-12-13 | Slurry for a separator, a separator and a preparation method thereof | Jinbo HE; Jianhai LUO; | |
| 17 | 20240213457 | 2023-12-11 | NEGATIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Jaewon KIM; Yongseok KIM; Jaehou NAH; Youngugk KIM; Heeyoung CHU; Dae-Hyeok LEE; Hyejin KIM; Sojeong YU; | |
| 18 | 20240120761 | 2023-12-08 | METHOD TO ENHANCE THE LIFE OF A LITHIUM BATTERY | Pradeep Nagabhushanrao; Nagaraju Ingurthi; Pavan Gudipalli; Anurag Jivanani; Himamshu Prasad; | |
| 19 | 20240105953 | 2023-12-07 | POSITIVE ELECTRODE SLURRY, POSITIVE ELECTRODE SHEET, AND LITHIUM BATTERY | Renjie QU; | |
| 20 | 20240120498 | 2023-12-07 | ELECTRODE ASSEMBLY AND LITHIUM BATTERY COMPRISING SAME | Juhee SOHN; Junggyu NAM; Junwon SUH; Jungyup YANG; Hyeri EOM; Jeongdoo YI; Daun HAN; Juhyeong HAN; Seokhun HONG; Jandee KIM; Bongkyoung PARK; Hyunhwa SONG; Sol CHOI; | |

# PATENT APPLICATION PUBLICATIONS

| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 21 | 20240128457 | 2023-12-07 | BATTERY SLURRY, ELECTRODE PLATE AND LITHIUM BATTERY | Linping LIAO; Shiwen WANG; Lili YU; | |
| 22 | 20240186574 | 2023-12-05 | SOLID-STATE POLYMER ELECTROLYTE FOR LITHIUM BATTERY | Hsisheng TENG; Thi Tuyet Hanh NGUYEN; Le NGUYEN; Wen-Hsiang WU; Yu-hsing LIN; | |
| 23 | 20240100781 | 2023-12-04 | SEPARATORS, BATTERIES, SYSTEMS, VEHICLES, AND RELATED METHODS | Xiaomin Zhang; Gerald Rumierz; Karl Humiston; Charles Haire; Tyrone Fields; Michael Braswell; Ronald Proctor; Ronnie Smith; | |
| 24 | 20240199422 | 2023-11-30 | NEGATIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | CHUL YOUM; | |
| 25 | 20240175927 | 2023-11-28 | METHOD FOR CALCULATING TERMINAL VOLTAGE OF LITHIUM BATTERY BASED ON ELECTROCHEMICAL MODEL, APPARATUS, AND MEDIUM | Mingchen JIANG; Qian LI; Liangchang WEI; Danfei GU; Siyuan CHEN; Xiao YAN; Enhai ZHAO; | Shanghai Makesens Energy Storage Technology Co., Ltd.; |
| 26 | 20240092190 | 2023-11-27 | CONTROLLING ELECTRICAL ACCESS TO A LITHIUM BATTERY ON A UTILITY VEHICLE | Arthur Harvey; Norman Padgett; John Ledden; Robert Bradley; Patrick Warden; | |
| 27 | 20240097181 | 2023-11-21 | SEPARATOR FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Gain KIM; Yongkyoung KIM; Yangseob KIM; Jungyoon LEE; | |
| 28 | 20240097117 | 2023-11-17 | COMPOSITE CATHODE ACTIVE MATERIAL, CATHODE AND LITHIUM BATTERY EACH CONTAINING COMPOSITE CATHODE ACTIVE MATERIAL, AND PREPARATION METHOD OF CATHODE ACTIVE MATERIAL | Sukgi Hong; Byongyong Yu; Donghee Yeon; Byungjin Choi; | |
| 29 | 20240088428 | 2023-11-13 | NEGATIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, METHOD OF PREPARING THE SAME AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Sang-Eun Park; Young-Ugk Kim; | |
| 30 | 20240097102 | 2023-11-13 | NEGATIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Young-Min Kim; | |
| 31 | 20240159838 | 2023-11-13 | METHOD FOR ANALYZING AND PREDICTING STATE OF HEALTH OF LITHIUM BATTERY, APPARATUS, ELECTRONIC DEVICE, AND STORAGE MEDIUM | Guopeng ZHOU; Xiaohua CHEN; Pei SONG; Enhai ZHAO; Xiao YAN; | Shanghai Makesens Energy Storage Technology Co., Ltd.; |
| 32 | 20240162449 | 2023-11-10 | Electrode plate, a cell, and a lithium battery | Juntai LU; Jianliang WEI; Wuyuan ZOU; | |
| 33 | 20240150177 | 2023-11-06 | SYNTHESIS OF CATHODE MATERIAL FOR LITHIUM BATTERY | Abdul Shakoor; Umair Nisar; Zawar Qureshi; Jeffin Abraham; Khadija Abdul Quddus; Siham AlQaradawi; Ramazan Kahraman; | Qatar University; |
| 34 | 20240097276 | 2023-10-31 | BINDER, SEPARATOR, AND LITHIUM-ION BATTERY USING SUCH SEPARATOR | Lei LI; Haiyang KANG; Yi ZHENG; Chengdong SUN; Shaohua AI; | CONTEMPORARY AMPEREX TECHNOLOGY CO., LIMITED; |
| 35 | 20240079644 | 2023-10-30 | METHOD FOR PRODUCING HIGH-PURITY CESIUM BISFLUOROSULFONYLIMIDE TO IMPROVE STABILITY OF LITHIUM BATTERY | Soon LEE; | |
| 36 | 20240170656 | 2023-10-30 | NEGATIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Hyejin KIM; Yongseok KIM; Sojeong YU; Kyeu SHEEM; Jungjoon KIM; Jaewon KIM; Jaehou NAH; Eunjoo LEE; | |
| 37 | 20240139571 | 2023-10-27 | FIRE-PROTECTION DETECTING METHOD AND DEVICE, ELECTRONIC DEVICE AND MEDIUM | Yizhong FANG; | XIAMEN HITHIUM ENERGY STORAGE TECHNOLOGY CO., LTD.; |
| 38 | 20240170650 | 2023-10-25 | NEGATIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, AND NEGATIVE ELECTRODE AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Sunil PARK; Young-Min KIM; Youngugk KIM; Changsu SHIN; Doori OH; Jongmin WON; Dae-Hyeok LEE; Sungwon JUNG; | |
| 39 | 20240186519 | 2023-10-20 | CURRENT COLLECTOR FOR RECHARGEABLE LITHIUM BATTERY, AND ELECTRODE AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Keemin PARK; Hyeseung JUNG; Hoyong AN; Kyuseo LEE; Seung-Hun HAN; Soochan KIM; Chaewoong CHO; Seungcheol MYEONG; Taeseup SONG; Ungyu PAIK; | |
| 40 | 20240136500 | 2023-10-19 | NEGATIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Keemin PARK; Hyeseung JUNG; Hoyong AN; Kyuseo LEE; Seung-Hun HAN; Soochan KIM; Chaewoong CHO; Seungcheol MYEONG; Taeseup SONG; Ungyu PAIK; | |

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| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 41 | 20240136530 | 2023-10-19 | METHOD OF MANUFACTURING ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY, ELECTRODE MANUFACTURED THEREFROM, AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE ELECTRODE | Keemin PARK; Hyeseung JUNG; Hoyong AN; Kyuseo LEE; Seung-Hun HAN; Soochan KIM; Chaewoong CHO; Seungcheol MYEONG; Taeseup SONG; Ungyu PAIK; | |
| 42 | 20240213535 | 2023-10-18 | ELECTROLYTE SOLUTION FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Harim LEE; Tae BAE; Sanghyung KIM; Seunghyeon SON; Yunhee KIM; Arum YU; | |
| 43 | 20240088443 | 2023-10-16 | ISOCYANATE ELECTROLYTE SOLUTION ADDITIVE BASED ON IMIDAZOLE STRUCTURAL GROUP AND USE THEREOF | Shaobang FU; Cunsheng LIN; Yu SHI; Shanguo ZHANG; Liqi XUAN; Heng JIANG; | Valiant Co., Ltd; |
| 44 | 20240213456 | 2023-10-12 | COMPOSITE CATHODE ACTIVE MATERIAL, CATHODE AND LITHIUM BATTERY CONTAINING COMPOSITE CATHODE ACTIVE MATERIAL AND PREPARATION METHOD THEREOF | Inhyuk Son; Andrei Kapylou; Sangkook Mah; Sungnim Jo; Kyueun Shim; | |
| 45 | 20240213598 | 2023-10-11 | SEALING TAPE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Ik CHO; Jinhwan PARK; Taejung KIM; Sanghyun PARK; Dae KIM; Byeongdo KWAK; Changhee WOO; | |
| 46 | 20240034023 | 2023-10-08 | BATTERY SEPARATORS AND RELATED METHODS | Lie Shi; Christopher Cowger; Heba Botros; | |
| 47 | 20240178466 | 2023-10-07 | ASIC CHIP FOR PERFORMING ACTIVE BATTERY EQUALIZATION | Pei SONG; Guopeng ZHOU; Jian ZHAO; Zonglin CAI; Xiao YAN; Enhai ZHAO; Yan MA; Yunkai WU; | Shanghai Makesens Energy Storage Technology Co., Ltd.; Shanghai Volta Institute of Digital Battery Energy Storage; |
| 48 | 20240120462 | 2023-10-06 | RECHARGEABLE LITHIUM BATTERY INCLUDING HYBRID NEGATIVE ELECTRODE AND HIGH CONCENTRATION ELECTROLYTE | Nam-Soon CHOI; Sewon PARK; Seunghee HAN; | |
| 49 | 20240120463 | 2023-10-06 | NEGATIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE ELECTRODE, AND ELECTROLYTE | Nam-Soon CHOI; Sewon PARK; Seunghee HAN; Kyeong-Min JEONG; | |
| 50 | 20240209120 | 2023-10-05 | METHOD OF PREPARING LITHIUM SALT OF CARBOXYMETHYL CELLULOSE AND RECHARGEABLE LITHIUM BATTERY COMPRISING LITHIUM SALT OF CARBOXYMETHYL CELLULOSE PREPARED BY SAME | Yunshik CHO; Minho CHO; Hana KIM; Jungmin LEE; Kukjoo LEE; Kyunghwa JUNG; | |
| 51 | 20240178470 | 2023-10-05 | RECYCLING METHOD FOR TREATING USED BATTERIES, IN PARTICULAR RECHARGEABLE BATTERIES, AND BATTERY PROCESSING INSTALLATION | Christian HANISCH; | |
| 52 | 20240030452 | 2023-10-03 | SILICON COMPOSITE CLUSTER AND CARBON COMPOSITE THEREOF, AND ELECTRODE, LITHIUM BATTERY, AND ELECTRONIC DEVICE EACH INCLUDING THE SAME | Inhyuk SON; Mijong KIM; Jumyeung LEE; Minwoo LIM; Junghyun CHOI; Sungsoo HAN; | |
| 53 | 20240047688 | 2023-10-03 | SILICON COMPOSITE CLUSTER AND CARBON COMPOSITE THEREOF, AND ELECTRODE, LITHIUM BATTERY, AND ELECTRONIC DEVICE EACH INCLUDING THE SAME | Inhyuk SON; Mijong KIM; Jumyeung LEE; Minwoo LIM; Junghyun CHOI; Sungsoo HAN; | |
| 54 | 20240113302 | 2023-10-03 | SILICON COMPOSITE CLUSTER AND CARBON COMPOSITE THEREOF, AND ELECTRODE, LITHIUM BATTERY, AND ELECTRONIC DEVICE EACH INCLUDING THE SAME | Inhyuk SON; Mijong KIM; Jumyeung LEE; Minwoo LIM; Junghyun CHOI; Sungsoo HAN; | |
| 55 | 20240204186 | 2023-10-03 | POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERIES, PREPARATION METHOD THEREOF AND RECHARGEABLE LITHIUM BATTERIES INCLUDING THE SAME | Jinhwa KIM; Minhan KIM; Jihyun SEOG; Youngjoo CHAE; | |
| 56 | 20240039120 | 2023-10-02 | LITHIUM BATTERIES UTILIZING NANOPOROUS SEPARATOR LAYERS | Steven Carlson; | |
| 57 | 20240125858 | 2023-09-29 | STATE OF CHARGE VALUE ESTIMATION METHOD FOR LITHIUM BATTERY | YUBO WANG; YANMEI ZHAN; YAHONG XIE; | |
| 58 | 20240113286 | 2023-09-28 | COMPOSITE POSITIVE ELECTRODE ACTIVE MATERIAL, POSITIVE ELECTRODE AND LITHIUM BATTERY INCLUDING THE SAME, AND PREPARING METHOD THEREOF | Inhyuk Son; Sangkook Mah; Sungnim Jo; Kyueun Shim; | |
| 59 | 20240178458 | 2023-09-28 | ORGANIC-INORGANIC COMPOSITE FILM AND LITHIUM BATTERY | Ming-Yi LU; Yi-Chang CHEN; Chang-Rung YANG; Chyi-Ming LEU; Ju-Wen CHANG; Ming-Xue LI; Tsung-Hsiung WANG; | INDUSTRIAL TECHNOLOGY RESEARCH INSTITUTE; |
| 60 | 20240213455 | 2023-09-28 | COMPOSITE CATHODE ACTIVE MATERIAL, CATHODE AND LITHIUM BATTERY INCLUDING THE COMPOSITE CATHODE ACTIVE MATERIAL, AND METHOD OF PREPARING THE COMPOSITE CATHODE ACTIVE MATERIAL | Sungnim Jo; Inhyuk Son; Sangkook Mah; Kyueun Shim; | |

# PATENT APPLICATION PUBLICATIONS

| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 61 | 20240021776 | 2023-09-27 | METHOD OF MANUFACTURING AN ANODE STRUCTURE, VACUUM DEPOSITION SYSTEM, ANODE STRUCTURE, AND LITHIUM BATTERY LAYER STACK | Roland TRASSL; | |
| 62 | 20240030434 | 2023-09-26 | COMPOSITE CATHODE ACTIVE MATERIAL, CATHODE AND LITHIUM BATTERY INCLUDING THE SAME, AND METHOD OF PREPARING THE COMPOSITE CATHODE ACTIVE MATERIAL | Kwangjin Park; Dongsu Ko; Kyoungmin Min; Changhoon Jung; Byungjin Choi; | |
| 63 | 20240213470 | 2023-09-25 | POSITIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY, AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Seonyoung KWON; Eunok OH; Jungwoo SON; Yuntaek OH; Minkyeong KANG; Taehee KWAK; | |
| 64 | 20240128531 | 2023-09-24 | METHOD FOR RECYCLING ALL TYPES OF LITHIUM BATTERIES | CHIH-HUANG LAI; HSIN-FANG CHANG; TZU-MIN CHENG; YUNG-FA YANG; TSUNG-TIEN CHEN; ZHENG-YU CHENG; CHI-YUNG CHANG; | Cleanaway Company Limited; |
| 65 | 20240110986 | 2023-09-22 | METHOD AND SYSTEM FOR IDENTIFYING ELECTROCHEMICAL MODEL PARAMETERS BASED ON CAPACITY CHANGE RATE | Pingchao Hao; Xuesi Zhang; Zhimin Zhou; Zhou Yang; Guopeng Zhou; Enhai Zhao; Xiao Yan; Jie Zhang; | |
| 66 | 20240113327 | 2023-09-22 | SOLID-STATE ELECTROLYTE, LITHIUM BATTERY COMPRISING SOLID-STATE ELECTROLYTE, AND PREPARATION METHOD OF SOLID-STATE ELECTROLYTE | Giyun Kwon; Sangbok Ma; Hyeokjo Gwon; Youngjoon Bae; Gabin Yoon; | |
| 67 | 20240105922 | 2023-09-21 | NEGATIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY, RECHARGEABLE LITHIUM BATTERY, AND ALL-SOLID-STATE RECHARGEABLE BATTERY | Hyuksoo SHIN; Hwichul YANG; Jungho LEE; Juhee SOHN; Jinhoon YANG; Sungwon JUNG; | |
| 68 | 20240170655 | 2023-09-21 | NEGATIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Yeongap KIM; | |
| 69 | 20240006712 | 2023-09-19 | MULTILAYER MICROPOROUS SEPARATORS FOR LITHIUM ION SECONDARY BATTERIES AND RELATED METHODS | Xiaomin Zhang; Lie Shi; William Paulus; | |
| 70 | 20240001464 | 2023-09-18 | CUTTING OF SOFT METALS WITH THE AID OF ULTRASOUND | Kamyab AMOUZEGAR; Patrick BOUCHARD; Nancy TURCOTTE; Frédéric PERRON; Dominic LEBLANC; Karim ZAGHIB; | HYDRO-QUÉBEC; |
| 71 | 20240006717 | 2023-09-14 | SEPARATOR FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Hyeonsun CHOI; Yongkyoung KIM; Jungyoon LEE; Yangseob KIM; | |
| 72 | 20240097113 | 2023-09-14 | ANODE ACTIVE MATERIAL, METHOD FOR PREPARING THE SAME, AND RECHARGEABLE LITHIUM BATTERY COMPRISING THE SAME | Byunghoon Park; Sunghwan Kang; Minkyung Gong; Jooyeon Park; Seman Kwon; | HANSOL CHEMICAL CO., LTD; |
| 73 | 20240162423 | 2023-09-13 | NEGATIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Seunguk KWON; | |
| 74 | 20230416111 | 2023-09-11 | Method of preparing positive active material for rechargeable lithium battery | Jinhwa KIM; Minhan KIM; Donggyu CHANG; Jihyun SEOG; Yuntaek OH; Jungwoo SON; | |
| 75 | 20230420663 | 2023-09-08 | NEGATIVE ELECTRODE MATERIAL, PREPARATION METHOD THEREOF, AND ALL-SOLID-STATE LITHIUM BATTERY | Biao LI; Zizhu GUO; Tong ZHANG; Zhuo SHI; | |
| 76 | 20240154174 | 2023-09-08 | RECHARGEABLE LITHIUM BATTERY | Hyunbong CHOI; Sundae KIM; Sangwoo PARK; Dahyun KIM; Yeji YANG; Hongryeol PARK; Sanghoon KIM; | |
| 77 | 20240213549 | 2023-09-07 | RECHARGEABLE LITHIUM BATTERIES | Sanghyung KIM; Tae BAE; Harim LEE; Seunghyeon SON; Yunhee KIM; Arum YU; | |
| 78 | 20240178455 | 2023-09-05 | RECHARGEABLE LITHIUM BATTERY | Wonmo SEONG; Youngsun KONG; Seok KANG; Jaesang YOON; Naoyuki HASE; Do-Wook JUN; Jongsoon KIM; Yongseok LEE; | |
| 79 | 20240136587 | 2023-08-31 | RECHARGEABLE LITHIUM BATTERY | Hongryeol PARK; Hyunbong CHOI; Sangwoo PARK; Dahyun KIM; Sundae KIM; Yeji YANG; Sanghoon KIM; | |
| 80 | 20240145778 | 2023-08-31 | RECHARGEABLE LITHIUM BATTERY | Yeji YANG; Hyunbong CHOI; Sundae KIM; Sangwoo PARK; Dahyun KIM; Hongryeol PARK; Sanghoon KIM; | |

# PATENT APPLICATION PUBLICATIONS

| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 81 | 20240145792 | 2023-08-31 | RECHARGEABLE LITHIUM BATTERY | Dahyun KIM; Sanghoon KIM; Hyunbong CHOI; Sundae KIM; Yeji YANG; Hongryeol PARK; Sangwoo PARK; | |
| 82 | 20230411681 | 2023-08-31 | LITHIUM PHOSPHATE DERIVATIVE COMPOUNDS AS Li SUPER-IONIC CONDUCTOR, SOLID ELECTROLYTE AND COATING LAYER FOR LITHIUM METAL BATTERY AND LITHIUM-ION BATTERY | Yifei MO; Qiang BAI; Xingfeng HE; Chen LING; | UNIVERSITY OF MARYLAND, COLLEGE PARK; TOYOTA MOTOR ENGINEERING & MANUFACTURING NORTH AMERICA, INC.; |
| 83 | 20240069103 | 2023-08-28 | METHOD, SYSTEM AND STORAGE MEDIUM FOR SIMULATING DATA SET BASED ON ELECTROCHEMICAL MODEL | Pingchao Hao; Zhou Yang; Zhimin Zhou; Enhai Zhao; Xiao Yan; | |
| 84 | 20240136566 | 2023-08-28 | RECHARGEABLE LITHIUM BATTERY | Dahyun KIM; Sanghoon KIM; Hyunbong CHOI; Sundae KIM; Yeji YANG; Hongryeol PARK; Sangwoo PARK; | |
| 85 | 20230402612 | 2023-08-25 | MATERIALS AND METHODS FOR COMPONENTS OF LITHIUM BATTERIES | Lin Chen; | |
| 86 | 20230402613 | 2023-08-25 | MATERIALS AND METHODS FOR COMPONENTS OF LITHIUM BATTERIES | Lin Chen; | |
| 87 | 20230420725 | 2023-08-24 | SEPARATOR FOR RECHARGEABLE BATTERY, METHOD OF PREPARING THE SAME AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Daehyun HONG; Dowon KIM; Taejoon PARK; Imhyuck BAE; Jaehyun CHO; Suna LEE; | |
| 88 | 20240072247 | 2023-08-23 | COMPOSITE ANODE ACTIVE MATERIAL, ANODE AND LITHIUM BATTERY COMPRISING SAME, AND METHOD OF PREPARING SAME | Jongseok Moon; Youngsoo Kim; Jinhwan Park; | |
| 89 | 20230391056 | 2023-08-21 | LOW ELECTRICAL RESISTANCE MICROPOROUS BATTERY SEPARATOR MEMBRANES, SEPARATORS, CELLS, BATTERIES, AND RELATED METHODS | Xiaomin Zhang; Lie Shi; | |
| 90 | 20240097115 | 2023-08-21 | METHOD OF PRODUCING CONDUCTING POLYMER NETWORK-ENABLED PARTICULATES OF ANODE ACTIVE MATERIAL PARTICLES FOR LITHIUM-ION BATTERIES | Bor Jang; | Honeycomb Battery Company; |
| 91 | 20230389475 | 2023-08-18 | ELECTRIC RIDING LAWN MOWER | Qian Liu; Toshinari Yamaoka; Zhen Wang; Fangjie Nie; | |
| 92 | 20230389476 | 2023-08-18 | ELECTRIC RIDING LAWN MOWER | Qian Liu; Toshinari Yamaoka; Zhen Wang; Fangjie Nie; | |
| 93 | 20230395811 | 2023-08-16 | HIGH ENERGY DENSITY LITHIUM METAL BASED ANODE FOR SOLID-STATE LITHIUM-ION BATTERIES | Claudiu Bucur; | |
| 94 | 20240006611 | 2023-08-09 | EPSILON-VOPO4 CATHODE PRODUCTION, AND APPLICATIONS THEREOF | Krystal Lee; Carrie Siu; Fengxia Xin; M Whittingham; | |
| 95 | 20240006612 | 2023-08-09 | RECHARGEABLE LITHIUM BATTERY WITH AN IMPROVED EPSILON-VOPO4 CATHODE, AND APPLICATIONS THEREOF | Krystal Lee; Carrie Siu; Fengxia Xin; M Whittingham; | |
| 96 | 20230387452 | 2023-08-09 | METHOD FOR FABRICATING GALLIUM-DOPED LITHIUM LANTHANUM ZIRCONIUM OXIDE, AND ALL-SOLID-STATE BATTERY INCLUDING THE SAME | Chun-Chen YANG; Yi-Shiuan WU; Kumlachew WALLE; | |
| 97 | 20240088438 | 2023-08-09 | ELECTROLYTE COMPOSITION AND LITHIUM BATTERY INCLUDING THE SAME | Jimin OH; Kwang KIM; | |
| 98 | 20240213465 | 2023-08-07 | POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Jinhwa KIM; Minhan KIM; Jihyun SEOG; Youngjoo CHAE; Soonrewl LEE; Wooyoung YANG; Ickkyu CHOI; Jongmin KIM; Jongsan IM; | |
| 99 | 20240047798 | 2023-08-04 | Battery Connecting Piece, Top Cover Assembly and Lithium Battery | Tianshun WANG; Rui SUN; Yanlin HAN; | |
| 100 | 20240053407 | 2023-08-03 | METHOD FOR ESTIMATING INTERNAL RESISTANCE OF LITHIUM BATTERY, STORAGE MEDIUM, AND ELECTRONIC DEVICE | Guopeng ZHOU; Xiaohua CHEN; Enhai ZHAO; Xiao YAN; | Shanghai Makesens Energy Storage Technology Co., Ltd.; |

# PATENT APPLICATION PUBLICATIONS

| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 101 | 20240055575 | 2023-08-03 | METHOD OF PREPARING NEGATIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING NEGATIVE ELECTRODE | Gwangwon PARK; Won-Gi AHN; Min-young JEONG; Taeil LEE; Juhye BAE; Jin PARK; Hyun JUNG; Kwan LEE; | |
| 102 | 20240072297 | 2023-08-02 | ELECTROLYTE COMPOSITION AND LITHIUM BATTERY INCLUDING THE SAME | Jaecheol CHOI; Young-Gi LEE; Ju KIM; | |
| 103 | 20240162565 | 2023-08-02 | SEPARATOR FOR RECHARGEABLE LITHIUM BATTERY, NEGATIVE ELECTRODE-SEPARATOR ASSEMBLY AND RECHARGEABLE LITHIUM BATTERY | Duckjae YOU; Kyoseon KOO; Junghyun NAM; Jeunggi MOON; Hyo-jung SONG; Mihwa YANG; Hosung YANG; Jinhee LEE; Jinyoung JANG; Byoung-Sun LEE; Hyeji SHIN; Heeyeon KIM; | |
| 104 | 20240055614 | 2023-08-01 | NEGATIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Hyeseung JUNG; Soochan KIM; Chaewoong CHO; Seung MYEONG; Taeseup SONG; | |
| 105 | 20240154159 | 2023-08-01 | Electrolyte, Lithium Battery Including the Same, and Method of Preparing the Electrolyte | Sangbok MA; Giyun KWON; Hyeokjo GWON; Youngjoon BAE; Gabin YOON; | |
| 106 | 20240166531 | 2023-08-01 | POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, PREPARING METHOD THEREOF AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Jungsue JANG; Jinyoung KIM; Donggyu CHANG; Jaeha SHIM; Taegeun KANG; | |
| 107 | 20230369593 | 2023-07-27 | NEGATIVE ELECTRODE FOR A RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Jinhyon LEE; Bokhyun KA; Kyeuyoon SHEEM; Soonho AHN; | |
| 108 | 20240079650 | 2023-07-27 | ADDITIVE FOR ELECTROLYTE, AND ELECTROLYTE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Hongryeol PARK; Hyunbong CHOI; Sangwoo PARK; Dahyun KIM; Sundae KIM; Yeji YANG; Olga TSAY; Pavel SHATUNOV; Sanghoon KIM; | |
| 109 | 20240038341 | 2023-07-26 | METHOD, SYSTEM AND STORAGE MEDIUM FOR CONSISTENCY ANALYSIS OF LITHIUM BATTERY MODULE | Danfei Gu; Mingchen Jiang; Siyuan Chen; Xiao Yan; Enhai Zhao; Qian Li; | |
| 110 | 20240030403 | 2023-07-22 | DRY ELECTRODE FILM, ELECTRODE COMPRISING THE DRY ELECTRODE FILM, AND LITHIUM BATTERY COMPRISING THE ELECTRODE | Ahram Pyun; Yeonhee Yoon; Sangpil Kim; Jinhyon Lee; Ilkyong Kwon; Hyun Nam; Donggeun Lee; | |
| 111 | 20240178373 | 2023-07-18 | POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERIES, PREPARATION METHOD THEREOF AND RECHARGEABLE LITHIUM BATTERIES INCLUDING THE SAME | Youngjoo CHAE; Minhan KIM; Jinhwa KIM; Jihyun SEOG; | |
| 112 | 20240027529 | 2023-07-17 | METHOD AND SYSTEM FOR DETECTING LITHIUM PRECIPITATION OF LITHIUM BATTERIES | Danfei Gu; Siyuan Chen; Mingchen Jiang; Xiao Yan; Enhai Zhao; Xiaohua Chen; | |
| 113 | 20240088442 | 2023-07-14 | ELECTROLYTE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Tae BAE; Yunhee KIM; Sanghyung KIM; Seunghyeon SON; Harim LEE; Arum YU; Jeong-A LEE; Saehun KIM; Nam-Soon CHOI; | |
| 114 | 20240213475 | 2023-07-13 | ADDITIVE FOR ELECTROLYTE, ELECTROLYTE FOR RECHARGEABLE LITHIUM BATTERY, AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Olga TSAY; Dahyun KIM; Hyunbong CHOI; Pavel SHATUNOV; Sundae KIM; Yeji YANG; Hongryeol PARK; Sangwoo PARK; | |
| 115 | 20230369575 | 2023-07-13 | LITHIUM-DOPED SILICON OXIDE COMPOSITE ANODE MATERIAL WITH HIGH INITIAL COULOMBIC EFFICIENCY AND PREPARATION METHOD THEREOF | Rusheng Fu; Dexin Yu; Yonglong Wang; Yunlin Yang; | |
| 116 | 20240021777 | 2023-07-11 | COATED ANODE FOR A LITHIUM BATTERY | Lianbing HU; Eric WACHSMAN; Boyang LIU; Liu ZHANG; Shaomao XU; Dennis MCOWEN; Chunpeng YANG; Hua XIE; | |
| 117 | 20240030415 | 2023-07-07 | LITHIUM BATTERY AND PREPARATION METHOD THEREOF | Jinhyon Lee; Ilkyong Kwon; Hyun Nam; Donggeun Lee; Ahram Pyun; | |
| 118 | 20230420684 | 2023-07-06 | CONDUCTIVE POLYMERS AND ELECTRODE PROCESSING USEFUL FOR LITHIUM BATTERIES | Gao Liu; Tianyu Zhu; | THE REGENTS OF THE UNIVERSITY OF CALIFORNIA; |
| 119 | 20240088375 | 2023-07-05 | POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Youngjoo CHAE; | |
| 120 | 20230357959 | 2023-07-03 | QUAD-POLYMER PRECURSOR FOR PRODUCING CARBON FIBER, METHOD FOR PRODUCING SAME AND METHOD FOR USING SAME | Min Jung; Hyun Shin; Kyu Park; Duck Yang; Benjamin Batchelor; Samsuddin Mahmood; | Board of Regents, The University of Texas System; Korea Institute of Carbon Convergence Technology; |

# PATENT APPLICATION PUBLICATIONS

| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 121 | 20230361361 | 2023-06-29 | ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY, AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Jaehwan HA; Kijun KIM; Heeeun YOO; Yeonhee YOON; Kyuseo LEE; | |
| 122 | 20240076200 | 2023-06-28 | POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, PREPARING METHOD THEREOF, AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Jungsue JANG; Donggyu CHANG; Jinyoung KIM; Jaeha SHIM; Taegeun KANG; | |
| 123 | 20230335818 | 2023-06-25 | METHOD FOR SEPARATING AND RECOVERING VALUABLE METALS FROM WASTE TERNARY LITHIUM BATTERIES | Yinghao Xie; Haijun Yu; Aixia Li; Xuemei Zhang; Changdong Li; | |
| 124 | 20240014374 | 2023-06-21 | ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY, ELECTRODE ASSEMBLY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Jaehwan HA; Taejoong KIM; Suhyun KIM; Seok PARK; Hyunhee KIM; Hoyong AN; Heeeun YOO; Duckhyun KIM; | |
| 125 | 20230335817 | 2023-06-21 | METHOD FOR RECYCLING LITHIUM BATTERY CATHODE MATERIAL | Haijun Yu; Yinghao Xie; Aixia Li; Xuemei Zhang; Changdong Li; | |
| 126 | 20230414982 | 2023-06-20 | ENDOTHERMIC AND FIRE SUPPRESSIVE MATERIAL AND LITHIUM BATTERY MODULE | Xiaojing Wang; | Maxim Nature Green Energy Solutions, Ltd.; LiWatt X Incorporation; |
| 127 | 20230331571 | 2023-06-20 | WET PROCESS FOR RECOVERING VALUABLE METALS FROM LITHIUM BATTERY | Yinghao Xie; Haijun Yu; Aixia Li; Xuemei Zhang; Changdong Li; | |
| 128 | 20230417834 | 2023-06-12 | METHOD, SYSTEM AND STORAGE MEDIUM FOR SOLID-PHASE CONCENTRATION CORRECTION OF LITHIUM BATTERIES | Pingchao Hao; Zhiyi Zhang; Yanan Guo; Xiao Yan; Enhai Zhao; Zhou Yang; Zhimin Zhou; Xiaohua Chen; | |
| 129 | 20230323847 | 2023-06-12 | Multifunctional Battery Booster | Patrick Clarke; John Whiting; Brian Butler; | |
| 130 | 20230408584 | 2023-06-07 | ELECTROCHEMICAL MODEL BASED METHOD FOR EARLY WARNING FOR LITHIUM BATTERIES | Danfei Gu; Mingchen Jiang; Siyuan Chen; Xiao Yan; Enhai Zhao; Peng Ding; Pei Song; Weikun Wu; Xiaohua Chen; | |
| 131 | 20230410949 | 2023-06-07 | METHOD AND SYSTEM FOR PREDICTING WORKING CONDITIONS OF LITHIUM BATTERIES | Danfei Gu; Mingchen Jiang; Siyuan Chen; Weikun Wu; Pei Song; Enhai Zhao; Xiao Yan; Xiaohua Chen; Peng Ding; Pingchao Hao; | |
| 132 | 20230317923 | 2023-06-05 | POSITIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY, METHOD OF PREPARING THE SAME, AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Kiyong AHN; Taehee KWAK; Jeuk HA; Seonyoung KWON; Yumi SONG; Eunok OH; Soonrewl LEE; Naoyuki HASE; | |
| 133 | 20230307607 | 2023-05-31 | NEGATIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Ji AHN; Dongwoo KIM; Jaehou NAH; Bumjin CHANG; Yurim CHA; Yeonjoo CHOI; Ilyoung CHOI; | |
| 134 | 20240206561 | 2023-05-25 | ELECTRONIC CIGARETTE HAVING DOUBLE ATOMIZING CORES AND METHOD FOR CONTROLLING HEAT BALANCE THEREOF | Maoqing SONG; Dehui ZOU; Zhenyu HUANG; | |
| 135 | 20230352756 | 2023-05-25 | METHODS FOR IMPURITY REMOVAL AND TREATMENT IN RECYCLING PROCESS OF SCRAP POSITIVE ELECTRODE MATERIALS OF LITHIUM BATTERIES | Joey Chung-Yen JUNG; Jiujun ZHANG; Linshan DAI; Pang-Chieh SUI; Yifang SHI; | SICHUAN ENERGY INTERNET RESEARCH INSTITUTE, TSINGHUA UNIVERSITY; |
| 136 | 20230299367 | 2023-05-24 | RECHARGEABLE LITHIUM BATTERY | Jaehwan HA; Kijun KIM; Heeeun YOO; Yeonhee YOON; Kyuseo LEE; | |
| 137 | 20230299340 | 2023-05-23 | BILAYER COMPONENT FOR A LITHIUM BATTERY | Won Chang; Zachary Hood; Jennifer Rupp; Lincoln Miara; | |
| 138 | 20240047744 | 2023-05-23 | COMPOSITE SOLID ELECTROLYTES FOR LITHIUM BATTERIES | Xuming WANG; Jan MILLER; Patrick MULLER; | |
| 139 | 20240183905 | 2023-05-23 | BATTERY CAPACITY METER AND LITHIUM BATTERY | Fuqun YE; Guoai HUANG; Quanfu ZOU; | |
| 140 | 20240199439 | 2023-05-23 | TERNARY PRECURSOR AND PREPARATION METHOD THEREFOR, TERNARY POSITIVE ELECTRODE MATERIAL, AND ELECTRIC APPARATUS | Qi WU; Chongheng SHEN; Qiang CHEN; Jingpeng FAN; Yuxiang ZHAO; Qisen HUANG; | CONTEMPORARY AMPEREX TECHNOLOGY CO., LIMITED; |

# PATENT APPLICATION PUBLICATIONS

| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 141 | 20230352651 | 2023-05-17 | RECHARGEABLE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Jinhyon LEE; Bokhyun KA; Kyeuyoon SHEEM; Soonho AHN; Junkyu LEE; | |
| 142 | 20230282807 | 2023-05-12 | POROUS SILICON-CONTAINING COMPOSITE, CARBON COMPOSITE USING THE SAME, AND ELECTRODE, LITHIUM BATTERY AND ELECTRONIC DEVICE EACH INCLUDING THE SAME | Junghyun Choi; Inhyuk Son; Mijong Kim; Sangkook Mah; Jumyeung Lee; Minwoo Lim; Sungsoo Han; | |
| 143 | 20230282886 | 2023-05-12 | RECHARGEABLE LITHIUM BATTERY | Kwang-Jo Cheong; Yong-Beom Lee; Myung-Ro Lee; Su-Min Lee; | |
| 144 | 20230272250 | 2023-05-10 | Ternary Composite Conductive Adhesive and Preparation Method therefor, Slurry and Lithium Battery | Jianxiang DENG; Changhao LIU; | FULLYMAX BATTERY CO., LTD.; |
| 145 | 20230307615 | 2023-05-09 | COMPOSITE CATHODE ACTIVE MATERIAL, CATHODE AND LITHIUM BATTERY INCLUDING THE SAME, AND METHOD OF PREPARING THE COMPOSITE CATHODE ACTIVE MATERIAL | San MOON; Jayhyok SONG; Sungjin AHN; Donghee YEON; Dongjin HAM; Jinhwan PARK; | |
| 146 | 20230278097 | 2023-05-09 | Metallic Foam Anode Coated with an Active Oxide Material | Hyeji Park; Hyelim Choi; Yumi Rho; Heeman Choe; | |
| 147 | 20230358821 | 2023-05-05 | Non-Destructive Evaluation of Lithium-Ion Batteries | Joshua Biller; | |
| 148 | 20230352740 | 2023-04-28 | ADDITIVES AND PARTICLES FOR LITHIUM-ION RECHARGEABLE BATTERY | Gao LIU; Thanh-Nhan TRAN; Chen FANG; Yanbao FU; Vincent BATTAGLIA; | |
| 149 | 20230256687 | 2023-04-27 | METHOD FOR STAMPING AND INTEGRALLY MOLDING TOP COVER SHEET, BATTERY TOP COVER STRUCTURE AND MANUFACTURING METHOD THEREOF | Shiya He; Hang Liu; | |
| 150 | 20240120460 | 2023-04-20 | BLENDED TERNARY POSITIVE-ELECTRODE MATERIAL, PREPARATION METHOD THEREOF AND LITHIUM ION BATTERY | Weifeng FAN; Ping ZHANG; Shilin HOU; Bin ZHANG; Cheng LI; Changwang HAO; Zhengqiang WANG; | YIBIN LIBODE NEW MATERIAL CO., LTD; |
| 151 | 20240120542 | 2023-04-20 | ELECTROLYTE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Tae BAE; Harim LEE; Sanghyung KIM; Seunghyeon SON; Arum YU; Yunhee KIM; | |
| 152 | 20240047671 | 2023-04-19 | POSITIVE ELECTRODE, AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Hyejin PARK; Yeji YANG; Wonseok CHO; Tae LEE; Sangwoo PARK; Sundae KIM; Sanghyung KIM; Minseo KIM; Myungheui WOO; Sanghoon KIM; Hana RA; Bokyung RYU; | |
| 153 | 20240097186 | 2023-04-14 | HIGH-PERFORMANCE CERAMIC-POLYMER SEPARATORS FOR LITHIUM BATTERIES | Jitendra Kumar; Guru Subramanyam; | |
| 154 | 20230249105 | 2023-04-11 | SLURRY FILTERING APPARATUS AND COATING SYSTEM | Shengyun YAN; Biao HUANG; Yuqian WEN; Jianxin DOU; Zhengshan GUO; | CONTEMPORARY AMPEREX TECHNOLOGY CO., LIMITED; |
| 155 | 20230275224 | 2023-04-11 | Electrolyte and Electrode Materials for Rechargeable Lithium Batteries | Jan Allen; | |
| 156 | 20240181253 | 2023-04-05 | MIGRAINE TREATMENT DEVICE | Luying MENG; Yang CHEN; Bin DU; | HI-DOW IPHC, INC.; |
| 157 | 20230311074 | 2023-03-31 | REDOX MEMBRANES FOR LITHIUM EXTRACTION | Heng Yang; Badri Shyam; John Busbee; John Cook; Rodrigo Rodriguez; | XERION ADVANCED BATTERY CORP.; |
| 158 | 20230317947 | 2023-03-31 | POSITIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Tae LEE; Myungheui WOO; Sanghoon KIM; Arum YU; | |
| 159 | 20230246186 | 2023-03-31 | Lithium Secondary Battery | Won Shin; Kyoung Ahn; Chul Lee; Jeong Oh; Min Kim; | LG Energy Solution, Ltd.; |
| 160 | 20240006110 | 2023-03-28 | TRANSFORMER | Lianfu HUANG; Zhiyuan HUANG; | Shenzhen Apesilicon Semiconductor Co., Ltd.; |

# PATENT APPLICATION PUBLICATIONS

| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 161 | 20240145767 | 2023-03-23 | SOLID-STATE ELECTROLYTE, LITHIUM BATTERY COMPRISING SOLID-STATE ELECTROLYTE, AND PREPARATION METHOD OF SOLID-STATE ELECTROLYTE | Wonsung Choi; Junhwan Ku; | |
| 162 | 20230299295 | 2023-03-20 | BINDER FOR RECHARGEABLE LITHIUM BATTERY, NEGATIVE ELECTRODE INCLUDING SAME, AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Yunshik CHO; Jungmin LEE; Ju-Won JEON; Young DO; | |
| 163 | 20230299273 | 2023-03-14 | ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Fumiko KIMURA; | |
| 164 | 20240186496 | 2023-03-14 | ZINC ALLOY ELECTRODES FOR LITHIUM BATTERIES | Jonathan Goodman; Yong Shi; | |
| 165 | 20230361314 | 2023-03-06 | Flexible Lithium Batteries Including Patterned Electrode Assemblies | Nicholas Pavlopoulos; Jason Tiffany; Konstantinos Gerasopoulos; Spencer Langevin; Matthew Logan; | |
| 166 | 20230201669 | 2023-03-06 | UNDERWATER PROPULSION DEVICE | Brandon Robinson; | |
| 167 | 20230290950 | 2023-03-03 | NEGATIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Mijung JUNG; | |
| 168 | 20240145766 | 2023-02-23 | Low-Cost Multi-Cationic Li-Garnet as a Solid-State Ionic Conductor for Lithium Batteries | Mahdi AMACHRAA; Samuel Cross; Yan Wang; | SAMSUNG ELECTRONICS CO., LTD.; |
| 169 | 20240154215 | 2023-02-17 | ALUMINUM PLASTIC FILM FOR LITHIUM BATTERY AND METHOD FOR MANUFACTURING THE SAME | TE-CHAO LIAO; SHIOU-YEH SHENG; TENG-KO MA; CHING-YAO YUAN; Chao-Hsien Lin; CHIA-YU LIN; YUN-BIN HSI; HAN-YI LEE; SHUN-CHIEH YANG; | |
| 170 | 20230261318 | 2023-02-16 | ENERGY STORAGE DEVICE | PING-LIN KUO; CHIH-HAO TSAO; SHUN-YUAN HSU; | |
| 171 | 20230197927 | 2023-02-15 | NEGATIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Juhye BAE; Won-Gi AHN; Junhong LEE; Min-young JEONG; | |
| 172 | 20230273267 | 2023-02-10 | DETERIORATION STATE ESTIMATION DEVICE, DETERIORATION STATE ESTIMATION METHOD, PROGRAM, AND POWER SUPPLY DEVICE FOR ANODE-FREE LITHIUM BATTERY EQUIPPED WITH SAME | Juichi Arai; Ken Ogata; | TeraWatt Technology K.K.; |
| 173 | 20230198017 | 2023-02-08 | SOLID POLYMER MATRIX ELECTROLYTE (PME) ELECTRODES FOR RECHARGEABLE LITHIUM BATTERY | Anaba Anani; Jin Lee; | |
| 174 | 20230253553 | 2023-02-07 | NEGATIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Won-Gi AHN; Min-young JEONG; Taeil LEE; Juhye BAE; Gwangwon PARK; | |
| 175 | 20230246202 | 2023-02-02 | ELECTRODE, LITHIUM BATTERY INCLUDING THE SAME, AND METHOD OF PREPARING THE ELECTRODE | Jinhyon Lee; Ilkyong Kwon; Hyun Nam; Donggeun Lee; Ahram Pyun; | |
| 176 | 20240055658 | 2023-02-02 | ELECTROLYTE AND LITHIUM-ION BATTERY INCLUDING THE SAME | Kui Li; Yuanyuan Tian; Juan Wang; | CALB Co., Ltd.; |
| 177 | 20230179006 | 2023-02-01 | AUTOMOBILE JUMPSTART ADAPTER FOR AN EXTERNAL BATTERY | Jiasheng WU; | |
| 178 | 20230242764 | 2023-01-27 | Fire Protection Material | Paul HOCHGESANG; Michael Blake; | |
| 179 | 20230246200 | 2023-01-24 | ELECTRODE AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Jinhee LEE; Hyo-jung SONG; Minjae KIM; Mihwa YANG; Kyoseon KOO; Jeunggi MOON; Duckjae YOU; | |
| 180 | 20230268490 | 2023-01-19 | NEGATIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Changsu SHIN; Youngugk KIM; Young-Min KIM; Sunil PARK; Jongmin WON; Jaehou NAH; Eunji KANG; Doori OH; Dae-Hyeok LEE; Hyun SONG; Myeong NAM; Pil YOO; | |

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| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 181 | 20230231109 | 2023-01-18 | NEGATIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Kyunghwa JUNG; Yunshik CHO; Seunghyun OH; Minho CHO; Kukjoo LEE; Jungmin LEE; | |
| 182 | 20230155399 | 2023-01-18 | METHODS AND SYSTEMS FOR CHARGE CONTROL | Luke O'Hara; Arthur Harvey; | |
| 183 | 20240145867 | 2023-01-17 | SEPARATOR FOR LITHIUM BATTERY AND METHOD FOR MANUFACTURING THE SAME | TE-CHAO LIAO; CHUN-CHE TSAO; CHENG-HUNG CHEN; LI-TING WANG; | |
| 184 | 20230170521 | 2023-01-13 | ELECTROLYTE STRUCTURE FOR A HIGH-TEMPERATURE, HIGH-PRESSURE LITHIUM BATTERY | Guodong Zhan; Timothy Moellendick; Abdulwahab Aljohar; Chinthaka Gooneratne; Jianhui Xu; | |
| 185 | 20230223546 | 2023-01-13 | METHOD FOR PRODUCING AN ANODE FOR LITHIUM BATTERIES | Kamyab AMOUZEGAR; Dominic LEBLANC; Andrea PAOLELLA; Abdelbast GUERFI; Shirin KABOLI; Patrick BOUCHARD; François LAROUCHE; Nicolas DELAPORTE; | HYDRO-QUÉBEC; |
| 186 | 20230231179 | 2023-01-12 | NEGATIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Fumiko KIMURA; | |
| 187 | 20230387406 | 2023-01-11 | POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, POSITIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY | Youngsun KONG; Wonmo SEONG; Seok KANG; Naoyuki HASE; Jaesang YOON; Do-Wook JUN; | |
| 188 | 20230170530 | 2023-01-11 | METHOD FOR MANUFACTURING ALL SOLID-STATE LITHIUM BATTERY | Chun-Chen YANG; Yi-Shiuan WU; Hoai-Khang TRAN; Min-Zen LEE; | |
| 189 | 20240063653 | 2023-01-10 | CHARGING CONTROL METHOD, SYSTEM, AND STORAGE MEDIUM | Fangzheng KOU; Yanshen HU; | |
| 190 | 20230352658 | 2023-01-04 | POSITIVE ELECTRODE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, METHOD OF PREPARING THE SAME, AND RECHARGEABLE LITHIUM BATTERY | Pilsang YUN; Hyunbeom KIM; Hanseul LEE; Do-Yu KIM; | |
| 191 | 20230231105 | 2023-01-03 | PREPARATION OF LI AND NA FOILS WITH {110} OR {100} SURFACE TEXTURING | Quan LI; Xitao HU; | |
| 192 | 20230223582 | 2022-12-30 | LITHIUM BATTERY | Junyi ZHAO; Hu ZOU; | |
| 193 | 20230216040 | 2022-12-30 | Nanopowder Coatings That Enhance Lithium Battery Component Performance | RICHARD LAINE; ELENI TEMECHE; TAYLOR BRANDT; PHILYONG KIM; | |
| 194 | 20230138917 | 2022-12-30 | LITHIUM BATTERY | Junyi Zhao; Hu Zou; | |
| 195 | 20230147863 | 2022-12-29 | LITHIUM-ION BATTERY | Junyi Zhao; Hu Zou; | |
| 196 | 20230207905 | 2022-12-28 | METHOD AND APPARATUS FOR DYNAMIC MANAGEMENT AND CONTROL OF LITHIUM BATTERY ENERGY STORAGE SYSTEM, AND ELECTRONIC DEVICE THEREWITH | Xiao Yan; Zhongcai Liu; Pingchao Hao; | |
| 197 | 20230208178 | 2022-12-28 | SYSTEM FOR DYNAMIC MANAGEMENT AND CONTROL OF LITHIUM BATTERY ENERGY STORAGE SYSTEM | Xiao Yan; Dongzheng Wang; Pingchao Hao; | |
| 198 | 20230146690 | 2022-12-28 | COMPOSITE CATHODE ACTIVE MATERIAL, CATHODE AND LITHIUM BATTERY INCLUDING THE SAME, AND METHOD OF PREPARING THE COMPOSITE CATHODE ACTIVE MATERIAL | Kwangjin Park; Dongsu Ko; Kyoungmin Min; Changhoon Jung; Byungjin Choi; | |
| 199 | 20230207817 | 2022-12-23 | NEGATIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Jungmin LEE; Yunshik CHO; Kiho PARK; Jaemin KIM; Jang CHOI; | |
| 200 | 20240121553 | 2022-12-23 | USB MICROPHONE FOR WIRELESS TRANSMISSION | Yudong CHEN; | Shenzhen Shidser Trading Co.,Ltd.; |

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| # | Pub. No | Filed | Title | Inventors | Assignees |
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| 201 | 20230216156 | 2022-12-22 | Semiconductor Based Material for Battery Health and Performance Assessment and Monitoring in the Sub-Cell Level | Shahab Shokrzadeh; Pooneh Farhat; | |
| 202 | 20230129063 | 2022-12-22 | NOVEL LITHIUM METAL NITRIDES AS LITHIUM SUPER-IONIC CONDUCTORS | Yifei MO; Qiang BAI; Alexander EPSTEIN; Chen LING; Ying ZHANG; | UNIVERSITY OF MARYLAND, COLLEGE PARK; TOYOTA MOTOR ENGINEERING & MANUFACTURING NORTH AMERICA, INC.; |
| 203 | 20230238594 | 2022-12-21 | LITHIUM BATTERY SYSTEM AND CHARGE-DISCHARGE METHOD OF THE SAME | CHUN-HSIEN CHO; KUO-CHIH YU; LI-TING CAI; | |
| 204 | 20230299349 | 2022-12-19 | ELECTROLYTE COMPOSITION AND LITHIUM BATTERY INCLUDING THE SAME | Jaecheol CHOI; Kwang KIM; Young-Gi LEE; Seok KANG; Ju KIM; Dong SHIN; Jimin OH; | Electronics and Telecommunications Research Institute; |
| 205 | 20240204163 | 2022-12-16 | Process for Depositing and Prelithiating an Anode Active Material in Porous Conductive Particles for Lithium Batteries | Bor Jang; | |
| 206 | 20230187637 | 2022-12-14 | ELECTRODE, LITHIUM BATTERY INCLUDING THE SAME, AND METHOD OF MANUFACTURING THE ELECTRODE | Ilkyong Kwon; Hyun Nam; Yeonhee Yoon; Donggeun Lee; Jinhyon Lee; Ahram Pyun; | |
| 207 | 20230187699 | 2022-12-13 | METHOD OF MAKING SOLID STATE ELECTRODE AND ELECTROLYTE FOR ALL SOLID STATE LITHIUM BATTERIES BY LAYERING | Rajesh Bashyam; Zhijun Gu; Sai Yellamilli; | |
| 208 | 20230307611 | 2022-12-09 | POSITIVE ELECTRODE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, METHOD OF PREPARING THE SAME, AND RECHARGEABLE LITHIUM BATTERY | Pilsang Yun; Jongsan Im; Hyunbeom Kim; Hanseul Lee; Do-Yu Kim; | |
| 209 | 20230178742 | 2022-12-05 | BINDER FOR NEGATIVE ELECTRODE OF RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Yunshik CHO; Seunghyun OH; Minho CHO; Kukjoo LEE; Kyunghwa JUNG; Jungmin LEE; | |
| 210 | 20230187647 | 2022-12-05 | METHOD OF MAKING POROUS IONICALLY AND ELECTRONICALLY CONDUCTIVE MATRIX FOR ALL SOLID STATE LITHIUM BATTERIES | Zhijun Gu; Rajesh Bashyam; | |
| 211 | 20230178725 | 2022-12-01 | RECHARGEABLE LITHIUM BATTERY | Pilsang YUN; Do-Yu KIM; Hyunbeom KIM; Sangin PARK; Yongchan YOU; | |
| 212 | 20230178864 | 2022-12-01 | RECHARGEABLE LITHIUM BATTERY | Pilsang YUN; Do-Yu KIM; Hyunbeom KIM; Sangin PARK; Yongchan YOU; | |
| 213 | 20230170470 | 2022-11-23 | COMPOSITE CATHODE ACTIVE MATERIAL, CATHODE AND LITHIUM SECONDARY BATTERY INCLUDING THE SAME, AND METHOD OF PREPARING THE SAME | Inhyuk Son; Sangkook Mah; Andrei Kapylou; Guesung Kim; Kyueun Shim; Sungnim Jo; | |
| 214 | 20230170476 | 2022-11-23 | COMPOSITE ANODE ACTIVE MATERIAL, ANODE AND LITHIUM BATTERY INCLUDING THE SAME | Kyueun Shim; Sangkook Mah; Inhyuk Son; Sungnim Jo; Guesung Kim; Jinhwan Park; Andrei Kapylou; Jaewoan Lee; | |
| 215 | 20230170479 | 2022-11-23 | COMPOSITE CATHODE ACTIVE MATERIAL, CATHODE AND LITHIUM BATTERY INCLUDING COMPOSITE CATHODE ACTIVE MATERIAL AND PREPARATION METHOD THEREOF | Inhyuk Son; Guesung Kim; Sangkook Mah; Kyueun Shim; Andrei Kapylou; Sungnim Jo; Jinhwan Park; Jongseok Moon; | |
| 216 | 20230170457 | 2022-11-22 | RECHARGEABLE LITHIUM BATTERY | Inho JUNG; Kyungsu RYU; Jinseong YOO; | |
| 217 | 20230327198 | 2022-11-16 | RECHARGEABLE LITHIUM BATTERY | Hyunbong CHOI; Yeji YANG; Sangwoo PARK; Sundae KIM; Sanghoon KIM; Hongryeol PARK; Dahyun KIM; | |
| 218 | 20230090892 | 2022-11-11 | SOLID ELECTROLYTE, METHOD OF PREPARING THE SAME, AND LITHIUM BATTERY INCLUDING THE SOLID ELECTROLYTE | Jusik KIM; Michael BADDING; Hyunseok KIM; Zhen SONG; Taehwan YU; | |
| 219 | 20230331518 | 2022-11-10 | ELEVATOR BACK-UP BATTERY SYSTEM | Gary GRAY; Thomas LYNN; | LiiON, LLC East Dundee; |
| 220 | 20230411977 | 2022-11-09 | BATTERY MANAGEMENT SYSTEM WITH PROTECTION AND EQUALIZATION FUNCTIONS | Jun HOU; Lianfu HUANG; | Shenzhen Apeman Innovations Technology Co., Ltd.; |

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|---|---|---|---|---|---|
| 221 | 20230077777 | 2022-11-07 | Layered Cavity Electrode Lithium Battery | Slobodan Petrovic; | |
| 222 | 20230051216 | 2022-11-04 | Electrothermal Ultrasonic Cleaning Ice Cream Scoop | Jianmin Wang; | ZHEJIANG WUYI WJL PLASTIC INDUSTRY CO.,LTD; |
| 223 | 20230045821 | 2022-11-03 | PREPARATION METHOD OF MULTIPLE CARBON-COATED HIGH-COMPACTION LITHIUM IRON MANGANESE PHOSPHATE | Ji Yang; Yihua Wei; Jie Sun; Zhonglin He; Jianhao He; Rong Luo; Wenzhi Jiang; Nan Jiang; Guangchun Cheng; Haijuan Liu; Ya He; | HUBEI RT ADVANCED MATERIALS CO., LTD.; |
| 224 | 20230060433 | 2022-11-03 | PREPARATION METHOD OF HIGH-SAFETY HIGH-CAPACITY LITHIUM MANGANESE IRON PHOSPHATE | Ji Yang; Yihua Wei; Jie Sun; Zhonglin He; Jianhao He; Shuo Lin; Cheng Xu; Pingjun Lin; Chao Liu; Menghua Yu; Hongfu Qi; Xiong Wang; Zhengchuang Cheng; | HUBEI RT ADVANCED MATERIALS CO., LTD.; |
| 225 | 20230307619 | 2022-10-19 | NEGATIVE ACTIVE MATERIAL COMPOSITE FOR RECHARGEABLE LITHIUM BATTERY, METHOD OF PREPARING THE SAME, NEGATIVE ELECTRODE INCLUDING THE SAME AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Jongmin WON; Youngugk KIM; Young-Min KIM; Sunil PARK; Jaehou NAH; Eunji KANG; Doori OH; Dae-Hyeok LEE; Changsu SHIN; | |
| 226 | 20230299288 | 2022-10-17 | NEGATIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Ilyoung CHOI; Soonbong CHOI; Joongho MOON; Hee CHOI; | |
| 227 | 20230122856 | 2022-10-14 | ELECTRODE ASSEMBLY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Hyo-jung SONG; Kyoseon KOO; Minjae KIM; Junghyun NAM; Jeunggi MOON; Mihwa YANG; Duckjae YOU; Jinhee LEE; | |
| 228 | 20230268484 | 2022-10-13 | NEGATIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, NEGATIVE ELECTRODE INCLUDING SAME, AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Hee CHOI; Soonbong CHOI; Joongho MOON; Ilyoung CHOI; | |
| 229 | 20230197932 | 2022-10-12 | NEGATIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Jaewon KIM; Yongseok KIM; Sojeong YU; Kyeu SHEEM; Jungjoon KIM; Jaehou NAH; Hyejin KIM; Eunjoo LEE; | |
| 230 | 20230114110 | 2022-10-11 | Standby Solution For Extended Run Time Power Systems | Timothy Scharf; Richard Bower; Alfonso Alvizar; | Advanced Powering Services, Inc.; |
| 231 | 20230122468 | 2022-10-10 | NEGATIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Minjae KIM; Kyoseon KOO; Junghyun NAM; Jeunggi MOON; Hyo-jung SONG; Mihwa YANG; Duckjae YOU; Jinhee LEE; Sungsoo HAN; | |
| 232 | 20230116454 | 2022-10-06 | NEGATIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Jungmin LEE; Minjae KIM; Won-Gi AHN; Kukjoo LEE; | |
| 233 | 20230116257 | 2022-10-04 | CONDUCTIVE MATERIAL DISPERSION FOR RECHARGEABLE LITHIUM BATTERY, NEGATIVE ELECTRODE PREPARED USING SAME, AND RECHARGEABLE LITHIUM BATTERY INCLUDING NEGATIVE ELECTRODE | Minjae Kim; Jongheon Seol; Junghyun Nam; Sungsoo Han; | |
| 234 | 20230109254 | 2022-10-04 | NEGATIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Minjae KIM; Jongheon SEOL; Soochan KIM; Hyeseung JUNG; Chaewoong CHO; Minyoung HONG; Junghyun NAM; Sungwoo HAN; | |
| 235 | 20230109733 | 2022-09-30 | NEGATIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Jongheon SEOL; Minjae KIM; Soochan KIM; Hyeseung JUNG; Chaewoong CHO; Minyoung HONG; Junghyun NAM; Sungsoo HAN; | |
| 236 | 20240136505 | 2022-09-30 | POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERIES, PREPARATION METHOD THEREOF AND RECHARGEABLE LITHIUM BATTERIES | Arumugam MANTHIRAM; Youngjin KIM; Hanseul Kim; Wonmo SEONG; Youngsun KONG; | |
| 237 | 20230098411 | 2022-09-29 | POSITIVE ELECTRODE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, METHOD OF PREPARING THE SAME, AND RECHARGEABLE LITHIUM BATTERY | Pilsang YUN; Jongmin KIM; Hyunbeom KIM; Sangin PARK; Hanseul LEE; | |
| 238 | 20240106086 | 2022-09-28 | ELECTRICALLY CONDUCTIVE STRUCTURE OF LITHIUM BATTERY AND FORMING METHOD THEREOF | Wen-Hung HUANG; | |
| 239 | 20230097943 | 2022-09-23 | HANDHELD LITHIUM BATTERY THREADING MACHINE AND THREADING METHOD | Hongwu XIE; Chenchen FEI; | Hangzhou Hongli Pipe Machinery Co., Ltd; |
| 240 | 20230290986 | 2022-09-19 | Porous Electrode for Electrochemical Cells | Wentao Li; | LiBAMA Power Corporation; |

# PATENT APPLICATION PUBLICATIONS

| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 241 | 20230163356 | 2022-09-19 | ELECTROLYTE COMPOSITION AND LITHIUM BATTERY INCLUDING THE SAME | Young-Gi LEE; Jaecheol CHOI; Sung HONG; Kwang KIM; Jeong LEE; Min JEON; Jimin OH; JINWOO LEE; | Electronics and Telecommunications Research Institute; |
| 242 | 20230009406 | 2022-09-19 | Compact Multifunctional Battery Booster | Brian Butler; Linh Nguyen; Patrick Clarke; Shenzhong Zhu; Xiao Chen; | |
| 243 | 20230113276 | 2022-09-16 | LASER PROCESSING OF LITHIUM BATTERY WEB | Wei-Sheng LEI; Girish GOPALAKRISHNAN NAIR; Kent ZHAO; Daniel STOCK; Tobias STOLLEY; Thomas DEPPISCH; Jean DELMAS; Kenneth LEDFORD; Subramanya HERLE; Kiran VACHHANI; Mahendran CHIDAMBARAM; Roland TRASSL; Neil MORRISON; Frank SCHNAPPENBERGER; Kevin CUNNINGHAM; Stefan BANGERT; James CUSHING; Visweswaren SIVARAMAKRISHNAN; | |
| 244 | 20230135650 | 2022-09-14 | NEGATIVE ACTIVE MATERIAL COMPOSITE FOR RECHARGEABLE LITHIUM BATTERY, METHOD OF PREPARING THE SAME, NEGATIVE ELECTRODE INCLUDING THE SAME, AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Young-Min KIM; Eunji KANG; Youngugk KIM; Yookyung KIM; Sunil PARK; Changsu SHIN; Doori OH; Jongmin WON; Dae-Hyeok LEE; Jungho LEE; | |
| 245 | 20230074353 | 2022-09-09 | GRADIENT MULTILAYER STRUCTURES FOR A LITHIUM BATTERY, METHODS FOR MANUFACTURING THEREOF, AND LITHIUM BATTERIES COMPRISING GRADIENT MULTILAYER STRUCTURES | Hui Du; James Brown; Chen Chen; Eongyu Yi; Sumin Zhu; | |
| 246 | 20230078236 | 2022-09-07 | NEGATIVE ACTIVE MATERIAL AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Eunjoo LEE; Yongseok KIM; Jaewon KIM; Jaehou NAH; Kyeu SHEEM; | |
| 247 | 20230115052 | 2022-09-02 | LITHIUM BATTERY RECYCLING PROCESS, APPARATUS, AND SYSTEM FOR THE PRODUCTION OF BLACK MASS | Rahul Bobbili; David Winsness; Milton Riebel; | |
| 248 | 20230207865 | 2022-08-31 | Sulfide Solid Electrolyte, A method for Stabilizing Sulfide Solid Electrolyte and a Lithium Battery of the Same | Bing-Joe Hwang; Sheng-Chiang Yang; Shi-Kai Jiang; Wei-Nien Su; | |
| 249 | 20230061580 | 2022-08-30 | METHOD FOR MANUFACTURING POROUS STRUCTURE FOR LITHIUM BATTERIES AND POROUS STRUCTURE FOR LITHIUM BATTERIES MANUFACTURED THEREBY | Jae Shin; Jong Song; Seong Ha; Seung Lee; Won Kim; Kyoung Ryu; Kwang Eom; Ha Song; Da Seok; Jin Jo; | Hyundai Motor Company; Kia Corporation; Kwangju Institute of Science and Technology; |
| 250 | 20240063365 | 2022-08-30 | NEGATIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Shinya WAKITA; | |
| 251 | 20230067969 | 2022-08-30 | High-Capacity Battery Manufacturing Method and High-Capacity Battery | Tengfei ZHAI; Zhengjun LEI; Sanxue ZHANG; Gaofeng ZHENG; Yi LIU; | AMERICA NATIONAL POWER STORAGE LLC; |
| 252 | 20230015911 | 2022-08-26 | ELECTROLYTE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Wonseok CHO; Younghye KANG; Dongyoung KIM; Soojin KIM; Aeran KIM; Suyeol RYU; Jeongmin SHIN; Junyong LEE; Tae LEE; Jin-Hyeok LIM; Myunghwan JEONG; Hyunbong CHOI; Jungmin HAN; | |
| 253 | 20230064888 | 2022-08-25 | SULFUR-CONTAINING COMPOUNDS AND POLYMERS AND THE USE THEREOF IN ELECTROCHEMICAL CELLS | Rachel LÉVESQUE-BÉLANGER; Andrea PAOLELLA; Jean-Christophe DAIGLE; Basile COMMARIEU; Michel ARMAND; Karim ZAGHIB; | HYDRO-QUÉBEC; |
| 254 | 20240072231 | 2022-08-25 | Ridged 3-dimensional battery electrodes for enhancing rate capability | Jorge Cardenas; John Bullivant; Katharine Harrison; Adam Cook; Albert Talin; | |
| 255 | 20230118702 | 2022-08-23 | Method, device and computer readable storage medium for estimating SOC of lithium battery | Hui Ma; Wentao Cang; Jianhua Lei; | |
| 256 | 20230097754 | 2022-08-23 | POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Sung CHOO; | |
| 257 | 20230093801 | 2022-08-22 | RECHARGEABLE LITHIUM BATTERY | Injun PARK; Myunghoon KIM; Sanghoon KIM; Yunhee KIM; Hongryeol PARK; Jeongmin SHIN; Seungryong OH; Myunghwan JEONG; Hyunbong CHOI; | |
| 258 | 20230094024 | 2022-08-22 | RECHARGEABLE LITHIUM BATTERY | Hongryeol PARK; Myunghoon KIM; Sanghoon KIM; Yunhee KIM; Injun PARK; Jeongmin SHIN; Seungryong OH; Myunghwan JEONG; Hyunbong CHOI; | |
| 259 | 20230098836 | 2022-08-22 | RECHARGEABLE LITHIUM BATTERY | Seungryong OH; Myunghoon KIM; Sanghoon KIM; Yunhee KIM; Injun PARK; Hongryeol PARK; Jeongmin SHIN; Myunghwan JEONG; Hyunbong CHOI; | |
| 260 | 20230063361 | 2022-08-22 | RECHARGEABLE LITHIUM BATTERY | Myunghoon KIM; Hyunbong CHOI; Sanghoon KIM; Yunhee KIM; Injun PARK; Hongryeol PARK; Seungryong OH; Myunghwan JEONG; | |

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| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 261 | 20240017688 | 2022-08-22 | VEHICLE STARTING POWER SUPPLY | Zhonghua WU; Naixing WANG; | Zhejiang Safemate Automotive Safety & Emergency Technology Co., Ltd.; |
| 262 | 20240120461 | 2022-08-19 | ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Gwangwon Park; Juhye BAE; Won-Gi Ahn; Taeil Lee; Min-young Jeong; | |
| 263 | 20240166533 | 2022-08-18 | HIGH-NICKEL TERNARY CORE-SHELL PRECURSOR, POSITIVE ELECTRODE MATERIAL AND PREPARATION METHOD THEREFOR | Kaihua XU; Kun ZHANG; Dongming JIA; Cong LI; Xing YANG; Xiaofei XUE; Liangjiao FAN; Xiaofei CHEN; Xueqian LI; Xiaoshuai ZHU; Hao LV; Wenfang YUAN; Ding WANG; Xianjin YUE; | JINGMEN GEM CO., LTD.; |
| 264 | 20230055896 | 2022-08-18 | SOLID-STATE ELECTROLYTE, CATHODE ELECTRODE, AND METHODS OF MAKING SAME FOR SULFIDE-BASED ALL-SOLID-STATE-BATTERIES | Hongli Zhu; Daxian Cao; | |
| 265 | 20220407054 | 2022-08-15 | LITHIUM BATTERY | Jinhyeok LIM; Yunhee KIM; Sujeong KOH; Seungtae LEE; Sunjoo CHOI; Siyoung CHA; Miyoung SON; Minju LEE; Myungheui WOO; Jinah SEO; Harim LEE; Erang CHO; | |
| 266 | 20220407055 | 2022-08-15 | LITHIUM BATTERY | Sunjoo CHOI; Yunhee KIM; Sujeong KOH; Seungtae LEE; Siyoung CHA; Miyoung SON; Minju LEE; Myungheui WOO; Jinhyeok LIM; Jinah SEO; Harim LEE; Erang CHO; | |
| 267 | 20220407058 | 2022-08-15 | LITHIUM BATTERY | Jinah SEO; Yunhee KIM; Sujeong KOH; Seungtae LEE; Sunjoo CHOI; Siyoung CHA; Miyoung SON; Minju LEE; Myungheui WOO; Jinhyeok LIM; Harim LEE; Erang CHO; | |
| 268 | 20220407113 | 2022-08-15 | ORGANIC ELECTROLYTIC SOLUTION AND LITHIUM BATTERY INCLUDING THE SAME | Erang CHO; Yunhee KIM; Sujeong KOH; Seungtae LEE; Sunjoo CHOI; Siyoung CHA; Miyoung SON; Minju LEE; Myungheui WOO; Jinhyeok LIM; Jinah SEO; Harim LEE; | |
| 269 | 20220407114 | 2022-08-15 | ORGANIC ELECTROLYTIC SOLUTION AND LITHIUM BATTERY INCLUDING THE SAME | Sujeong KOH; Yunhee KIM; Seungtae LEE; Sunjoo CHOI; Siyoung CHA; Miyoung SON; Minju LEE; Jinhyeok LIM; Jinah SEO; Harim LEE; Erang CHO; | |
| 270 | 20230109315 | 2022-08-10 | POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, PREPARING METHOD THEREOF AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Jungsue JANG; Donghyun KIL; Jinyoung KIM; Jaeha SHIM; | |
| 271 | 20240055883 | 2022-08-10 | CONVERTER FOR A RECHARGEABLE BATTERY | Todd Ernst; Aking Peng; Daniel Sechler; Kunli Wang; Rory Pynenburg; | |
| 272 | 20220402791 | 2022-08-08 | BIOAUGMENTATION TREATMENT PROCESS FOR LITHIUM BATTERY PRODUCING WASTEWATER | Jinyou SHEN; Hebing ZHANG; Jing WANG; Junfeng HE; Xinbai JIANG; Hong WANG; Cheng HOU; Xiaodong LIU; | |
| 273 | 20240047775 | 2022-08-02 | LITHIUM ION BATTERY RECYCLING PROCESS UTILIZING MAGNETIC SEPARATION OF ELECTRODE MATERIALS | Albert LIPSON; Jessica DURHAM; Jeffrey SPANGENBERGER; | |
| 274 | 20230068367 | 2022-08-01 | THERMAL RUNAWAY SUPPRESSION ELEMENT AND THE RELATED APPLICATIONS | Szu-Nan YANG; | PROLOGIUM TECHNOLOGY CO., LTD.; Prologium Holding Inc.; |
| 275 | 20230085771 | 2022-07-28 | ELECTRODE, LITHIUM BATTERY CONTAINING ELECTRODE, AND PREPARATION METHOD THEREOF | Donggeun Lee; Ilkyong Kwon; Hyun Nam; Jinhyon Lee; | |
| 276 | 20240039002 | 2022-07-28 | LITHIUM BATTERY CELLS WITH REDUCED DENDRITE FORMATION | Meng JIANG; Meinan HE; Biqiong WANG; Jiazhi HU; Fan XU; Louis HECTOR, JR; | |
| 277 | 20230089248 | 2022-07-25 | NEGATIVE ELECTRODE AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Min-young JEONG; Juhye BAE; Won-Gi AHN; Taeil LEE; | |
| 278 | 20230109679 | 2022-07-21 | ADDITIVE FOR ELECTROLYTE, ELECTROLYTE, AND ELECTROCHEMICAL DEVICE | Chaojie XIONG; Min GUO; | |
| 279 | 20220359882 | 2022-07-20 | PLATING TECHNIQUE FOR ELECTRODE | John Affinito; Chariclea Scordilis-Kelley; Yuriy Mikhaylik; | Sion Power Corporation; |
| 280 | 20230120799 | 2022-07-11 | ELECTROLYTE COMPOSITION AND LITHIUM BATTERY INCLUDING THE SAME | Jimin OH; Kwang KIM; Sung HONG; Nam PARK; Ho LEE; Young-Gi LEE; | Electronics and Telecommunications Research Institute; |

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| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 281 | 20220328873 | 2022-06-24 | POLYOXYMETHYLENE-BASED ALL-SOLID-STATE POLYMER ELECTROLYTE PREPARED BY IN-SITU RING-OPENING POLYMERIZATION AND APPLICATION | Guanglei CUI; Jianjun ZHANG; Han WU; Tingting LIU; Jinning ZHANG; Ben TANG; Zhe YU; Hongxia XU; | |
| 282 | 20230402614 | 2022-06-10 | CURRENT COLLECTOR FOR LITHIUM BATTERY | Avetik HARUTYUNYAN; | |
| 283 | 20230268485 | 2022-06-07 | COMPOSITE CATHODE ACTIVE MATERIAL, CATHODE AND LITHIUM BATTERY WHICH EMPLOY SAME, AND PREPARATION METHOD THEREFOR | Jongseok Moon; Inhyuk Son; Andrei Kapylou; Guesung Kim; Sangkook Mah; Sungnim Jo; | |
| 284 | 20240069102 | 2022-06-07 | A LITHIUM BATTERY POWER DISPLAY METHOD AND SYSTEM | Beilei Zuo; Jianyun Peng; Feng Wei; Jianwei Lin; Sai Yang; Xiongjie Lei; | |
| 285 | 20220344775 | 2022-06-03 | NANOPOROUS SEPARATORS FOR BATTERIES AND RELATED MANUFACTURING METHODS | Steven Carlson; Benjamin Sloan; David Avison; | |
| 286 | 20220302449 | 2022-06-01 | Lithium Battery Electrodes | Jason CROY; Arturo GUTIERREZ; Michael THACKERAY; Meinan HE; | UCHICAGO ARGONNE, LLC; |
| 287 | 20230387548 | 2022-05-31 | Heat/Flame-Resistant Polymer Composite-Based Solid Electrolyte Separator, Lithium Secondary Battery, and Manufacturing Method | Bor Jang; | Global Graphene Group, Inc.; |
| 288 | 20220302535 | 2022-05-25 | PACKAGE HOUSING AND BATTERY PACK | Zhuocheng Jia; Kanzhu Huang; | DONGGUAN POWERAMP TECHNOLOGY LIMITED; |
| 289 | 20230327212 | 2022-05-24 | LITHIUM BATTERY AND MANUFACTURING METHOD THEREOF | Wei-Jen Liu; Tzu-Hsin Tseng; | Chung Yuan Christian University; |
| 290 | 20220285789 | 2022-05-24 | LITHIUM REPLENISHING DIAPHRAGM AND PREPARATION METHOD FOR LITHIUM REPLENISHING DIAPHRAGM | Shiwei ZANG; Wenqing LIU; | |
| 291 | 20230032078 | 2022-05-23 | On-Board Charging System for Electric Vehicle | Regnault Bamiji; | |
| 292 | 20220293921 | 2022-05-23 | COATING OF ELECTRODE MATERIALS FOR ENERGY STORAGE DEVICES | Jin-Myoung Lim; Fantai Kong; Mark Griffin; | |
| 293 | 20230373812 | 2022-05-19 | DEFECT-FREE LITHIUM NICKEL(3+) OXIDE MATERIALS FOR USE IN LITHIUM BATTERIES AND METHOD OF PREPARATION THEREOF | Jihyeon GIM; Eungje LEE; Jinhyup HAN; Jason CROY; | |
| 294 | 20230335714 | 2022-05-18 | POSITIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY COMPRISING THE SAME | Jaehwan HA; Kijun KIM; Duckhyun KIM; Heeeun YOO; Woonsuk JANG; | |
| 295 | 20230074190 | 2022-05-17 | POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, PREPARING METHOD THEREOF, AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Hyunjeong KIM; Gwiwoon KANG; Jayhyok SONG; Dongwook SHIN; Soonkie HONG; | |
| 296 | 20220281552 | 2022-05-17 | ELECTRIC BALANCE BIKE | Xuesen LIAO; | |
| 297 | 20240014511 | 2022-05-13 | SEPARATOR AND LITHIUM BATTERY EMPLOYING SAME | Jinyoung KIM; Hana KIM; Byungmin LEE; Minho CHO; | |
| 298 | 20220344771 | 2022-05-13 | CYLINDRICAL BATTERY CAP AND CYLINDRICAL BATTERY | Junfeng ZHAO; | |
| 299 | 20240055687 | 2022-05-12 | ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY, AND RECHARGEABLE LITHIUM BATTERY COMPRISING THE SAME | Suhyun KIM; Duckhyun KIM; Taejoong KIM; Hyunhee KIM; Hoyong AN; | |
| 300 | 20240088468 | 2022-05-12 | METHOD FOR EXTRACTING LITHIUM FROM WASTE LITHIUM BATTERY | Haijun YU; Yinghao XIE; Aixia LI; Xuemei ZHANG; Changdong LI; | GUANGDONG BRUNP RECYCLING TECHNOLOGY CO., LTD.; HUNAN BRUNP RECYCLING TECHNOLOGY CO., LTD.; HUNAN BRUNP EV RECYCLING CO., LTD.; |

# PATENT APPLICATION PUBLICATIONS

| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 301 | 20240170734 | 2022-05-10 | Flame Retardants for Battery Electrolytes | Zhongxin Ge; Joseph Baker; Yunqi Liu; Huaxiang Yang; | |
| 302 | 20220367874 | 2022-05-09 | Rechargeable Battery and Electrolysis Method of Making the Same | Donald Sadoway; Emilie Bodoin; | |
| 303 | 20220359865 | 2022-05-06 | SECONDARY PARTICLE FOR A CATHODE OF A SECONDARY LITHIUM BATTERY CELL AND METHOD FOR PRODUCING SUCH A PARTICLE | Vedran GLAVAS; Julian Koopmann; Jonathan Mueller; Stéphane Olouou Guifo; Julian Wegener; Marco Wiethop; | VOLKSWAGEN AKTIENGESELLSCHAFT; |
| 304 | 20220367849 | 2022-05-06 | Rechargeable Battery and Electrolysis Method of Making Same | Donald Sadoway; Emilie Bodoin; | |
| 305 | 20230352749 | 2022-05-04 | POSITIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY COMPRISING THE SAME | Duckjae YOU; San MOON; Jihyun JANG; Seongho JEON; | |
| 306 | 20230361351 | 2022-05-03 | Sulfolane Based Electrolyte For High Voltage Rechargeable Lithium Batteries | Lin-Shu Du; Brendan Hayes-Oberst; Chao Shen; | |
| 307 | 20230178793 | 2022-05-02 | ELECTROLYTE OPERABLE IN WIDE TEMPERATURE RANGES AND LITHIUM BATTERY INCLUDING SAME | Jihyun HONG; Minah LEE; Jin CHOI; Jina LEE; | KOREA INSTITUTE OF SCIENCE AND TECHNOLOGY; |
| 308 | 20220293961 | 2022-05-01 | Porous Polymer Lithium Cathode | Slobodan Petrovic; | |
| 309 | 20230348284 | 2022-04-28 | LOW THERMAL CONDUCTIVITY AND LOW-K DIELECTRIC AEROGEL MATERIAL AND PREPARATION METHOD THEREFOR | Jean-Hong CHEN; Shiu-Shiu CHEN; | |
| 310 | 20240158887 | 2022-04-28 | METHOD FOR EFFICIENTLY REMOVING FLUORINE FROM SPENT LITHIUM BATTERY | Shibao OUYANG; Changdong LI; Yanchao QIAO; Ruokui CHEN; Dingshan RUAN; Yong CAI; | GUANGDONG BRUNP RECYCLING TECHNOLOGY CO., LTD.; HUNAN BRUNP RECYCLING TECHNOLOGY CO., LTD.; HUNAN BRUNP EV RECYCLING CO., LTD.; |
| 311 | 20220352521 | 2022-04-27 | INTEGRATED BATTERY ELECTRODE AND SEPARATOR | Yuriy Mikhaylik; Urs Schoop; | Sion Power Corporation; |
| 312 | 20220352543 | 2022-04-20 | NEGATIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Junyoung CHEONG; Sungsu KIM; Jungkun KIM; | |
| 313 | 20220331863 | 2022-04-13 | METHOD FOR MAKING LOW SURFACE AREA ALLOY PARTICULATE WITH HIGH SILICON CONTENT | Mark OBROVAC; Simeng CAO; Mina SALEHABADI; | |
| 314 | 20240204195 | 2022-04-11 | COMPOSITION FOR LITHIUM BATTERY ELECTRODES | Julio Abusleme; Anne-Charlotte Gulluche; Andrea Oriani; Michele Fiore; Roberto Biancardi; | SOLVAY SPECIALTY POLYMERS ITALY S.P.A.; |
| 315 | 20230327208 | 2022-04-11 | ELECTROLYTES FOR LITHIUM BATTERIES | Chi Su; Khalil Amine; | UCHICAGO ARGONNE, LLC; |
| 316 | 20230327108 | 2022-04-08 | SILVER-DOPED SULFUR CATHODE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY | Ghazaleh NAZARI; | |
| 317 | 20240213630 | 2022-04-08 | LITHIUM BATTERY AND METHOD FOR PREPARING LITHIUM BATTERY | Yajun NING; Tianjun XIA; Dongpeng YU; Jiashuai JI; | |
| 318 | 20230101381 | 2022-04-07 | POSITIVE ACTIVE MATERIAL PRECURSOR FOR RECHARGEABLE LITHIUM BATTERY, METHOD FOR PREPARING POSITIVE ACTIVE MATERIAL USING THE PRECURSOR, AND POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY | Youngsun KONG; Seok KANG; Wonmo SEONG; Dowook JUN; Naoyuki HASE; | |
| 319 | 20230170411 | 2022-04-06 | BIDIRECTIONAL CONDUCTION TRENCH GATE POWER MOS DEVICE AND MANUFACTURING METHOD THEREOF | Ming QIAO; Yong CHEN; Wenliang LIU; Dong FANG; Fabei ZHANG; Bo ZHANG; | University of Electronic Science and Technology of China; |
| 320 | 20240047746 | 2022-04-06 | ADDITIVE, ELECTROLYTE COMPRISING SAME FOR RECHARGEABLE LITHIUM BATTERY, AND RECHARGEABLE LITHIUM BATTERY | Sanghyung KIM; Tae LEE; Minseo KIM; Myungheui WOO; Hyejin PARK; Sanghoon KIM; Dahyun KIM; Bokyung RYU; | |

# PATENT APPLICATION PUBLICATIONS

| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 321 | 20240120540 | 2022-04-06 | ELECTROLYTE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Tae LEE; Sanghyung KIM; Minseo KIM; Myungheui WOO; Hyejin PARK; Sanghoon KIM; Dahyun KIM; Bokyung RYU; | |
| 322 | 20240120538 | 2022-04-04 | NON-AQUEOUS ELECTROLYTE FOR RECHARGEBALE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY COMPRISING SAME | Olga TSAY; Yeji YANG; Sangwoo PARK; Sundae KIM; Pavel SHATUNOV; Hyunbong CHOI; Hongryeol PARK; Hyeonji HWANG; Dahyun KIM; | |
| 323 | 20220328880 | 2022-04-04 | ELECTROLYTES FOR LITHIUM BATTERIES | Yuriy Mikhaylik; Igor Kovalev; Alexis Sheffield; | Sion Power Corporation; |
| 324 | 20240204178 | 2022-04-01 | COMPOSITE CATHODE ACTIVE MATERIAL, CATHODE AND LITHIUM BATTERY EMPLOYING SAME, AND PREPARATION METHOD FOR SAME | Andrei Kapylou; Jongseok Moon; Inhyuk Son; Guesung Kim; Sangkook Mah; Sungnim Jo; | |
| 325 | 20220320498 | 2022-03-31 | COMPOSITE CATHODE ACTIVE MATERIAL, CATHODE AND LITHIUM BATTERY CONTAINING COMPOSITE CATHODE ACTIVE MATERIAL AND PREPARATION METHOD THEREOF | Andrei Kapylou; Jongseok Moon; Inhyuk Son; Guesung Kim; Denis Chernyshov; Sangkook Mah; Sungnim Jo; | |
| 326 | 20240154176 | 2022-03-31 | BATTERY AND ASSEMBLING METHOD THEREOF | Yajun NING; Tianjun XIA; Dongpeng YU; Jiashuai JI; | |
| 327 | 20240162504 | 2022-03-31 | Flame Retardants for Battery Electrolytes | Charles Varnado, Jr; Joseph Baker; | |
| 328 | 20240170735 | 2022-03-31 | FLAME RETARDANTS FOR BATTERY ELECTROLYTES | Charles Varnado, Jr; | |
| 329 | 20240170736 | 2022-03-31 | FLAME RETARDANTS FOR BATTERY ELECTROLYTES | Charles Varnado, JR; | |
| 330 | 20220384780 | 2022-03-30 | POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, PREPARING METHOD THEREOF AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Jungsue JANG; Donghyun KIL; Minhan KIM; Jinyoung KIM; Jinhwa KIM; Jihyun SEOG; Jaeha SHIM; Kiyong AHN; Donggyu CHANG; Youngjoo CHAE; Aram CHOI; Jeuk HA; | |
| 331 | 20240072303 | 2022-03-30 | ELECTROLYTE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Minseo KIM; Tae LEE; Sanghyung KIM; Myungheui WOO; Hyejin PARK; Dahyun KIM; Bokyung RYU; | |
| 332 | 20240128507 | 2022-03-30 | ELECTROLYTE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Sanghyung KIM; Tae LEE; Minseo KIM; Myungheui WOO; Hyejin PARK; Sanghoon KIM; Dahyun KIM; Bokyung RYU; | |
| 333 | 20240128508 | 2022-03-30 | ELECTROLYTE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Minseo KIM; Tae LEE; Myungheui WOO; Dahyun KIM; | |
| 334 | 20240128509 | 2022-03-30 | ELECTROLYTE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Seunghyeon SON; Tae BAE; Sanghyung KIM; Harim LEE; | |
| 335 | 20220311095 | 2022-03-24 | SEPARATOR AND LITHIUM BATTERY INCLUDING SEPARATOR | Hyeonsun Choi; Dongwan Seo; Jinyoung Kim; | |
| 336 | 20220320586 | 2022-03-24 | IN-SITU CONTROL OF SOLID ELECTROLYTE INTERFACE FOR ENHANCED CYCLE PERFORMANCE IN LITHIUM METAL BATTERIES | Zhaohui Liao; Chariclea Scordilis-Kelley; Akmeemana Mudalige; Tracy Kelley; Yuriy Mikhaylik; Enic Azalia; Juan Venegas; | Sion Power Corporation; |
| 337 | 20220384801 | 2022-03-22 | POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, METHOD OF PREPARING THE SAME, AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Youngsun KONG; Kiyong AHN; Seonyoung KWON; Min KIM; Dookyun LEE; Dowook JUN; Kijoo HONG; | |
| 338 | 20230231104 | 2022-03-21 | PRECURSOR SOLUTION, AND MODIFIED LAYER AND LITHIUM-BASED BATTERY PREPARED BY USING THE SAME | Chi-Chang HU; Chih-Han YEN; Li-Qian WANG; Chen-Wei TAI; Hao-Yu KU; | National Tsing Hua University; |
| 339 | 20220407042 | 2022-03-16 | RECHARGEABLE SOLID-STATE LITHIUM ION BATTERY | Sankar DASGUPTA; Colin BRIDGES; Rajshekar DASGUPTA; Elmira Memarzadeh; | ELECTROVAYA INC.; |
| 340 | 20220352502 | 2022-03-11 | POSITIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | San MOON; Duckjae YOU; Jihyun JANG; Seongho JEON; | |

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| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 341 | 20240186605 | 2022-03-11 | METHOD FOR RECYCLING LITHIUM SALTS FROM BATTERIES | Gregory SCHMIDT; | ARKEMA FRANCE; |
| 342 | 20240170666 | 2022-03-10 | COMPOSITE CATHODE ACTIVE MATERIAL, CATHODE AND LITHIUM BATTERY EMPLOYING SAME, AND METHOD FOR MANUFACTURING SAME | Sungnim Jo; Sangkook Mah; Inhyuk Son; Guesung Kim; Jongseok Moon; Andrei Kapylou; | |
| 343 | 20220293934 | 2022-03-09 | COMPOSITE ELECTRODE HAVING A SOLID ELECTROLYTE BASED ON POLYCARBONATES | Huu-Dat NGUYEN; Lionel PICARD; | COMMISSARIAT A L'ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES; SAFT; |
| 344 | 20220302450 | 2022-03-08 | NEGATIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY COMPRISING NEGATIVE ELECTRODE | Eunji KANG; | |
| 345 | 20220285680 | 2022-03-07 | ELECTRODE, LITHIUM BATTERY INCLUDING THE SAME, AND METHOD OF MANUFACTURING THE SAME | Jinhyon Lee; Ilkyong Kwon; Junghyun Nam; Hyun Nam; Donggeun Lee; | |
| 346 | 20230327472 | 2022-03-04 | ELEVATOR EMERGENCY POWER SYSTEMS AND METHODS | JUNKYEONG KIM; MINJUN SEO; Darin Morgan; | |
| 347 | 20230207894 | 2022-03-04 | CLOSED LOOP PROCESS FOR NEAR ZERO-ENERGY REGENERATION OF ELECTRODES BY RECYCLING SPENT RECHARGEABLE LITHIUM BATTERIES | DHAMODARAN SANTHANAGOPALAN; SHANTIKUMAR NAIR; BINITHA GANGAJA; | |
| 348 | 20240145723 | 2022-03-02 | METHOD OF MANUFACTURING LITHIUM BATTERY ELECTRODES WITH ENHANCED ELECTRICAL AND IONIC CONDUCTIVITY | Simon PARK; Chaneel PARK; Hongseok CHO; Jong-Song KIM; Kyoung-Soo PARK; Ji-Hoon KANG; | |
| 349 | 20220181638 | 2022-02-25 | ELECTRODE ASSEMBLY AND SECONDARY LITHIUM BATTERY INCLUDING THE SAME | Jooyong SONG; In KIM; Juri KIM; Hyun KIM; | LG CHEM, LTD.; |
| 350 | 20240006714 | 2022-02-23 | SEPARATOR FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Byung-Soo KIM; Namju KIM; Yeonho LEE; Jaehyun CHO; | |
| 351 | 20230268548 | 2022-02-23 | Layered Solid-State Lithium Battery | Javier Parrondo; Cenk Gumeci; | |
| 352 | 20220278332 | 2022-02-23 | ALL-SOLID-STATE LITHIUM BATTERY | Takuya Sugimoto; | |
| 353 | 20220271276 | 2022-02-22 | ELECTRODE, LITHIUM BATTERY INCLUDING THE SAME, AND METHOD OF MANUFACTURING THE SAME | Ilkyong Kwon; Hyun Nam; Donggeun Lee; Jinhyon Lee; | |
| 354 | 20230261500 | 2022-02-17 | LITHIUM BATTERY CHARGE-LIMITING APPARATUS | Hui-Te HSU; Chi-Hsien CHEN; Shih-Wei TAI; | |
| 355 | 20230132268 | 2022-02-17 | NEGATIVE ELECTRODE MATERIAL, PREPARATION METHOD THEREFOR AND USE THEREOF | Wei XIE; Chunlei PANG; Zhiqiang DENG; Jianguo REN; Xueqin HE; | |
| 356 | 20230318034 | 2022-02-16 | ELECTROLYTE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Dahyun KIM; Minseo KIM; Sanghyung KIM; Sanghoon KIM; Hyejin PARK; Myungheui WOO; Bokyung RYU; Tae LEE; | |
| 357 | 20230042579 | 2022-02-15 | CHARGER | YONGKUI MOU; | |
| 358 | 20240047690 | 2022-02-10 | LITHIATED METAL ORGANIC FRAMEWORKS WITH A BOUND SOLVENT FOR SECONDARY BATTERY APPLICATIONS | Richelle LYNDON; Amit PATWARDHAN; Chris AFFOLTER; Karl LILLERUD; Teague EGAN; Nicholas GRUNDISH; Kevin REIMUND; Benny FREEMAN; John GOODENOUGH; | ENERGY EXPLORATION TECHNOLOGIES, INC.; BOARD OF REGENTS, THE UNIVERSITY OF TEXAS SYSTEM; |
| 359 | 20220166062 | 2022-02-08 | SOLID ELECTROLYTE, METHOD OF PREPARING THE SAME, AND LITHIUM BATTERY INCLUDING THE SOLID ELECTROLYTE | Jusik KIM; Michael BADDING; Hyunseok KIM; Zhen SONG; Taehwan YU; | |
| 360 | 20230246192 | 2022-02-03 | Elastomer-Protected Anode and Lithium Battery | Bor Jang; | Global Graphene Group, Inc.; |

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| 361 | 20220255327 | 2022-01-31 | DECENTRALIZED ACTIVE EQUALIZATION METHOD FOR CASCADED LITHIUM-ION BATTERY PACK | Yongduan Song; Jiawei Chen; Li Chen; Qingchao Song; | |
| 362 | 20230246230 | 2022-01-31 | ELECTROLYTES FOR LITHIUM BATTERIES | Chi Su; Khalil Amine; | UCHICAGO ARGONNE, LLC; |
| 363 | 20230335806 | 2022-01-28 | ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY COMPRISING SAME | Hoyong AN; Suhyun KIM; | |
| 364 | 20230238571 | 2022-01-27 | Conducting Polymer/Inorganic Hybrid Solid-State Electrolytes, Lithium Batteries Containing Same, and Production Processes | Aruna Zhamu; Bor Jang; | Global Graphene Group, Inc.; |
| 365 | 20230238636 | 2022-01-27 | Electric Car Power Boaster System | Regnault Bamiji; | |
| 366 | 20220246926 | 2022-01-27 | POSITIVE ELECTRODE, LITHIUM BATTERY INCLUDING POSITIVE ELECTRODE, AND METHOD OF MANUFACTURING POSITIVE ELECTRODE | Jongseok Moon; Inhyuk Son; Andrei KAPYLOU; Guesung Kim; Sangkook Mah; Sungnim Jo; | |
| 367 | 20230238575 | 2022-01-25 | Elastomer/Inorganic Hybrid Solid-State Electrolytes, Lithium Batteries Containing Same, and Production Processes | Aruna Zhamu; Bor Jang; | Global Graphene Group, Inc.; |
| 368 | 20220149353 | 2022-01-24 | THREE-DIMENSIONAL COMPOSITE METALLIC LITHIUM NEGATIVE ELECTRODE, METALLIC LITHIUM BATTERY AND APPARATUS | Chengyong LIU; Yongsheng GUO; Chuying OUYANG; | |
| 369 | 20220181618 | 2022-01-24 | LOW-COBALT AND COBALT-FREE, HIGH-ENERGY CATHODE MATERIALS FOR LITHIUM BATTERIES | Arumugam Manthiram; Wangda Li; Steven Lee; | Board of Regents, The University of Texas System; |
| 370 | 20220293913 | 2022-01-18 | POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, PREPARING METHOD THEREOF AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Pilsang YUN; Hyunbeom KIM; Sangin PARK; Yongchan YOU; | |
| 371 | 20230231181 | 2022-01-17 | Inorganic-Polymeric Hybrid Solid-State Electrolytes, Lithium Batteries Containing Same, and Production Processes | Aruna Zhamu; Bor Jang; | Global Graphene Group, Inc.; |
| 372 | 20220223868 | 2022-01-14 | ANODE-LESS LITHIUM-SULFUR (LI-S) BATTERY WITH LITHIUM METAL-FREE CURRENT | Wonbong Choi; Juhong Park; Sungyong In; | |
| 373 | 20240038983 | 2022-01-11 | Method of Preparing Positive Electrode Active Material and Positive Electrode Active Material | Jun Eom; Dong Ahn; Chae Lim; Na Park; Jun Lee; No Kwak; Ji Kim; Byoung Jung; | LG Chem, Ltd.; LG Chem, Ltd.; |
| 374 | 20240079543 | 2022-01-11 | Superficial fluorination with elemental fluorine of lithium metal used as anode in lithium metal batteries | Maurizio SANSOTERA; Luca MAGAGNIN; Eugenio GIBERTINI; Piergiorgio MARZIANI; Walter NAVARRINI; | |
| 375 | 20230026993 | 2022-01-07 | METHOD FOR MAKING LITHIUM FOIL ANODE OF ALL-SOLID-STATE LITHIUM BATTERY | Chun-Chen Yang; Yi-Shiuan Wu; Chelladurai Karuppiah; Shimelis Besha; | |
| 376 | 20230246297 | 2021-12-31 | LITHIUM BATTERY SEPARATOR INCLUDING POROUS PVDF-BASED RESIN COATING AND PREPARATION METHOD THEREFOR | Yaozong BAI; Pingchuan MA; Gaojun LIU; Feifei GAO; Jingran DU; Xujie ZHANG; Yang ZHOU; Mengmeng ZHAI; Chao HAN; Ming WEI; Sen ZHANG; Yuan SUN; | SINOMA LITHIUM BATTERY SEPARATOR CO., LTD.; |
| 377 | 20220209220 | 2021-12-30 | ELECTRODE, LITHIUM BATTERY INCLUDING THE SAME, AND METHOD OF MANUFACTURING THE ELECTRODE | Jinhyon Lee; Ilkyong Kwon; Junghyun Nam; Hyun Nam; Donggeun Lee; | |
| 378 | 20240030509 | 2021-12-30 | METHOD FOR SAFE PYROLYSIS AND IMPURITY REMOVAL OF WASTE LITHIUM BATTERY AND APPLICATION | Haijun YU; Yingsheng ZHONG; Yinghao XIE; Xuemei ZHANG; Changdong LI; | GUANGDONG BRUNP RECYCLING TECHNOLOGY CO., LTD.; HUNAN BRUNP RECYCLING TECHNOLOGY CO., LTD.; HUNAN BRUNP VEHICLES RECYCLING CO., LTD.; |
| 379 | 20220336817 | 2021-12-28 | LITHIUM BATTERY AND METHOD OF PREPARING THE SAME | Victor ROEV; Jusik Kim; Myungjin Lee; | |
| 380 | 20220209234 | 2021-12-23 | FIBROUS CARBON AEROGELS COATED WITH NANO-THIN SILICON AS LITHIUM BATTERY ANODES | Roxana Trifu; Nicholas Leventis; Redouane Begag; | Aspen Aerogels, Inc.; |

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| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 381 | 20220123285 | 2021-12-23 | COMPOSITE STRUCTURE, LITHIUM BATTERY, AND METHOD OF PRODUCING COMPOSITE STRUCTURE | Shingo Ohta; Masaki Watanabe; Yasutoshi Hojo; | |
| 382 | 20220367909 | 2021-12-22 | HIGH-PERFORMANCE CERAMIC-POLYMER SEPARATORS FOR LITHIUM BATTERIES | Jitendra Kumar; Guru Subramanyam; | |
| 383 | 20220209236 | 2021-12-21 | Elastic Anode Binder For Secondary Lithium Ion Battery | Yoon-Jeong Heo; Sung-Tae Ko; Chae-Yong Sung; Ji-Su Woo; | |
| 384 | 20240055681 | 2021-12-21 | PROCESS FOR RECOVERING MATERIALS FROM SPENT RECHARGEABLE LITHIUM BATTERIES | Feng Zou; Quanmin Yang; Vladimir Paserin; Alex Carpenter; | |
| 385 | 20230307707 | 2021-12-20 | ELECTROLYTE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Tae LEE; Minseo KIM; Myungheui WOO; Sanghoon KIM; Dahyun KIM; | |
| 386 | 20220187375 | 2021-12-14 | LITHIUM-ION BATTERY HEALTH MANAGEMENT BASED ON SINGLE PARTICLE MODEL | Guangxing Niu; Bin Zhang; | University of South Carolina; |
| 387 | 20240063385 | 2021-12-13 | POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, METHOD OF PREPARING SAME, AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Sang NAM; Kwon CHOI; Jung SONG; Sang LEE; | POSCO Holdings Inc.; RESEARCH INSTITUTE OF INDUSTRIAL SCIENCE & TECHNOLOGY; |
| 388 | 20230268552 | 2021-12-07 | ELECTROLYTE FOR LITHIUM BATTERY, AND LITHIUM BATTERY COMPRISING SAME | Olga TSAY; Hyejin Park; Pavel SHATUNOV; Sanghyung Kim; Sangwoo Park; Myungheui Woo; Bokyung Ryu; Wonseok Cho; | |
| 389 | 20220093967 | 2021-12-07 | METHODS FOR WET CHEMICAL SYNTHESIS OF LITHIUM ARGYRODITES AND ENHANCING INTERFACE STABILITY | Hui Wang; Yang Li; Thad Druffel; | University of Louisville Research Foundation, Inc.; |
| 390 | 20230344004 | 2021-12-06 | ELECTROLYTE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Dahyun KIM; Minseo KIM; Sanghyung KIM; Sanghoon KIM; Hyejin PARK; Myungheui WOO; Bokyung RYU; Tae LEE; Wonseok CHO; | |
| 391 | 20230253621 | 2021-12-06 | ELECTROLYTE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Minseo KIM; Dahyun KIM; Myungheui WOO; Tae LEE; | |
| 392 | 20220181686 | 2021-12-06 | COMPOSITE SOLID POLYMER ELECTROLYTES AND ORGANIC CATHODE MATERIALS SUITABLE FOR SOLID-STATE LITHIUM BATTERIES | Vilas Pol; Zheng Li; Sensen Zhang; | |
| 393 | 20220093938 | 2021-12-02 | ULTRA-LOW TEMPERATURE AND HIGH-CAPACITY PRIMARY LITHIUM BATTERY AND PREPARATION METHOD THEREOF | Biying HUANG; Richard HUANG; Tianwen TANG; | |
| 394 | 20240097192 | 2021-12-02 | LITHIUM BATTERY ELECTROLYTE | Ning DING; Xuesong YIN; | |
| 395 | 20230170482 | 2021-12-01 | Elastomer-Protected Anode and Lithium-Ion Battery | Xingxing Zhang; Bor Jang; | Global Graphene Group, Inc.; |
| 396 | 20220173439 | 2021-11-30 | ELECTROLYTE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY | Hyunbong CHOI; Myunghoon KIM; Sanghoon KIM; Yunhee KIM; Injun PARK; Hongryeol PARK; Jeongmin SHIN; Seungryong OH; Myunghwan JEONG; | |
| 397 | 20220393182 | 2021-11-30 | ENCAPSULATED SULFUR CATHODES FOR RECHARGEABLE LITHIUM BATTERIES | Weiyang Li; Yi Cui; Zhi Seh; Guangyuan Zheng; Yuan Yang; | The Board of Trustees of the Leland Stanford Junior University; |
| 398 | 20230268553 | 2021-11-23 | RECHARGEABLE LITHIUM BATTERY | Yoon-Sok KANG; Youngsoo KIM; Jinhwan PARK; Suk-Gi HONG; Taehyun HWANG; | |
| 399 | 20230163271 | 2021-11-23 | Elastic Polymer-Protected Anode Particles, Anode, and Lithium-Ion Battery | Xingxing Zhang; Bor Jang; | Global Graphene Group, Inc.; |
| 400 | 20240030431 | 2021-11-23 | Lithium Battery Cathode Active Material Having Oriented Structure, and Preparation Method Therefor | Seung Choi; Jae Kim; Deuk Kim; Hye Park; Jeong Kim; | |

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| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 401 | 20220149481 | 2021-11-22 | MICROPOROUS MEMBRANES, SEPARATORS, LITHIUM BATTERIES, AND RELATED METHODS | Changqing Adams; Michael Bielmann; Zhengming Zhang; | |
| 402 | 20240128550 | 2021-11-22 | BATTERY CASING AND LITHIUM BATTERY | Liangliang LIU; Yuan ZHU; Rongjiang LIU; | |
| 403 | 20220173369 | 2021-11-19 | FABRICATION OF LITHIUM BATTERY DRY ELECTRODES | Soon LIEW; Yong ZHU; Yam CHONG; Yu TSE; Kevin TAN; Shengbo LU; Li FU; Chenmin LIU; | |
| 404 | 20220158168 | 2021-11-18 | NEGATIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Juhye BAE; Won-Gi AHN; Junhong LEE; Min-young JEONG; | |
| 405 | 20240006594 | 2021-11-15 | POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Ohmin KWON; Sang NAM; Kwon CHOI; Jung SONG; Sanghyuk LEE; Inchul PARK; | POSCO Holdings Inc.; RESEARCH INSTITUTE OF INDUSTRIAL SCIENCE & TECHNOLOGY; POSCO CHEMICAL CO.,LTD; |
| 406 | 20230361275 | 2021-11-15 | NEGATIVE ACTIVE MATERIAL AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Dae-Hyeok LEE; Youngugk KIM; Jaemyung KIM; Jaehou NAH; Changsu SHIN; Chul YOUM; Jongmin WON; Jungho LEE; Heeyoung CHU; | |
| 407 | 20240136509 | 2021-11-15 | POSITIVE ELECTRODE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, METHOD OF PREPARING SAME, AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Ohmin KWON; Sang NAM; Kwon CHOI; Jung SONG; Sanghyuk LEE; Inchul PARK; | POSCO Holdings Inc.; RESEARCH INSTITUTE OF INDUSTRIAL SCIENCE & TECHNOLOGY; |
| 408 | 20240136515 | 2021-11-15 | POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, METHOD FOR MANUFACTURING SAME, AND RECHARGEABLE LITHIUM BATTERY COMPRISING SAME | Sanghyuk LEE; Jong PARK; Jung SONG; Sang NAM; Kwon CHOI; Inchul PARK; Ohmin KWON; | POSCO Holdings Inc.; RESEARCH INSTITUTE OF INDUSTRIAL SCIENCE & TECHNOLOGY; POSCO CHEMICAL CO., LTD; |
| 409 | 20240014444 | 2021-11-11 | NON-AQUEOUS ELECTROLYTE SOLUTION AND LITHIUM BATTERY | Xiaoqin Chen; Chaolun Gan; Erbo Shi; Li Zhang; Mingyao Gu; Cao Sun; | |
| 410 | 20230141574 | 2021-11-10 | method for preparing a porous polymeric film material under high voltage and with high safety and a solid-state lithium battery using the porous polymeric film material | HUI-TUNG KUO; GILANG BASWARA ANGGARA PUTRA; CHANG-SHOU CHEN; CHEN-CHAO LIU; | |
| 411 | 20220255072 | 2021-11-09 | POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, PREPARING METHOD THEREOF AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Pilsang YUN; Hyunbeom KIM; Sangin PARK; Yongchan YOU; | |
| 412 | 20220140347 | 2021-11-04 | SELF-HEALABLE CONDUCTIVE BINDER FOR ANODE OF LITHIUM ION BATTERY AND THE PREPARATION METHOD THEREOF | Ju JEON; | Kookmin University Industry Academy Cooperation Foundation; |
| 413 | 20240182313 | 2021-11-04 | COMPOSITE ANODE MATERIAL, METHOD FOR PREPARING SAME, AND LITHIUM-ION BATTERY | Chunlei PANG; Tengyu LIANG; Jianguo REN; Xueqin HE; | |
| 414 | 20240213580 | 2021-10-31 | FLEXIBLE, HEAT-CONDUCTING, INSULATING, AND VISCOUS PHASE CHANGE HEAT DISSIPATION SHEET, AND PREPARATION METHOD THEREFOR AND BATTERY THERMAL MANAGEMENT SYSTEM THEREOF | Zhengguo ZHANG; Yi WU; Ziye LING; Xiaoming FANG; | SOUTH CHINA UNIVERSITY OF TECHNOLOGY; |
| 415 | 20240120466 | 2021-10-27 | NEGATIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, NEGATIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY, AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Changsu SHIN; Jongmin KIM; Jongmin WON; Youngugk KIM; Jaemyung KIM; Jaehou NAH; Dae-Hyeok LEE; Jungho LEE; | |
| 416 | 20230128117 | 2021-10-26 | NEGATIVE ELECTRODE WITH GRADIENT STRUCTURE | Taylor Garrick; | GM GLOBAL TECHNOLOGY OPERATIONS LLC; |
| 417 | 20230402654 | 2021-10-18 | STABILIZED ELECTROLYTES FOR LOW-TEMPERATURE BATTERIES | Zheng CHEN; Ping LIU; John HOLOUBEK; | |
| 418 | 20220140440 | 2021-10-13 | SEPARATOR FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Byung-Soo KIM; Yeonho LEE; Namju KIM; Jaehyun CHO; | |
| 419 | 20230268512 | 2021-10-12 | POSITIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Jin-Su HA; Sungjin AHN; San MOON; Seongho JEON; Minho CHO; | |
| 420 | 20220029153 | 2021-10-12 | NEGATIVE ELECTRODE FOR A RECHARGEABLE LITHIUM BATTERY | Jinhyon LEE; Bokhyun KA; Kyeuyoon SHEEM; Soonho AHN; Junkyu LEE; | |

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| 421 | 20220029146 | 2021-10-11 | COMPOSITE LITHIUM METAL ANODES FOR LITHIUM BATTERIES WITH REDUCED VOLUMETRIC FLUCTUATION DURING CYCLING AND DENDRITE SUPPRESSION | Yi Cui; Zheng Liang; Yayuan Liu; Dingchang Lin; | |
| 422 | 20220311013 | 2021-10-06 | BATTERY CONNECTIONS AND METALLIZED FILM COMPONENTS IN ENERGY STORAGE DEVICES HAVING INTERNAL FUSES | Brian Morin; Carl Hu; | |
| 423 | 20220131201 | 2021-10-04 | BATTERY CONNECTIONS AND METALLIZED FILM COMPONENTS IN ENERGY STORAGE DEVICES HAVING INTERNAL FUSES | Brian Morin; Carl Hu; | |
| 424 | 20220331814 | 2021-09-29 | ENERGY-SAVING PREPARATION SYSTEM FOR SILICON-CARBON ANODE MATERIAL OF LITHIUM BATTERY | Tengshi Wang; Lin XIANG; | |
| 425 | 20220102720 | 2021-09-29 | Procédé de préparation d'un matériau actif d'électrode positive du type oxyde métallique lithié comprenant du titane | David Peralta; Carole Bourbon; Jean-François Colin; Nathalie Herlin-Boime; | |
| 426 | 20230365106 | 2021-09-28 | Lithium Battery Powered Trailer Brake Breakaway Control Device and System | Derek UNDERHILL; James McBRIDE; James STANFIELD; | |
| 427 | 20220115704 | 2021-09-24 | ELECTROLYTES FOR LITHIUM BATTERIES | Yuriy Mikhaylik; Igor Kovalev; Alexis Sheffield; | Sion Power Corporation; |
| 428 | 20230369594 | 2021-09-24 | PRIMARY AND SECONDARY SODIUM AND LITHIUM BATTERIES | Hongjie DAI; Guanzhou ZHU; Yuanyao LI; | The Board of Trustees of the Leland Stanford Junior University; |
| 429 | 20230335868 | 2021-09-22 | CIRCULAR LITHIUM BATTERY AND METHOD FOR PRODUCING THE SAME | Zhengwei WANG; Kun DING; | |
| 430 | 20240014509 | 2021-09-14 | BATTERY SEPARATOR AND COATING PROCESS THEREOF, COATING SYSTEM AND BATTERY | Yue CHENG; Chenbo LIAO; Yongle CHEN; Zhi ZHUANG; Huajing SHAN; Qianqian LIU; | |
| 431 | 20210399293 | 2021-09-02 | METAL ELECTRODE | Terence Unger; | |
| 432 | 20220328939 | 2021-08-25 | LITHIUM BATTERY CELL AND MANUFACTURING METHOD THEREOF | Cheng-Huang Chen; Yi-Hsiang Chan; Shu-Lin Chen; Wei-En Hsu; | |
| 433 | 20230226716 | 2021-08-24 | NOVEL SAW CHAIN | Quanfu WANG; Guozhang MA; Liqun ZHANG; | Wuhu Jingfeng Garden Machinery Technology Co., Ltd.; |
| 434 | 20230166426 | 2021-08-24 | HIGH-EFFICIENCY SAW CHAIN | Quanfu WANG; Guozhang MA; Liqun ZHANG; | Wuhu Jingfeng Garden Machinery Technology Co., Ltd.; |
| 435 | 20230096724 | 2021-08-24 | Flame-Resistant Hybrid Inorganic-Polymeric Solid-State Electrolytes and Lithium Batteries Containing Same | Bor Jang; | |
| 436 | 20230322661 | 2021-08-19 | Synthesis of N,N-Branched Sulfamoyl Fluoride Compounds Using Bismuth Trifluoride | Rajendra Singh; Qichao Hu; Johnathan Sheiman; | |
| 437 | 20230057285 | 2021-08-13 | Prelithiated Anode, Lithium-Ion Battery Containing Same, and Method of Producing Same | Aruna Zhamu; Hui He; Bor Jang; | |
| 438 | 20240026185 | 2021-08-13 | MODIFIED PARA-ARAMID POLYMER SOLUTION, COATING SLURRY, LITHIUM BATTERY SEPARATOR AND PREPARATION METHOD THEREOF | Qi CHEN; Haibing MA; Qianli MA; | |
| 439 | 20230246231 | 2021-08-13 | SOLID POLYMER ELECTROLYTES FOR SOLID-STATE LITHIUM METAL BATTERIES | Xiaowei Li; Yongwei Zheng; Christopher Li; | DREXEL UNIVERSITY; |
| 440 | 20230053067 | 2021-08-10 | SOLID POLYMER ELECTROLYTES WITH INCREASED POLYMER POLARIZABILITY FOR SOLID-STATE LITHIUM BATTERIES | Zijie Lu; Xiaojiang Wang; Andrew Drews; Venkataramani Anandan; | |

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| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 441 | 20220069350 | 2021-08-09 | ADDITIVE, ELECTROLYTE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY | Wonseok CHO; Dahyun KIM; Minseo KIM; Sanghyung KIM; Sanghoon KIM; Sangwoo PARK; Hyejin PARK; Myungheui WOO; Bokyung RYU; Tae LEE; Olga TSAY; Pavel SHATUNOV; | |
| 442 | 20230136533 | 2021-08-06 | NEW TYPE OF CAP FOR CYLINDRICAL LITHIUM BATTERY AND NEW TYPE OF CYLINDRICAL LITHIUM BATTERY | Junfeng Zhao; | |
| 443 | 20220416254 | 2021-08-06 | CURRENT COLLECTING PLATE AND CYLINDRICAL LITHIUM BATTERY | Junfeng Zhao; | |
| 444 | 20220399609 | 2021-08-06 | CAP FOR FULL-TAB CYLINDRICAL LITHIUM BATTERY AND FULL-TAB CYLINDRICAL LITHIUM BATTERY | Junfeng ZHAO; | |
| 445 | 20210359337 | 2021-08-02 | COMPOSITE MATERIAL, PREPARATION METHOD THEREOF AND LITHIUM ION BATTERY | Weichao TANG; Suli LI; Wei ZHAO; Hao YUAN; Junyi LI; Yanming XU; Pengjian ZUO; | |
| 446 | 20230198098 | 2021-07-27 | SEPARATOR MEMBRANE, SEPARATOR MEMBRANE ROLL, BATTERY CELL, AND POWER LITHIUM BATTERY | Xiang PING; Chao HUA; Baocheng ZHONG; Xiaobao YE; Xuemei YANG; Xiufeng CHEN; | JIANGSU SENIOR NEW MATERIAL TECHNOLOGY CO., LTD; SHENZHEN SENIOR TECHNOLOGY MATERIAL CO., LTD.; |
| 447 | 20230187757 | 2021-07-23 | Modular series-connected battery pack (BlMoSe) | Luc POUYADOU; Maxime DI MEGLIO; Florence ROBIN; | |
| 448 | 20220045402 | 2021-07-23 | METHOD FOR THE FABRICATION OF A HYBRID SOLID ELECTROLYTE MEMBRANE, AND AN ALL-SOLID-STATE LITHIUM BATTERY USES THE MEMBRANE | Chun-Chen YANG; Yi-Shiuan WU; Kumlachew WALLE; | MING CHI UNIVERSITY OF TECHNOLOGY; |
| 449 | 20230028639 | 2021-07-21 | Smart Gloves | Xiaowu Wu; | |
| 450 | 20230261202 | 2021-07-20 | POROUS COMPOSITE, ANODE AND LITHIUM BATTERY EACH INCLUDING SAME, AND METHOD FOR PREPARING SAME | Sangkook Mah; Inhyuk Son; Sungnim Jo; | |
| 451 | 20220102751 | 2021-07-20 | AEROSOL JET PRINTED LITHIUM BATTERY | Konstantinos Gerasopoulos; Bing Tan; Priestly Shuler; Matthew Logan; Sarah Adams; Matthew Hagedon; | |
| 452 | 20220024674 | 2021-07-20 | SHIPPING PACKAGE FOR LITHIUM BATTERY | Dylan VANDEMARK; Matthew VANDEMARK; | CellBlock FCS, LLC; |
| 453 | 20210351402 | 2021-07-16 | LITHIUM METAL FOILS WITH LOW DEFECT DENSITY | Timothy Westmore; Hany EITOUNI; Almira NUVAL; Russell Pratt; | |
| 454 | 20220020980 | 2021-07-14 | NEGATIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEBALE LITHIUM BATTERY INCLUDING SAME | Changsu SHIN; Heeyoung CHU; Youngugk KIM; Jaemyung KIM; Chul YOUM; Jongmin WON; Dae-Hyeok LEE; Jungho LEE; | |
| 455 | 20240101443 | 2021-07-12 | POSITIVE ELECTRODE ACTIVE MATERIAL PRECURSOR FOR LITHIUM SECONDARY BATTERY AND METHOD FOR MANUFACTURING SAME | Kiyong AHN; Do-Wook JUN; Youngsun KONG; Seonyoung KWON; Min KIM; Dookyun LEE; Kijoo HONG; | |
| 456 | 20220267000 | 2021-07-09 | ARTIFICIAL INTELLIGENT SHEPHERD BEE | Dongxu Zhang; | |
| 457 | 20220037720 | 2021-07-09 | THERMAL RUNAWAY SUPPRESSANT OF LITHIUM BATTERIES AND THE RELATED APPLICATIONS | Szu-Nan YANG; | PROLOGIUM TECHNOLOGY CO., LTD.; PROLOGIUM HOLDING INC.; |
| 458 | 20220037738 | 2021-07-09 | LITHIUM ENERGY STORAGE DEVICE WITH INTERNAL FUSE | Brian Morin; | |
| 459 | 20240055650 | 2021-07-09 | SULFIDE COMPOSITE ELECTROLYTES FOR SOLID-STATE LITHIUM BATTERIES | Hui Wang; Yang Li; Thad Druffel; | UNIVERSITY OF LOUISVILLE RESEARCH FOUNDATION, INC.; |
| 460 | 20230006194 | 2021-07-02 | LITHIUM ION BATTERY WITH THIN ANODE | Devendra Sadana; | POSI ENERGY-SILICON POWER, LLC; |

# PATENT APPLICATION PUBLICATIONS

| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 461 | 20230268488 | 2021-06-29 | CATHODE ACTIVE MATERIAL FOR LITHIUM-ION BATTERY (LIB) AND PREPARATION METHOD THEREOF | Bo TANG; Piao NING; Guishi HAN; | BASF SHANSHAN BATTERY MATERIALS CO.,LTD.; |
| 462 | 20210408551 | 2021-06-25 | NEGATIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Won-Gi AHN; Juhye BAE; Junhong LEE; Min-young JEONG; | |
| 463 | 20220356280 | 2021-06-22 | COPOLYMERIZED PVDF RESIN FOR LITHIUM ION BATTERY BINDERS AND ITS PREPARATION METHOD | Yupeng Wu; Jinming Han; Congli Ma; Zhigang Wu; Lanhui SU; Jinming Wang; Zhengliang Wang; Xinben Zhao; | ZHEJIANG QUZHOU JUSU CHEMICAL INDUSTRY CO.,LTD; Zhejiang Juhua Technology Center Co., Ltd; ZHEJIANG JUHUA CO.,LTD.ELECTROCHEMISTRY PLANT; |
| 464 | 20210313565 | 2021-06-18 | LITHIUM BATTERY AND METHOD FOR MANUFACTURING LITHIUM BATTERY | Makoto TOMOYORI; | |
| 465 | 20210399304 | 2021-06-17 | NEGATIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, METHOD OF PREPARING SAME, AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Jungho LEE; Jaehou NAH; Hyun SOH; Inhyuk SON; Duk-Hyoung YOON; | |
| 466 | 20210313561 | 2021-06-15 | SOLID-STATE POSITIVE ELECTRODE, METHOD OF MANUFACTURE THEREOF, AND BATTERY INCLUDING THE ELECTRODE | Qingsong Tu; Tan Shi; Gerbrand Ceder; Lincoln Miara; | Samsung Electronics Co., Ltd.; The Regents of the University of California; |
| 467 | 20220200072 | 2021-06-10 | Lithium battery with cap charging indication function | Qiu Deliang; Yang Xianlei; | |
| 468 | 20210388639 | 2021-06-10 | ELECTRIC LOCK SYSTEM | Xiaoyu E; | |
| 469 | 20210384563 | 2021-06-08 | ANODE RECOVERY IN RECYCLED BATTERIES | Eric Gratz; Zhangfeng Zheng; | |
| 470 | 20220393323 | 2021-06-04 | MANUFACTURING METHOD OF LITHIUM BATTERY CELL | Chueh-Yu KO; Chiang-Ping CHEN; | |
| 471 | 20220407183 | 2021-06-03 | Multi-Layer Solid Electrolyte Separator for a Lithium Secondary Battery and Manufacturing Method | Bor Jang; | Global Graphene Group, Inc.; |
| 472 | 20210283441 | 2021-06-03 | FIRE EXTINGUISHING SYSTEM FOR LITHIUM BATTERY ENERGY STORAGE UNIT BASED ON STAGEWISE WARNING AND MULTIPLE SPRAYING | Yuancheng CAO; Weixin ZHANG; Shun TANG; | |
| 473 | 20220298858 | 2021-06-02 | INTELLIGENT CONTROLLER FOR AUTOMATICALLY ADJUSTING SLAT ANGLES OF WINDOW SHUTTER | Xiaojian Li; Ye Li; | |
| 474 | 20210288375 | 2021-06-02 | Reinforced-End Battery Cell Spacer | Gerald Baker; | |
| 475 | 20230275215 | 2021-06-01 | SILICON-CARBON COMPOSITE MATERIAL FOR SECONDARY LITHIUM BATTERY AND PREPARATION METHOD THEREFOR | Qinghua CHEN; Pan HU; Bing FANG; | |
| 476 | 20210376309 | 2021-06-01 | COMPOSITE CATHODE ACTIVE MATERIAL, CATHODE INCLUDING THE SAME, LITHIUM BATTERY EMPLOYING THE CATHODE, AND PREPARATION METHOD THEREOF | Inhyuk Son; Sangkook Mah; Sungnim Jo; Guesung Kim; Jongseok Moon; Andrei Kapylou; | |
| 477 | 20210376314 | 2021-06-01 | COMPOSITE CATHODE ACTIVE MATERIAL, CATHODE INCLUDING THE SAME, LITHIUM BATTERY EMPLOYING THE CATHODE, AND PREPARATION METHOD THEREOF | Inhyuk SON; Sangkook MAH; Sungnim JO; Andrei KAPYLOU; Guesung KIM; Jongseok MOON; | |
| 478 | 20210376310 | 2021-05-28 | ATOMIC LAYER DEPOSITION OF IONICALLY CONDUCTIVE COATINGS FOR LITHIUM BATTERY FAST CHARGING | NEIL DASGUPTA; KUAN-HUNG CHEN; ERIC KAZYAK; | |
| 479 | 20230216023 | 2021-05-26 | ANODE PIECE FOR LITHIUM BATTERY HAVING BOTH HIGH SAFETY AND HIGH CAPACITY, AND PREPARATION METHOD AND USE THEREFOR | Wenjun LI; Qiufeng DING; Hao YANG; Hangyu XU; Haiyun MA; Zepeng DING; Yadan WANG; Yongwei LI; Huigen YU; | BEIJING WELION NEW ENERGY TECHNOLOGY CO., LTD; |
| 480 | 20230216084 | 2021-05-26 | ANODE PIECE, AND PREPARATION METHOD AND USE THEREFOR IN SEMI-SOLID STATE BATTERY | Wenjun LI; Junying WANG; Jiuming LI; Hangyu XU; Huigen YU; | BEIJING WELION NEW ENERGY TECHNOLOGY CO., LTD; |

# PATENT APPLICATION PUBLICATIONS

| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 481 | 20220407182 | 2021-05-19 | Polymer Composite Separator for a Lithium Secondary Battery and Manufacturing Method | Bor Jang; | |
| 482 | 20220377290 | 2021-05-18 | Solar-Powered Wildlife Camera | John Hurst; Chad Parks; Travis Mathias; | |
| 483 | 20210359339 | 2021-05-12 | CATHODE FOR SOLID-STATE LITHIUM BATTERY | Sally Lou; Daniel Hoffman; Juchuan Li; | |
| 484 | 20210344079 | 2021-04-29 | SOLID-STATE POLYMER SEPARATOR FOR LITHIUM-ION BATTERIES | Claudiu BUCUR; | |
| 485 | 20210238202 | 2021-04-23 | NOVEL ORGANOBORANES USEFUL AS ELECTROLYTES FOR LITHIUM BATTERIES | Ishrat Khan; Ahmed Alzharani; Amal Al-abdulrahman; Rasha Alshahrani; | |
| 486 | 20220356313 | 2021-04-19 | POLYOLEFIN MICROPOROUS FILM AND PREPARATION METHOD THEREOF | Yue CHENG; Kun LI; Kun PENG; Bei JIN; Qianqian LIU; | |
| 487 | 20220336893 | 2021-04-16 | SQUARE WINDED BUTTON LITHIUM BATTERY | Xingyi Duan; | |
| 488 | 20220328860 | 2021-04-09 | CERAMIC LITHIUM BATTERY WITH PIEZOELECTRIC COMPENSATION LAYERS | Arwed NIESTROJ; | Sakuu Corporation; |
| 489 | 20210320378 | 2021-04-09 | SEPARATOR AND LITHIUM BATTERY INCLUDING THE SAME | Jungyoon Lee; Hyeonsun Choi; Yangseob Kim; Jinyoung Kim; | |
| 490 | 20230040511 | 2021-03-30 | LITHIUM BATTERY SYSTEM AND OVERHEAD WORKING TRUCK | Huili REN; Hou ZHU; Yi ZHONG; Jianhui DUAN; Lu XIONG; | ZOOMLION INTELLIGENT ACCESS MACHINERY CO., LTD.; |
| 491 | 20230108718 | 2021-03-26 | LOW-COBALT AND COBALT-FREE, HIGH-ENERGY CATHODE MATERIALS FOR LITHIUM BATTERIES | Arumugam MANTHIRAM; Wangda LI; Steven LEE, III; | |
| 492 | 20220250938 | 2021-03-24 | CATHODE MATERIAL AND PREPARATION METHOD THEREOF AND SECONDARY LITHIUM BATTERY | Youyuan HUANG; Shunyi YANG; Xiong SONG; Hongxu ZHANG; Liang LUO; Shun NOMURA; Koki MORITA; Takuya SHINOMIYA; | |
| 493 | 20230116369 | 2021-03-23 | LITHIUM MIXED INORGANIC ELECTROLYTES | Vincent PELE; Nadège ROUMEGOUS; Christian JORDY; Valérie PRALONG; | SAFT; Centre national de la recherche scientifique; ECOLE NATIONALE SUPERIEURE D INGENIEURS DE CAEN; UNIVERSITE DE CAEN NORMANDIE; |
| 494 | 20220045403 | 2021-03-22 | ENERGY STORAGE DEVICE HAVING A CURRENT COLLECTOR WITH INHERENT CURRENT LIMITATIONS | Brian Morin; Carl Hu; | |
| 495 | 20220302440 | 2021-03-19 | FLAME-RESISTANT BIPOLAR ELECTRODES, BIPOLAR LITHIUM BATTERIES, AND MANUFACTURING METHOD | Bor Jang; | |
| 496 | 20220302459 | 2021-03-18 | NEGATIVE ELECTRODES FOR SECONDARY LITHIUM BATTERIES AND METHODS OF MAKING THE SAME | Xingyi Yang; Xingcheng Xiao; Joel Toner; | GM GLOBAL TECHNOLOGY OPERATIONS LLC; |
| 497 | 20230216039 | 2021-03-18 | A CLASS OF ARTIFICIAL SEI LAYERS FOR STABILIZING LITHIUM DEPOSITION IN LITHIUM BATTERIES AND RELATED METHODS | Arumugam MANTHIRAM; Sanjay NANDA; Amruth BHARGAV, III; | |
| 498 | 20210210755 | 2021-03-17 | DISORDERED ROCK SALT ELECTRODES FOR LITHIUM BATTERIES | Michael THACKERAY; Eungje LEE; Jason CROY; | UCHICAGO ARGONNE, LLC; |
| 499 | 20210288383 | 2021-03-09 | COATING COMPOSITION FOR SEPARATOR, METHOD FOR PREPARING SEPARATOR USING THE SAME, AND SEPARATOR AND LITHIUM BATTERY EMPLOYING THE SEPARATOR | Daehyun HONG; Dowon KIM; | |
| 500 | 20210281104 | 2021-03-09 | Battery Operated One-Shot Device Mitigating the Effects of Lithium Battery Passivation | Francis Mattia; Richard Frantz; | |

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| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 501 | 20210280943 | 2021-03-08 | METHOD FOR PREPARING COMPOSITE SEPARATOR, COMPOSITE SEPARATOR, AND LITHIUM BATTERY COMPRISING COMPOSITE SEPARATOR | Daehyun HONG; | |
| 502 | 20210280868 | 2021-03-03 | NEGATIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Sunil PARK; Narae KIM; Jaehou NAH; Joongho MOON; Hyun SOH; Eunjoo LEE; | |
| 503 | 20220293927 | 2021-03-03 | Electrolyte and Electrode Materials for Rechargeable Lithium Batteries | Jan Allen; | |
| 504 | 20230369589 | 2021-03-02 | SILICON-BASED NEGATIVE ELECTRODE MATERIAL CONTAINING SILICATE SKELETON, NEGATIVE ELECTRODE PLATE, AND LITHIUM BATTERY | Yingying Yin; Bonan Liu; Fei Luo; Hong Li; | |
| 505 | 20230178805 | 2021-03-02 | ELECTROLYTE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY COMPRISING SAME | Injun PARK; Soojin KIM; Junyong LEE; Tae LEE; Hyejeong JEONG; Olga TSAY; Hyunbong CHOI; Jungmin HAN; | |
| 506 | 20230035022 | 2021-02-25 | A NOVEL GOLD-BASED POROUS MATERIAL FOR A LITHIUM BATTERY | David PECH; Sai-Gourang PATNAIK; Daniel GUAY; | |
| 507 | 20220271335 | 2021-02-23 | LITHIUM BATTERIES CONTAINING FLAME-RESISTANT QUASI-SOLID OR SOLID-STATE ELECTROLYTES AND MANUFACTURING METHOD | Bor Jang; | |
| 508 | 20210175556 | 2021-02-22 | RECYCLING METHOD FOR TREATING USED BATTERIES, IN PARTICULAR RECHARGEABLE BATTERIES, AND BATTERY PROCESSING INSTALLATION | Christian HANISCH; | |
| 509 | 20220263070 | 2021-02-15 | SOLID-STATE MEDIUM FOR LITHIUM ION TRANSPORT, LITHIUM BATTERIES AND MANUFACTURING METHOD | Hui He; Bor Jang; | |
| 510 | 20210296699 | 2021-02-12 | SOLID POLYMER ELECTROLYTE BASED ON A COMB POLYMER | Lionel PICARD; Thomas CLEMENT; Patrice RANNOU; | COMMISSARIAT A L'ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES; UNIVERSITE GRENOBLE ALPES; CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE; |
| 511 | 20220263092 | 2021-02-08 | Composite Cathode Material for Lithium Batteries | Shigemasa Kuwata; Hideyuki Komatsu; Maarten Sierhuis; Balachandran Gadaguntla Radhakrishnan; Shreyas Honrao; John Lawson; | |
| 512 | 20210249648 | 2021-02-08 | NEGATIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Hee CHOI; | |
| 513 | 20220246915 | 2021-02-04 | THERMALLY STABLE ELASTIC POLYMER-ENCAPSULATED ANODE PARTICLES FOR LITHIUM BATTERIES AND METHOD OF MANUFACTURING | Bor Jang; | |
| 514 | 20220246937 | 2021-02-04 | ELASTIC FLAME-RETARDANT POLYMER-ENCAPSULATED ANODE PARTICLES FOR LITHIUM BATTERIES AND METHOD OF MANUFACTURING | Bor Jang; | Global Graphene Group, Inc.; |
| 515 | 20220216523 | 2021-02-04 | THIN LITHIUM BATTERY AND METHOD FOR MANUFACTURING SAME | Chang LEE; Keun CHOI; Jung KIM; Jung LEE; | |
| 516 | 20220246936 | 2021-02-03 | PHOSPHAZENE COMPOUND-BASED ELASTIC POLYMER-ENCAPSULATED ANODE PARTICLES FOR LITHIUM BATTERIES AND METHOD OF MANUFACTURING | Bor Jang; | |
| 517 | 20220255129 | 2021-02-02 | PHOSPHAZENE COMPOUND-BASED ELECTROLYTE COMPOSITIONS, QUASI-SOLID AND SOLID-STATE ELECTROLYTES, AND LITHIUM BATTERIES | Bor Jang; | |
| 518 | 20210178471 | 2021-02-02 | Fabrication of Three-Dimensional Porous Electrode | Hyeji Park; Hyelim Choi; Heeman Choe; | |
| 519 | 20220238932 | 2021-01-28 | ELECTROCHEMICAL CELL MONITORING ASSEMBLY | Jing Gao; Brian Koch; Gayatri Dadheech; Mark Verbrugge; Alok Warey; James Salvador; Robert Schmidt; | GM GLOBAL TECHNOLOGY OPERATIONS LLC; |
| 520 | 20220238916 | 2021-01-27 | FLAME-RESISTANT ELECTROLYTE COMPOSITIONS FROM PHOSPHONATE VINYL MONOMERS, QUASI-SOLID AND SOLID-STATE ELECTROLYTES, AND LITHIUM BATTERIES | Bor Jang; | |

# PATENT APPLICATION PUBLICATIONS

| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 521 | 20220238914 | 2021-01-22 | FLAME-RESISTANT QUASI-SOLID AND SOLID-STATE ELECTROLYTES, LITHIUM BATTERIES AND MANUFACTURING METHOD | Hui He; Lu Zhang; Bor Jang; | |
| 522 | 20210242455 | 2021-01-22 | NEGATIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Chul YOUM; | |
| 523 | 20230140494 | 2021-01-20 | ADDITIVE FOR ELECTROLYTE OF SECONDARY LITHIUM BATTERY, ELECTROLYTE FOR SECONDARY LITHIUM BATTERY, AND SECONDARY LITHIUM BATTERY COMPRISING SAME | Olga TSAY; Soojin KIM; Hyunbong CHOI; Younghye KANG; Jin-Hyeok LIM; Myunghwan JEONG; Wonseok CHO; Pavel SHATUNOV; | |
| 524 | 20220231333 | 2021-01-18 | QUASI-SOLID AND SOLID-STATE ELECTROLYTE FOR LITHIUM-ION AND LITHIUM METAL BATTERIES AND MANUFACTURING METHOD | Hui He; Lu Zhang; Bor Jang; | |
| 525 | 20230047382 | 2021-01-13 | A PROTECTIVE LAYER FOR A METAL ELECTRODE AND LITHIUM BATTERY COMPRISING THE SAME | Ryo Takata; Franz Schmidt; Daniel Esken; Ting-Tai Lee; Chia-Chen Fang; Nae-Lih Wu; | Evonik Operations GmbH; |
| 526 | 20210130947 | 2021-01-13 | COMPOSITE FORMED FROM SEMI-CONTINUOUS AND MULTI-STEP PROCESS | Junbing Yang; | CLB Americas, Inc.; |
| 527 | 20220223917 | 2021-01-08 | FLAME-RESISTANT QUASI-SOLID ELECTROLYTE FOR LITHIUM-ION AND LITHIUM METAL BATTERIES AND PRODUCTION METHOD | Hui He; Bor Jang; | |
| 528 | 20220158232 | 2021-01-07 | ELECTROLYTE AND FABRICATING METHOD THEREOF, AND LITHIUM BATTERY | Yu-hsing LIN; Hsisheng TENG; Yi-han SU; Subramani RAMESH; Thi Tuyet Hanh NGUYEN; Yu-ting HUANG; | |
| 529 | 20230038076 | 2020-12-24 | POWER SUPPLY METHOD AND SYSTEM FOR HYDROGEN FUEL CELL STACK, AND HYDROGEN POWERED MOTORCYCLE AND DRIVING METHOD AND SYSTEM THEREOF | MINMIN LU; CHENG QIAN; WEIJIE ZE; QIAN MA; | |
| 530 | 20230344012 | 2020-12-23 | LITHIUM BATTERY PRODUCTION PROCESS AND EQUIPMENT | Wenjun LI; Yunhao LIU; Baopeng HOU; Huigen YU; Yongwei LI; | BEIJING WELION NEW ENERGY TECHNOLOGY CO., LTD; |
| 531 | 20210305659 | 2020-12-23 | COMPOSITION FOR COATING LAYER, SEPARATOR FOR RECHARGEABLE LITHIUM BATTERY INCLUDING COATING LAYER FORMED THEREFROM AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Gain KIM; Yeonjoo CHOI; Jayeon GU; Yangseob KIM; Jae KIM; Sun MOON; Young LEE; | |
| 532 | 20230034644 | 2020-12-23 | FIREPROOF, LIGHTWEIGHT, POLYMER-POLYMER SOLID-STATE ELECTROLYTE FOR SAFE LITHIUM BATTERIES | Yi CUI; Jiayu WAN; Yi CUI; Yusheng YE; | The Board of Trustees of the Leland Stanford Junior University; |
| 533 | 20220199977 | 2020-12-21 | ELASTIC NETWORK POLYMER-ENCAPSULATED ANODE PARTICLES FOR LITHIUM BATTERIES AND METHOD OF MANUFACTURING | Hui He; Bor Jang; | |
| 534 | 20230024237 | 2020-12-17 | GRADIENT DOPED COBALT-FREE POSITIVE ELECTRODE MATERIAL AND PREPARATION METHOD THEREFOR, LITHIUM-ION BATTERY POSITIVE ELECTRODE, AND LITHIUM BATTERY | Qiqi Qiao; Weijun Jiang; Mingzhu Sun; Xinpei Xu; Zetao Shi; Jiali Ma; Sixian Chen; Pengfei Wang; | SVolt Energy Technology Co., Ltd.; |
| 535 | 20210098839 | 2020-12-14 | FUNCTIONAL THERMAL INSULATION DEVICE FOR LITHIUM BATTERY | Huanyu MAO; Saifu LONG; | SUZHOU YOULIONBATTERY INC.; |
| 536 | 20220190322 | 2020-12-11 | ELASTIC CROSSLINKED POLYMER-ENCAPSULATED ANODE PARTICLES FOR LITHIUM BATTERIES AND METHOD OF MANUFACTURING | Aruna Zhamu; Bor Jang; | |
| 537 | 20230007900 | 2020-12-09 | PROCESS AND SYSTEM FOR PRODUCING LIPF[6], AND MIXTURE CRYSTAL, COMPOSITION, ELECTROLYTE SOLUTION, AND LITHIUM BATTERY CONTAINING LIPF[6] | Jiangang REN; Haibing ZHANG; Xiaohong MA; Guoqiang MA; Haidao LIU; Qing YANG; Jingbo DONG; Huichuang CHEN; Qi ZHANG; Nan SHENG; | |
| 538 | 20220173385 | 2020-12-02 | AIR-STABLE PARTICULATES OF ANODE ACTIVE MATERIALS FOR LITHIUM BATTERIES | Bor Jang; | |
| 539 | 20210359300 | 2020-12-02 | Alternative Method for Making Lithium Battery Cathode Materials | Stephen Campbell; | Nano One Materials Corp.; |
| 540 | 20210226308 | 2020-11-30 | LITHIUM ENERGY STORAGE DEVICE WITH INTERNAL FUSE | Brian Morin; | |

# PATENT APPLICATION PUBLICATIONS

| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 541 | 20230024232 | 2020-11-18 | Flame Retardants For Battery Electrolytes | Tse-Chong Wu; Zhongxin Ge; Sascha Welz; Mark Bennett; | |
| 542 | 20220416299 | 2020-11-18 | Flame Retardants For Lithium Batteries | Zhongxin Ge; Tse-Chong Wu; Sascha Welz; Mark Bennett; | |
| 543 | 20220416300 | 2020-11-18 | Flame Retardants For Battery Electrolytes | Zhongxin Ge; Tse-Chong Wu; Sascha Welz; Mark Bennett; | |
| 544 | 20220416316 | 2020-11-18 | Flame Retardants For Battery Electrolytes | Zhongxin Ge; Tse-Chong Wu; Sascha Welz; Mark Bennett; Yunqi Liu; | |
| 545 | 20220407110 | 2020-11-18 | Flame Retardants For Lithium Batteries | Zhongxin Ge; Tse-Chong Wu; Sascha Welz; Mark Bennett; | |
| 546 | 20210151746 | 2020-11-13 | NEGATIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Jongmin WON; Young-Min KIM; Jaemyung KIM; Jaehou NAH; Changsu SHIN; Dae-Hyeok LEE; | |
| 547 | 20210151750 | 2020-11-12 | LITHIUM BATTERY STRUCTURE | Li-Chun CHEN; Tsung-Hsiung WANG; Chen-Chung CHEN; | INDUSTRIAL TECHNOLOGY RESEARCH INSTITUTE; |
| 548 | 20220271280 | 2020-10-30 | A LITHIUM NEGATIVE ELECTRODE WITH PROTECTIVE LAYER, PREPARATION METHOD AND APPLICATION THEREOF | Wei Yuan; Chun Wang; Qiqi Pan; Cheng Wang; Yuhang Yuan; Zhiqiang Qiu; Yong Tang; | |
| 549 | 20210143411 | 2020-10-30 | NEGATIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Dae-Hyeok LEE; Young-Min KIM; Jaemyung KIM; Jaehou NAH; Changsu SHIN; Jongmin WON; | |
| 550 | 20210135215 | 2020-10-29 | POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, METHOD OF PREPARING THE SAME, AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Donghyun Kil; | |
| 551 | 20230106658 | 2020-10-19 | METHODS FOR MANUFACTURING POSITIVE ELECTRODE ACTIVE MATERIAL PRECURSOR MATERIAL AND POSITIVE ELECTRODE ACTIVE MATERIAL FOR SECONDARY LITHIUM BATTERY, AND POSITIVE ELECTRODE ACTIVE MATERIAL FOR SECONDARY LITHIUM BATTERY MANUFACTURED THEREBY | Myung-Jin KIM; Ji-Hoon LEE; Bong-Jin CHOI; | |
| 552 | 20220388863 | 2020-10-16 | Lithium Battery Positive Electrode Material Precursor, Preparation Method Therefor and Application Thereof | Tongbao ZHANG; Biwei WANG; Ye ZHU; Huanxin GAO; | |
| 553 | 20210119195 | 2020-10-14 | SEPARATOR FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Byung-Soo KIM; Jaehyun CHO; | |
| 554 | 20220115639 | 2020-10-13 | ELASTIC POLYMER MATRIX-PROTECTED PARTICLES OF ANODE ACTIVE MATERIALS FOR LITHIUM BATTERIES AND METHOD OF MANUFACTURING | Hui He; Bor Jang; | |
| 555 | 20220416315 | 2020-10-08 | Metal Battery | Thomas Kugler; Evan Keyzer; Jack Blincow; | Sumitomo Chemical Co., Ltd; |
| 556 | 20210111397 | 2020-10-07 | SECONDARY LITHIUM BATTERY AND MANUFACTURING METHOD | Claus-Christian Fischer; Goran Kilibarda; Bernd Kreidler; Sebastian Schebesta; | |
| 557 | 20220109142 | 2020-10-05 | ELECTRODE STRUCTURES FOR LITHIUM BATTERIES | Hui He; Bor Jang; | |
| 558 | 20210020920 | 2020-10-01 | POLYMER BINDER FOR LITHIUM BATTERY AND METHOD OF MANUFACTURING | Baofei Pan; Hui He; Aruna Zhamu; Bor Jang; | |
| 559 | 20220098061 | 2020-09-28 | OZONE WATER VESSEL CAPABLE OF DIRECTLY ELECTROLYZING TAP WATER TO GENERATE OZONE WATER | MING-YUNG HSU; WEI-CHUN HSU; | |
| 560 | 20220344748 | 2020-09-25 | CAR POWER SUPPLY SYSTEM AND SOLID OXIDE FUEL CELL VEHICLE | Xiaowen Sun; Yanbo Wang; Youpeng Chen; Changming Hu; Jin-Li Pei; Lei Sun; Yaxin Du; | |

# PATENT APPLICATION PUBLICATIONS

| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 561 | 20220320505 | 2020-09-25 | COMPOSITE NEGATIVE ELECTRODE MATERIAL AND PREPARATION METHOD THEREFOR AND LITHIUM BATTERY | Chunlei PANG; Yiming KONG; Tengyu LIANG; Jianguo REN; Xueqin HE; | BTR NEW MATERIAL GROUP CO., LTD.; DINGYUAN NEW ENERGY TECHNOLOGY CO., LTD.; |
| 562 | 20240162489 | 2020-09-24 | ELECTROLYTE FOR SECONDARY LITHIUM BATTERY AND SECONDARY LITHIUM BATTERY COMPRISING SAME | Tae LEE; Soojin KIM; Suyeol RYU; Kyu-Eun SHIM; Junyong LEE; Wonseok CHO; Hyunbong CHOI; Jungmin HAN; | |
| 563 | 20220274847 | 2020-09-11 | PROCESS TO PRODUCE CATHODE MATERIALS FOR RECHARGEABLE LI BATTERIES | Feng ZOU; Yang LIU; | |
| 564 | 20220069348 | 2020-09-01 | FLAME-RESISTANT QUASI-SOLID HYBRID ELECTROLYTE FOR SAFE LITHIUM BATTERIES AND PRODUCTION METHOD | Hui He; Aruna Zhamu; Bor Jang; | |
| 565 | 20220069278 | 2020-08-28 | Vertically Integrated Pure Lithium Metal Production and Lithium Battery Production | Emilie Bodoin; | |
| 566 | 20220069281 | 2020-08-28 | GRAPHENE-INFILTRATED POROUS ANODE ACTIVE MATERIAL PARTICLES FOR RECHARGEABLE LITHIUM BATTERIES | Kuber Mishra; Song-Hai Chai; Aruna Zhamu; Yu-Sheng Su; Bor Jang; | |
| 567 | 20220069313 | 2020-08-28 | GRAPHENE-PROTECTED LITHIOPHILIC OR NATHIOPHILIC METAL ANODE FOR AN ALKALI METAL BATTERY | Hui He; Aruna Zhamu; Hao-Hsun Chang; Bor Jang; | |
| 568 | 20220069340 | 2020-08-27 | CERAMIC-SOFT COMPOSITES FOR SOLID-STATE SILICON ANODES | Timothy Arthur; Nikhilendra Singh; Rana Mohtadi; Oscar Tutusaus; | |
| 569 | 20220289589 | 2020-08-26 | MIXED LITHIUM TRANSITION METAL OXIDE COATED WITH PYROGENICALLY PRODUCED ZIRCONIUM-CONTAINING OXIDES | Daniel ESKEN; Marcel HERZOG; | Evonik Operations GmbH; |
| 570 | 20220306486 | 2020-08-26 | MIXED LITHIUM TRANSITION METAL OXIDE COATED WITH PYROGENICALLY PRODUCED ZIRCONIUM-CONTAINING OXIDES | Daniel ESKEN; Marcel HERZOG; | Evonik Operations GmbH; |
| 571 | 20220336805 | 2020-08-24 | LITHIUM TRANSITION METAL OXIDE AND PRECURSOR PARTICULATES AND METHODS | Lituo ZHENG; Mark OBROVAC; | |
| 572 | 20200362274 | 2020-08-07 | PARTICLE REMOVAL FROM ELECTROCHROMIC FILMS USING NON-AQUEOUS FLUIDS | Harvey KALWEIT; Satya Ajjarapu; Jean-Christophe Giron; | |
| 573 | 20210043931 | 2020-08-05 | POSITIVE ACTIVE MATERIAL PRECURSOR FOR RECHARGEABLE LITHIUM BATTERY, POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, METHOD OF PREPARING THE POSITIVE ACTIVE MATERIAL, AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE POSITIVE ACTIVE MATERIAL | Do-Yu KIM; | |
| 574 | 20220246899 | 2020-07-30 | Manufacturing method for electrode of electricity storage device and electrode of electricity storage device | Shunji HASUO; | |
| 575 | 20210036319 | 2020-07-28 | POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, METHOD OF PREPARING THE SAME, POSITIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Eunok OH; Yumi SONG; Jeuk HA; | |
| 576 | 20230121840 | 2020-07-24 | CARBON-COATED LITHIUM-RICH OXIDE COMPOSITE MATERIAL AND PREPARATION METHOD THEREOF | Guangchun CHENG; Jie SUN; Zhonglin HE; | HUBEI RT ADVANCED MATERIALS CO., LTD.; |
| 577 | 20220298023 | 2020-07-24 | IMPROVED MICROGRANULATION METHODS AND PRODUCT PARTICLES THEREFROM | Mark OBROVAC; Lituo ZHENG; Matthew GARAYT; | |
| 578 | 20220231281 | 2020-07-20 | Method for Preparing Positive Electrode Active Material for Lithium Secondary Battery and Positive Electrode Active Material Prepared Thereby | Jun EOM; Dong AHN; Chae LIM; Ji KIM; Byoung JUNG; | LG Chem, Ltd.; |
| 579 | 20210005928 | 2020-07-02 | SOLID POLYMER ELECTROLYTE | Adrien LASSAGNE; Celine Barchasz; Lionel Picard; | COMMISSARIAT A L'ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES; |
| 580 | 20230299271 | 2020-07-02 | CARBON-COATED SILICON PARTICLES FOR LITHIUM BATTERIES | Stefan HAUFE; Christoph DRAEGER; Jennifer WEGENER; | Wacker Chemie AG; |

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| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 581 | 20210057712 | 2020-06-30 | ENERGY STORAGE DEVICE HAVING THIN CURRENT COLLECTOR | Brian Morin; Carl Hu; | SOTERIA BATTERY INNOVATION GROUP, INC.; |
| 582 | 20230266392 | 2020-06-29 | MULTI-OBJECTIVE SIMULTANEOUS CHARGING METHOD FOR LITHIUM-ION BATTERY PACKS | Jian CHEN; Hao CHEN; Xiaodong FAN; Mi ZHOU; Yuan FU; | ZHEJIANG UNIVERSITY; |
| 583 | 20210328217 | 2020-06-28 | LITHIUM BATTERY AND ANODE MATERIAL THEREOF | Tsung-Yi Chen; Syuan-Yu Wang; Chun-Han Kuo; Han-Yi Chen; | National Tsing Hua University; |
| 584 | 20220158260 | 2020-06-25 | Method for Recovering Lithium Battery Cell by Heat Treatment and Method for Manufacturing Lithium Battery Cell Comprising the Same | Hyunjun Choi; Youngdeok Kim; Daesoo Kim; | LG Chem, Ltd.; |
| 585 | 20210399333 | 2020-06-23 | LiZnCl4 DERIVATIVES IN THE SPACE GROUP of Pmn21 as Li SUPER-IONIC CONDUCTOR, SOLID ELECTROLYTE, and COATING LAYER for Li METAL BATTERY and Li-ION BATTERY | Yifei MO; Yunsheng LIU; Chen LING; | TOYOTA MOTOR ENGINEERING & MANUFACTURING NORTH AMERICA, INC.; UNIVERSITY OF MARYLAND, COLLEGE PARK; |
| 586 | 20210391607 | 2020-06-16 | LITHIUM BATTERY MODULE WITH TEMPERATURE EQUALIZATION AND HEAT DISSIPATION STRUCTURE | Yuan-Li CHIANG; | |
| 587 | 20230216142 | 2020-06-12 | NON-WOVEN FABRIC AND PREPARATION METHOD THEREFOR, LITHIUM BATTERY DIAPHRAGM, AND LITHIUM BATTERY DIAPHRAGM BASE MEMBRANE | Li CHEN; Lujing LIN; Xuemei YANG; Xiufeng CHEN; | |
| 588 | 20220315821 | 2020-06-03 | Use of 2,3,3,3-tetrafluoropropene for heating a lithium battery | Gregory SCHMIDT; | Arkema France; |
| 589 | 20220320618 | 2020-06-03 | LITHIUM BATTERY PROCESSING METHOD AND DEACTIVATING AGENT | Hiroshi Minami; Masanobu Takeuchi; | Panasonic Intellectual Property Management Co., Ltd.; |
| 590 | 20200388854 | 2020-05-26 | CERMET ELECTRODE FOR SOLID STATE AND LITHIUM ION BATTERIES | JEFFREY SAKAMOTO; NATHAN TAYLOR; | |
| 591 | 20230079456 | 2020-05-19 | Brushless Motor | Xingwei WANG; Yong BU; | SHENZHEN TOPBAND CO., LTD.; |
| 592 | 20230025702 | 2020-05-19 | BATTERY SWITCH ON CIRCUIT AND LITHIUM BATTERY | Ming LIU; Lu SHI; Jinfeng XIANG; Xiaoyin CAO; | |
| 593 | 20210367229 | 2020-05-19 | CONDUCTING POLYMER NETWORK/EXPANDED GRAPHITE-ENABLED NEGATIVE ELECTRODE FOR A LITHIUM-ION BATTERY | Sheng-Yi Lu; Aruna Zhamu; Bor Jang; | |
| 594 | 20200274138 | 2020-05-12 | THIN FILM COATINGS ON MIXED METAL OXIDES | Alan WEIMER; Amanda HOSKINS; | |
| 595 | 20220149447 | 2020-05-09 | Method for reasonably adjusting end-of-discharge voltage of lithium battery with attenuation of battery life | YUEJIU ZHENG; ZHENG MENG; YONG ZHOU; XIN LAI; LONG ZHOU; ANQI SHEN; WENKUAN ZHU; YUNFENG HUANG; HAIDONG LIU; | UNIVERSITY OF SHANGHAI FOR SCIENCE AND TECHNOLOGY; |
| 596 | 20210098752 | 2020-05-05 | COMPOSITE PACKAGING MATERIAL FOR LITHIUM BATTERY | Yu-Ting CHIU; | |
| 597 | 20200350581 | 2020-05-04 | POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, METHOD OF PREPARING THE SAME, AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Jeom-Soo Kim; Byeong Min; | |
| 598 | 20200350557 | 2020-05-01 | NEGATIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY COMPRISING THE SAME | Jaehwan Ha; Kijun Kim; Beom Kim; Junghyun Nam; Heeeun Yoo; Yeonhee Yoon; Kyuseo Lee; Dongmyung Lee; | |
| 599 | 20210344035 | 2020-04-29 | METHOD OF PRODUCING A LITHIUM BATTERY CELL CONTAINING A NON-FLAMMABLE QUASI-SOLID ELECTROLYTE | Hui He; Aruna Zhamu; Bor Jang; | |
| 600 | 20210344038 | 2020-04-29 | METHOD OF PRODUCING NON-FLAMMABLE QUASI-SOLID ELECTROLYTE AND A QUASI-SOLID ELECTROLYTE/SEPARATOR LAYER FOR USE IN A LITHIUM BATTERY | Hui He; Aruna Zhamu; Bor Jang; | |

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| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 601 | 20200343550 | 2020-04-24 | POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, METHOD OF PREPARING THE SAME, AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Kwanghwan CHO; Kyu LEE; Hanseul KIM; Sung DOO; Seongmin KIM; | |
| 602 | 20200343551 | 2020-04-24 | POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, METHOD OF PREPARING THE SAME, AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Kwanghwan CHO; Kyu LEE; Hanseul KIM; Sung DOO; Seongmin KIM; | |
| 603 | 20230167220 | 2020-04-23 | HIGHLY ELECTRICAL CONDUCTIVE COMPOSITE MATERIAL BASED ON GRAPHENE-LITHIUM POLYCARBOXYLATE-NANOPARTICLES | Héctor AGUILAR BOLADOS; Mehrdad YAZDANI-PEDRAM ZOBEIRI; Moises de Jesus GALLEGOS COFRE; | |
| 604 | 20210320293 | 2020-04-13 | METHOD FOR RECOVERING LITHIUM BATTERY ACTIVE CATHODE MATERIAL FROM CATHODE WASTE | Albert LIPSON; Jessica DURHAM; | |
| 605 | 20200280062 | 2020-04-09 | NEGATIVE ACTIVE MATERIAL COMPOSITE FOR RECHARGEABLE LITHIUM BATTERY, METHOD OF PREPARING THE SAME, AND NEGATIVE ELECTRODE AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Changsu SHIN; Young-Min KIM; Soonho AHN; Jaehou NAH; Jaemyung KIM; | |
| 606 | 20230159345 | 2020-04-08 | SYSTEM AND PROCESS FOR DIRECT LITHIUM EXTRACTION AND PRODUCTION OF LOW CARBON INTENSITY LITHIUM CHEMICALS FROM GEOTHERMAL BRINES | Francis WEDIN; Alexander GRANT; | |
| 607 | 20200235378 | 2020-04-08 | POSITIVE ACTIVE MATERIAL | Dae-Hoe LEE; Do-Hyung PARK; Yong-Chan YOU; Min-Han KIM; | |
| 608 | 20220181745 | 2020-04-02 | POLYAMIDE-IMIDE COATED SEPARATORS FOR HIGH ENERGY RECHARGEABLE LITHIUM BATTERIES | Zhengming Zhang; Changqing Adams; Stefan Reinartz; | |
| 609 | 20220052342 | 2020-03-30 | Prelithiated negative electrode, preparation method thereof, and lithium ion battery and supercapacitor comprising the same | Zhaoyong SUN; Chenghao LIU; Qiang CHEN; Hanbo MU; | |
| 610 | 20210066750 | 2020-03-26 | HIGH-PERFORMANCE CERAMIC-POLYMER SEPARATORS FOR LITHIUM BATTERIES | Jitendra Kumar; Guru Subramanyam; | |
| 611 | 20220158237 | 2020-03-18 | MULTI-LAYER ELECTROLYTE ASSEMBLY FOR LITHIUM BATTERIES | Mengyi ZHANG; Peter BIEKER; Lei GUI; Martin WINTER; | WESTFÄLISCHE WILHELMS-UNIVERSITÄT MÜNSTER; |
| 612 | 20210079026 | 2020-03-17 | SILICON COMPOUND, PREPARATION METHOD THEREOF AND LITHIUM BATTERY | Fu-Ming Wang; Quoc Pham; Alem Hailu; Arif Imawan; | National Taiwan University of Science and Technology; |
| 613 | 20200280097 | 2020-02-28 | HIGH-ENERGY DENSITY RECHARGEABLE LITHIUM BATTERY | Long Chen; Xiulin Fan; Chunsheng Wang; | University of Maryland, College Park; |
| 614 | 20230099840 | 2020-02-18 | IN-SITU POLYMERIZED HYBRID POLYMER ELECTROLYTE FOR HIGH VOLTAGE LITHIUM BATTERIES | Shasha Su; Jinhua Jiang; Jing Feng; Jun Yang; Huichao Lu; Zhixin Xu; Hongping Li; | |
| 615 | 20220069309 | 2020-02-17 | COMPOSITION FOR LITHIUM BATTERY ELECTRODES | Julio ABUSLEME; Maurizio BISO; Riccardo PIERI; | |
| 616 | 20200259209 | 2020-02-11 | ELECTROLTYE AND LITHIUM BATTERY INCLUDING THE ELECTROLYTE | Insun PARK; Myongchun KOH; Dongyoung KIM; Yoonsok KANG; Jinah SEO; | |
| 617 | 20200251780 | 2020-01-31 | ELECTROLYTE, LITHIUM BATTERY INCLUDING THE SAME, AND METHOD OF MANUFACTURING THE LITHIUM BATTERY | Insun PARK; Myongchun KOH; Dongyoung KIM; Jinah SEO; | |
| 618 | 20210088810 | 2020-01-30 | SMART GLASSES | William Adams; Yu Ai; Jaren Goh Chee Wei; | |
| 619 | 20200251724 | 2020-01-30 | POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, METHOD OF PREPARING THE SAME AND RECHARGEABLE LITHIUM BATTERY INCLUIDNG THE SAME | Sungsoo KIM; Donghyun KIL; | |
| 620 | 20200168942 | 2020-01-30 | ELECTROLYTES FOR INTERCALATED LITHIUM BATTERIES | Erik Koep; | S2 Batteries; |

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| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 621 | 20210234167 | 2020-01-27 | POROUS GRAPHENE/CARBON COMPOSITE BALLS FOR AN ALKALI METAL BATTERY ANODE | Aruna Zhamu; Hui He; Hao-Hsun Chang; Bor Jang; | |
| 622 | 20220114421 | 2020-01-14 | METHOD FOR ESTIMATING THE CAPACITY OF LITHIUM BATTERY BASED ON CONVOLUTION LONG-SHORT-TERM MEMORY NEURAL NETWORK | Penghua Li; Zijian Zhang; Ping Wang; Yi Chai; Xiaosong Hu; Liping Chen; Jie Hou; Anyu Cheng; | CHONGQING UNVERSITY OF POSTS AND TELECOMMUNICATIONS; |
| 623 | 20200220205 | 2020-01-14 | ELECTROCHEMICAL CELL | John Affinito; Yuriy Mikhaylik; Chariclea Scordilis-Kelley; | Sion Power Corporation; |
| 624 | 20220094017 | 2020-01-03 | POLYIMIDE COATED SEPARATORS, POROUS POLYIMIDE COATINGS, LITHIUM BATTERIES, AND RELATED METHODS | Zhengming Zhang; Changqing Adams; | |
| 625 | 20200220179 | 2019-12-30 | CONDUCTIVE ARRAY, COMPOSITE MEMBRANE INCLUDING THE CONDUCTIVE ARRAY, LITHIUM BATTERY INCLUDING THE COMPOSITE MEMBRANE, AND METHOD OF MANUFACTURING THE CONDUCTIVE ARRAY | Wonsung CHOI; Kyounghwan CHOI; Youngeal KIM; Hyunjin KIM; Huisu JEONG; | |
| 626 | 20210123131 | 2019-12-23 | METHOD FOR MANUFACTURING A DOPED METAL OXIDE FILM | TING-KUEI TSAI; YU-LIN YEH; MIN-CHUAN WANG; | |
| 627 | 20220048122 | 2019-12-11 | CUTTING OF SOFT METALS WITH THE AID OF ULTRASOUND | Kamyab AMOUZEGAR; Patrick BOUCHARD; Nancy TURCOTTE; Frédéric PERRON; Dominic LEBLANC; Karim ZAGHIB; | HYDRO-QUÉBEC; |
| 628 | 20210111431 | 2019-12-02 | GEL-STATE ELECTROLYTE AND FABRICATING METHOD THEREOF, AND LITHIUM BATTERY | YU-HSIEN TSENG; YI-HAN SU; YU-CHENG CHEN; YU-SHING LIN; YU-CHENG TSENG; HSISHENG TENG; SHENG-SHU HOU; | |
| 629 | 20200280060 | 2019-12-02 | NEGATIVE ACTIVE MATERIAL COMPOSITE FOR RECHARGEABLE LITHIUM BATTERY, METHOD OF PREPARING THE SAME, NEGATIVE ELECTRODE INCLUDING THE SAME, AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Young-Min KIM; Changsu SHIN; Soonho AHN; Jaehou NAH; Jaemyung KIM; | |
| 630 | 20210159507 | 2019-11-27 | BATTERY WITH METALLIZED FILM CURRENT COLLECTOR HAVING LOW INTERNAL RESISTANCE | Brian Morin; Carl Hu; | |
| 631 | 20220029157 | 2019-11-25 | POSITIVE ELECTRODE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, PRODUCTION METHOD THEREFOR AND RECHARGEABLE LITHUM BATTERY COMPRISING SAME | Jung SONG; Sang NAM; Kwon CHOI; | |
| 632 | 20210160607 | 2019-11-21 | Headphone Charging Case | Jianfei Liu; Sihua Geng; Sen Wang; Zhou Yi; | Sharetronic Data Technology (Hong Kong) Limited; |
| 633 | 20210151741 | 2019-11-15 | METAL-CONTAINING GRAPHENE BALLS AS AN ANODE ACTIVE MATERIAL FOR AN ALKALI METAL BATTERY | Aruna Zhamu; Hao-Hsun Chang; Bor Jang; | |
| 634 | 20200152977 | 2019-11-07 | COMPOSITE STRUCTURE, LITHIUM BATTERY, AND METHOD OF PRODUCING COMPOSITE STRUCTURE | Shingo Ohta; Masaki Watanabe; Yasutoshi Hojo; | Toyota Jidosha Kabushiki Kaisha; |
| 635 | 20200152978 | 2019-11-07 | POSITIVE ACTIVE MATERIAL, METHOD OF MANUFACTURING THE SAME AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Kwanghwan CHO; Kisuk KANG; Ilseok KIM; Won SEONG; | |
| 636 | 20210083317 | 2019-11-01 | LITHIUM ION CONDUCTIVE COMPOSITE MATERIAL FOR ALL SOLID-STATE LITHIUM BATTERY, AND SOLID POLYMER ELECTROLYTE AND ALL SOLID-STATE LITHIUM BATTERY INCLUDING THE SAME | Chun-Chen Yang; Yi-Shiuan Wu; Hoai-Khang Tran; Min-Zen Lee; | |
| 637 | 20210126235 | 2019-10-29 | METHOD FOR PREPARATION OF COATING MATERIAL FOR TERNARY LITHIUM BATTERY | Biing-Jiun Perng; | |
| 638 | 20200106083 | 2019-09-27 | PROCESS FOR PREPARING A GELLED ELECTROLYTE | Camille Guerin; Gérard Gebel; Lionel Picard; | |
| 639 | 20200381705 | 2019-09-20 | LITHIUM ALLOY AS AN ANODE MATERIAL AND A PREPARATION METHOD THEREOF | Jingze LI; Weishang JIA; Zeyu YAO; Yuchi LIU; Siji QU; Chao LI; | University of Electronic Science and Technology of China; |
| 640 | 20220059904 | 2019-09-16 | MULTILAYER MEMBRANES, SEPARATORS, BATTERIES, AND METHODS | Eric White; Brian Stepp; Geoffrey Tice; | |

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| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 641 | 20210320291 | 2019-09-05 | Rechargeable Lithium Battery with a Composite Anode | Ulrich Wietelmann; | |
| 642 | 20210316994 | 2019-08-28 | Spherical Graphite for Lithium Battery and Preparation Method thereof | Qi WU; | |
| 643 | 20190379046 | 2019-08-21 | OLIGOMER-POLYMER AND LITHIUM BATTERY | Fu-Ming Wang; Bing-Joe Hwang; Chorng-Shyan Chern; Jung-Mu Hsu; Jing-Pin Pan; Chang-Rung Yang; Quoc Pham; | National Taiwan University of Science and Technology; Industrial Technology Research Institute; |
| 644 | 20200317245 | 2019-08-15 | CAMERA DOLLY ELECTRICAL SYSTEM | Leonard Chapman; | |
| 645 | 20210320331 | 2019-08-07 | SOLID POLYMER MATRIX ELECTROLYTE (PME) FOR RECHARGEABLE LITHIUM BATTERIES AND BATTERIES MADE THEREWITH | Anaba Anani; | |
| 646 | 20190356012 | 2019-08-02 | SOLID-STATE ELECTROLYTE FOR A LITHIUM BATTERY | Weston Hermann; | |
| 647 | 20220320619 | 2019-07-26 | METHOD FOR RECYCLING LITHIUM BATTERIES | Christian HANISCH; Tobias ELWERT; Lisa BRÜCKNER; | |
| 648 | 20190363394 | 2019-07-23 | PROCESS FOR PRODUCING LITHIUM BATTERIES HAVING AN ULTRA-HIGH ENERGY DENSITY | Aruna Zhamu; Bor Jang; | Global Graphene Group, Inc.; |
| 649 | 20200106064 | 2019-07-12 | DETACHABLE COMBINED LITHIUM BATTERY POWER SUPPLY | Dexin LIANG; Qiping XIANG; | |
| 650 | 20210009235 | 2019-07-11 | SNOW VEHICLE | Hiroyuki OKADA; Lucas FUREY; Gerard KARPIK; James VIZANKO; | |
| 651 | 20190341656 | 2019-07-11 | NEGATIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Jung-Hyun Nam; Jong-Hwan Park; Yeon-Joo Choi; Eon-Mi Lee; Hoon Seok; | |
| 652 | 20210408578 | 2019-07-09 | FUNCTIONALIZED METAL OXIDE NANOPARTICLES AND SOLID ELECTROLYTE COMPRISING THE SAME | Juan NICOLÁS AGUADO; Rodrigo PARÍS ESCRIBANO; Elisabetta FEDELI; Oihane GARCÍA CALVO; Andriy KVASHA; Idoia URDAMPILLETA GONZALEZ; | |
| 653 | 20210013729 | 2019-07-09 | Battery Charge/Discharge Management Method And System | Chung-Fu Chou; | |
| 654 | 20220021042 | 2019-07-04 | PLANT FOR THE DISPOSAL OF LITHIUM BATTERIES AND RECOVERY OF LITHIUM | Giustiniano TIBERIO; Domenico D'OTTAVIO; Salvatore COSTA; | |
| 655 | 20210265624 | 2019-06-24 | METHOD FOR SYNTHESISING CORE-SHELL SILICON-GERMANIUM NANOPARTICLES BY LASER PYROLYSIS, METHOD FOR PRODUCING AN ELECTRODE FOR A LITHIUM BATTERY AND ASSOCIATED ELECTRODE | Nathalie HERLIN-BOIME; Antoine DESRUES; Florent BOISMAIN; Cédric HAON; John ALPER; | |
| 656 | 20220216483 | 2019-06-22 | LITHIUM METAL NEGATIVE ELECTRODE AND MANUFACTURING METHOD THEREFOR, AND LITHIUM BATTERY USING NEGATIVE ELECTRODE | Yanming CUI; Zhangbo LIU; Xiaoxiong XU; Yuanqiao HUANG; | |
| 657 | 20220181684 | 2019-06-22 | Hybrid solid-liquid electrolyte lithium storage battery | Xiaoxiong XU; Chao DING; Yonglong ZHANG; Zanzan ZHANG; | |
| 658 | 20210261434 | 2019-06-18 | METHOD FOR PRODUCING A LITHIUM-CONTAINING METAL OXIDE THAT CAN BE USED AS AN ACTIVE MATERIAL FOR A POSITIVE ELECTRODE | David Peralta; | |
| 659 | 20200028154 | 2019-06-18 | METHOD FOR DETERMINING STATE OF CHARGE IN LITHIUM BATTERIES THROUGH USE OF A NOVEL ELECTRODE | Mohit Singh; Xiao-Liang Wang; | Seeo, Inc.; |
| 660 | 20210305550 | 2019-06-14 | CATHODE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, METHOD FOR MANUFACTURING SAME, AND RECHARGEABLE LITHIUM BATTERY COMPRISING SAME | Soohyeon KIM; Jongmin KIM; | |

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| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 661 | 20200176811 | 2019-06-13 | LITHIUM SOLID-STATE CONDUCTOR, LITHIUM BATTERY INCLUDING THE CONDUCTOR, AND METHODS OF MANUFACTURE THEREOF | Yan Wang; Lincoln Miara; Jeong-Ju Cho; | SAMSUNG ELECTRONICS CO., LTD.; |
| 662 | 20210091401 | 2019-05-31 | MINIATURE BUTTON RECHARGEABLE LITHIUM BATTERY STRUCTURE ASSEMBLY | Qigang DONG; | WEIFANG YUYUAN ELECTRONICS CO.,LTD; |
| 663 | 20210210782 | 2019-05-21 | Composite Solid Electrolyte Including Lithium Iron Phosphate | Jan Miller; Xuming Wang; Qinyu Zhu; | |
| 664 | 20190355945 | 2019-05-17 | SENSOR SUB CONFIGURATION | Michael Alkier; | |
| 665 | 20190355971 | 2019-05-16 | NEGATIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Young-Min KIM; | |
| 666 | 20190348844 | 2019-05-14 | DYNAMIC PULSE CHARGING SCHEME FOR SERIES-CONNECTED BATTERIES | Pedro Moss; Mark Weatherspoon; Jamal Stephens; | |
| 667 | 20210020983 | 2019-05-13 | IONIC CONDUCTOR AND LITHIUM BATTERY | Daisuke SHISHIHARA; Yuki TAKEUCHI; Ayako KONDO; Hideaki HIKOSAKA; Hidetoshi MIZUTANI; | NGK SPARK PLUG CO., LTD.; |
| 668 | 20190267671 | 2019-05-13 | ELECTROLYTE AND SECONDARY LITHIUM BATTERY | Ming ZHANG; Changlong HAN; Cui ZHANG; Xiaochong ZHOU; Feng JU; | |
| 669 | 20190341620 | 2019-05-06 | REDUCING HAZARD OF LITHIUM DENDRITES IN LITHIUM CELLS | Celina Mikolajczak; | |
| 670 | 20210284554 | 2019-04-29 | PROCESS FOR PRODUCTION OF LITHIUM BATTERY ELECTRODES FROM BRINE | Michael MISLAN; | |
| 671 | 20190247925 | 2019-04-23 | Metal Foam for Electrode of Secondary Lithium Battery, Preparing Method Thereof, and Secondary Lithium Battery Including the Metal Foam | Ji Um; Hyeji Park; Myounggeun Choi; Hyelim Choi; Yong-Hun Cho; Yung-Eun Sung; Heeman Choe; | |
| 672 | 20200335792 | 2019-04-22 | PARTICULATES OF CONDUCTING POLYMER NETWORK-PROTECTED ANODE ACTIVE MATERIAL PARTICLES FOR LITHIUM-ION BATTERIES | Bor Jang; | Nanotek Instruments, Inc.; |
| 673 | 20220006118 | 2019-04-15 | MODIFIED SOLID ELECTROLYTE MEMBRANE, PREPARATION METHOD THEREFOR, AND LITHIUM BATTERY | Zhao Yan; Fei Luo; Ling Tao; Hong Li; | |
| 674 | 20200328403 | 2019-04-10 | CONDUCTING POLYMER NETWORK-ENABLED PARTICULATES OF ANODE ACTIVE MATERIAL PARTICLES FOR LITHIUM-ION BATTERIES | Bor Jang; | Nanotek Instruments, Inc.; |
| 675 | 20200322704 | 2019-04-02 | Sound Cloud Ceiling Fan Design | Richard Mosher; | |
| 676 | 20220190331 | 2019-03-29 | LITHIUM BATTERY AND USE OF A GERMANIUM ORGANYL-BASED ELECTROLYTE ADDITIVE AS AN ELECTROLYTE ADDITIVE THEREIN | Sven Klein; Jan-Patrick Schmiegel; Hao Jia; Tobias Placke; Martin Winter; Jakub Reiter; Lydia Terborg; Quan Fan; | |
| 677 | 20220173435 | 2019-03-28 | LITHIUM BATTERY AND USE OF A UREA-BASED ELECTROLYTE ADDITIVE AS AN ELECTROLYTE ADDITIVE THEREIN | Jakub Reiter; Lydia Terborg; Sven Klein; Xin Qi; Tobias Placke; Martin Winter; Xiqing Wang; Jan-Patrick Schmiegel; | |
| 678 | 20200313162 | 2019-03-26 | METHOD OF PRODUCING GRAPHENE-ENCAPSULATED GRAPHITE-SUPPORTED ANODE ACTIVE MATERIAL FOR LITHIUM-ION BATTERIES | Aruna Zhamu; Yu-Sheng Su; Bor Jang; | Nanotek Instruments, Inc.; |
| 679 | 20200313170 | 2019-03-26 | GRAPHENE-ENCAPSULATED GRAPHITE-SUPPORTED ANODE ACTIVE MATERIAL FOR LITHIUM-ION BATTERIES | Aruna Zhamu; Yu-Sheng Su; Bor Jang; | Nanotek Instruments, Inc.; |
| 680 | 20210020946 | 2019-03-19 | POLYAMIDE-IMIDE BINDER FOR LITHIUM BATTERY | Bryan BENSON; R TILFORD; Maurizio BISO; Christine HAMON; | |

# PATENT APPLICATION PUBLICATIONS

| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 681 | 20200283631 | 2019-03-08 | POLYAMIDES, POLYUREAS, AND POLYPHOSPHORAMIDES AS ELECTROLYTES FOR LITHIUM ION BATTERIES | Sambasiva Bheemireddy; Hany Eitouni; | |
| 682 | 20200188154 | 2019-03-07 | Knee Brace Massager Apparatus | Raymond Hsu; | |
| 683 | 20220181707 | 2019-03-06 | LITHIUM BATTERY PASSIVATION DETECTION, ACTIVATION AND MAINTENANCE MODULE | Robert Reginald Albert FELTHAM; Martin CHIARIZIO; Andreas BRENNER; | |
| 684 | 20210066712 | 2019-03-06 | POSITIVE ELECTRODE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Young-Ki KIM; Soonrewl LEE; Young-Hun LEE; Jiyeon JANG; Ickkyu CHOI; Mingzi HONG; Soonkie HONG; | |
| 685 | 20190280292 | 2019-03-06 | LITHIUM METAL FOILS WITH LOW DEFECT DENSITY | Timothy Westmore; Hany Eitouni; Almira Nuval; Russell Pratt; | |
| 686 | 20220131129 | 2019-02-26 | METHOD AND APPARATUS FOR PRODUCING TERNARY CATHODE MATERIAL | Edward FENG; Rocky WEI; | |
| 687 | 20200259206 | 2019-02-13 | REDUCED LLTO PARTICLES WITH ELECTRONICALLY INSULATING COATINGS | Katherine Harry; Hany Eitouni; | |
| 688 | 20200407841 | 2019-02-01 | THIN FILM FORMATION METHOD, THIN FILM FORMATION APPARATUS, AND LITHIUM BATTERY | Manabu GIBO; Shunsuke SASAKI; Takahito KIMOTO; | |
| 689 | 20210005858 | 2019-01-16 | SEPARATOR, METHOD FOR MANUFACTURING SAME, AND LITHIUM BATTERY INCLUDING SAME | Yongkyoung Kim; Gain Kim; Jungyoon Lee; | |
| 690 | 20200119353 | 2019-01-02 | ELECTROCHEMICALLY STABLE ANODE PARTICULATES FOR LITHIUM SECONDARY BATTERIES | Bor Jang; | Nanotek Instruments, Inc.; |
| 691 | 20200210541 | 2018-12-31 | Detection of Lithium Plating Potential with Multi-Particle Reduced-Order Model | Sangwoo Han; Saeed Rahimian; Mehdi Forouzan; Ying Liu; Yifan Tang; | Chongqing Jinkang New Energy Vehicle, Ltd.; SF Motors, Inc.; |
| 692 | 20190207214 | 2018-12-27 | DISORDERED ROCK SALT ELECTRODES FOR LITHIUM BATTERIES | Michael THACKERAY; Eungje LEE; Jason CROY; | UCHICAGO ARGONNE, LLC; |
| 693 | 20190372109 | 2018-12-21 | COMPOSITE CATHODE ACTIVE MATERIAL, CATHODE AND LITHIUM BATTERY INCLUDING THE SAME, AND METHOD OF PREPARING THE COMPOSITE CATHODE ACTIVE MATERIAL | San MOON; Jayhyok SONG; Sungjin AHN; Donghee YEON; Dongjin HAM; Jinhwan PARK; | |
| 694 | 20210036329 | 2018-12-19 | LITHIUM BATTERY WITH IMPROVED PENETRATION CHARACTERISTICS AND MANUFACTURING METHOD THEREFOR | Sejong SHIN; Ochang GWON; Hogon YOU; Rizhu YIN; Taekyeong LEE; Inho JUNG; | |
| 695 | 20220059812 | 2018-12-19 | ELECTROCHEMICALLY ACTIVE DISPERSIONS AND COMPOSITES FOR RECHARGEABLE BATTERY ANODES | Mark OBROVAC; Yidan CAO; Jun WANG; | |
| 696 | 20190123384 | 2018-12-12 | SURFACE COATINGS FOR CERAMIC ELECTROLYTE PARTICLES | Katherine Harry; Hany Eitouni; | |
| 697 | 20200086212 | 2018-12-04 | Easy-to-store Combined Wireless Gun-shaped Simulation Game Controller | Ka WONG; | |
| 698 | 20190097229 | 2018-11-30 | ELECTRODES INCORPORATING COMPOSITES OF GRAPHENE AND SELENIUM-SULFUR COMPOUNDS FOR IMPROVED RECHARGEABLE LITHIUM BATTERIES | Ilhan Aksay; Daniel Dabbs; Michael Pope; | VORBECK MATERIALS CORP.; |
| 699 | 20190157671 | 2018-11-16 | POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Young-Hun LEE; Hyunjei CHUNG; Yongmok CHO; Yoonyoung CHOI; Ickkyu CHOI; | |
| 700 | 20190081356 | 2018-11-09 | NON-AQUEOUS ELECTROLYTIC SOLUTION AND LITHIUM BATTERY | Koji ABE; Takashi HATTORI; Yahuo MATSUMORI; | UBE INDUSTRIES, LTD.; |

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| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 701 | 20190150691 | 2018-10-25 | BATTERY FOR AUTONOMOUS FLOOR-CLEANING APPARATUS | Hongli Song; | |
| 702 | 20200127277 | 2018-10-18 | POROUS GRAPHENE PARTICULATE-PROTECTED ANODE ACTIVE MATERIALS FOR LITHIUM BATTERIES | Sheng-Yi Lu; Wen Chiu; Bor Jang; | Nanotek Instruments, Inc.; |
| 703 | 20190051895 | 2018-10-17 | POSITIVE ACTIVE MATERIAL, POSITIVE ELECTRODE AND LITHIUM BATTERY INCLUDING THE POSITIVE ACTIVE MATERIAL, AND METHOD OF MANUFACTURING THE POSITIVE ACTIVE MATERIAL | Jungmin Han; Jaehong Lim; Yongchan You; | |
| 704 | 20200119337 | 2018-10-15 | ELECTROCHEMICALLY STABLE ANODE PARTICULATES FOR LITHIUM SECONDARY BATTERIES AND METHOD OF PRODUCTION | Bor Jang; | Nanotek Instruments, Inc.; |
| 705 | 20200119359 | 2018-10-12 | OLIGOMER AND LITHIUM BATTERY | Chorng-Shyan Chern; Fu-Ming Wang; Quoc Pham; | National Taiwan University of Science and Technology; |
| 706 | 20190123352 | 2018-10-11 | ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Youngsan KO; Minjae KIM; Kijun KIM; Duckhyun KIM; Jinhee KIM; Woonsuk JANG; Hyeoksu JANG; | |
| 707 | 20190123356 | 2018-10-10 | ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Youngsan KO; Minjae KIM; Kijun KIM; Dong-Ho SON; Woonsuk JANG; Seung-Hun HAN; | |
| 708 | 20200343595 | 2018-09-27 | RECHARGEABLE BATTERY | Xiaolin LIU; Jianjun SHU; | |
| 709 | 20200099046 | 2018-09-25 | NANO-ALLOY INTERPHASE FOR LITHIUM METAL SOLID STATE BATTERIES | John MULDOON; Keita NIITANI; Patrick BONNICK; | Toyota Motor Engineering & Manufacturing North America, Inc.; |
| 710 | 20210341146 | 2018-09-21 | PUSH-OUT PORTABLE ARC IGNITER | Jiawei FAN; | JIANGSU TIANWANG SOLAR TECHNOLOGY CO., LTD; |
| 711 | 20200091754 | 2018-09-17 | LOW-ENERGY-CONSUMPTION HIGH-FREQUENCY WIRELESS CHARGING SYSTEM FOR LITHIUM BATTERY | Ming Liu; Chengbin Ma; Ming-Liang Fang; Chih-Hao Chuang; | |
| 712 | 20190157708 | 2018-09-13 | Lithium Battery Formation Fixture and Automation Battery Formation Equipment | Tiejun Mao; Zhiquan Wang; Xiaofu Luo; | |
| 713 | 20190051879 | 2018-08-09 | SEPARATOR FOR RECHARGEABLE BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Byungmin LEE; Hana KIM; Jungsue JANG; Myungkook PARK; Seung YANG; Bokyung JUNG; Minho CHO; Rae KIM; Namhee LEE; | |
| 714 | 20190039156 | 2018-08-02 | BLADE HOLDER WITH ADJUSTING SLIDE | Rudolf Supe-Dienes; | |
| 715 | 20190036147 | 2018-07-27 | HYBRID AQUEOUS RECHARGEABLE BATTERY | Xinhai YUAN; Jun MO; Lei ZHOU; Xiongwei WU; Yusong ZHU; Lijun FU; Yuping WU; | Nanjing Tech University; |
| 716 | 20200031234 | 2018-07-26 | SELF-CHARGING ELECTRIC CAR SYSTEM | Regnault Bamiji; | |
| 717 | 20190036120 | 2018-07-26 | Amorphous LiF as an Artificial SEI Layer for Lithium Batteries | Mordechai Kornbluth; Jonathan Mailoa; Boris Kozinsky; Georgy Samsonidze; John Christensen; | |
| 718 | 20190027739 | 2018-07-24 | POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Minhan Kim; Dongjin Kim; Ilseok Kim; Dohyung Park; Junseok Park; Daehoe Lee; Okgyu Lim; Gyuran Jeon; Jeonjin Choi; | |
| 719 | 20200227725 | 2018-07-19 | LITHIUM SULFUR BATTERIES AND COMPONENTS THEREOF | Yong JOO; Brian WILLIAMS; | |
| 720 | 20200028205 | 2018-07-18 | FAST-CHARGEABLE LITHIUM BATTERY ELECTRODES | Aruna Zhamu; Bor Jang; | Nanotek Instruments, Inc.; |

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| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 721 | 20210079281 | 2018-07-10 | IMMERSION TYPE HEAT DISSIPATION COOLING LIQUID FOR POWER LITHIUM BATTERY AND METHOD FOR PREPARING THEREOF | HAIJUN JIAO; JUNHUA XU; ZHIPENG ZHU; | |
| 722 | 20190140282 | 2018-07-05 | METHOD FOR SYNTHESIZING ADDITIVE OF LITHIUM BATTERY AND CATHODE THEREOF | Fu-Ming WANG; Quoc-Thai PHAM; Chorng-Shyan CHERN; Yen-Jung HSU; | |
| 723 | 20190013515 | 2018-07-05 | SILICON-CARBON COMPOSITE ANODES FOR LITHIUM-ION BATTERIES AND METHOD OF MAKING THE SAME | Vilas Pol; Jialiang Tang; | Purdue Research Foundation; |
| 724 | 20180323470 | 2018-07-02 | COPOLYMERS OF PEO AND FLUORINATED POLYMERS AS ELECTROLYTES FOR LITHIUM BATTERIES | Jin Yang; Jonathan Pistorino; Russell Pratt; Hany Eitouni; | Seeo, Inc.; |
| 725 | 20190393545 | 2018-06-29 | POLY(PYROCARBONATE)-BASED POLYMER ELECTROLYTES FOR HIGH VOLTAGE LITHIUM ION BATTERIES | Malar Azagarsamy; Kulandaivelu Sivanandan; Hany Eitouni; Jonathan Mailoa; Georgy Samsonidze; Boris Kozinsky; | |
| 726 | 20190006679 | 2018-06-29 | ANODE AND LITHIUM BATTERY INCLUDING THE SAME | Changui JEONG; Jiyeon KWAK; Youngugk KIM; Uisong DO; Sangeun PARK; Yuntaek OH; Yongchan YOU; Inoh CHA; Heeseon CHOI; | |
| 727 | 20200395612 | 2018-06-27 | SLURRY FOR POSITIVE ELECTRODE OF SECONDARY LITHIUM BATTERY, PREPARATION METHOD FOR SAME, AND APPLICATION THEREOF | Tian XIE; Weizhen FAN; Le YU; Jingwei ZHAO; | GUANGZHOU TINCI MATERIALS TECHNOLOGY CO., LTD.; |
| 728 | 20200127264 | 2018-06-27 | SEPARATOR, LITHIUM BATTERY EMPLOYING SAME, AND METHOD FOR MANUFACTURING SEPARATOR | Gain KIM; Yongkyoung KIM; Jinwoo KIM; Hyungbae KIM; | |
| 729 | 20180320518 | 2018-06-27 | Solid-liquid phase change driven heat engine via hydraulic oil power generation | Yanming Wei; | |
| 730 | 20210265702 | 2018-06-26 | COMPOSITE LITHIUM BATTERY SEPARATOR AND PREPARATION METHOD THEREFOR | Yongqiang YAO; Xiang PING; Liuhao ZHANG; Bin YE; Xiufeng CHEN; | |
| 731 | 20180294461 | 2018-06-12 | COMPOSITE FILM, METHOD OF PREPARING THE SAME AND LITHIUM BATTERY HAVING THE SAME | DALI FENG; WEI SONG; JIALING HU; LINA JIN; JUN SHAN; LONG HE; | |
| 732 | 20190372186 | 2018-05-30 | SULFONE ELECTROLYTES FOR CAPACITOR-ASSISTED BATTERIES | Dewen Kong; Zhe Li; Xiusheng Zhang; | |
| 733 | 20190372174 | 2018-05-29 | METHOD OF IMPROVING FIRE-RESISTANCE OF A LITHIUM BATTERY | Hui He; Yu-Sheng Su; Aruna Zhamu; Bor Jang; | Nanotek Instruments, Inc.; |
| 734 | 20210159541 | 2018-05-10 | ELECTROLYTE FOR LITHIUM BATTERY AND LITHIUM BATTERY COMPRISING SAME | Myunghwan JEONG; Kyoungsoo KIM; Erang CHO; Manseok HAN; Taejeong KIM; Joowan PYO; | |
| 735 | 20180331400 | 2018-05-10 | LITHIUM BATTERY | Delphine GUY-BOUYSSOU; | STMicroelectronics (Tours) SAS; |
| 736 | 20190341648 | 2018-05-07 | HOLE-CONTAINING ELECTRODE DESIGNS FOR LITHIUM ION BATTERY AND CAPACITOR HYBRID SYSTEMS | Qiang Wu; Xiusheng Zhang; Xiaochao Que; Jingjing Wu; | |
| 737 | 20180309157 | 2018-04-18 | PROTECTED LITHIUM ELECTRODES HAVING A LIQUID ANOLYTE RESERVOIR ARCHITECTURE AND ASSOCIATED RECHARGEABLE LITHIUM BATTERY CELLS | Steven Visco; Vitaliy Nimon; Yevgeniy Nimon; Bruce Katz; Lutgard De Jonghe; Alexei Petrov; | |
| 738 | 20190308043 | 2018-04-10 | FIRE SUPPRESSION AGENT WITH VERMICULITE | Adam Chattaway; Robert Dunster; | |
| 739 | 20190311594 | 2018-04-10 | CONTAINER FOR LITHIUM BATTERY | Robert Norris; Terry Simpson; | |
| 740 | 20210408599 | 2018-03-30 | ACHIEVING SAFE AND STABLE ANODES FOR LI ION, LI-S AND LI-AIR BATTERIES: ENHANCED LI+-SOLVENT COORDINATION IN ELECTROLYTES | Lain-Jong LI; Jun MING; | |

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| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 741 | 20190248958 | 2018-03-19 | PREPARATION METHOD OF OLIGOMER ADDITIVE, OLIGOMER ADDITIVE, AND LITHIUM BATTERY | Fu-Ming Wang; Chorng-Shyan Chern; | National Taiwan University of Science and Technology; |
| 742 | 20200044278 | 2018-03-19 | BATTERY SEPARATORS, ELECTRODES, CELLS, LITHIUM BATTERIES AND RELATED METHODS | Zhengming ZHANG; Weifeng Fang; | |
| 743 | 20190288251 | 2018-03-14 | Energy Storage System for Installation on Two- and Three-Dimensional Vertical Surfaces | Dieter Nowak; Werner Nowak; | Micron Corporation; |
| 744 | 20180198165 | 2018-03-05 | NON-AQUEOUS ELECTROLYTIC SOLUTION AND LITHIUM BATTERY | Koji ABE; Takashi HATTORI; Yasuo MATSUMORI; | UBE INDUSTRIES, LTD.; |
| 745 | 20180198170 | 2018-03-02 | ALL-SOLID-STATE LITHIUM BATTERY | Yuki FUJITA; Nobuyuki KOBAYASHI; | NGK INSULATORS, LTD.; |
| 746 | 20190267663 | 2018-02-23 | Method of Producing Elastomer Composite-Encapsulated Particles of Anode Active Materials for Lithium Batteries | Aruna Zhamu; Bor Jang; | Nanotek Instruments, Inc.; |
| 747 | 20190217132 | 2018-02-21 | Portable Respirator with Potential Equilibrium and Carbon Oxygen Exchange | Chun LAU; | |
| 748 | 20190367657 | 2018-02-02 | BINDER AGENT COMPOSITION FOR LITHIUM BATTERY ELECTRODE, AND ELECTRODE USING SAME | Hironori MIZUTA; Kazuki TAKIMOTO; Hiromi WATAHIKI; Kaho SUGIMOTO; Takatoshi MATSUURA; Kuniaki OKAMOTO; Nobutaka SHIMAMURA; | |
| 749 | 20190348714 | 2018-01-17 | TRIFUNCTIONAL ADDITIVES FOR ELECTROLYTE COMPOSITION FOR LITHIUM BATTERIES | Kazuki YOSHIDA; Takeo FUKUZUMI; Jinbum KIM; Eri SAWADA; Martin SCHULZ-DOBRICK; | BASF SE; |
| 750 | 20190222038 | 2018-01-12 | Portable Emergency Energy-Storage System with Intelligent Protection | Zhangsheng Chen; | |
| 751 | 20180212257 | 2018-01-05 | CONTROL OF SWELLING OF PRIMARY CELLS THROUGH ELECTROLYTE SELECTION | Timothy Marshall; | |
| 752 | 20180123368 | 2017-12-27 | Wireless charging device and system thereof | Yu Tian; Wenyan Jiang; | Haoxiang Electric Energy (Kunshan) Co., Ltd.; |
| 753 | 20180191026 | 2017-12-21 | PROTECTIVE LAYER HAVING IMPROVED CONTACTING FOR LITHIUM CELLS AND/OR LITHIUM BATTERIES | Joerg Thielen; Jean Fanous; Marcus Wegner; | |
| 754 | 20190190012 | 2017-12-15 | HYBRID NEGATIVE ELECTRODES FOR FAST CHARGING AND HIGH-ENERGY LITHIUM BATTERIES | Yan Wu; Meng Jiang; Mark Verbrugge; Raghunathan K; | GM GLOBAL TECHNOLOGY OPERATIONS LLC; |
| 755 | 20190386293 | 2017-12-01 | TERNARY MATERIAL AND PREPARATION METHOD THEREOF, BATTERY SLURRY, POSITIVE ELECTRODE AND LITHIUM BATTERY | Jinghua CHEN; Junfei YOU; Chaqing XU; Wenyu CAO; | BYD COMPANY LIMITED; |
| 756 | 20180083265 | 2017-11-28 | METHOD FOR DETERMINING STATE OF CHARGE IN LITHIUM BATTERIES THROUGH USE OF A NOVEL ELECTRODE | Mohit Singh; Xiao-Liang Wang; | Seeo, Inc.; |
| 757 | 20190165363 | 2017-11-27 | Graphene Foam-Protected Niobium-Based Composite Metal Oxide Anode Active Materials for Lithium Batteries | Aruna Zhamu; Bor Jang; | Nanotek Instruments, Inc.; |
| 758 | 20180159132 | 2017-11-22 | ANODE ACTIVE MATERIAL PARTICLES WITH ARTIFICIAL SEI-LAYER BY MEANS OF GRAFT-TO-POLYMERIZATION | Andreas GONSER; Wilfried AICHELE; | |
| 759 | 20190334196 | 2017-11-20 | SIC-MOF ELECTROLYTE | Joerg Thielen; Olga Heckel; | |
| 760 | 20180175385 | 2017-11-20 | Graphene-Vanadium Oxide Nanowire, Method for Preparation Thereof, Positive Active Material Comprising the Same and Lithium Battery Comprising the Positive Active Material | Won HONG; Hae KIM; Jin LEE; Sang LEE; Yeon KIM; | |

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| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 761 | 20190140324 | 2017-11-03 | BATTERY CHARGING METHOD | Alex CH. MEVAY; | |
| 762 | 20180351163 | 2017-10-25 | STABILIZED LITHIUM COBALT OXIDE SPINEL ELECTRODES FOR LITHIUM BATTERIES | Michael THACKERAY; Eungje LEE; Jason CROY; | UCHICAGO ARGONNE, LLC; |
| 763 | 20180047980 | 2017-10-20 | POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY | BYUNG-SUNG KWAK; JOSEPH GORDON, II; OMKARAM NALAMASU; YANGKOOK SUN; WONGI KIM; SEUNGMIN OH; | |
| 764 | 20180110311 | 2017-10-19 | SMART ANTI-LOST PORTABLE BAG | Jessey Lee; Hongbo Zhang; | |
| 765 | 20190115591 | 2017-10-16 | Surface-Stabilized Cathode Active Material Particles, Lithium Secondary Batteries Containing Same, and Method of Manufacturing | Aruna Zhamu; Bor Jang; | Nanotek Instruments, Inc.; |
| 766 | 20180108914 | 2017-10-13 | ELECTRODE FOR LITHIUM BATTERY, LITHIUM BATTERY INCLUDING THE SAME, AND METHOD OF MANUFACTURING THE LITHIUM BATTERY | Ilwon SEONG; Seungho NA; Seojae LEE; Jaeyeon LEE; Chonghoon LEE; Kyeongho JANG; Woonsuk JANG; Yeonbok JEONG; Jongwoo CHOI; Kichul HAM; | |
| 767 | 20190260101 | 2017-10-12 | RECYCLING METHOD FOR TREATING USED BATTERIES, IN PARTICULAR RECHARGEABLE BATTERIES, AND BATTERY PROCESSING INSTALLATION | Christian HANISCH; | |
| 768 | 20200274167 | 2017-09-29 | LITHIUM PRIMARY BATTERY HAVING HIGH DISCHARGE EFFECT AND GOOD SAFETY | Xianwen HE; Wenshuo PAN; Yuanjun XIE; | |
| 769 | 20200266452 | 2017-09-29 | PRIMARY LITHIUM BATTERY HAVING HIGH DISCHARGE EFFICIENCY | Xianwen HE; Wenshuo PAN; Zhongfen LAO; | |
| 770 | 20180115021 | 2017-09-26 | LITHIUM BATTERY AND METHOD FOR MANUFACTURING SAME | Young-Gi LEE; Dong SHIN; Kwang KIM; | ELECTRONICS AND TELECOMMUNICATIONS RESEARCH INSTITUTE; |
| 771 | 20180083317 | 2017-09-19 | ADDITIVE COMPOSITION FOR LITHIUM BATTERY ELECTROLYTE, ORGANIC ELECTROLYTE INCLUDING THE SAME, AND LITHIUM BATTERY INCLUDING THE ADDITIVE COMPOSITION | Sejeong PARK; Hoseok YANG; Sujeong KOH; Yunhee KIM; Hyunwoo KIM; Minyoung LEE; Heeyeon HWANG; | |
| 772 | 20170373300 | 2017-09-06 | ALL SOLID STATE LITHIUM BATTERY | Kazuki MAEDA; Toshihiro YOSHIDA; Masahiro SHIMONO; Natsumi SHIMOGAWA; | NGK INSULATORS, LTD.; |
| 773 | 20190020015 | 2017-08-24 | LITHIUM MANGANESE IRON PHOSPHATE-BASED PARTICULATE FOR A CATHODE OF A LITHIUM BATTERY, LITHIUM MANGANESE IRON PHOSPHATE-BASED POWDERY MATERIAL CONTAINING THE SAME, AND METHOD FOR MANUFACTURING THE POWDERY MATERIAL | Hsin-Ta Huang; Tai-Hung LIN; Yi-Hsuan WANG; Chih-Tsung Hsu; | |
| 774 | 20170358822 | 2017-08-14 | POLYMER COMPOSITION WITH ELECTROPHILIC GROUPS FOR STABILIZATION OF LITHIUM SULFUR BATTERIES | Russell Pratt; Hany Eitouni; Kulandaivelu Sivanandan; | |
| 775 | 20170358823 | 2017-08-14 | POLYMER COMPOSITION WITH ELECTROPHILIC GROUPS FOR STABILIZATION OF LITHIUM SULFUR BATTERIES | Russell Pratt; Hany Eitouni; Kulandaivelu Sivanandan; | |
| 776 | 20170334724 | 2017-08-04 | COMPOSITIONS AND METHODS FOR MANUFACTURING A CATHODE FOR LITHIUM SECONDARY BATTERY | Dong Kim; Sa Kim; Young Kim; Jun Song; Woo Cho; Jeom Kim; Dong Kim; | |
| 777 | 20180040917 | 2017-07-31 | RECHARGEABLE LITHIUM BATTERY | Holger Fink; Joachim Fetzer; Thorsten Ochs; Sarmimala Hore; | |
| 778 | 20180026257 | 2017-07-20 | NEGATIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, METHOD OF PREPARING SAME, AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Doori OH; Chul YOUM; | |
| 779 | 20170317386 | 2017-07-20 | NON-AQUEOUS ELECTROLYTIC SOLUTION AND LITHIUM BATTERY | Koji ABE; Takashi HATTORI; Yasuo MATSUMORI; | UBE INDUSTRIES, LTD.; |
| 780 | 20180026302 | 2017-07-20 | HIGH-PERFORMANCE CERAMIC-POLYMER SEPARATORS FOR LITHIUM BATTERIES | Jitendra Kumar; Guru Subramanyam; | |

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| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 781 | 20190046822 | 2017-07-11 | AUTOMATIC FIRE EXTINGUISHER | Masaya IWASAKI; Yuichi KOUGA; | |
| 782 | 20170309962 | 2017-07-07 | NON-AQUEOUS ELECTROLYTIC SOLUTION AND LITHIUM BATTERY | Koji ABE; Takashi HATTORI; Yasuo MATSUMORI; | UBE INDUSTRIES, LTD.; |
| 783 | 20190148710 | 2017-07-06 | LITHIUM BATTERIES | Yasuyuki Kusumoto; Miyuki Nakai; | Panasonic Intellectual Property Management Co., Ltd.; |
| 784 | 20180026262 | 2017-06-13 | NEGATIVE ACTIVE MATERIAL, LITHIUM BATTERY INCLUDING THE SAME, AND METHOD OF PREPARING THE NEGATIVE ACTIVE MATERIAL | Changui JEONG; Jiyeon KWAK; Yeongap KIM; Youngugk KIM; Uisong DO; Sangeun PARK; Yuntaek OH; Yongchan YOU; Inoh CHA; Heeseon CHOI; | |
| 785 | 20200328401 | 2017-06-07 | PROCESS FOR HEAT TREATING A LITHIUM BATTERY | Margaud LECUYER; Vincent BODENEZ; Philippe BERNARDO; Mathieu DRU; Marc DESCHAMPS; | Blue Solutions; |
| 786 | 20170346070 | 2017-05-26 | POSITIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Ji-Hyun Kim; Chang-Wook Kim; | |
| 787 | 20170256795 | 2017-05-18 | CATHODE MATERIAL PREPARATION METHOD, CATHODE MATERIAL AND LITHIUM-ION BATTERY | Dmitrij SEMENENKO; Alina BELOVA; Daniil ITKIS; Viktor KRIVCHENKO; | |
| 788 | 20180145330 | 2017-05-10 | OLIGOMER AND LITHIUM BATTERY | Fu-Ming Wang; Chorng-Shyan Chern; Jung-Mu Hsu; | National Taiwan University of Science and Technology; |
| 789 | 20170244136 | 2017-05-09 | METHOD OF QUICK CHARGING A LITHIUM BATTERY FOR A BRUSHLESS DC MOTOR DRIVE SYSTEM | Dehong Wang; Hui Liao; Lijun Peng; | |
| 790 | 20170237061 | 2017-05-04 | METHOD FOR MANUFACTURING ELECTRODE, ELECTRODE MANUFACTURED ACCORDING TO THE METHOD, SUPERCAPACITOR INCLUDING THE ELECTRODE, AND RECHARGABLE LITHIUM BATTERY INCLUDING THE ELECTRODE | Yong-Won SONG; Jung LIM; Tae YOO; Sun KIM; | |
| 791 | 20180256278 | 2017-04-25 | SMART PRESSURE-SENSITIVE MEASURING DEVICE FOR DISTAL FEMORAL TUMOR REMOVAL | TAT YAU; | |
| 792 | 20200303706 | 2017-03-29 | DEPOSITIONS OR LAYERS FOR MICROPOROUS MEMBRANES, IMPROVED MEMBRANES, IMPROVED LITHIUM BATTERY SEPARATORS, IMPROVED BATTERIES, IMPROVED HIGH VOLTAGE LITHIUM BATTERIES, AND RELATED METHODS | Ronnie Smith; Katherine Chemelewski; Shante Williams; Junqing MA; James Rapley; | |
| 793 | 20180248178 | 2017-02-24 | ANODE MATERIALS FOR LITHIUM BATTERY OF IMPROVED TEMPERATURE PERFORMANCE | Chung Chan; Yeming Xu; Chao Cai; Kowk Keung Paul Ho; | |
| 794 | 20170250382 | 2017-02-24 | STRUCTURES OF LITHIUM BATTERY CELL AND MANUFACTURING PROCESS THEREOF | Jing-Yih CHERNG; Pin-Shiuan LI; | |
| 795 | 20170237054 | 2017-02-15 | SYSTEM AND METHOD FOR A REINFORCED CONTAINER ASSOCIATED WITH BATTERY HANDLING | Thomas Mast; | |
| 796 | 20180228238 | 2017-02-14 | HELMET WITH BUILT-IN AUTOMOBILE DATA RECORDER | CAIO GANSAUSKAS; | |
| 797 | 20180108945 | 2017-02-13 | LITHIUM BATTERY, SOLID ELECTROLYTE MEMBRANE AND THEIR MANUFACTURING METHODS THEREOF | CHI-HUNG SU; CHAO-YEN KUO; DER-JUN JAN; | |
| 798 | 20190036122 | 2017-02-10 | ELECTROCHROMIC ELECTRODE FOR ENERGY STORAGE DEVICE | Adriana Iordache; Lionel Picard; Jonathan Skrzypski; Sébastien Solan; | |
| 799 | 20170203135 | 2017-02-08 | CELLULAR TELEPHONE FIRE SUPPRESSION PACKET | Peter Cordani; | |
| 800 | 20170365856 | 2017-01-30 | VIRUS SCAFFOLD FOR SELF-ASSEMBLED, FLEXIBLE AND LIGHT LITHIUM BATTERY | Ki Nam; Chung-Yi Chiang; Angela Belcher; | Massachusetts Institute of Technology; |

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| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 801 | 20170222244 | 2017-01-10 | SOLID ELECTROLYTE AND LITHIUM BATTERY COMPRISING THE SOLID ELECTROLYTE | Hyunjin Kim; Joonhee Kim; Victor Roev; Hyukjae Kwon; Dongmin Im; Kisuk Kang; Youngjoon Bae; | |
| 802 | 20180183090 | 2016-12-28 | SOLID ELECTROLYTE AND LITHIUM BATTERY EMPLOYING THE SAME | Ting-Ju YEH; Ya-Chi CHANG; Shu-Chun YU; Shih-Chieh LIAO; | INDUSTRIAL TECHNOLOGY RESEARCH INSTITUTE; |
| 803 | 20170331148 | 2016-12-27 | LITHIUM ALL-SOLID-STATE BATTERY | Thomas Yersak; Se-Hee Lee; Conrad Stoldt; | |
| 804 | 20170346099 | 2016-12-23 | LITHIUM BATTERY AND METHOD OF PREPARING PROTECTED ANODE | Hongsoo Choi; Yongsu Kim; Yonggun Lee; Wonseok Chang; | |
| 805 | 20170179479 | 2016-12-20 | POSITIVE ACTIVE MATERIAL, LITHIUM BATTERY INCLUDING THE SAME, AND METHOD OF MANUFACTURING THE POSITIVE ACTIVE MATERIAL | YoungJin PARK; DoHyung PARK; MinHan KIM; DongJin KIM; KyoungHyun KIM; IlSeok KIM; | |
| 806 | 20170187024 | 2016-12-15 | SEPARATOR FOR RECHARGEABLE BATTERY AND RECHARGEABLE BATTERY INCLUDING THE SAME | Keewook KIM; Jinkyu PARK; Hyeonsun CHOI; | |
| 807 | 20170365855 | 2016-12-07 | LITHIUM BATTERY | Saebom RYU; Yonggun LEE; Taehwan YU; | |
| 808 | 20180358658 | 2016-12-06 | ELECTROCHEMICAL CELL FOR A LITHIUM BATTERY, COMPRISING A SPECIFIC ELECTROLYTE | Thibaut Gutel; Laura Boutafa; Daniel Tomasi; | |
| 809 | 20170162838 | 2016-12-06 | LEAKTIGHT FEEDTHROUGH OF GLASS-METAL TYPE, ITS USE FOR AN ELECTROCHEMICAL LITHIUM BATTERY, AND ASSOCIATED METHOD OF PRODUCTION | Pascal REVIRAND; Lionel PICARD; | COMMISSARIAT A L'ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES; |
| 810 | 20180375089 | 2016-12-02 | ANODE ACTIVE MATERIAL PARTICLES HAVING AN ARTIFICIAL SEI LAYER | Andreas Gonser; Wilfried Aichele; | |
| 811 | 20170324089 | 2016-11-30 | ELECTRODE MATERIAL, METHOD FOR PRODUCING THE SAME, AND LITHIUM BATTERY | Takehiko SAWAI; Shinji SAITO; Kazunori URAO; Jun NAKAGAWA; Kazuma HANAI; | |
| 812 | 20170084920 | 2016-11-30 | ELECTRODE MATERIAL, METHOD FOR PRODUCING THE SAME, AND LITHIUM BATTERY | Takehiko SAWAI; Shinji SAITO; Kazunori URAO; Jun NAKAGAWA; Kazuma HANAI; | |
| 813 | 20180145334 | 2016-11-23 | POROUS ELECTRODE FOR LITHIUM BATTERY, METHOD OF MANUFACTURING THE SAME, AND LITHIUM BATTERY INCLUDING THE SAME | Minsang SONG; Wei LIU; Yi CUI; | |
| 814 | 20170155173 | 2016-11-23 | RESONATING LITHIUM BATTERY DEVICE WITH DAMPING FUNCTION | Fu-Tzu HSU; Chieh-Sen TU; | |
| 815 | 20170179544 | 2016-11-09 | LITHIUM POSITIVE ELECTRODE MATERIAL AND LITHIUM BATTERY | Hsiu-Fen LIN; Shih-Chieh LIAO; Chia-Chin LEE; Chi-Ju CHENG; Jin-Ming CHEN; | INDUSTRIAL TECHNOLOGY RESEARCH INSTITUTE; |
| 816 | 20180123096 | 2016-10-27 | Means for Assembling Cylindrical Batteries into a Modular and Rebuildable Battery Pack | Shawn McCarty; | |
| 817 | 20190341655 | 2016-10-09 | MODULAR MULTI-CELL BATTERY | Zumeng HAN; Zejun Peng; Zide ZHU; | |
| 818 | 20180261838 | 2016-10-07 | DIRECT SYNTHESIS OF CARBON DOPED TiO2-BRONZE NANOSTRUCTURES AS ANODE MATERIALS FOR HIGH PERFORMANCE LITHIUM BATTERIES | Claudio CAPIGLIA; Remo PROIETTI ZACCARIA; Subrahmanyam GORIPARTI; Ermanno MIELE; Francesco DE ANGELIS; | |
| 819 | 20180097371 | 2016-10-05 | LITHIUM BATTERY MODULE IMBALANCE RESCUE DEVICE AND WIRING ASSEMBLY THEREOF | JAMES LIN; | |
| 820 | 20190023574 | 2016-09-29 | METHOD FOR PRODUCING A LITHIUM BATTERY MATERIAL, MATERIALS AND LITHIUM BATTERY | Marc DUBOIS; Katia GUÉRIN ARAUJO DA SILVA; Élodie DISA-SAINTON; | |

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| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 821 | 20210167373 | 2016-08-25 | CATION-DISORDERED OXIDES FOR RECHARGEABLE LITHIUM BATTERIES AND OTHER APPLICATIONS | Gerbrand Ceder; Jinhyuk Lee; Dong-Hwa Seo; | Massachusetts Institute of Technology; |
| 822 | 20190088940 | 2016-08-25 | CATION-DISORDERED OXIDES FOR RECHARGEABLE LITHIUM BATTERIES AND OTHER APPLICATIONS | Gerbrand Ceder; Jinhyuk Lee; Dong-Hwa Seo; | Massachusetts Institute of Technology; |
| 823 | 20180037132 | 2016-08-05 | SECONDARY LITHIUM BATTERY FOR VEHICLE USE | FU-CHIEH CHEN; | |
| 824 | 20170125843 | 2016-08-02 | LITHIUM BATTERY | Seungtae LEE; Hyunbong CHOI; Miyoung SON; Aeran KIM; Myungheui WOO; Harim LEE; Aehui GOH; | |
| 825 | 20180219224 | 2016-07-28 | Sintered Body Containing Lithium Titanate and Lithium Lanthanum Titanate, Method for Producing Same, and Lithium Battery | Ryota ESAKI; Tsutomu NISHIZAKI; Tetsuya TAMURA; | |
| 826 | 20170229882 | 2016-07-14 | POWER DEVICE HAVING HIGH ELECTRICITY STORAGE PERFORMANCE CAPACITOR | RONG-SAN LIN; | |
| 827 | 20160315355 | 2016-07-05 | CATHODE ACTIVE MATERIAL FOR OVERCHARGE PROTECTION IN SECONDARY LITHIUM BATTERIES | Peter Hallac; Sung-Jin Cho; Frederic Bonhomme; Mohamed Taggougui; David Boone; Qingfang Shi; Alexandre Ntepe; | |
| 828 | 20190288328 | 2016-06-21 | LITHIUM-ION BATTERY WITH WIRE-CONTAINING ELECTRODES | Zhiqiang Yu; Xiaochao Que; Haijing Liu; Wentian Gu; Meiyuan Wu; | |
| 829 | 20170047608 | 2016-06-21 | RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Dong-Hyun SHIN; Young-Kee KIM; Joon-Kil SON; | |
| 830 | 20160351884 | 2016-05-26 | Lithium Battery Core | Wen-Hung Huang; | |
| 831 | 20160351904 | 2016-05-24 | CATHODE ADDITIVE FOR RECHARGEABLE LITHIUM BATTERIES | John Goodenough; Kyusung Park; | |
| 832 | 20160359190 | 2016-05-23 | ELECTRODE COMPOSITE BODY, METHOD OF MANUFACTURING ELECTRODE COMPOSITE BODY, AND LITHIUM BATTERY | Tsutomu TERAOKA; Tomofumi YOKOYAMA; Hitoshi YAMAMOTO; | SEIKO EPSON CORPORATION; |
| 833 | 20160359191 | 2016-05-23 | ELECTRODE COMPOSITE BODY, METHOD OF MANUFACTURING ELECTRODE COMPOSITE BODY, AND LITHIUM BATTERY | Tsutomu TERAOKA; Tomofumi YOKOYAMA; Hitoshi YAMAMOTO; | SEIKO EPSON CORPORATION; |
| 834 | 20170047630 | 2016-05-09 | LITHIUM BATTERY MODULE | Jing-Yih CHERNG; | |
| 835 | 20160254530 | 2016-05-09 | CATHODE MATERIALS FOR SECONDARY (RECHARGEABLE) LITHIUM BATTERIES | Michel Armand; John Goodenough; Akshaya Padhi; Kirakodu Nanjundaswamy; Christian Masquelier; | |
| 836 | 20160322620 | 2016-04-27 | SEPARATOR FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Hana KIM; Hyoungwoo CHOI; Jungsue JANG; Minho CHO; Myungkook PARK; Seungrim YANG; Byungmin LEE; Eon-Mi LEE; Bo JUNG; Sung HAN; | |
| 837 | 20170062865 | 2016-04-13 | DOUBLE-SIDED ALL-SOLID-STATE THIN-FILM LITHIUM BATTERY AND MANUFACTURING METHOD THEREOF | CHI-HUNG SU; YUAN-RUEI JHENG; DER-JUN JAN; TIEN-HSIANG HSUEH; YUH-JENQ YU; | |
| 838 | 20160362047 | 2016-03-08 | Love Steps | Anthonie Moore; Jose Valenzuela; Genaro Valenzuela; | |
| 839 | 20170062826 | 2016-02-25 | ADHESIVE COMPOSITION, ELECTRODE COMPOSITION, ELECTRODE AND LITHIUM BATTERY | Bing-Joe Hwang; Che-Tseng Lin; Tzu-Yang Huang; Nae-Lih Wu; Jau-Jiun Huang; Man-Kit Leung; Cheng-Han Yu; | |
| 840 | 20160248066 | 2016-02-25 | SEPARATORS FOR HIGH VOLTAGE RECHARGEABLE LITHIUM BATTERIES AND RELATED METHODS | Lie Shi; C Wensley; Ronnie Smith; Kwantai Cho; Edward Kruger; | |

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| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 841 | 20160248096 | 2016-02-19 | Lithium Battery Incorporating Tungsten Disulfide Nanotubes | Roc Hatfield; | |
| 842 | 20160233549 | 2016-02-08 | High Salt Concentration Electrolytes For Rechargeable Lithium Battery | Arunkumar TIRUVANNAMALAI; Jaehee HWANG; Xiaobo LI; Yury MATULEVICH; Qichao HU; | |
| 843 | 20170222205 | 2016-01-29 | SEPARATORS, BATTERIES, SYSTEMS, VEHICLES, AND RELATED METHODS | Xiaomin Zhang; Gerald Rumierz; Karl Humiston; Charles Haire; Tyrone Fields; Michael Braswell; Ronald Proctor; Ronnie Smith; | |
| 844 | 20160149202 | 2016-01-23 | NEGATIVE ELECTRODE, NEGATIVE ACTIVE MATERIAL, METHOD OF PREPARING THE NEGATIVE ELECTRODE, AND LITHIUM BATTERY INCLUDING THE NEGATIVE ELECTRODE | Gue-sung KIM; Moon-Seok KWON; Han-su KIM; | |
| 845 | 20160149222 | 2016-01-23 | NEGATIVE ELECTRODE, NEGATIVE ACTIVE MATERIAL, METHOD OF PREPARING THE NEGATIVE ELECTRODE, AND LITHIUM BATTERY INCLUDING THE NEGATIVE ELECTRODE | Gue-sung Kim; Moon-Seok Kwon; Han-su Kim; | |
| 846 | 20160233501 | 2016-01-20 | NEGATIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY COMPRISING SAME | Su-Kyung LEE; Sang-Hyuck AHN; Deok-Hyun KIM; Xianhui MENG; Young CHOI; Sang-Pil KIM; Yong-Chan YOU; | |
| 847 | 20160218392 | 2016-01-14 | ORGANIC ELECTROLYTIC SOLUTION AND LITHIUM BATTERY EMPLOYING THE ORGANIC ELECTROLYTIC SOLUTION | Seungtae Lee; Soojin Kim; Minju Lee; Woocheol Shin; | |
| 848 | 20160197326 | 2016-01-12 | PROTECTED LITHIUM ELECTRODES WITH PROTECTIVE MEMBRANE HAVING A GARNET LIKE STRUCTURE AND LITHIUM BATTERY CELLS THEREOF | Steven Visco; Yevgeniy Nimon; Bruce Katz; | |
| 849 | 20160190585 | 2015-12-28 | COMPOSITE CATHODE ACTIVE MATERIAL, PREPARATION METHOD THEREOF, CATHODE INCLUDING THE MATERIAL, AND LITHIUM BATTERY INCLUDING THE CATHODE | Jaegu Yoon; Donghan Kim; Kwangjin Park; Sukgi Hong; Jinhwan Park; Jaekook Kim; Sungjin Kim; Jihyeon Gim; Jinju Song; | |
| 850 | 20160111698 | 2015-12-28 | SEPARATOR FOR LITHIUM SECONDARY BATTERY AND METHOD FOR MANUFACTURING SAME | Young Lee; So Lee; Na Kang; Jung Kim; Nurasyikin Misdan; Yang-Kook Sun; Hun-Gi Jung; | |
| 851 | 20160164060 | 2015-12-04 | COATED SEPARATORS FOR LITHIUM BATTERIES AND RELATED METHODS | Zhengming Zhang; Jinbo He; Xuefa Li; Insik Jeon; Lie Shi; Jill Watson; | |
| 852 | 20170141429 | 2015-11-27 | LITHIUM-ION CONDUCTING SOLID ELECTROLYTE, METHOD FOR MANUFACTURING THE SAME, AND LITHIUM BATTERY INCLUDING THE SAME | Jong-won LEE; Kyu-nam JUNG; Rak-hyun SONG; Seok-joo PARK; Seung-bok LEE; Tak-hyoung LIM; Sang-don LEE; | |
| 853 | 20160072122 | 2015-11-18 | LITHIUM BATTERIES CONTAINING LITHIUM-BEARING IRON PHOSPHATE AND CARBON | Sébastien Patoux; Sébastien Martinet; Sébastien Launois; Alain Gourgue; Alain Germeau; Isabelle Willems; | |
| 854 | 20160346573 | 2015-11-16 | LITHIUM BATTERY FIRE SUPPRESSION WATER HOSE SYSTEM | Bradley Carson; Dale Carson; | |
| 855 | 20170309963 | 2015-11-06 | HIGH VOLUMETRIC ENERGY DENSITY LITHIUM BATTERY WITH LONG CYCLE LIFE | Wenjuan Liu; Hideaki Maeda; Koichi Numata; Jianxin Ma; Yuhua Kao; Murali Theivanayagam; Ing-Feng Hu; | |
| 856 | 20160133939 | 2015-11-03 | ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Dong-Ho Son; Ki-Jun Kim; | |
| 857 | 20170127490 | 2015-10-30 | INTELLIGENT LIGHTING APPARATUS | BAINIAN HU; | |
| 858 | 20160118818 | 2015-10-22 | Lithium Battery System and Control Method Therefor | Shin YAMAUCHI; | |
| 859 | 20170309971 | 2015-09-30 | ELECTRODE FOR LITHIUM BATTERY, LITHIUM BATTERY AND PASTE FOR ELECTROCHEMICAL CELL | Han ZHANG; Ayumi KOISO; Akihito SHIGEMATSU; Yu IIMURO; Keita NAGAKAWA; Mitsuaki CHIDA; Takaomi HAYASHI; Hitoshi ONISHI; Masataka MIYASATO; Satoko FUJIYAMA; | Mitsui Chemicals, Inc.; |
| 860 | 20160099464 | 2015-09-30 | POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, AND POSITIVE ACTIVE MATERIAL LAYER AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Yuki Takei; Masatsugu Nakano; Heidy Visbal; | |

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| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 861 | 20160093923 | 2015-09-28 | INHERENTLY SAFE THERMO-RESPONSIVE GEL ELECTROLYTES FOR ELECTROCHEMICAL DEVICES | HongPeng Wang; Chun-Yi Liang; | |
| 862 | 20160028082 | 2015-09-25 | Cathode Active Material for Lithium Secondary Battery, and Lithium Secondary Battery Using Same | Su Choi; Sang-Hoon Jeon; Su Kwon; Jeong Gu; Hyun Jung; Sung Cho; Bong Jeong; | |
| 863 | 20160285258 | 2015-09-22 | SAFETY CLAMP SYSTEM FOR EMERGENCY START OF VEHICLE BATTERY | Kun-Chang WU; Po-Hung CHEN; Page XING; | |
| 864 | 20170077496 | 2015-09-11 | METAL GRADIENT-DOPED CATHODE MATERIAL FOR LITHIUM BATTERIES AND ITS PRODUCTION METHOD | Mao-Huang LIU; Chien-Wen JEN; Hsin-Ta HUANG; Cong-Min LIN; | FU JEN CATHOLIC UNIVERSITY; |
| 865 | 20160072153 | 2015-09-08 | ELECTRODE BODY FOR LITHIUM BATTERY, AND LITHIUM BATTERY | Sukenori ICHIKAWA; Hirofumi HOKARI; | |
| 866 | 20160133903 | 2015-09-04 | SEPARATOR FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Yeon-Joo CHOI; Jong-Hwan PARK; Jung-Hyun NAM; Eun-Gyeong LEE; | |
| 867 | 20160049643 | 2015-08-07 | CATHODE MATERIAL, CATHODE INCLUDING THE SAME, AND LITHIUM BATTERY INCLUDING THE CATHODE | In Kim; Eunjung Kim; Sangwoon Yang; Jongbum Lee; Youngeun Kim; Jaekyung Kim; | |
| 868 | 20160316878 | 2015-08-06 | MULTIFUNCTIONAL COMBINED BAG STRUCTURE | Shizhi ZHOU; | |
| 869 | 20170229712 | 2015-07-30 | Superhydrophobic, Nanostructured Protective Layer for Rechargeable Lithium Battery Cells Having a Metal Lithium Anode | Thomas Wöhrle; Martin Tenzer; | |
| 870 | 20160141717 | 2015-07-22 | ELECTROLYTE FOR LITHIUM BATTERY AND LITHIUM BATTERY INCLUDING THE ELECTROLYTE | Minju LEE; Woocheol SHIN; Seungtae LEE; Vladimir EGOROV; Soojin KIM; | |
| 871 | 20160028048 | 2015-07-17 | LITHIUM BATTERY AND METHOD OF MANUFACTURING THE SAME | Young-Gi LEE; Kwang KIM; Kunyoung KANG; Dong SHIN; | ELECTRONICS AND TELECOMMUNICATIONS RESEARCH INSTITUTE; |
| 872 | 20160028103 | 2015-07-16 | ELECTRODE ASSEMBLY, LITHIUM BATTERY, AND METHOD FOR PRODUCING ELECTRODE ASSEMBLY | Tomofumi YOKOYAMA; Sukenori ICHIKAWA; Yasushi YAMAZAKI; Masahiro FURUSAWA; | |
| 873 | 20170013808 | 2015-07-14 | Invisi-Gate | Laura Leavenworth; Jonathan Robbins; | |
| 874 | 20170162865 | 2015-07-10 | CATHODE FOR LITHIUM BATTERIES | Antonio Páez Dueñas; Jesús García San Luis; José Amarilla Álvarez; Beatriz Vázquez Santos; Rosa María Menéndez López; Ricardo Santamaría Ramírez; Clara Blanco Rodríguez; Fernando Calle Gómez; | |
| 875 | 20160006033 | 2015-07-06 | LITHIUM BATTERY | Kyeuyoon Sheem; | |
| 876 | 20160049637 | 2015-06-18 | POSITIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND METHOD OF PREPARING SAME, NEGATIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND METHOD OF PREPARING SAME | Ju-Hee SOHN; Jin-Hyon LEE; Jung-Yeon WON; Eun-Young GOH; Jong-Ki LEE; Sang-In PARK; | |
| 877 | 20160156028 | 2015-06-15 | POSITIVE ACTIVE MATERIAL, LITHIUM BATTERIES INCLUDING THE POSITIVE ACTIVE MATERIAL, AND METHOD OF PREPARING THE POSITIVE ACTIVE MATERIAL | Hyunjoo JE; Jihyun KIM; Changwook KIM; Yongchan YOU; | |
| 878 | 20160156027 | 2015-06-03 | POSITIVE ELECTRODE, LITHIUM BATTERY INCLUDING THE SAME, AND METHOD OF MANUFACTURING THE POSITIVE ELECTRODE | Jeonghoon Kim; Yumi Song; Mingzi Hong; Dohyung Park; | |
| 879 | 20160118686 | 2015-06-02 | ELECTROLYTE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Moon-Sung Kim; Duck-Hyun Kim; Jeong-Hye Lee; Sang-Il Han; Pavel Shatunov; Woo-Cheol Shin; | |
| 880 | 20150349307 | 2015-05-26 | METHOD FOR PREPARING A COATED LITHIUM BATTERY COMPONENT | Gayatri Dadheech; Mei Cai; Li Yang; | |

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| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 881 | 20150364754 | 2015-05-21 | Silicene nanocomposite anode for lithium ion battery | Elwood Egerton; Joan Howard; James Rowatt; Richard Altobellis; | Paideia LLC; |
| 882 | 20160013477 | 2015-05-20 | Silicon nanocomposite anode for lithium ion battery | Elwood Egerton; Joan Howard; James Rowatt; Richard Altobellis; | Paideia LLC; |
| 883 | 20170187062 | 2015-05-15 | LITHIUM BATTERY ELECTROLYTE SOLUTION CONTAINING METHYL (2,2,3,3,-TETRAFLUOROPROPYL) CARBONATE | Lin Wang; Douglas Brune; Ravi Shankar; Matthew Yonkey; | |
| 884 | 20170187071 | 2015-05-15 | LITHIUM BATTERY ELECTROLYTE SOLUTION CONTAINING ETHYL (2,2,3,3-TETRAFLUOROPROPYL) CARBONATE | Lin Wang; Douglas Brune; Ravi Shankar; Matthew Yonkey; | |
| 885 | 20170187072 | 2015-05-15 | LITHIUM BATTERY ELECTROLYTE SOLUTION CONTAINING (2,2-DIFLUOROETHYL) ETHYL CARBONATE | Lin Wang; Douglas Brune; Ravi Shankar; Matthew Yonkey; | Dow Global Technologies LLC; |
| 886 | 20160126542 | 2015-05-05 | POSITIVE ACTIVE MATERIAL, POSITIVE ELECTRODE AND LITHIUM BATTERY INCLUDING THE POSITIVE ACTIVE MATERIAL, AND METHOD OF MANUFACTURING THE POSITIVE ACTIVE MATERIAL | Jungmin Han; Jaehong Lim; Yongchan You; | |
| 887 | 20150380736 | 2015-05-04 | COMPOSITE CATHODE ACTIVE MATERIAL, CATHODE AND LITHIUM BATTERY INCLUDING THE MATERIAL, AND METHOD OF PREPARING THE MATERIAL | Youngjin Park; Dohyung Park; Kwanghwan Cho; Kihyun Kim; Minhan Kim; Sun-Ho Kang; | |
| 888 | 20150311501 | 2015-04-29 | THREE-DIMENSIONALLY STRUCTURED LITHIUM ANODE | Martin TENZER; Thomas WÖHRLE; | |
| 889 | 20160049644 | 2015-04-24 | POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY | Joon-Hyung Lee; Jae-Hyun Shim; Ki-Soo Lee; Evgeny Menshikov; Irina Menshikova; | |
| 890 | 20150287986 | 2015-04-22 | ELECTRODE PROTECTION IN BOTH AQUEOUS AND NON-AQUEOUS ELECTROCHEMICAL CELLS, INCLUDING RECHARGEABLE LITHIUM BATTERIES | John Affinito; Yuriy Mikhaylik; Yordan Geronov; Christopher Sheehan; | Sion Power Corporation; |
| 891 | 20160064730 | 2015-04-16 | COMPOSITE POSITIVE ELECTRODE ACTIVE MATERIAL AND POSITIVE ELECTRODE AND LITHIUM BATTERY COMPRISING THE COMPOSITE POSITIVE ELECTRODE ACTIVE MATERIAL | Haneol PARK; Seonyoung KWON; Minhan KIM; Jihyun KIM; Joong-Ho MOON; Kyounghyun KIM; Dohyung PARK; Jongseo CHOI; | |
| 892 | 20150325856 | 2015-04-15 | ENVIRONMENTALLY FRIENDLY INKJET-PRINTABLE LITHIUM BATTERY CATHODE FORMULATIONS, METHODS AND DEVICES | John Federici; Yuan Gu; Aide Wu; | |
| 893 | 20160107010 | 2015-04-09 | FIRE SUPPRESSION PACKAGING | Peter Cordani; | |
| 894 | 20150214575 | 2015-04-07 | GLASS COMPRISING SOLID ELECTROLYTE PARTICLES AND LITHIUM BATTERY | Ryo ABURATANI; Minoru SENGA; Tsuyoshi OTA; Masaru NAKAGAWA; | IDEMITSU KOSAN CO., LTD.; |
| 895 | 20150340731 | 2015-04-01 | ELECTRODE STRUCTURE AND LITHIUM BATTERY INCLUDING THE SAME | Bo-Hyun Kim; Jong-Ki Lee; Hong-Jeong Kim; Yu-Jin Han; | |
| 896 | 20150340732 | 2015-04-01 | ELECTRODE STRUCTURE AND LITHIUM BATTERY INCLUDING THE SAME | Bo-Hyun Kim; Jong-Ki Lee; Hong-Jeong Kim; Yu-Jin Han; | |
| 897 | 20170025706 | 2015-04-01 | ELECTROLYTE ADDITIVES FOR LITHIUM ION BATTERIES | Jeffrey Dahn; Jian Xia; Yaohui Wang; Remi Petibon; Lin Ma; Kathlyne Nelson; Laura Downie; | |
| 898 | 20170012281 | 2015-03-25 | LITHIUM BATTERY CATHODE MATERIALS THAT CONTAIN STABLE FREE RADICALS | Wenjuan LIU; John KRAMER; Koichi NUMATA; | |
| 899 | 20150333315 | 2015-03-23 | NEGATIVE ELECTRODE AND LITHIUM BATTERY INCLUDING THE SAME | Duk-Hyoung YOON; So-Ra LEE; Hye-Ri EOM; | |
| 900 | 20150188124 | 2015-03-12 | ELECTRODE FOR LITHIUM BATTERY COMPRISING SOLID ELECTROLYTE NANOPARTICLES AND LITHIUM BATTERY | Sukenori ICHIKAWA; | |

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| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 901 | 20170170479 | 2015-02-26 | CATHODE MATERIALS CONTAINING OLIVINE STRUCTURED NANOCOMPOSITES | Rachid YAZAMI; Somaye SAADAT; | |
| 902 | 20160351893 | 2015-02-13 | Galvanic Cells and (Partially) Lithiated Lithium Battery Anodes with Increased Capacity and Methods for Producing Synthetic Graphite Intercalation Compounds | Ulrich Wietelmann; Vera Nickel; Stefan Scherer; Ute Emmel; Thorsten Buhrmester; Steffen Haber; Gerd Krämer; | |
| 903 | 20150243978 | 2015-02-13 | POSITIVE ELECTRODE ACTIVE MATERIAL, LITHIUM BATTERY CONTAINING THE SAME, AND METHOD OF MANUFACTURING THE POSITIVE ELECTRODE ACTIVE MATERIAL | Jeongkuk Shon; Minsang Song; Jaejun Chang; Sangmin Ji; Jaeman Choi; Jehwon Choi; Dongjin Ham; | |
| 904 | 20150162605 | 2015-02-13 | ANODE ACTIVE MATERIAL INCLUDING A MULTILAYER METAL NANOTUBE, ANODE INCLUDING THE ANODE ACTIVE MATERIAL, LITHIUM BATTERY INCLUDING THE ANODE, AND METHOD OF PREPARING THE ANODE ACTIVE MATERIAL | Jae-man CHOI; Seung-sik HWANG; Moon-seok KWON; Min-sang SONG; Jeong-kuk SHON; Myung-hoon KIM; Han-su KIM; Un-gyu PAIK; Tae-seup SONG; | |
| 905 | 20160107009 | 2015-02-12 | FIRE SUPPRESSION PACKAGING AND METHOD OF MANUFACTURE | Peter Cordani; | |
| 906 | 20150226807 | 2015-02-10 | DETERMINATION OF NOMINAL CELL RESISTANCE FOR REAL-TIME ESTIMATION OF STATE-OF-CHARGE IN LITHIUM BATTERIES | Albert Aumentado; Scott Mullin; Mohit Singh; | |
| 907 | 20150236343 | 2015-02-09 | COATED ELECTRODES FOR LITHIUM BATTERIES | Qiangfeng Xiao; Gayatri Dadheech; Li Yang; Mei Cai; | |
| 908 | 20160359199 | 2015-02-04 | SPECIFIC LITHIUM BATTERIES COMPRISING NON-AQUEOUS ELECTROLYTES BASED ON SULFONE COMPOUNDS | Herve GALIANO; Matthieu LE DIGABEL; Agnes BILLER; Nelly PENOT; Jean MARTIN; Christophe DUDEZERT; | RENAULT S.A.S; |
| 909 | 20160223175 | 2015-02-03 | PORTABLE HIGH POWER AC LIGHTING | FU-I YANG; | |
| 910 | 20150180027 | 2015-01-27 | MULTI-COMPONENT INTERMETALLIC ELECTRODES FOR LITHIUM BATTERIES | Michael THACKERAY; Lynn TRAHEY; John Vaughey; | UCHICAGO ARGONNE, LLC; |
| 911 | 20150349333 | 2015-01-22 | COMPOSITE CATHODE ACTIVE MATERIALS, PREPARATION METHODS THEREOF, AND LITHIUM BATTERIES INCLUDING THE COMPOSITE CATHODE ACTIVE MATERIALS | Junho Park; Wonsung Choi; Jaegu Yoon; Yoonsok Kang; Jinhwan Park; Sungjin Ahn; Jaejun Chang; Byungjin Choi; | |
| 912 | 20150287981 | 2015-01-14 | NEGATIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, METHOD OF PREPARING SAME AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Sumihito Ishida; Young-Kee Kim; Jeong-Woo Han; | |
| 913 | 20150123615 | 2015-01-08 | LITHIUM BATTERY PACK AND SYSTEM FOR CHARGING THE SAME | Dezhong Yang; | CHERVON INTELLECTUAL PROPERTY LIMITED; |
| 914 | 20150118563 | 2014-12-31 | LITHIUM-RICH POSITIVE ELECTRODE MATERIAL, LITHIUM BATTERY POSITIVE ELECTRODE, AND LITHIUM BATTERY | Chaohui Chen; | |
| 915 | 20150102530 | 2014-12-22 | METHOD AND APPARATUS FOR SOLID-STATE MICROBATTERY PHOTOLITHOGRAPHIC MANUFACTURE, SINGULATION AND PASSIVATION | Mark Wallace; Jody Klaassen; Jeffrey Sather; Stuart Shakespeare; | |
| 916 | 20160181615 | 2014-12-19 | Solid-State Batteries with Improved Performance and Reduced Manufacturing Costs and Methods for Forming the Same | Jeroen Van Duren; Abraham Anapolsky; | |
| 917 | 20150207174 | 2014-12-12 | ELECTROLYTE AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Min-Ju LEE; Soo-Jin KIM; Myung-Heui WOO; Myung-Hwan JEONG; Woo-Cheol SHIN; | |
| 918 | 20150162641 | 2014-12-09 | PROTECTED LITHIUM ELECTRODES HAVING A LIQUID ANOLYTE RESERVOIR ARCHITECTURE AND ASSOCIATED RECHARGEABLE LITHIUM BATTERY CELLS | Steven Visco; Vitaliy Nimon; Yevgeniy Nimon; Bruce Katz; Lutgard De Jonghe; Alexei Petrov; | |
| 919 | 20150162599 | 2014-12-05 | POSITIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY, PREPARING SAME, AND RECHARGEABLE LITHIUM BATTERY | Yuki Takei; Masatsugu Nakano; Keisuke Nomura; | |
| 920 | 20160156062 | 2014-12-02 | Solid-State Batteries with Electrodes Infused with Ionically Conductive Material and Methods for Forming the Same | Karl Littau; Abraham Anapolsky; | |

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| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 921 | 20180277826 | 2014-11-26 | COMBINATION OF PLASMA COATING AND SPRAY COATING FOR LITHIUM BATTERY ELECTRODE FABRICATION | Xiaohong Gayden; Zhiqiang Yu; Qiang Wu; | |
| 922 | 20150180031 | 2014-11-26 | LITHIUM METAL OXIDE ELECTRODES FOR LITHIUM BATTERIES | Michael THACKERAY; Jason CROY; Brandon LONG; | UCHICAGO ARGONNE, LLC; |
| 923 | 20150180032 | 2014-11-26 | COBALT-STABILIZED LITHIUM METAL OXIDE ELECTRODES FOR LITHIUM BATTERIES | Michael THACKERAY; Jason CROY; Brandon LONG; | UCHICAGO ARGONNE, LLC; |
| 924 | 20150147627 | 2014-11-24 | RECHARGEABLE LITHIUM BATTERY | Yasuo TAKANO; | |
| 925 | 20150155598 | 2014-11-21 | Fluoride Ion Electrochemical Cell | Rachid YAZAMI; | California Institute of Technology; Centre National De La Recherche Scientifique (C.N.R.S.); |
| 926 | 20150214540 | 2014-11-11 | POSITIVE ACTIVE MATERIAL, LITHIUM BATTERY INCLUDING THE SAME, AND METHOD OF MANUFACTURING THE POSITIVE ACTIVE MATERIAL | Young-Ki Kim; Young-Hun Lee; Soon-Rewl Lee; Ick-Kyu Choi; Yong-Chul Park; | |
| 927 | 20150068029 | 2014-11-10 | CATHODE FOR LITHIUM BATTERY WITH EXCELENT OUTPUT PROPERTIES, METHOD OF MANUFACTURING THE CATHODE AND LITHIUM BATTERY USING THE SAME | Sang-Sun PARK; Yong-Jun PARK; A-Ram CHOI; Bum-Soo KIM; | |
| 928 | 20150200422 | 2014-11-07 | ELECTROLYTE ADDITIVE FOR LITHIUM BATTERY, ELECTROLYTE INCLUDING THE SAME, AND LITHIUM BATTERY INCLUDING THE ELECTROLYTE | Jeong-Hye LEE; Woo-Cheol SHIN; Duck-Hyun KIM; Moon-Sung KIM; E-Rang CHO; | |
| 929 | 20150155562 | 2014-11-05 | NEGATIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, METHOD OF PREPARING SAME, AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Jae-Hwan HA; Jin-Uk LEE; Ki-Jun KIM; Cheol-Hee HWANG; | |
| 930 | 20150118549 | 2014-10-28 | LITHIUM BATTERY | Jun YOSHIDA; | |
| 931 | 20150140435 | 2014-10-27 | RECHARGEABLE LITHIUM BATTERY | Jea-Woan LEE; In-Seop BYUN; Chan HONG; Soo-Mi EO; Seung-Hee PARK; | |
| 932 | 20150030909 | 2014-10-10 | Solid-State Lithium Battery | Jon Ihlefeld; Paul Clem; Cynthia Edney; David Ingersoll; Ganesan Nagasubramanian; Kyle Fenton; | |
| 933 | 20160099482 | 2014-10-07 | Solid-State Batteries with Improved Electrode Conductivity and Methods for Forming the Same | Abraham Anapolsky; Jeroen Van Duren; | |
| 934 | 20160099468 | 2014-10-06 | Solid-State Batteries and Methods for Forming the Same | Abraham Anapolsky; | |
| 935 | 20170301958 | 2014-10-03 | PLASMA DEPOSITION TO FABRICATE LITHIUM BATTERIES | Su Deng; Xiaohong Gayden; | |
| 936 | 20160093848 | 2014-09-30 | MODULAR APPROACH FOR ADVANCED BATTERY MODULES HAVING DIFFERENT ELECTRICAL CHARACTERISTICS | Richard DeKeuster; Robert Mack; Stephen Cash; | |
| 937 | 20150125735 | 2014-09-23 | RECHARGEABLE LITHIUM BATTERY | Tae-Hyun Bae; Woo-Cheol Shin; Sang-Hyun Eom; Myung-Hoon Kim; Seung-Tae Lee; Ae-Ran Kim; Dong-Myung Choi; | |
| 938 | 20150140402 | 2014-09-18 | SEPARATOR, LITHIUM BATTERY INCLUDING THE SAME, METHOD OF MANUFACTURING THE SEPARATOR, AND METHOD OF MANUFACTURING THE LITHIUM BATTERY | Young-Su Kim; Jung-Jin Moon; Yun-Kyung Jo; Ihn Kim; Chan-Jung Kim; Na-Rae Park; Suk-Jung Son; | |
| 939 | 20160226097 | 2014-09-05 | METHOD FOR MANUFACTURING A LITHIUM CELL FUNCTIONAL LAYER | Marcus Wegner; Jean Fanous; Martin Tenzer; | |
| 940 | 20150118575 | 2014-09-04 | RECHARGEABLE LITHIUM BATTERY | Tae-Hyun Bae; Woo-Cheol Shin; Sang-Hyun Eom; Myung-Hoon Kim; Seung-Tae Lee; Ae-Ran Kim; Dong-Myung Choi; Ha-Rim Lee; | |

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| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 941 | 20150171471 | 2014-08-27 | LITHIUM BATTERY AND ELECTROLYTE ADDITIVE FOR LITHIUM BATTERY | Atetegeb Haregewoin; Sheng-Diann Lin; Ermias Leggesse; Chih-Chiang Chiang; Bing-Joe Hwang; | |
| 942 | 20150056387 | 2014-08-19 | METHODS FOR MAKING COATED POROUS SEPARATORS AND COATED ELECTRODES FOR LITHIUM BATTERIES | Gayatri Dadheech; Mei Cai; Li Yang; | |
| 943 | 20150004472 | 2014-08-08 | POSITIVE ELECTRODES FOR LITHIUM BATTERIES | Michael THACKERAY; Christopher JOHNSON; Sun-Ho KANG; | UCHICAGO ARGONNE, LLC; |
| 944 | 20160164088 | 2014-07-28 | POSITIVE ELECTRODE MATERIALS FOR A LITHIUM BATTERY WITH A BASE OF AN OVERLITHIATED LAYERED OXIDE | David Peralta; Frederic Fabre; Pierre Feydi; Sebastien Martinet; Marlene Rey; Loïc Simonin; | COMMISSARIAT À L'ENERGIE ATOMIQUE ET AUX ÉNERGIES ALTERNATIVES; |
| 945 | 20140335400 | 2014-07-28 | LITHIUM BATTERY | Jing-Yih CHERNG; Hsuan-Fu WANG; Te-Chuan LAI; Hung-I TSAI; Chih-Chao LIN; | |
| 946 | 20150072233 | 2014-07-22 | NEGATIVE ACTIVE MATERIAL AND LITHIUM BATTERY CONTAINING THE NEGATIVE ACTIVE MATERIAL | So-Ra Lee; Chang-Su Shin; Ui-Song Do; Sang-Eun Park; Xian-Hui Meng; Jae-Myung Kim; | |
| 947 | 20150155561 | 2014-07-14 | ANODE AND LITHIUM BATTERY INCLUDING THE SAME | Gue-sung KIM; Sang-kook MAH; Woon-jung PAEK; Myung-jin LEE; | |
| 948 | 20140308192 | 2014-06-24 | CATHODE MATERIALS FOR SECONDARY (RECHARGEABLE) LITHIUM BATTERIES | Michel Armand; John Goodenough; Akshaya Padhi; Kirakodu Nanjundaswamy; Christian Masquelier; | |
| 949 | 20140377653 | 2014-06-20 | POROUS SILICON BASED NEGATIVE ELECTRODE ACTIVE MATERIAL, METHOD FOR MANUFACTURING THE SAME, AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Soojin PARK; Sin CHOI; Ji YOON; Byoung BANG; | |
| 950 | 20150024249 | 2014-06-13 | RECHARGEABLE LITHIUM BATTERY AND METHOD OF PREPARING THE SAME | Young-Chang Lim; Jea-Woan Lee; In-Seop Byun; Joon-Sup Kim; Chan Hong; Young-Hwan Kim; Seung-Hee Park; | |
| 951 | 20170098817 | 2014-05-21 | DISTRIBUTING CONDUCTIVE CARBON BLACK ON ACTIVE MATERIAL IN LITHIUM BATTERY ELECTRODES | Zhiqiang Yu; Meiyuan Yu; Xiaochao Que; Jianyong Liu; | |
| 952 | 20150017531 | 2014-05-15 | BINDER COMPOSITION FOR RECHARGEABLE LITHIUM BATTERY, AND NEGATIVE ELECTRODE AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Byung-Joo CHUNG; Eon-Mi LEE; | SAMSUNG SDI CO., LTD.; |
| 953 | 20150155557 | 2014-05-13 | NEGATIVE ELECTRODE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, METHOD FOR PREPARING THE SAME AND RECHARGEABLE LITHIUM BATTERY USING THE SAME | Se KWON; Yong Park; | POSCO CHEMTECH CO., LTD.; |
| 954 | 20140356707 | 2014-05-13 | NEGATIVE ELECTRODE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, METHOD FOR PREPARING THE SAME AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Se Kwon; Ji Jung; Yong Park; | POSCO CHEMTECH CO., LTD.; |
| 955 | 20140248540 | 2014-05-13 | PROCESS OF MAKING NEGATIVE ELECTRODE AND RECHARGEABLE LITHIUM BATTERY USING THE SAME | Shengshui ZHANG; | U.S. Government as represented by the Secretary of the Army; |
| 956 | 20170058389 | 2014-05-12 | LITHIUM BATTERY FABRICATION PROCESS USING MULTIPLE ATMOSPHERIC PLASMA NOZZLES | Xiaohong Gayden; Jianyong Liu; Zhiqiang Yu; Haijing Liu; Qiang Wu; | |
| 957 | 20140356733 | 2014-05-05 | ADDITIVE FOR LITHIUM BATTERY ELECTROLYTE, ORGANIC ELECTROLYTE SOLUTION INCLUDING THE SAME AND LITHIUM BATTERY USING THE ELECTROLYTE SOLUTION | Makhmut Khasanov; Woo-Cheol Shin; Vladimir Egorov; Pavel Shatunov; Denis Chernyshov; Sang-Hoon Kim; Ha-Rim Lee; In-Haeng Cho; Alexey Tereshchenko; | Samsung SDI Co., Ltd.; |
| 958 | 20140349176 | 2014-04-22 | ADDITIVE FOR ELECTROLYTE, ELECTROLYTE AND RECHARGEABLE LITHIUM BATTERY | Vladimir Egorov; Jiten Singh; Woo-Cheol Shin; Maeng-Eun Lee; Jung-Yi Yu; Sang-Il Han; Sang-Hoon Kim; Duck-Hyun Kim; Myung-Hwan Jeong; Seung-Tae Lee; Tae-Hyun Bae; Mi-Hyun Lee; Eon-Mi Lee; Ha-Rim Lee; Moon-Sung Kim; In-Haeng Cho; E-Rang Cho; Dong-Myung Choi; Makhmut Khasanov; Pavel Shatunov; Alexey Tereshchenko; Denis Chernyshov; | Samsung SDI Co., Ltd.; |
| 959 | 20140287307 | 2014-04-22 | Novel Sulphur-Modified Monolithic Porous Carbon-Based Material, Process For The Preparation Thereof And Uses Thereof In The Storage And Release Of Energy | David Ayme-Perrot; Marie Dieudonne; Philippe Sonntag; Anne-Caroline Pasquier; | |

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| # | Pub. No | Filed | Title | Inventors | Assignees |
|---|---|---|---|---|---|
| 961 | 20160149224 | 2014-04-15 | LITHIUM BATTERY | Kazuki OKUNO; Akihisa HOSOE; Junichi NISHIMURA; Koutarou KIMURA; Kengo GOTO; Hideaki SAKAIDA; | |
| 962 | 20150099641 | 2014-04-10 | METHOD FOR MANUFACTURING ELECTRODE OF LITHIUM BATTERY | Christine Lee; Shinn-Dar Wu; Joseph Lee; Jenq-Gong Duh; | Other; |
| 963 | 20150171420 | 2014-03-27 | NEGATIVE ELECTRODE ACTIVE MATERIAL, METHOD FOR MANUFACTURING THE SAME, AND LITHIUM RECHARGABLE BATTERY INCLUDING THE SAME | Soojin PARK; Sang-Young Lee; Seung Ko; Jung-In Lee; Jang-Hoon Park; Han Lee; Ji Yoon; Byoung Bang; Chang Lee; Il Jeong; | SEJIN INNOTECH CO., LTD.; UNIST Academy-Industry Research Corporation; |
| 964 | 20140272501 | 2014-03-14 | BATTERY PACK MECHANICAL DESIGN TO ACCOMMODATE LEAD-ACID AND LITHIUM BATTERY WITH SAME PACKAGING | MATT O'BRIEN; Youssef Daou; | WM GreenTech Automotive Corp; |
| 965 | 20150073632 | 2014-03-11 | TRI-HYBRID AUTOMOTIVE POWER PLANT | Nicholas Hill; | |
| 966 | 20140272575 | 2014-03-11 | BINDER FOR RECHARGEABLE LITHIUM BATTERY, ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY INCLUDING BINDER, METHOD OF PREPARING ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY, AND RECHARGEABLE LITHIUM BATTERY INCLUDING ELECTRODE | Eon-Mi LEE; Byung-Joo CHUNG; Nam-Seon KIM; Yang-Soo KIM; Kwang-Sik CHOI; | AEKYUNG CHEMICAL CO., LTD.; SAMSUNG SDI CO., LTD.; |
| 967 | 20140255773 | 2014-03-06 | ADDITIVE OF ELECTROLYTE OF LITHIUM BATTERY AND ELECTROLYTE OF LITHIUM BATTERY USING THE SAME | WAN HUNG; MING SHEN; CHUN LIU; CHI HUNG; | Formosa Plastics Corporation; |
| 968 | 20150030937 | 2014-02-27 | Nonaqueous Electrolyte for Lithium Ion and Lithium Metal Batteries | Elena Shembel; Irina Maksyuta; Volodymyr Redko; Tymofiy Pastushkin; | ENERIZE CORPORATION; |
| 969 | 20140234726 | 2014-02-20 | Lithium Battery with Composite Solid Electrolyte | John Christensen; Paul Albertus; Edward Knudsen; Timm Lohmann; Boris Kozinsky; | |
| 970 | 20140162108 | 2014-02-14 | LITHIUM BATTERY WITH HERMETICALLY SEALED ANODE | Steven Visco; Yevgeniy Nimon; Lutgard De Jonghe; Bruce Katz; Alexei Petrov; | PolyPlus Battery Company; |
| 971 | 20140356710 | 2014-02-06 | ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY, AND RECHARGEABLE LITHIUM BATTERY INCLUDING ELECTRODE | Byung-Joo Chung; Eon-Mi Lee; | Samsung SDI Co., Ltd.; |
| 972 | 20140216632 | 2014-02-04 | METHOD FOR PRODUCING ACTIVE MATERIAL MOLDED BODY, ACTIVE MATERIAL MOLDED BODY, METHOD FOR PRODUCING LITHIUM BATTERY, AND LITHIUM BATTERY | Sukenori ICHIKAWA; Tomofumi YOKOYAMA; | SEIKO EPSON CORPORATION; |
| 973 | 20140220436 | 2014-02-04 | METHOD FOR PRODUCING ELECTRODE ASSEMBLY, ELECTRODE ASSEMBLY, AND LITHIUM BATTERY | Tomofumi YOKOYAMA; Sukenori ICHIKAWA; | SEIKO EPSON CORPORATION; |
| 974 | 20140199595 | 2014-01-16 | Method of Synthesis of a Compound LiM1-x-y-zNyQzFexPO4 and Use Thereof as Electrode Material for a Lithium Battery | Lorraine Raboin; Thibaut Gutel; | Commissariat A L'Energie Atomique et aux Energies Alternatives; |
| 975 | 20140141333 | 2014-01-03 | PROCESS FOR PREPARING ELECTROACTIVE INSERTION COMPOUNDS AND ELECTRODE MATERIALS OBTAINED THEREFROM | Laurent GAUTHIER; Michel GAUTHIER; Donald LAVOIE; Christophe MICHOT; Nathalie RAVET; | |
| 976 | 20140234708 | 2013-12-20 | ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY, METHOD OF PREPARING THE SAME AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Hyun-Ki Park; Dong-Hee Han; Jae-Myung Kim; Sang-Eun Park; Su-Kyung Lee; | Samsung SDI Co., Ltd.; |
| 977 | 20140212694 | 2013-12-16 | COMPOSITE ANODE ACTIVE MATERIAL, ANODE INCLUDING THE SAME, LITHIUM BATTERY INCLUDING THE ANODE, AND METHOD OF PREPARING THE COMPOSITE ANODE ACTIVE MATERIAL | Yo-Han PARK; Young-Ugk KIM; Seung-Uk KWON; Jae-Hyuk KIM; Soon-Sung SUH; Yury MATULEVICH; Duk-Hyoung YOON; Hee-Young CHU; Chang-Ui JEONG; | SAMSUNG SDI CO., LTD.; |
| 978 | 20140205914 | 2013-12-13 | ELECTROLYTE FOR LITHIUM RECHARGEABLE BATTERY AND LITHIUM RECHARGEABLE BATTERY INCLUDING THE ELECTROLYTE | SANG-IL HAN; Woo-Cheol SHIN; Jung-Yi YU; Tae-Hyun BAE; Myung-Hwan JEONG; Sang-Gun KIM; | SAMSUNG SDI CO., LTD.; |
| 979 | 20140167502 | 2013-12-11 | Converter device and method of converting power | James Lopez; | Estill Medical Technologies, Inc.; |
| 980 | 20140162128 | 2013-12-10 | POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, AND POSITIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Masatsugu NAKANO; Yuki TAKEI; | Samsung SDI Co., Ltd.; |

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|---|---|---|---|---|---|
| 981 | 20150155588 | 2013-12-03 | LITHIUM BATTERY ASSEMBLY METHOD, ASSEMBLY SYSTEM AND POSITIVE AND NEGATIVE HOMOPOLAR EXPLOSION-PROOF LITHIUM BATTERY | Muxin LU; | |
| 982 | 20150010818 | 2013-11-27 | RECHARGEABLE LITHIUM BATTERY WITH CONTROLLED PARTICLE SIZE RATIO OF ACTIVATED CARBON TO POSITIVE ACTIVE MATERIAL | Jung-Woo An; Sumihito Ishida; Joon-Kil Son; | Samsung SDI Co., Ltd.; |
| 983 | 20140154574 | 2013-11-21 | NEGATIVE ELECTRODE ACTIVE SUBSTANCE AND LITHIUM BATTERY | Kunihiro NOBUHARA; | TOYOTA JIDOSHA KABUSHIKI KAISHA; |
| 984 | 20140170504 | 2013-11-18 | FLEXIBLE SOLID ELECTROLYTE, ALL-SOLID-STATE LITHIUM BATTERY INCLUDING THE FLEXIBLE SOLID ELECTROLYTE, AND METHOD OF PREPARING THE FLEXIBLE SOLID ELECTROLYTE | Seung-wook BAEK; Tae-young KIM; Young-sin PARK; Jae-myung LEE; | Samsung Electronics Co., Ltd.; |
| 985 | 20150017527 | 2013-11-15 | NEGATIVE ELECTRODE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, METHOD FOR PREPARING THE SAME, AND RECHARGEABLE LITHIUM BATTERY USING THE SAME | Kyoung LEE; Heon LEE; Mi LEE; Eun HYEONG; | POSCO CHEMTECH CO., LTD.; |
| 986 | 20140079996 | 2013-11-14 | METHOD FOR IMPROVING ENVIRONMENTAL STABILITY OF CATHODE MATERIALS FOR LITHIUM BATTERIES | Feng Zou; Huan Huang; Lunzhi Liao; Quan Yang; | TIAX LLC; |
| 987 | 20150295243 | 2013-11-12 | CATHODE ACTIVE MATERIAL, LITHIUM BATTERY AND METHOD OF PRODUCING CATHODE ACTIVE MATERIAL | Shigeto Okada; Ayuko Kitajou; Jun Yoshida; Shinji Nakanishi; | TOYOTA JIDOSHA KABUSHIKI KAISHA; KYUSHU UNIVERSITY, NATIONAL UNIVERSITY CORPORATION; |
| 988 | 20140315087 | 2013-11-05 | POSITIVE ACTIVE MATERIAL, METHOD OF PREPARING THE SAME, AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Dong-Hwan YU; Young-Jin CHOI; Young-Soo JUNG; Ji-Yong LEE; Sung-Hoon KIM; | SAMSUNG SDI CO., LTD.; |
| 989 | 20140287312 | 2013-11-04 | POSITIVE ACTIVE MATERIAL FOR A RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Young-Jin CHOI; Sung-Hoon KIM; Dong-Hwan YU; Young-Soo JUNG; Ji-Yong LEE; | SAMSUNG SDI CO., LTD.; |
| 990 | 20140295273 | 2013-11-01 | ANODE, LITHIUM BATTERY INCLUDING THE ANODE, AND METHOD OF PREPARING THE ANODE | Sang-kook MAH; Jeong-kuk SHON; | Samsung SDI Co., Ltd.; Samsung Electronics Co., Ltd.; |
| 991 | 20140127556 | 2013-10-30 | LITHIUM SALT AND ELECTROLYTE SOLUTION AND LITHIUM BATTERY CONTAINING THE SAME | Fu-Ming Wang; | China Petrochemical Development Corporation, Taipei (Taiwan); |
| 992 | 20150017524 | 2013-10-29 | ELECTRODE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, METHOD FOR PREPARING THE SAME, ELECTRODE INCLUDING THE SAME, AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE ELECTRODE | Mi Lee; Heon Lee; Kyoung Lee; Hyun Choi; | POSCO CHEMTECH CO., LTD.; |
| 993 | 20140127581 | 2013-10-29 | Lithium-Rich Anode Material, Lithium Battery Anode, and Lithium Battery | Chaohui Chen; | Huawei Technologies Co., Ltd.; |
| 994 | 20140315089 | 2013-10-22 | POSITIVE ACTIVE MATERIAL, METHOD OF PREPARING THE SAME, AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Dong-Hwan YU; Young-Jin CHOI; Young-Soo JUNG; Ji-Yong LEE; Sung-Hoon KIM; | SAMSUNG SDI CO., LTD.; |
| 995 | 20140045067 | 2013-10-22 | POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, METHOD OF PREPARING THE SAME, AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Jaephil CHO; Yong CHO; | UNIST Academy-Industry Research Corporation; |
| 996 | 20150099169 | 2013-10-07 | HIGH ENERGY DENSITY MULTIVALENT CONVERSION BASED CATHODES FOR LITHIUM BATTERIES | Nancy DUDNEY; Jagjit NANDA; Surendra MARTHA; | |
| 997 | 20150318572 | 2013-09-25 | ELECTROLYTE SOLUTION, ELECTROCHEMICAL DEVICE, LITHIUM BATTERY AND MODULE | Yoshiko KUWAJIMA; Meiten KOH; Akiyoshi YAMAUCHI; Hitomi MIYAWAKI; Hideo SAKATA; Akinori TANI; Shinichi KINOSHITA; | DAIKIN INDUSTRIES, LTD.; |
| 998 | 20150081237 | 2013-09-19 | DATA DRIVEN/PHYSICAL HYBRID MODEL FOR SOC DETERMINATION IN LITHIUM BATTERIES | Changqing Ye; Peter Paris; Larry Deal; Scott Mullin; Mohit Singh; | |
| 999 | 20150056493 | 2013-09-13 | COATED POROUS SEPARATORS AND COATED ELECTRODES FOR LITHIUM BATTERIES | Gayatri Dadheech; Li Yang; Mei Cai; | GM Global Technology Operations LLC; |
| 1,000 | 20140120410 | 2013-09-11 | POSITIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Jin-Man Jeoung; Kyeu-Yoon Sheem; | Samsung SDI Co., Ltd.; |

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| # | Pub. No | Filed | Title | Inventors | Assignees |
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| 1,001 | 20150061686 | 2013-09-04 | Method for detecting lithium battery | Yu-Min Liao; Kuo-Kuang Jen; Ping-Lin Kuo; Torng-Jinn Lee; Jeng-Shiung Jan; | |
| 1,002 | 20140079988 | 2013-09-04 | ELECTROLYTE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Su-Hee Han; | SAMSUNG SDI CO., LTD.; |
| 1,003 | 20140220426 | 2013-08-27 | PHOSPHORUS CONTAINING COMPOUND, METHOD OF PREPARING SAME, AND ELECTROLYTE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Denis Chernyshov; Woo-Cheol Shin; Vladimir Egorov; Pavel Shatunov; Alexey Tereshchenko; Makhmut Khasanov; Jung-Yi Yu; Sang-IL Han; Sang-Hoon Kim; Duck-Hyun Kim; Myung-Hwan Jeong; Seung-Tae Lee; Tae-Hyun Bae; Mi-Hyun Lee; Eon-Mi Lee; Ha-Rim Lee; Moon-Sung Kim; In-Haeng Cho; E-Rang Cho; Dong-Myung Choi; | Samsung SDI Co., Ltd.; |
| 1,004 | 20140178764 | 2013-08-22 | NEGATIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, NEGATIVE ELECTRODE AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Sun-Il Park; Kyeu-Yoon Sheem; Young-Kee Kim; | Samsung SDI Co., Ltd.; |
| 1,005 | 20140050975 | 2013-08-14 | NEGATIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY AND NEGATIVE ELECTRODE AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Jun-Kyu Cha; Na-Ri Seo; Myoung-Sun Kim; Dong-Ho Son; Kwi-Seok Choi; | Samsung SDI Co., Ltd.; |
| 1,006 | 20150042266 | 2013-08-12 | WIRELESS CHARGING DEVICE | Kuan-Wei CHEN; | |
| 1,007 | 20150295242 | 2013-07-31 | METHOD FOR PREPARING PARTIALLY SURFACE-PROTECTED ACTIVE MATERIALS FOR LITHIUM BATTERIES | Jean-Baptiste Ducros; Jean Martin; Gregory Douglade; | RENAULT s.a.s.; |
| 1,008 | 20140134502 | 2013-07-30 | ELECTROLYTE FOR SECONDARY LITHIUM BATTERY AND SECONDARY LITHIUM BATTERY USING THE SAME | Yoon-sok KANG; Min-sik PARK; Jun-young MUN; | SAMSUNG FINE CHEMICALS CO., LTD.; SAMSUNG SDI CO., LTD.; |
| 1,009 | 20160072149 | 2013-07-29 | AN ELECTRODE PLATE, A METHOD FOR FORMING THE ELECTRODE PLATE, AND A METHOD FOR FORMING A LITHIUM BATTERY CORE CONTAINING ELECTRODE PLATE | Wenhong Huang; | |
| 1,010 | 20140127564 | 2013-07-29 | NEGATIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Jeong-Woo Han; Young-Kee Kim; Jung-Woo An; Sumihito Ishida; | Samsung SDI Co., Ltd.; |
| 1,011 | 20140178748 | 2013-07-17 | ELECTROLYTE ADDITIVE AND ELECTROLYTE INCLUDING SAME AND LITHIUM RECHARGEABLE BATTERY INCLUDING ELECTROLYTE | Denis CHERNYSHOV; Woo-Cheol SHIN; Pavel SHATUNOV; Alexey TERESHCHENKO; Vladimir EGOROV; Makhmut KHASANOV; Myung-Hwan JEONG; | |
| 1,012 | 20140134467 | 2013-07-17 | LITHIUM BATTERY WITH EXCELLENT SAFETY | Sang-Il LEE; Dong-Choon Lee; Kwang-Il Jung; Bum-Soo Kim; | |
| 1,013 | 20150180039 | 2013-07-11 | Sustainable Current Collectors for Lithium Batteries | John Oswald Thomas; Michel Bernard Armand; | |
| 1,014 | 20140255771 | 2013-06-28 | POSITIVE ACTIVE MATERIAL COMPOSITION FOR RECHARGEABLE LITHIUM BATTERY, POSITIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY INCLUDING SAME AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Seung-Hun Han; Myung-Duk Lim; Chae-Woong Cho; | |
| 1,015 | 20140030559 | 2013-06-19 | LITHIUM ION FLUORIDE ELECTROCHEMICAL CELL | Rachid YAZAMI; Isabelle DAROLLES; Cedric WEISS; | |
| 1,016 | 20140370388 | 2013-06-18 | METHOD FOR DETERMINING STATE OF CHARGE IN LITHIUM BATTERIES THROUGH USE OF A NOVEL ELECTRODE | Mohit Singh; Xiao-Liang Wang; | |
| 1,017 | 20150311492 | 2013-06-14 | High Energy Density Charge And Discharge Lithium Battery | Xujiong Wang; Quntin Qu; Lili Liu; Yuyang Hou; Yuping Wu; | |
| 1,018 | 20140154582 | 2013-05-23 | LITHIUM BATTERY AND METHOD FOR MANUFACTURING THE SAME | Chyi-Ming LEU; Angelia LO; Jen-Chih LO; | INDUSTRIAL TECHNOLOGY RESEARCH INSTITUTE; |
| 1,019 | 20140002942 | 2013-05-14 | Secondary Lithium Ion Battery With Mixed Nickelate Cathodes | Yanning Song; Kenneth Avery; Richard Chamberlain, II; Per Onnerud; | Boston-Power, Inc.; |
| 1,020 | 20140041211 | 2013-04-25 | METHODS FOR FABRICATING LITHIUM BATTERY ANODES | XING-FENG HE; YANG WU; JIA-PING WANG; KAI-LI JIANG; SHOU-SHAN FAN; | HON HAI PRECISION INDUSTRY CO., LTD.; Tsinghua University; |

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|---|---|---|---|---|---|
| 1,021 | 20140041210 | 2013-04-25 | METHODS FOR FABRICATING LITHIUM BATTERY ANODES | XING-FENG HE; YANG WU; JIA-PING WANG; KAI-LI JIANG; SHOU-SHAN FAN; | HON HAI PRECISION INDUSTRY CO., LTD.; TSINGHUA UNIVERSITY; |
| 1,022 | 20140057046 | 2013-04-24 | METHODS FOR FABRICATING ANODES OF LITHIUM BATTERY | YANG WU; XING-FENG HE; JIA-PING WANG; KAI-LI JIANG; SHOU-SHAN FAN; | HON HAI PRECISION INDUSTRY CO., LTD.; TSINGHUA UNIVERSITY; |
| 1,023 | 20140057178 | 2013-04-24 | ANODES OF LITHIUM BATTERY | XING-FENG HE; YANG WU; JIA-PING WANG; KAI-LI JIANG; SHOU-SHAN FAN; | HON HAI PRECISION INDUSTRY CO., LTD.; TSINGHUA UNIVERSITY; |
| 1,024 | 20150236382 | 2013-04-24 | 1.5-3 V LITHIUM BATTERIES WITH OVERCHARGE PROTECTION | Ulrich Wietelmann; Ute Emmel; Irina Tschernych; | |
| 1,025 | 20150093654 | 2013-04-19 | COMPOSITION FOR A LITHIUM BATTERY COMPRISING AT LEAST ONE SPECIFIC FLUORINATED COMPOUND AS AN ORGANIC SOLVENT AND AT LEAST ONE LITHIUM SALT | Hervé Galiano; Charlotte Beord; Nathalie Pierre; Stéphane Cadra; Bruno Ameduri; Ali Alaaeddine; Noureddine Ajellal; | COMMISSARIAT À L'ÉNERGIE ATOMIQUE ET AUX ÉNERGIES ALTERNATIVES; |
| 1,026 | 20130230646 | 2013-04-12 | METHOD AND APPARATUS FOR SOLID-STATE MICROBATTERY PHOTOLITHOGRAPHIC MANUFACTURE, SINGULATION AND PASSIVATION | Mark Wallace; Jody Klaassen; Jeffrey Sather; Stuart Shakespeare; | CYMBET CORPORATION; |
| 1,027 | 20140255776 | 2013-04-11 | METHOD FOR MANUFACTURING ELECTRODE, ELECTRODE MANUFACTURED ACCORDING TO THE METHOD, SUPERCAPACITOR INCLUDING THE ELECTRODE, AND RECHARGABLE LITHIUM BATTERY INCLUDING THE ELECTRODE | Yong-Won SONG; Jung LIM; Tae YOO; Sun KIM; | KOREA INSTITUTE OF SCIENCE AND TECHNOLOGY; |
| 1,028 | 20130224599 | 2013-04-03 | NEGATIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, METHOD OF PREPARING THE SAME, AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Soojin PARK; Byoungman BANG; Hyun-Kon SONG; Jaephil CHO; Hyun-Jung KIM; | UNIST Academy-Industry Research Corporation; |
| 1,029 | 20140011095 | 2013-03-18 | ORGANIC/INORGANIC HYBRID ELECTROLYTE, METHODS FOR PREPARING THE SAME, AND LITHIUM BATTERY INCLUDING THE SAME | Young-Gi LEE; Kwang Kim; Kunyoung Kang; Dong Shin; | Electronics and Telecommunications Research Institute; |
| 1,030 | 20150056513 | 2013-03-15 | POWDER COMPRISING CARBON NANOSTRUCTURES AND ITS METHOD OF PRODUCTION | Derek Fray; Carsten Schwandt; Rajshekar Dasgupta; Ali Kamali; | |
| 1,031 | 20140077755 | 2013-03-15 | EMERGENCY POWER SUPPLY STARTING SYSTEM FOR A LITHIUM BATTERY WITH AUTOMATIC PREHEATING FUNCTION | Zhongren Zhang; Zhenming Fan; Ke Li; Qiang Wu; Jing Shen; | SHANGHAI POWER STATION CO., LTD.; SHANGHAI GREATWAY TOP POWER CO., LTD.; SHANGHAI GUANGWEI ELECTRIC & TOOLS CO., LTD.; |
| 1,032 | 20140008006 | 2013-03-15 | METHOD OF MANUFACTURING LITHIUM BATTERY | Young-Gi Lee; Kwang Kim; Kunyoung Kang; Dong Shin; | Electronics and Telecommunications Research Institute; |
| 1,033 | 20140266007 | 2013-03-14 | Portable Charger | Ming Li; | TELEDEX, INC.; |
| 1,034 | 20140272576 | 2013-03-14 | METHODS AND APPARATUS FOR HIGH CAPACITY ANODES FOR LITHIUM BATTERIES | Priyanka Kamat; Rene Hartner; Yitzhak Gilboa; Kang-Jay Hsia; Srikanth Ranganathan; Xiaofeng Liang; | SANDISK 3D LLC; |
| 1,035 | 20140272577 | 2013-03-14 | METHODS AND APPARATUS FOR HIGH CAPACITY ANODES FOR LITHIUM BATTERIES | Renee Hartner; Yitzhak Gilboa; Priyanka Kamat; Kang-Jay Hsia; | SanDisk 3D LLC; |
| 1,036 | 20140178739 | 2013-03-14 | POSITIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Tae-Jin Jung; | SAMSUNG SDI CO., LTD.; |
| 1,037 | 20140057170 | 2013-03-14 | NEGATIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Jun-Kyu Cha; Myoung-Sun Kim; Young-su Kim; Ki-Jun Kim; | Samsung SDI Co., Ltd.; |
| 1,038 | 20130323592 | 2013-03-14 | BINDER FOR ELECTRODE OF LITHIUM BATTERY, AND ELECTRODE AND LITHIUM BATTERY CONTAINING THE BINDER | Beom-Wook Lee; Hye-Sun Jeong; Hye-Ran Lee; | |
| 1,039 | 20140141338 | 2013-03-13 | RECHARGEABLE LITHIUM BATTERY | Chan-Seok KIM; | SAMSUNG SDI CO., LTD.; |
| 1,040 | 20140065476 | 2013-03-13 | ELECTROLYTE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Moon-Sung KIM; Woo-Cheol SHIN; Sang-Il HAN; Jung-Yi YU; Myung-Hwan JEONG; Tae-Hyun BAE; Mi-Hyun LEE; Myung-Hoon KIM; Sang-Geun KIM; So-Hyun HUR; Ha-Rim LEE; | SAMSUNG SDI CO., LTD.; |

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|---|---|---|---|---|---|
| 1,041 | 20140057161 | 2013-03-13 | Electrolyte Additive for Rechargeable Lithium Battery and Rechargeable Lithium Battery Including Same | Dae-Sik Kim; Jiten Singh; Eun-Cheol Lee; Maeng-eun Lee; Won-Il Jung; | SAMSUNG SDI CO., LTD; |
| 1,042 | 20130189585 | 2013-03-11 | NEGATIVE ACTIVE MATERIAL FOR A RECHARGEABLE LITHIUM BATTERY, A METHOD OF PREPARING THE SAME, AND A RECHARGEABLE LITHIUM BATTERY COMPRISING THE SAME | Yong-Mook Kang; Nam-Soon Choi; Sung-Soo Kim; | SAMSUNG SDI CO., LTD.; |
| 1,043 | 20140141340 | 2013-03-01 | ELECTROLYTE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Vladimir Egorov; Woo-Cheol Shin; Pavel Shatunov; | SAMSUNG SDI CO., LTD.; |
| 1,044 | 20140079971 | 2013-03-01 | LITHIUM BATTERY STRUCTURE | Wen-Hung HUANG; | DIJIYA ENERGY SAVING TECHNOLOGY INC.; |
| 1,045 | 20130260252 | 2013-02-27 | COMPOSITE ELECTRODE ACTIVE MATERIAL, ELECTRODE AND LITHIUM BATTERY CONTAINING THE COMPOSITE ELECTRODE ACTIVE MATERIAL, AND METHOD OF PREPARING THE COMPOSITE ELECTRODE ACTIVE MATERIAL | Kyeu-Yoon Sheem; Jeong-Doo Yi; Hyun-Uk Jo; Da-Un Han; | Samsung SDI Co., Ltd.; |
| 1,046 | 20140045060 | 2013-02-25 | COMPOSITE ANODE ACTIVE MATERIAL, ANODE AND LITHIUM BATTERY EACH INCLUDING THE COMPOSITE ANODE ACTIVE MATERIAL, AND METHOD OF PREPARING THE COMPOSITE ANODE ACTIVE MATERIAL | Sang-Eun Park; Jae-Myung Kim; So-Ra Lee; Yu-Jeong Cho; Ui-Song Do; Chang-Su Shin; Su-Kyung Lee; | Samsung SDI Co., Ltd.; |
| 1,047 | 20130157105 | 2013-02-19 | AQUEOUS INK FOR THE PRINTING OF ELECTRODES FOR LITHIUM BATTERIES | Lionel PICARD; Nelly GIROUD; Hélène ROUAULT; Sébastien SOLAN; | Commissariat A L'Energie Atomique Et Aux Energies Alternatives; |
| 1,048 | 20130157128 | 2013-02-13 | ELECTRODE FOR LITHIUM BATTERIES AND ITS METHOD OF MANUFACTURE | Sébastien SOLAN; Nelly GIROUD; | Commissariat A L'Energie Atomique Et Aux Energies Alternatives; |
| 1,049 | 20140065477 | 2013-02-08 | POSITIVE ACTIVE MATERIAL COMPOSITION FOR RECHARGEABLE LITHIUM BATTERY, AND POSITIVE ELECTRODE AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Seung-Hun HAN; Myung-Duk LIM; Chae-Woong CHO; | Samsung SDI Co., Ltd.; |
| 1,050 | 20130252110 | 2013-02-05 | NEGATIVE ACTIVE MATERIAL AND LITHIUM BATTERY CONTAINING THE SAME | Sam-Jin PARK; Ki-Jun KIM; Na-Ri SEO; Ihn KIM; Dong-Ho SON; Myoung-Sun KIM; Young-Su KIM; | SAMSUNG SDI CO., LTD.; |
| 1,051 | 20140377650 | 2013-02-05 | ASSEMBLY CONSISTING OF A CURRENT COLLECTOR AND A SILICON ELECTRODE | Pascal Tiquet; Sebastien Donet; Lionel Filhol; | COMMISSARIAT A L'ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES; |
| 1,052 | 20130288125 | 2013-01-24 | POSITIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY, RECHARGEABLE LITHIUM BATTERY INCLUDING SAME AND METHOD OF PREPARING RECHARGEABLE LITHIUM BATTERY | Kyeu-Yoon SHEEM; Jake KIM; | SAMSUNG SDI CO., LTD.; |
| 1,053 | 20140017556 | 2013-01-23 | SOFT-PACKAGE LITHIUM BATTERY EDGEFOLD STRUCTURE | Lianghai Liu; Hongxing Fang; Yaohui Wang; Baiqing Zhang; Xiaohua Zhang; | NINGDE AMPEREX TECHNOLOGY LIMITED; DONGGUAN AMPEREX TECHNOLOGY LIMITED; |
| 1,054 | 20140377664 | 2013-01-09 | LITHIUM ALL-SOLID-STATE BATTERY | Thomas Yersak; Se-Hee Lee; Conrad Stoldt; | |
| 1,055 | 20140342229 | 2012-12-12 | POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY | Byung-Sung Kwak; Joseph Gordon, II; Omkaram Nalamasu; Yangkook Sun; Wongi Kim; Seugmin Oh; | |
| 1,056 | 20130101901 | 2012-12-11 | LITHIUM-TRANSITION METAL COMPLEX COMPOUNDS HAVING Nth ORDER HIERARCHICAL STRUCTURE, METHOD OF PREPARING THE SAME AND LITHIUM BATTERY COMPRISING AN ELECTRODE COMPRISING THE SAME | Yoonsok KANG; Joungwon Park; Guesung Kim; Jaegu Yoon; | SAMSUNG ELECTRONICS CO., LTD.; |
| 1,057 | 20130337326 | 2012-12-06 | POSITIVE ACTIVE MATERIAL, METHOD OF PREPARING THE SAME, AND LITHIUM BATTERY INCLUDING THE POSITIVE ACTIVE MATERIAL | Jun-young MUN; Jin-hwan PARK; Jae-gu YOON; Jun-ho PARK; | SAMSUNG ELECTRONICS CO., LTD.; |
| 1,058 | 20140315104 | 2012-11-30 | Lithium Battery Electrodes Containing Lithium Oxalate | Wenjuan Liu; Murali Theivanayagam; Koichi Numata; Ing-Feng Hu; David Wilson; Yiyong He; | |
| 1,059 | 20140072880 | 2012-11-30 | NON-AQUIOUS RECHARGEABLE LITHIUM BATTERY | Kwang-Jo Cheong; Yong-Beom Lee; Hee-Sun Yun; Soo-Mi Eo; | SAMSUNG SDI CO., LTD.; |
| 1,060 | 20130224604 | 2012-11-28 | ELECTROLYTE FOR SECONDARY LITHIUM BATTERY AND SECONDARY LITHIUM BATTERY INCLUDING SAME | Jung-Yi Yu; Woo-Cheol Shin; Sang-Il Han; Myung-Hwan Jeong; Tae-Hyun Bae; Moon-Sung KIM; Sang-Geun Kim; Maeng-Eun Lee; Jiten Singh; | SAMSUNG SDI CO., LTD.; |

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| 1,061 | 20130084507 | 2012-11-28 | NON-VOLATILE CATHODES FOR LITHIUM OXYGEN BATTERIES AND METHOD OF PRODUCING SAME | Lonnie Johnson; | JOHNSON IP HOLDING, LLC; |
| 1,062 | 20130087737 | 2012-11-26 | NEGATIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, METHOD OF PREPARING SAME, AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Tae-Wan Kim; Joon-Sup Kim; Sung-Soo Kim; Ri-Zhu Yin; Jin-Ho Lee; Wan-Uk Choi; | SAMSUNG SDI CO., LTD.; |
| 1,063 | 20130189572 | 2012-11-15 | RECHARGEABLE LITHIUM BATTERY | Su-Hee Han; | Samsung SDI Co., Ltd.; |
| 1,064 | 20130230782 | 2012-11-12 | LITHIUM BATTERY | Seung-Goo Baek; | SAMSUNG SDI CO., LTD.; |
| 1,065 | 20130122369 | 2012-11-08 | NEGATIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Bong-Chull Kim; Kang-Kook Jung; Hyung-Dong Lee; Na-Rae Park; Jae-Hoon Kim; Hyun-Jun Choi; Sung-Soo Park; Sang-Hun Lee; | SAMSUNG SDI CO., LTD.; |
| 1,066 | 20140227609 | 2012-09-21 | ARCHITECTURES FOR SOLID STATE BATTERIES | Jonathan FREY; Brian BERLAND; | |
| 1,067 | 20150122008 | 2012-09-18 | RADIOSONDE POWER SOURCE DEVICE AND RADIOSONDE | Kensaku Shimizu; | |
| 1,068 | 20140242463 | 2012-09-18 | CATHODE ACTIVE MATERIAL FOR A LITHIUM SECONDARY BATTERY, METHOD FOR MANUFACTURING SAME, AND LITHIUM SECONDARY BATTERY INCLUDING SAME | Jun Song; Young Kim; Jeom-Soo Kim; Woo Cho; Jae-Hun Kim; Jin Kim; | KOREA ELECTRONICS TECHNOLOGY INSTITUTE; |
| 1,069 | 20130177819 | 2012-09-14 | RECHARGEABLE LITHIUM BATTERY | Su-Hee Han; | Samsung SDI Co., Ltd.; |
| 1,070 | 20130065128 | 2012-09-12 | ENCAPSULATED SULFUR CATHODES FOR RECHARGEABLE LITHIUM BATTERIES | Weiyang Li; Yi Cui; Zhi Seh; Guangyuan Zheng; Yuan Yang; | The Board of Trustees of the Leland Stanford Junior University; |
| 1,071 | 20130236796 | 2012-09-06 | LITHIUM BATTERY | Youngsik Kim; Rongrong Chen; Hui He; | |
| 1,072 | 20130209895 | 2012-09-05 | RECHARGEABLE LITHIUM BATTERY | Ji-Young Kim; Wan-Mook Lim; Myoung-Han Ryu; Hyun-Ki Jung; Hyo-Rim Bak; | SAMSUNG SDI CO., LTD.; |
| 1,073 | 20130120887 | 2012-09-05 | PROTECTION DEVICE FOR LITHIUM BATTERY ASSEMBLY | FU-CHIEH CHEN; | |
| 1,074 | 20130171524 | 2012-08-30 | POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Jaephil CHO; Mijung Noh; | SK Innovation Co., Ltd.; UNIST Academy-Industry Research Corporation; |
| 1,075 | 20140059844 | 2012-08-28 | METHOD FOR MANUFACTURING GEL LITHIM BATTERY | CHIN-HUANG TSAI; Chih-Hung Shen; Der-Shiuh Shy; Xue-Kun Xing; | |
| 1,076 | 20130252068 | 2012-08-24 | MANUFACTURING METHOD OF HIGH-PERFORMANCE SILICON BASED ELECTRODE USING POLYMER PATTERN ON CURRENT COLLECTOR AND MANUFACTURING METHOD OF NEGATIVE ELECTRODE OF RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Joong LEE; Won CHOI; Joo WOO; Ho CHOI; Jung KIM; Hieu NGUYEN; Chairul HUDAYA; A KIM; Ji PARK; Sang KIM; Xuyan LIU; | KOREA INSTITUTE OF SCIENCE AND TECHNOLOGY; |
| 1,077 | 20130260233 | 2012-08-13 | LITHIUM BATTERY ANODE HAVING PROTECTIVE FILM MADE UP OF INORGANIC PARTICLES AND LITHIUM BATTERY | BOR-YUAN HSIAO; CHENG-CHUNG CHIU; CHIEN-FANG HUANG; | UER TECHNOLOGY CORPORATION; UER TECHNOLOGY (SHENZHEN) LIMITED; |
| 1,078 | 20130260234 | 2012-08-13 | LITHIUM BATTERY CATHODE HAVING PROTECTIVE FILM MADE UP OF INORGANIC PARTICLES AND LITHIUM BATTERY | BOR-YUAN HSIAO; CHENG-CHUNG CHIU; CHIEN-FANG HUANG; | UER TECHNOLOGY CORPORATION; UER TECHNOLOGY (SHENZHEN) LIMITED; |
| 1,079 | 20130164622 | 2012-08-13 | POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, METHOD OF PREPARING THE SAME, AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Han-Eol Park; Sang-In Park; Ki-Hyun Kim; Ji-Hyun Kim; Jay-Hyok Song; Yong-Chan You; Ha-Young Lee; | |
| 1,080 | 20130189582 | 2012-08-10 | COMPOSITE ANODE ACTIVE MATERIAL, METHOD OF PREPARING COMPOSITE ANODE ACTIVE MATERIAL, AND ANODE AND LITHIUM BATTERY INCLUDING COMPOSITE ANODE ACTIVE MATERIAL | Jong-Hee Lee; | Samsung SDI Co., Ltd.; |

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| 1,081 | 20130196227 | 2012-08-09 | POSITIVE ELECTRODE, METHOD OF MANUFACTURING THE SAME, AND LITHIUM BATTERY COMPRISING THE POSITIVE ELECTRODE | Hyun-Deok LEE; Yong-Chul Park; Mi-Ran Song; Jin-Hyoung Seo; Min-Ju Kim; Na-Leum Yoo; Gyeong-Jae Heo; | Samsung SDI Co., Ltd.; |
| 1,082 | 20130040185 | 2012-08-07 | SEPARATOR FOR RECHARGEABLE LITHIUM BATTERY, AND ELECTRODE STRUCTURE AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Hironari Takase; | |
| 1,083 | 20130183579 | 2012-07-27 | POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Seung-Mo Kim; Jun-Sik Jeoung; | |
| 1,084 | 20130089784 | 2012-07-19 | NEGATIVE ACTIVE MATERIAL AND LITHIUM BATTERY CONTAINING THE NEGATIVE ACTIVE MATERIAL | Yu-Jeong Cho; So-Ra Lee; Ha-Na Yoo; Ui-Song Do; Chang-Su Shin; Su-Kyung Lee; Jae-Myung Kim; | |
| 1,085 | 20130089783 | 2012-07-17 | Negative Active Material and Lithium Battery Containing the Negative Active Material | Ha-Na Yoo; Jae-Myung Kim; So-Ra Lee; Chang-Su Shin; Ui-Song Do; Yu-Jeong Cho; Su-Kyung Lee; Sang-Eun Park; | |
| 1,086 | 20130202967 | 2012-07-12 | NEGATIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Jae-Hyuk Kim; Sung-Hwan Moon; Seung-Uk Kwon; Soon-Sung Suh; Chang-Ui Jeong; Yo-Han Park; Chun-Gyoo Lee; Yury Matulevich; Jong-Seo Choi; | |
| 1,087 | 20130071745 | 2012-07-10 | ELECTRODE ACTIVE MATERIAL, PREPARATION METHOD THEREOF, AND ELECTRODE AND LITHIUM BATTERY CONTAINING THE SAME | Jun-young MUN; Won-chang Choi; Jin-hwan Park; | SAMSUNG ELECTRONICS CO., LTD.; |
| 1,088 | 20120265264 | 2012-06-29 | System and Method for Conditioning a Lithium Battery in an Automatic External Defibrillator | Gintaras Vaisnys; Giovanni Meier; Glenn Laub; | Defibtech, LLC; |
| 1,089 | 20120256123 | 2012-06-15 | POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, METHOD OF PREPARING THE SAME, AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Jaephil CHO; Youn-Han CHANG; Sang-Hoon JEON; Hyun-Jung LEE; | L & F CO., LTD.; |
| 1,090 | 20130337345 | 2012-06-15 | OXIDE ANODE MATERIALS FOR LITHIUM BATTERIES | Ali Abouimrane; Khalil Amine; | |
| 1,091 | 20140106238 | 2012-06-13 | LIQUID ELECTROLYTE FOR A LITHIUM BATTERY, CONTAINING A QUATERNARY MIXTURE OF NON-AQUEOUS ORGANIC SOLVENTS | Nelly Giroud; Hélène Rouault; Florence Rouillon; | COMMISSARIAT A L'ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES; |
| 1,092 | 20120305861 | 2012-06-04 | INORGANIC COMPOUNDS | Sven ALBRECHT; Michael KRUFT; Stefan MALCUS; | TODA KOGYO EUROPE GMBH; |
| 1,093 | 20130011731 | 2012-05-11 | CATHODE SLURRY COMPOSITION, CATHODE PREPARED FROM THE SAME, AND LITHIUM BATTERY COMPRISING THE CATHODE | Hye-Sun JEONG; Jun-Kyu Cha; Seung-Hun Han; Ki-Jun Kim; | Samsung SDI Co., Ltd.; |
| 1,094 | 20130300367 | 2012-05-10 | Rechargeable Power Supply Device | Robert Yates; | |
| 1,095 | 20130059210 | 2012-05-02 | ELECTROLYTE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Jung-Yi YU; Woo-Cheol SHIN; Sang-Il HAN; Mi-Hyun LEE; Tae-Hyun BAE; | SAMSUNG SDI CO., LTD.; |
| 1,096 | 20130224543 | 2012-04-13 | CATHODE FOR LITHIUM BATTERY WITH EXCELLENT OUTPUT PROPERTIES, METHOD OF MANUFACTURING THE CATHODE AND LITHIUM BATTERY USING THE SAME | Sang-Sun PARK; Yong-Jun PARK; A-Ram CHOI; Bum-Soo KIM; | VITZROCELL CO., LTD.; |
| 1,097 | 20130230764 | 2012-04-12 | METHOD OF MANUFACTURING HEADER FOR LITHIUM BATTERY USING POLYMER AND HEADER FOR LITHIUM BATTERY MANUFACTURED BY THE SAME | Sang-Sun PARK; Ji-Hui YOUN; Bum-Soo KIM; | VITZROCELL CO., LTD.; |
| 1,098 | 20130260195 | 2012-04-02 | OIL-COOLED LITHIUM BATTERY MODULE | Shijin Long; | |
| 1,099 | 20120264009 | 2012-03-30 | METHOD FOR MANUFACTURING POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY USING SAME | Min-Han KIM; Do-Hyung Park; Seon-Young Kwon; Yu-Mi Song; Ji-Hyun Kim; Kyoung-Hyun Kim; | Samsung SDI Co., Ltd.; |
| 1,100 | 20150180001 | 2012-03-02 | AMORPHOUS IONICALLY-CONDUCTIVE METAL OXIDES, METHOD OF PREPARATION, AND BATTERY | Lonnie Johnson; Davorin Babic; Elena Krumenaker; Tedric Campbell; Kieran Claffey; | JOHNSON IP HOLDING, LLC; |

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| 1,101 | 20130344365 | 2012-02-28 | Lithium Secondary Battery | Hiroshi Haruna; Shingo Ito; | Shin-Kobe Electric Machinery Co., Ltd.; |
| 1,102 | 20130221922 | 2012-02-24 | UNIVERSAL SERIAL BUS CHARGING DEVICE | YUN-ZHAO LIU; | GUANGDONG JETFAST PORTABLE LIGHTING CO., LTD.; |
| 1,103 | 20130224580 | 2012-02-24 | LITHIUM BATTERY HAVING ELECTRODE TABS WITH SAFE MODIFICATION | Jing-Yih CHERNG; Hsuan-Fu WANG; Te-Chuan LAI; Hung-I TSAI; Chih-Chao LIN; | AMITA TECHNOLOGIES INC LTD.; |
| 1,104 | 20140174268 | 2012-02-07 | CUTTING APPARATUS | Massimiliano Sale; | KEMET ELECTRONICS ITALIA S.R.L.; |
| 1,105 | 20130196216 | 2012-01-31 | HIGH-TEMPERATURE-PROOF LITHIUM BATTERY TERMINAL COVER SET | HONG-WEN HWANG; | |
| 1,106 | 20120308889 | 2012-01-31 | NEGATIVE ELECTRODE AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Byung-Joo Chung; | Samsung SDI Co., Ltd.; |
| 1,107 | 20120244440 | 2012-01-31 | RECHARGEABLE LITHIUM BATTERY | Nathan Lee; Ung-Kuk Heo; Seung-Ho Na; | |
| 1,108 | 20120135292 | 2012-01-23 | CONFORMAL SOLID STATE PACKAGE METHOD AND DEVICE FOR A BATTERY DEVICE | Stephen Buckingham; Svetlana Lukich; Ann Sastry; Marc Langlois; | Sakti3, Inc.; |
| 1,109 | 20130189564 | 2012-01-21 | Lithium Ion Battery and Manufacturing Method Thereof | Jaeger XIE; | |
| 1,110 | 20120129051 | 2012-01-20 | POSITIVE ELECTRODE AND LITHIUM BATTERY UTILIZING THE SAME | Fu-Ming WANG; Chang-Rung YANG; Chen-Chung CHEN; Kuo CHIU; | INDUSTRIAL TECHNOLOGY RESEARCH INSTITUTE; |
| 1,111 | 20130022858 | 2012-01-19 | LITHIUM BATTERY SEPARATOR WITH SHUTDOWN FUNCTION | Stephen Mazur; Simon Frisk; Natalia Levit; | E.I. DU PONT DE NEMOURS AND COMPANY; |
| 1,112 | 20130017431 | 2012-01-19 | LITHIUM BATTERY SEPARATOR WITH SHUTDOWN FUNCTION | SIMON FRISK; NATALIA LEVIT; PANKAJ ARORA; | E. I. DU PONT DE NEMOURS AND COMPANY; |
| 1,113 | 20130034779 | 2012-01-18 | ELECTROLYTE FOR RECHARGEABLE LITHIUM BATTERY, AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Mi-Hyeun Oh; Ho-Seok Yang; Man-Seok Han; Dai-In Park; Jin-Hyunk Lim; | Samsung SDI Co., Ltd.; |
| 1,114 | 20130169228 | 2011-12-30 | MCU INTEGRATION BATTERY CHARGER/DISCHARGER | FU-I YANG; | SAMYA TECHNOLOGY CO., LTD.; |
| 1,115 | 20120308880 | 2011-12-27 | POROUS LI4TI5O12 ANODE MATERIAL, METHOD OF MANUFACTURING THE SAME AND BATTERY COMPRISING THE SAME | Jenq DUH; Chih LIN; | NATIONAL TSING HUA UNIVERSITY; |
| 1,116 | 20120121977 | 2011-12-27 | Surface-modified silicon anode active material, method of preparing the same, and anode and lithium battery employing the same | WANLI XU; JOHN FLAKE; | Electrochemical Materials, LLC; |
| 1,117 | 20130327249 | 2011-12-20 | ELECTRODES FOR LITHIUM BATTERIES | Martin Winter; Sangsik Jeong; Stefano Passerini; | ROCKWOOD LITHIUM GMBH; EVONIK LITARION GMBH; VOLKSWAGEN AKTIENGESELLSCHAFT; |
| 1,118 | 20130045419 | 2011-12-19 | NEGATIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, NEGATIVE ELECTRODE INCLUDING THE SAME AND METHOD OF PREPARING THE SAME, AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Hee-Joon Chun; Tae-Gon Kim; Joon-Sup Kim; Wan-Uk Choi; Hisaki Tarui; Jea-Woan Lee; Jae-Yul Ryu; Chang-Keun Back; Young-Chang Lim; Seung-Hee Park; | |
| 1,119 | 20120321960 | 2011-12-16 | NEGATIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, METHOD OF PREPARING THE SAME, AND NEGATIVE ELECTRODE AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Hee-Joong KIM; Sumihito Ishida; Eui-Hwan Song; | SAMSUNG SDI CO., LTD.; |
| 1,120 | 20130088186 | 2011-11-24 | CHARGER | FANG-KENG HSIEH; | HON HAI PRECISION INDUSTRY CO., LTD.; |

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| 1,121 | 20130316244 | 2011-11-23 | ELECTRODE FOR LITHIUM ION BATTERIES AND THE METHOD FOR MANUFACTURING THE SAME | Jingjun Zhang; Longjie Zhou; Jun Yang; Haiping Jia; | |
| 1,122 | 20130011730 | 2011-11-18 | POSITIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY | Tae-Hyun Bae; Woo-Cheol Shin; Sang-Il Han; Jung-Yi Yu; Mi-Hyun Lee; | SAMSUNG SDI CO., LTD.; |
| 1,123 | 20130209915 | 2011-10-24 | ELECTROLYTE SOLUTION FOR LITHIUM BATTERY, LITHIUM BATTERY INCLUDING ELECTROLYTE SOLUTION, ELECTROLYTE SOLUTION FOR LITHIUM AIR BATTERY, AND LITHIUM AIR BATTERY INCLUDING ELECTROLYTE SOLUTION | Tsunehisa Hirashita; Hirofumi Nakamoto; Taishi Shiotsuki; | NATIONAL UNIVERSITY CORPORATION NAGOYA INSTITUTE OF TECHNOLOGY; TOYOTA JIDOSHA KABUSHIKI KAISHA; |
| 1,124 | 20120040238 | 2011-10-20 | CONDUCTIVE CONNECTING STRUCTURE FOR A CORE ASSEMBLY OF A SECONDARY LITHIUM BATTERY | DONALD PH. WU; | |
| 1,125 | 20120094153 | 2011-10-13 | Cross Stripping for High-Rate Lithium Battery Cell Pack | Samuel Fuller; | BRAILLE BATTERY, INC.; |
| 1,126 | 20120328955 | 2011-10-12 | LITHIUM SECONDARY BATTERY HAVING HIGH CAPACITY | Kyoung Ryu; Dong Kim; Ho Lee; Sunggoo Yun; | HYUNDAI MOTOR COMPANY; |
| 1,127 | 20130183589 | 2011-09-27 | BATTERY SINTERED BODY, PRODUCING METHOD OF BATTERY SINTERED BODY AND ALL SOLID LITHIUM BATTERY | Yoshitaka Minamida; Chihiro Yada; Keiichi Kohama; | TOYOTA JIDOSHA KABUSHIKI KAISHA; |
| 1,128 | 20120301753 | 2011-09-27 | ELECTROLYTE STORAGE STRUCTURE FOR A LITHIUM BATTERY | Chin-Ming Chen; Te-Chuan Lai; Jing-Yih Cherng; | AMITA TECHNOLOGIES INC LTD.; |
| 1,129 | 20130059197 | 2011-09-26 | LITHIUM BATTERY CORE AND SHELL STRUCTURE | Wen-Hung HUANG; | |
| 1,130 | 20120231341 | 2011-09-24 | POSITIVE ACTIVE MATERIAL, AND ELECTRODE AND LITHIUM BATTERY CONTAINING THE POSITIVE ACTIVE MATERIAL | Jun-Sik Kim; Chong-Hoon Lee; Sung-Soo Kim; Seo-Jae Lee; Jeong-Soon Shin; | |
| 1,131 | 20120208080 | 2011-09-22 | ELECTROLYTE FOR RECHARGEABLE LITHIUM BATTERY, AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Dai-In Park; Ho-Seok Yang; Man-Seok Han; Jin-Hyunk Lim; Mi-Hyeun Oh; | |
| 1,132 | 20120135290 | 2011-09-22 | OLIVINE-BASED POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY USING SAME | Han-Eol Park; Sun-Hwa Kwon; Ji-Hyun Kim; Ki-Hyun Kim; Yong-Chan You; Yoon-Chang Kim; | Samsung SDI Co., Ltd.; |
| 1,133 | 20120070746 | 2011-09-22 | LOW ELECTROLYTE ELECTROCHEMICAL CELLS | Yuriy Mikhaylik; Karthikeyan Kumaresan; John Affinito; | Sion Power Corporation; |
| 1,134 | 20120148920 | 2011-09-20 | POSITIVE ACTIVE MATERIAL FOR LITHIUM BATTERIES AND LITHIUM BATTERY INCLUDING THE SAME | Jay-Hyok Song; Young-Hun Lee; Yu-Mi Song; Young-Ki Kim; Soon-Rewl Lee; Ick-Kyu Choi; Yoon-Chang Kim; | Samsung SDI Co., Ltd.; |
| 1,135 | 20130071737 | 2011-09-20 | LITHIUM IRON TITANIUM PHOSPHATE COMPOSITES FOR LITHIUM BATTERIES | Ilias Belharouak; Gary Koenig, JR; | |
| 1,136 | 20130266868 | 2011-09-14 | METHOD OF PREPARING POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY PREPARED BY USING THE METHOD, AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Yang-Kook Sun; Hyo-Jin Kim; | |
| 1,137 | 20120064390 | 2011-09-09 | LITHIUM ION BATTERY ELECTROLYTE AND LITHIUM BATTERY HAVING THE SAME | Huiying Wang; Guishu Zhou; | BYD Company Limited; |
| 1,138 | 20120135305 | 2011-08-29 | Positive Active Material for Rechargeable Lithium Battery, Method of Preparing the Same, and Rechargeable Lithium Battery Including the Same | Chang-Hyuk Kim; Do-Hyung Park; Seon-Young Kwon; Min-Han Kim; Ji-Hyun Kim; Jeong-Seop Lee; Yoon-Chang Kim; | SAMSUNG SDI CO., LTD.; |
| 1,139 | 20120135318 | 2011-08-25 | POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY COMPRISING SAME | Jae-Hyuk KIM; Sung-Hwan Moon; Matulevich Yuri; Myung-Hwan Jeong; Hee-Young Chu; Chang-Ui Jeong; Joo-Han Song; Jong-Seo Choi; | Samsung SDI Co., Ltd.; |
| 1,140 | 20110300451 | 2011-08-22 | LITHIUM ION CONDUCTIVE SOLID ELECTROLYTE AND PRODUCTION PROCESS THEREOF | Yasushi Inda; | OHARA INC.; |

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| 1,141 | 20130143123 | 2011-08-19 | MESOPOROUS METAL PHOSPHATE MATERIALS FOR ENERGY STORAGE APPLICATION | Palani Balaya; Saravanan Kuppan; Hwang Lee; Ananthanarayanan Krishnamoorthy; | National University of Singapore; |
| 1,142 | 20120070743 | 2011-08-16 | POSITIVE ACTIVE MATERIAL, METHOD OF PREPARING THE SAME, AND LITHIUM BATTERY INCLUDING THE POSITIVE ACTIVE MATERIAL | Seon-Young Kwon; Do-Hyung Park; Min-Han Kim; Ji-Hyun Kim; Jeong-Seop Lee; Chang-Hyuk Kim; Yoon-Chang Kim; | SAMSUNG SDI CO., LTD.; |
| 1,143 | 20120171546 | 2011-08-15 | HEAT DISSIPATING HOUSING AND LITHIUM BATTERY PACK USING THE SAME, AND SEMICONDUCTING TAPE FOR HEAT DISSIPATION | Kenichi Tagawa; Yoshinari Takayama; Shunsuke Noumi; | NITTO DENKO CORPORATION; |
| 1,144 | 20120045697 | 2011-08-15 | ELECTROLYTE FOR RECHARGEABLE LITHIUM BATTERY, AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Na-Rae PARK; Jin-Hyunk LIM; Su-Hee HAN; Mi-Hyeun OH; Eun-Gi SHIM; | TECHNO SEMICHEM CO., LTD.; SAMSUNG SDI CO., LTD.; |
| 1,145 | 20130040188 | 2011-08-12 | RECHARGEABLE ELECTROCHEMICAL BATTERY CELL | Laurent ZINCK; Christian PSZOLLA; Christiane RIPP; Markus BORCK; Claudia WOLLFARTH; | Fortu Intellectual Property AG; |
| 1,146 | 20120212817 | 2011-08-12 | SELF HEATABLE INSPECTION MIRROR | Robert Moore; | |
| 1,147 | 20120135307 | 2011-08-04 | NEGATIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, METHOD OF PRODUCING NEGATIVE ELECTRODE AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Dong-Ho SON; Ki-Jun KIM; Ihn KIM; Ho-Yong AN; | Samsung SDI., Ltd.; |
| 1,148 | 20120025784 | 2011-08-01 | Advanced Charge Balancing System for Lithium Batteries | Salim Rana; | |
| 1,149 | 20120052384 | 2011-07-06 | COMPOSITION FOR POSITIVE ELECTRODE OF RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING POSITIVE ELECTRODE | Sae-Weon ROH; Yong-Chul Park; Sung-Soo Kim; So-Hyun Hur; In-Haeng Cho; | Samsung SDI Co., Ltd.; |
| 1,150 | 20120052379 | 2011-06-30 | Electrode for rechargeable lithium battery, method of preparing same, and rechargeable lithium battery including same | Sae-Weon Roh; Man-Seok Han; Tae-Keun Kim; Sung-Soo Kim; Jin-Kyu Hong; | |
| 1,151 | 20120202113 | 2011-06-22 | Lithium Ion Battery | James Hodge; Joseph Turner; | K2 ENERGY SOLUTIONS, INC.; |
| 1,152 | 20130115519 | 2011-06-14 | SEPARATOR FOR LITHIUM SECONDARY BATTERY AND METHOD FOR MANUFACTURING SAME | Young Lee; So Lee; Na Kang; Jung Kim; Nurasyikin Misdan; Yang-Kook Sun; Hun-Gi Jung; | ICUF-HYU (Industry-University Cooperation Foundati Hanyang Unversity; |
| 1,153 | 20110305947 | 2011-06-13 | POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, RECHARGEABLE LITHIUM BATTERY USING THE SAME AND METHOD FOR MANUFACTURING THE SAME | Yu-Mi SONG; Do-Hyung PARK; Seon-Young KWON; Ji-Hyun KIM; Min-Han KIM; Kyoung-Hyun KIM; | SAMSUNG SDI CO., LTD.; |
| 1,154 | 20140009122 | 2011-06-03 | APPARATUS AND METHOD FOR CHARGING A LITHIUM BATTERY | Se Lo; | |
| 1,155 | 20120070745 | 2011-05-31 | NEGATIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Sumihito ISHIDA; Jong-Ki Lee; Kyeu-Yoon Sheem; Mee-Young Lee; | Samsung SDI Co., Ltd.; |
| 1,156 | 20120100439 | 2011-05-27 | ELECTROLYTE SOLUTION FOR SECONDARY LITHIUM BATTERY AND SECONDARY LITHIUM BATTERY INCLUDING THE ELECTROLYTE SOLUTION | Yoon-sok Kang; Seok-soo Lee; Jae-gu Yoon; Jin-hwan Park; Mi-jeong Song; | Samsung Electronics Co., Ltd.; |
| 1,157 | 20120177989 | 2011-05-16 | NEGATIVE ACTIVE MATERIAL COMPOSITION, METHOD OF PREPARING NEGATIVE ELECTRODE PLATE BY USING NEGATIVE ACTIVE MATERIAL COMPOSITION, AND LITHIUM SECONDARY BATTERY MANUFACTURED BY USING THE NEGATIVE ACTIVE MATERIAL COMPOSITION | Dong-Ho Son; Ki-Jun Kim; Ihn Kim; Young-Su Kim; Sam-Jin Park; Na-Ri Seo; Myoung-Sun Kim; | |
| 1,158 | 20120064410 | 2011-05-09 | POSITIVE ELECTRODE PLATE, METHOD OF MANUFACTURING THE SAME, AND LITHIUM BATTERY INCLUDING THE POSITIVE ELECTRODE PLATE | Ji-Hyun Kim; Do-Hyung Park; Seong-Young Kwon; Min-Han Kim; Jeong-Seop Lee; Chang-Hyuk Kim; | Samsung SDI Co., Ltd.; |
| 1,159 | 20120021287 | 2011-05-05 | POSITIVE ELECTRODE AND LITHIUM BATTERY INCLUDING THE SAME | SOON-REWL LEE; ICK-KYU CHOI; YOUNG-KI KIM; JAY-HYOK SONG; YOUNG-HUN LEE; YU-MI SONG; YOON-CHANG KIM; | SAMSUNG SDI CO., LTD.; |
| 1,160 | 20110293507 | 2011-05-04 | PROCESS OF MAKING NANO-SCALE INTEGRATED TITANIA PARTICLES FOR LITHIUM BATTERY ELECTRODE APPLICATIONS | Damien Dambournet; Ilias Belharouak; Khalil Amine; | |

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| 1,161 | 20120270096 | 2011-04-21 | HIGH-POWER AND LARGE-CAPACITY LITHIUM BATTERY OF ELECTRIC BUS | Liankuan Xu; | |
| 1,162 | 20130062575 | 2011-03-31 | METAL IMIDE COMPOUNDS AS ANODE MATERIALS FOR LITHIUM BATTERIES AND GALVANIC ELEMENTS WITH A HIGH STORAGE CAPACITY | Ulrich Wietelmann; | CHEMETALL GMBH; |
| 1,163 | 20110305954 | 2011-03-25 | POSITIVE ACTIVE MATERIAL PRECURSOR FOR SECONDARY LITHIUM BATTERY, POSITIVE ACTIVE MATERIAL USING SAME, AND SECONDARY LITHIUM BATTERY INCLUDING THE POSITIVE ACTIVE MATERIAL | Min-Han KIM; Do-Hyung Park; Seon-Young Kwon; Yu-Mi Song; Ji-Hyun Kim; Kyoung-Hyun Kim; | Samsung SDI Co., Ltd.; |
| 1,164 | 20120045695 | 2011-03-04 | Negative electrode for a rechargeable lithium battery and rechargeable lithium battery including the same | Kyeu-Yoon Sheem; Bok-Hyun Ka; Sumihito Ishida; Da-Woon Han; | |
| 1,165 | 20110293991 | 2011-02-14 | RECHARGEABLE LITHIUM BATTERY | Jae-Yul Ryu; Wan-Uk Choi; Joon-Sup Kim; Jea-Woan Lee; Jin-Hee Moon; Chang-Keun Back; Young-Ugk Kim; Seung-Hee Park; | |
| 1,166 | 20120202121 | 2011-02-04 | HIGH VOLTAGE BATTERY FOR A LITHIUM BATTERY | Monique RICHARD; | Toyota Motor Engin. & Manufact. N.A.(TEMA); |
| 1,167 | 20130071738 | 2011-01-31 | SOFT PACKAGE LITHIUM BATTERY TAB MATERIAL AND ITS METHOD OF PLATING AND APPLICATION | Qiming Wang; | |
| 1,168 | 20120034524 | 2011-01-28 | Nano-Composite Anode for High Capacity Batteries and Methods of Forming Same | Robert Caracciolo; Youssef Habib; | ILLUMINEX CORPORATION; |
| 1,169 | 20110117444 | 2011-01-28 | Electrolytic Solution and Lithium Battery Employing the Same | Fu-Ming Wang; Chang-Rung Yang; Jing-Pin Pan; Hung-Chun Wu; | INDUSTRIAL TECHNOLOGY RESEARCH INSTITUTE; |
| 1,170 | 20120009483 | 2011-01-07 | Negative active material for rechargeable lithium battery and rechargeable lithium battery including the same | Hee-Young Chu; Sung-Hwan Moon; Jae-Hyuk Kim; Jong-Seo Choi; | |
| 1,171 | 20110311866 | 2011-01-04 | LITHIUM BATTERY AND METHOD OF MANUFACTURING THE SAME | Jin-Hyunk Lim; Jin-Sung Kim; Su-Hee Han; Na-Rae Park; Mi-Hyeun Oh; | |
| 1,172 | 20120034523 | 2010-12-21 | NEGATIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Kyeu-Yoon SHEEM; Sumihito ISHIDA; Eui-Hwan SONG; Young-Seak LEE; | SAMSUNG SDI CO., LTD.; |
| 1,173 | 20110269007 | 2010-12-20 | HIGH RATE SEAWATER ACTIVATED LITHIUM BATTERY CELLS BI-POLAR PROTECTED ELECTRODES AND MULTI-CELL STACKS | Steven Visco; Yevgeniy Nimon; Lutgard De Jonghe; Bruce Katz; | PolyPlus Battery Company; |
| 1,174 | 20120045693 | 2010-12-14 | NEGATIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, METHOD OF PREPARING SAME, AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Ji-Yong Eom; | |
| 1,175 | 20110300446 | 2010-12-11 | LITHIUM BATTERY CATHODE COMPOSITE MATERIAL | GAI YANG; CHANG-YIN JIANG; JIAN GAO; JIE-RONG YING; JIAN-JUN LI; XIANG-MING HE; | HON HAI PRECISION INDUSTRY CO., LTD.; TSINGHUA UNIVERSITY; |
| 1,176 | 20120241666 | 2010-12-06 | CATHODE ACTIVE MATERIAL PRECURSOR AND ACTIVE MATERIAL FOR A RECHARGEABLE LITHIUM BATTERY COMPRISING HOLLOW NANOFIBROUS CARBON, AND PRODUCTION METHOD THEREOF | Ji Hong; Ki Byun; | ROUTE JJ CO., LTD.; |
| 1,177 | 20110154595 | 2010-11-26 | Mouth piece toothbrush | Jeremiah Hill; | |
| 1,178 | 20130126802 | 2010-11-24 | HIGH-VOLTAGE LITHIUM BATTERY CATHODE MATERIAL | Ningning Wu; Guopeng Teng; Wen Song; Yuan Chen; Yahe Wang; Huanzeng Ge; | CITIC GUOAN MENGGULI POWER TECHNOLOGY CO., LTD.; |
| 1,179 | 20120130690 | 2010-11-23 | Quantum-Simulations Database and Design Engine for Development of Lithium Batteries | Deepak SRIVASTAVA; Jun Li; Sang Yang; | Nanoexa Corporation; |
| 1,180 | 20110293990 | 2010-11-19 | RECHARGEABLE LITHIUM BATTERY | Jae-Yul Ryu; Wan-Uk Choi; Joon-Sup Kim; Jea-Woan Lee; Jin-Hee Moon; Chang-Keun Back; Young-Ugk Kim; Seung-Hee Park; | |

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| 1,182 | 20120064408 | 2010-10-22 | POSITIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, METHOD OF PREPARING THE SAME, AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Hyun-Kon Song; Myeong-Hee Lee; Jin-Young Kim; Soojin Park; Jaephil Cho; | UNIST Academy-Industry Research Corporation; |
| 1,183 | 20110045358 | 2010-10-19 | NON-AQUEOUS ELECTROLYTE FOR A LITHIUM BATTERY AND LITHIUM BATTERY INCLUDING THE SAME | Jung OH; Young CHO; Ho YANG; Kab LEE; | PANAX ETEC CO., LTD; |
| 1,184 | 20110118123 | 2010-10-14 | SUPER-CONDUCTIVE NANOPARTICLE, SUPER-CONDUCTIVE NANOPARTICLE POWDER, AND LITHIUM BATTERY COMPRISING THE POWDER | So-Ra LEE; Jae-Myung KIM; Kyu-Nam JOO; Young-Su KIM; Deok-Hyun KIM; Gu-Hyun CHUNG; | Samsung SDI Co., Ltd.; |
| 1,185 | 20110104568 | 2010-10-08 | Negative Electrode For Rechargeable Lithium Battery and Rechargeable Lithium Battery Including Same | Min-Seok Sung; Goo-Jin Jeong; Sang-Min Lee; Kyeu-Yoon Sheem; Yong-Mook Kang; Sung-Soo Kim; | |
| 1,186 | 20120009477 | 2010-09-28 | Anode material of rapidly chargeable lithium battery and manufacturing method thereof | Jin-Ming Chen; Yen-Po Chang; Shih-Chieh Liao; Yu-Min Peng; Chi-Ju Cheng; Meng-Lun Lee; | Industrial Technology Research Institute; |
| 1,187 | 20110165467 | 2010-09-14 | NEGATIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Kyoung-Han YEW; Sang-Min LEE; Young-Hwan KIM; Duck-Chul HWANG; | SAMSUNG SDI CO., LTD.,; |
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| 1,189 | 20110143200 | 2010-09-09 | METHOD OF MANUFACTURING CATHODE ACTIVE MATERIAL FOR LITHIUM SECONDARY BATTERY AND 1-D NANOCLUSTER CATHODE ACTIVE MATERIAL WITH CHESTNUT TYPE MORPHOLOGY OBTAINED BY THE METHOD | Young Lee; Min Choi; Kwang Kim; Jae Cho; | Electronics and Telecommunications Research Institute; Ulsan National Institute Science and Technology Academy-Industry Research Cooperation; |
| 1,190 | 20110091370 | 2010-09-08 | Mechanochemical Synthesis of Carbon Fluorides and an Electrochemical Cell using the Synthesized Carbon Fluorides | Wishvender Behl; Jeffrey Read; | U.S. Government as represented by the Secretary of the Army; |
| 1,191 | 20110017959 | 2010-09-08 | CATHODE MATERIALS FOR SECONDARY (RECHARGEABLE) LITHIUM BATTERIES | Michel Armand; John Goodenough; Akshaya Padhi; Kirakodu Nanjundaswamy; Chirstian Masquelier; | |
| 1,192 | 20100323098 | 2010-08-31 | ELECTRODE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, ELECTRODE STRUCTURAL BODY COMPRISING SAID ELECTRODE MATERIAL, RECHARGEABLE LITHIUM BATTERY HAVING SAID ELECTRODE STRUCTURAL BODY, PROCESS FOR THE PRODUCTION OF SAID ELECTRODE STRUCTURAL BODY, AND PROCESS FOR THE PRODUCTION OF SAID RECHARGEABLE LITHIUM BATTERY | Takeshi Kosuzu; Soichiro Kawakami; Masaya Asao; Hidetoshi Tsuzuki; Takao Ogura; Naoya Kobayashi; | CANON KABUSHIKI KAISHA; |
| 1,193 | 20110165464 | 2010-08-25 | Negative Electrode for Rechargeable Lithium Battery and Rechargeable Lithium Battery Including Same | Kyoung-Han YEW; Sang-Min LEE; Young-Jun LEE; Young-Hwan KIM; | Samsung SDI Co., Ltd.; |
| 1,194 | 20110050462 | 2010-08-25 | Finders keepers locator | James LaGreca; | |
| 1,195 | 20120045672 | 2010-08-23 | VENTED BATTERY PACK | DUANE KRUGER; | DELPHI TECHNOLOGIES, INC.; |
| 1,196 | 20110165465 | 2010-08-20 | Negative active material for rechargeable lithium battery, method of preparing same, and rechargeable lithium battery including same | Tae-Keun Kim; Jun-Sik Kim; Jin-Kyu Hong; Sae-Weon Roh; Man-Seok Han; Sung-Soo Kim; Eui-Hwan Song; | Samsung SDI Co., Ltd.; |
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| 1,202 | 20110127462 | 2010-08-10 | ELECTRODE COMPOSITION FOR INKJET PRINT, ELECTRODE PREPARED USING THE ELECTRODE COMPOSITION, AND LITHIUM BATTERY COMPRISING THE ELECTRODE | Jae-man CHOI; Hansu Kim; Moon-seok Kwon; Min-sang Song; | Samsung Electronics Co., Ltd.; |
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| 1,204 | 20110195311 | 2010-07-28 | NEGATIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY, METHOD FOR MANUFACTURING THEREOF, AND RECHARGEABLE LITHIUM BATTERY COMPRISING THE SAME | Beom-Kwon Kim; Tae-Sik Kim; Kyu-Nam Joo; Jae-Myung Kim; | |
| 1,205 | 20120021290 | 2010-07-21 | ELECTRIC POWER STORAGE SYSTEM | Chun-Yi HONG; | |
| 1,206 | 20110033753 | 2010-07-19 | ELECTRODE FOR LITHIUM BATTERY AND ITS MANUFACTURING METHOD, AND LITHIUM BATTERY | Sukenori ICHIKAWA; | SEIKO EPSON CORPORATION; |
| 1,207 | 20110104574 | 2010-07-08 | Nonaqueous electrolyte for lithium Ion and lithium metal batteries | Elena Shembel; Irina Maksyuta; Volodymyr Redko; Tymofiy Pastushkin; | Enerize Corporation; |
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| 1,209 | 20120100434 | 2010-07-01 | LIQUID ELECTROLYTE FOR LITHIUM ACCUMULATOR, COMPRISING A MIXTURE OF NON-AQUEOUS ORGANIC SOLVENTS | Severine Jouanneau-Si Larbi; Lise Daniel; Florence Masse; | COMMISSARIAT A L'ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES; |
| 1,210 | 20110001352 | 2010-07-01 | POWER SOURCE APPARATUS FOR VEHICLE | Hiroshi TAMURA; Teruhiko KAMEOKA; Takao SUENAGA; Atsushi IMAI; Shigenori SAITO; | DENSO CORPORATION; |
| 1,211 | 20110195316 | 2010-06-18 | LITHIUM BATTERY | Kenichi Morigaki; | |
| 1,212 | 20120060360 | 2010-06-02 | Polymer electrolyte for lithium battery and method for preparing lithium battery using same | Jiansheng Liu; | |
| 1,213 | 20100308776 | 2010-05-28 | BATTERY CHARGER | Dezhong Yang; Nanfei Wu; | CHERVON LIMITED; |
| 1,214 | 20120121988 | 2010-05-14 | NEGATIVE ACTIVE MATERIAL FOR RECHARGEABLE LITHIUM BATTERY, METHOD OF MANUFACTURING THE SAME AND RECHARGEABLE LITHIUM BATTERY HAVING THE SAME | Sang Lee; Taehyun Jeon; Ung Lee; Do Seung; | GS CALTEX CORPORATION; |
| 1,215 | 20100261059 | 2010-04-14 | COMPOSITE ANODE ACTIVE MATERIAL, ANODE INCLUDING THE COMPOSITE ANODE ACTIVE MATERIAL, LITHIUM BATTERY INCLUDING THE ANODE, METHOD OF PREPARING THE COMPOSITE ANODE ACTIVE MATERIAL | Dong-Min IM; Ha-su KIM; Hun-joon SOHN; | Samsung SDI Co., Ltd.; SNU R&D Foundation; |
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| 1,217 | 20100239916 | 2010-03-29 | NON-AQUEOUS ELECTROLYTE AND A BATTERY, A SUPERCAPACITOR, AN ELECTROCHROMIC DEVICE AND A SOLAR CELL INCLUDING SUCH AN ELECTROLYTE | Aninda Bhattacharryya; Joachim Maier; Anna Jarosik; | Max-Planck-Gesellschaft zur Forderung der Wissenschaften e.V.; |
| 1,218 | 20100233552 | 2010-03-24 | MOBILE GENERATOR FOR SUPPLYING POWER TO THE ON-BOARD POWER SUPPLY SYSTEM FROM GROUND, ESPECIALLY THE ON-BOARD POWER SUPPLY SYSTEM OF A PARKED AIRCRAFT | Ronny Knepple; Bernd Speth; | DIEHL AEROSPACE GMBH; |
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| 1,220 | 20120028128 | 2010-03-18 | ALL-SOLID-STATE LITHIUM BATTERY | Yoshikatsu Seino; Tadatoshi Murota; Tetsu Fujiwara; | SANTOKU CORPORATION; |

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| 1,222 | 20100209772 | 2010-02-16 | NON-AQUEOUS ELECTROLYTE, AND RECHARGEABLE LITHIUM BATTERY INCLUDING THE SAME | Doo-Kyoung Lee; Sung-Soo Kim; Kyoung-Han Yew; Nam-Soon Choi; Su-Yeong Park; | Samsung SDI Co., LTD.; |
| 1,223 | 20100209770 | 2009-12-31 | POSITIVE ELECTRODE FOR RECHARGEABLE LITHIUM BATTERY AND RECHARGEABLE LITHIUM BATTERY INCLUDING SAME | Wan-Mook LIM; | Samsung SDI Co., Ltd.; |
| 1,224 | 20110156645 | 2009-12-29 | ALL-IN-ONE LITHIUM BATTERY CHARGER | FU-I YANG; | SAMYA TECHNOLOGY CO., LTD.; |
| 1,225 | 20110300430 | 2009-12-24 | SEPARATOR FOR BATTERY, AND NON-AQUEOUS LITHIUM BATTERY | Yasushi Usami; Takeyoshi Yamada; Eiki Yasukawa; Takayuki Nakajima; | MITSUBISHI CHEMICAL CORPORATION; MITSUBISHI PLASTICS, INC.; |
| 1,226 | 20110076565 | 2009-12-22 | Negative active material for rechargeable lithium battery, method of preparing the same, and rechargeable lithium battery including the same | Jaephil Cho; Mi Park; | UNIST Academy-Industry Research Corporation; |
| 1,227 | 20110297889 | 2009-12-04 | METHOD FOR MANUFACTURING A COMPOSITE MATERIAL OF SnO2 AND CARBON NANOTUBES AND/OR CARBON NANOFIBERS, MATERIAL OBTAINED BY THE METHOD, AND LITHIUM BATTERY ELECTRODE COMPRISING SAID MATERIAL | Dominique Plee; Mohamed Chakir; Patrice Simon; | UNIVERSITE PAUL SABATIER ( TOULOUSE III ); ARKEMA FRANCE; |
| 1,228 | 20110281179 | 2009-11-10 | NON-AQUEOUS ELECTROLYTIC SOLUTION, AND LITHIUM BATTERY COMPRISING SAME | Koji Abe; | UBE INDUSTRIES, LTD.; |
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| 1,232 | 20120077081 | 2009-10-07 | ELECTRODE COMPRISING A MODIFIED COMPLEX OXIDE AS ACTIVE SUBSTANCE | Joël Gaubicher; Dominique Guyomard; Marc Deschamps; Bernard Lestriez; François Tanguy; | |
| 1,233 | 20110250497 | 2009-10-07 | ELECTRODE COMPRISING A MODIFIED COMPLEX OXIDE AS ACTIVE SUBSTANCE | Joël Gaubicher; Dominique Guyomard; Marc Deschamps; Bernard Lestriez; François Tanguy; | |
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| 1,235 | 20110266954 | 2009-08-28 | MULTIFUNCTIONAL RECHARGEABLE LED LIGHT | Shun Lam; | |
| 1,236 | 20120068109 | 2009-08-27 | CATHODE MATERIAL FOR SECONDARY LITHIUM BATTERIES AND PREPARATION METHOD | Jay Shi; | |
| 1,237 | 20110163274 | 2009-08-20 | ELECTRODE COMPOSITE, BATTERY ELECTRODE FORMED FROM SAID COMPOSITE, AND LITHIUM BATTERY COMPRISING SUCH AN ELECTRODE | Dominique Plee; Bernard Lestriez; Dominique Guyomard; Sabrina Desaever; | Arkema France; |
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| 1,239 | 20110117432 | 2009-06-15 | INORGANIC BINDERS FOR BATTERY ELECTRODES AND AQUEOUS PROCESSING THEREOF | Andreas Kay; | DOW GLOBAL TECHNOLOGIES LLC; |
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| 1,242 | 20110044887 | 2009-03-25 | MESOPOROUS MANGANESE DIOXIDE | Katherine Amos; Tobias Gordon-Smith; | Nanotecture Ltd.; |
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| 1,244 | 20100090662 | 2009-01-16 | CHARGER SYSTEM FOR RECHARGEABLE LITHIUM BATTERIES UTILIZING POWER SUPPLY TERMINAL AS INITIAL CHARGING MEANS, AND COMPLETING CHARGING VIA INTERNAL CONSTANT-VOLTAGE CHARGER | Tadashi OKUTO; | |
| 1,245 | 20100151331 | 2008-12-16 | Positive active material and rechargeable lithium battery comprising same | Yang-Kook Sun; Byung-Chun Park; Hyung-Bae Kim; | EnerCeramic Inc.; |
| 1,246 | 20100261064 | 2008-11-13 | HIGH POWER LITHIUM UNIT CELL AND HIGH POWER LITHIUM BATTERY PACK HAVING THE SAME | Jeon Oh; Joong Lee; Eun Park; | SK Energy Co., Ltd.; |
| 1,247 | 20100273056 | 2008-10-29 | LITHIUM BATTERY AND METHOD FOR PRODUCING THE SAME | Ryoko Kanda; Nobuhiro Ota; Takashi Uemura; Kentaro Yoshida; Mitsuyasu Ogawa; | SUMITOMO ELECTRIC INDUSTRIES, LTD.; |
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| 1,249 | 20110143212 | 2008-09-26 | Non-Aqueous Electrolyte Solution for Rechargeable Lithium Batteries | Charles Angell; Xiao-Guang Sun; | |
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