

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
SONY CORPORATION	11/17/2017
RECEIVING PARTY DATA	
Name:	TOHOKU MURATA MANUFACTURING CO., LTD.
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State/Country:	JAPAN
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	16169557
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DATE SIGNED:	12/12/2018
Total Attachments: 11	
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ASSIGNMENT

WHEREAS, the undersigned, to wit: SONY CORPORATION (hereinafter "ASSIGNOR"), is the lawful owner of the inventions on the attached List of Applications which were filed with the United States Patent and Trademark Office.

AND WHEREAS, TOHOKU MURATA MANUFACTURING CO., LTD., having its principal office and place of business at 1-1 Shimosugishita, Takahura, Hiwada-machi, Koriyama-shi, Fukushima, JAPAN, (hereinafter "ASSIGNEE") desires to acquire the entire right, title, and interest therein;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, said ASSIGNOR does hereby sell, assign, and transfer, and hereby set over unto ASSIGNEE, its successors, assigns and legal representatives, the full and exclusive right, title and interest to said invention in the United States of America and all foreign countries, including, without limitation, said invention as described in the aforesaid application, to be held and enjoyed by said ASSIGNEE, its successors and assigns, as fully and entirely as the same would have been held and enjoyed by said ASSIGNOR had this assignment and sale not been made, including, without limitation, all rights to the aforesaid application and to any United States Letters Patent therefor, when issued together with all improvements thereon and betterments thereof, all related applications including, but not limited to, divisions, continuations, continuations-in-part, reissues and reexaminations thereof and substitutions of or for said application, and all foreign rights including the right to make application for Letters Patent for said inventions in any and all foreign countries and the right to claim priority as to the filing date under the International Convention on the basis for the aforesaid application for United States Letters Patent; and ASSIGNOR hereby authorizes and requests the Commissioner of Patents to issue all Letters Patent issuing therefrom to ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns and legal representatives.

ASSIGNOR hereby agrees to execute any papers, provide any information and testify in any interference or litigation at the request of ASSIGNEE, its successors, assigns and legal representatives, when deemed essential to ASSIGNEE's, its successors', assigns' and legal representatives' full enjoyment, protection, enforcement and title in and to such invention and rights hereby transferred.

ASSIGNOR furthermore agrees upon request of said ASSIGNEE, its successors, assigns and legal representatives, and without further remuneration, to execute any and all papers desired by said ASSIGNEE, its successors, assigns and legal representatives, for the filing and granting of foreign applications and the perfecting of title thereto in said ASSIGNEE, its successors, assigns and legal representatives.

Signature

Date Signed

SONY CORPORATION

By: 

November 17, 2017

Name: Tomonori Okuwaki

Title: Senior General Manager,

Intellectual Property Division

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List of Applications

K&L Ref. No.	Serial number	Filing Date	Title
3712174.04149	15/719024	5/31/2013	BATTERY
3712174.04148	15/713900	9/25/2017	ELECTRODE, SECONDARY BATTERY, BATTERY PACK, ELECTRIC VEHICLE, ELECTRIC POWER STORAGE SYSTEM, ELECTRIC POWER TOOL, AND ELECTRONIC APPARATUS
3712174.04142	15/710077	9/20/2017	A BATTERY PACK
3712174.04135	15/718909	9/28/2017	BATTERY, ELECTRONIC DEVICE, ELECTRIC VEHICLE, ELECTRICAL STORAGE DEVICE, ELECTRICAL STORAGE SYSTEM AND WEARABLE TERMINAL
3712174.04123	15/625021	6/16/2017	LITHIUM-ION SECONDARY BATTERY, NEGATIVE ELECTRODE FOR LITHIUM-ION SECONDARY BATTERY, BATTERY PACK, ELECTRIC VEHICLE, POWER STORAGE SYSTEM, ELECTRIC TOOL, AND ELECTRONIC DEVICE
3712174.04117	15/608106	5/30/2017	ELECTRIC STORAGE APPARATUS, ELECTRONIC DEVICE, ELECTRIC VEHICLE, AND ELECTRIC POWER SYSTEM
3712174.04115	15/539512	6/23/2017	SECONDARY BATTERY, BATTERY PACK, ELECTRIC VEHICLE, ELECTRIC POWER STORAGE SYSTEM, ELECTRIC POWER TOOL, AND ELECTRONIC APPARATUS
3712174.04114	15/543144	7/12/2017	SECONDARY BATTERY, BATTERY PACK, ELECTRIC VEHICLE, ELECTRIC POWER STORAGE SYSTEM, ELECTRIC POWER TOOL, AND ELECTRONIC APPARATUS
3712174.04113	15/538504	6/21/2017	POWER STORAGE MODULE, POWER STORAGE APPARATUS, POWER STORAGE SYSTEM, CONTROL METHOD, ELECTRONIC APPARATUS, ELECTRIC VEHICLE, AND ELECTRIC POWER SYSTEM
3712174.04112	15/608055	5/30/2017	SECONDARY BATTERY, ELECTRONIC DEVICE, ELECTRIC POWER TOOL, ELECTRICAL VEHICLE, AND ELECTRIC POWER STORAGE SYSTEM
3712174.04107	15/602614	5/23/2017	BATTERY
3712174.04106	15/653708	7/19/2017	NONAQUEOUS ELECTROLYTE BATTERY
3712174.04104	15/534851	6/9/2017	SECONDARY BATTERY-USE ELECTROLYTIC SOLUTION, SECONDARY BATTERY, BATTERY PACK, ELECTRIC VEHICLE, ELECTRIC POWER STORAGE SYSTEM, ELECTRIC POWER TOOL, AND ELECTRONIC APPARATUS
3712174.04102	15/585541	5/3/2017	BATTERY, BATTERY PACK, ELECTRONIC APPARATUS, ELECTRICALLY DRIVEN VEHICLE, ELECTRICAL STORAGE DEVICE, AND POWER SYSTEM

3712174.04101	15/585407	5/3/2017	SECONDARY BATTERY, BATTERY PACK, ELECTRIC VEHICLE, ELECTRIC POWER STORAGE SYSTEM, ELECTRIC POWER TOOL, AND ELECTRONIC APPARATUS
3712174.04098	15/523535	5/1/2017	SECONDARY BATTERY-USE ELECTROLYTIC SOLUTION, SECONDARY BATTERY, BATTERY PACK, ELECTRIC VEHICLE, ELECTRIC POWER STORAGE SYSTEM, ELECTRIC POWER TOOL, AND ELECTRONIC APPARATUS
3712174.04097	15/472911	3/29/2017	SEPARATOR, BATTERY AND ELECTRONIC DEVICE
3712174.04096	15/518344	4/11/2017	SECONDARY BATTERY-USE ACTIVE MATERIAL, SECONDARY BATTERY-USE ELECTRODE, SECONDARY BATTERY, BATTERY PACK, ELECTRIC VEHICLE, ELECTRIC POWER STORAGE SYSTEM, ELECTRIC POWER TOOL, AND ELECTRONIC APPARATUS
3712174.04094	15/519223	4/14/2017	BATTERY PACK AND ELECTRIC DEVICE
3712174.04089	15/517041	4/5/2017	BATTERY, BATTERY PACK, ELECTRONIC DEVICE, ELECTRIC VEHICLE, ELECTRICITY STORAGE DEVICE, AND POWER SYSTEM
3712174.04085	15/514556	3/27/2017	GLASS-CERAMIC, LITHIUM ION CONDUCTOR, BATTERY, ELECTRONIC DEVICE, AND METHOD FOR PRODUCING ELECTRODE
3712174.04083	15/432370	2/14/2017	POSITIVE ACTIVE MATERIAL AND NON-AQUEOUS ELECTROLYTE SECONDARY BATTERY
3712174.04076	15/420566	1/31/2017	BATTERY
3712174.04075	15/412254	1/23/2017	POWER RESERVE APPARATUS, POWER SYSTEM, AND ELECTRIC VEHICLE
3712174.04074	15/411242	1/20/2017	METHOD OF PRODUCING A SEPARATOR AND METHOD OF PRODUCING A MICROPOROUS MEMBRANE
3712174.04065	15/370522	12/6/2016	BATTERY PACK AND MANUFACTURING METHOD THEREFOR
3712174.04064	15/324924	1/9/2017	POSITIVE ELECTRODE ACTIVE MATERIAL, POSITIVE ELECTRODE, BATTERY, BATTERY PACK, ELECTRONIC DEVICE, ELECTRIC VEHICLE, POWER STORAGE DEVICE, AND POWER SYSTEM
3712174.04049	15/336317	10/27/2016	SEPARATOR, BATTERY, BATTERY PACK, ELECTRONIC APPARATUS, ELECTRIC VEHICLE, ELECTRIC STORAGE DEVICE, AND POWER SYSTEM
3712174.04048	15/309540	11/8/2016	BATTERY MODULE, ELECTRICITY STORAGE DEVICE, ELECTRICITY STORAGE SYSTEM, ELECTRONIC DEVICE, ELECTRIC-POWERED VEHICLE, AND POWER SYSTEM
3712174.04047	15/308233	11/1/2016	POWER SUPPLY APPARATUS AND POWER SUPPLY METHOD
3712174.04042	15/272839	9/22/2016	BATTERY
3712174.04036	15/345796	11/8/2016	SECONDARY BATTERY

3712174.04033	15/128315	9/22/2016	BATTERY, BATTERY PACK, ELECTRONIC EQUIPMENT, ELECTRIC VEHICLE, POWER STORAGE DEVICE, AND POWER SYSTEM
3712174.04028	15/253208	8/31/2016	ELECTRIC CIRCUIT, CHARGE CONTROL DEVICE, CHARGE SYSTEM, AND CONTROL METHOD
3712174.04027	15/219696	7/26/2016	BATTERY, SEPARATOR, AND LAMINATED MICROPOROUS FILM
3712174.04026	15/218624	7/25/2016	SECONDARY BATTERY
3712174.04021	15/235873	8/12/2016	BATTERY MODULE
3712174.04015	15/195468	6/28/2016	NONAQUEOUS ELECTROLYTE BATTERY AND A BATTERY PACKAGE
3712174.04012	15/109918	7/6/2016	CELL, CELL PACK, ELECTRONIC DEVICE, ELECTRIC VEHICLE, ELECTRICITY STORAGE APPARATUS, AND POWER SYSTEM
3712174.04006	15/165086	5/26/2016	NONAQUEOUS ELECTROLYTE SECONDARY BATTERY AND SEPARATOR
3712174.04002	15/155721	5/16/2016	BATTERY, SEPARATOR, BATTERY PACK, ELECTRONIC DEVICE, ELECTROMOTIVE VEHICLE, POWER STORAGE APPARATUS, AND ELECTRIC POWER SYSTEM
3712174.03992	15/026483	03/31/2016	BATTERY, ELECTROLYTE, BATTERY PACK, ELECTRONIC DEVICE, ELECTRIC VEHICLE, POWER STORAGE DEVICE, AND POWER SYSTEM
3712174.03991	15/076135	3/21/2016	ELECTROLYTIC SOLUTION AND BATTERY
3712174.03984	13/450641	4/19/2012	ELECTROLYTIC SOLUTION AND BATTERY
3712174.03983	12/123840	5/20/2008	ELECTROLYTIC SOLUTION AND BATTERY
3712174.03977	15/021892	3/14/2016	BATTERY, ELECTROLYTE, BATTERY PACK, ELECTRONIC DEVICE, ELECTRIC MOTOR VEHICLE, ELECTRICAL STORAGE DEVICE, AND POWER SYSTEM
3712174.03976	15562822	9/28/2017	ELECTRIC AIRCRAFT AND POWER SUPPLY DEVICE
3712174.03975	14/917484	3/8/2016	SECONDARY BATTERY-USE ANODE, SECONDARY BATTERY, BATTERY PACK, ELECTRIC VEHICLE, ELECTRIC POWER STORAGE SYSTEM, ELECTRIC POWER TOOL, AND ELECTRONIC APPARATUS
3712174.03970	14/976139	12/21/2015	BATTERY, NEGATIVE ELECTRODE ACTIVE MATERIAL, AND ELECTRIC TOOL
3712174.03969	15/005143	1/25/2016	BATTERY UNIT
3712174.03966	15/041592	2/11/2016	IC CARD
3712174.03960	14/924977	10/28/2015	POWER STORAGE DEVICE AND POWER STORAGE SYSTEM
3712174.03959	14/972458	12/17/2015	ELECTRODE WITH POROUS PROTECTIVE FILM, NONAQUEOUS ELECTROLYTE SECONDARY BATTERY, AND METHOD FOR MANUFACTURING ELECTRODE WITH POROUS PROTECTIVE FILM
3712174.03955	14/870703	9/30/2015	CELL

3712174.03954	14/900842	12/22/2015	POWER STORAGE DEVICE, POWER STORAGE SYSTEM, ELECTRONIC APPARATUS, ELECTRIC VEHICLE, AND ELECTRIC POWER SYSTEM
3712174.03951	14/929950	11/2/2015	BATTERY MONITOR CIRCUIT, STORAGE APPARATUS, ELECTRONIC APPARATUS, ELECTRIC-POWERED VEHICLE, AND POWER SYSTEM
3712174.03948	14/873747	10/2/2015	ELECTROLYTIC SOLUTION AND BATTERY
3712174.03947	14/971029	12/16/2015	ANODE AND BATTERY USING THE SAME
3712174.03935	14/773661	9/8/2015	SECONDARY BATTERY-USE ACTIVE MATERIAL, SECONDARY BATTERY-USE ELECTRODE, SECONDARY BATTERY, BATTERY PACK, ELECTRIC VEHICLE, ELECTRIC POWER STORAGE SYSTEM, ELECTRIC POWER TOOL, AND ELECTRONIC APPARATUS
3712174.03932	14/777715	09/16/2015	SEPARATOR, BATTERY, BATTERY PACK, ELECTRONIC APPARATUS, ELECTRIC VEHICLE, POWER STORAGE DEVICE, AND ELECTRIC POWER SYSTEM
3712174.03931	14/777346	9/15/2015	BATTERY, ELECTROLYTE LAYER, BATTERY PACK, ELECTRONIC APPARATUS, ELECTRIC VEHICLE, POWER STORAGE DEVICE, AND ELECTRIC POWER SYSTEM
3712174.03927	14/775111	9/11/2015	AIR-METAL SECONDARY BATTERY
3712174.03924	14/777356	9/15/2015	SEPARATOR, BATTERY, BATTERY PACK, ELECTRONIC APPARATUS, ELECTRIC VEHICLE, POWER STORAGE DEVICE, AND ELECTRIC POWER SYSTEM
3712174.03909	14/722752	5/27/2015	MONITORING APPARATUS, MONITORING CONTROL APPARATUS, POWER SUPPLY APPARATUS, MONITORING METHOD, MONITORING CONTROL METHOD, POWER STORAGE SYSTEM, ELECTRONIC APPARATUS, MOTOR-DRIVEN VEHICLE, AND ELECTRIC POWER SYSTEM
3712174.03906	14/760403	7/10/2015	SECONDARY BATTERY-USE ACTIVE MATERIAL, SECONDARY BATTERY-USE ELECTRODE, SECONDARY BATTERY, BATTERY PACK, ELECTRIC VEHICLE, ELECTRIC POWER STORAGE SYSTEM, ELECTRIC POWER TOOL, AND ELECTRONIC APPARATUS
3712174.03904	14/840645	8/31/2015	HEAT-RESISTANT MICROPOROUS FILM AND BATTERY SEPARATOR
3712174.03899	14/725705	5/29/2015	SEPARATOR AND NONAQUEOUS ELECTROLYTE BATTERY
3712174.03898	15/329701	1/27/2017	ELECTRIC STORAGE SYSTEM
3712174.03896	14/760614	7/13/2015	COMPOSITE MATERIAL FOR ELECTRODES, METHOD FOR PRODUCING SAME, AND SECONDARY BATTERY
3712174.03893	14/688459	4/16/2015	SECONDARY BATTERY, BATTERY PACK, ELECTRONIC APPARATUS, ELECTRIC TOOL, ELECTRIC VEHICLE, AND POWER STORAGE SYSTEM

3712174.03890	14/746259	6/22/2015	ELECTRODE MATERIAL FOR SECONDARY BATTERIES AND MANUFACTURING METHOD THEREOF, AND SECONDARY BATTERY
3712174.03884	14/643419	3/10/2015	BATTERY AND BATTERY PACK
3712174.03880	15/116042	8/2/2016	CIRCUIT BOARD, POWER STORAGE DEVICE, BATTERY PACK, AND ELECTRONIC DEVICE
3712174.03879	15/115774	8/1/2016	BATTERY PACK, POWER STORAGE DEVICE, POWER STORAGE SYSTEM, ELECTRONIC APPLIANCE, ELECTRIC VEHICLE, AND POWER SYSTEM
3712174.03877	15/112891	7/20/2016	ELECTRODE, METHOD OF PRODUCING THE SAME, BATTERY, AND ELECTRONIC DEVICE
3712174.03874	15/301816	10/4/2016	OWER STORAGE DEVICE, CONTROL METHOD, CONTROL DEVICE, POWER STORAGE SYSTEM, MAINTENANCE SYSTEM, ELECTRIC VEHICLE, AND ELECTRONIC EQUIPMENT
3712174.03873	15/107007	6/21/2016	CHARGING DEVICE, CHARGING CONTROL METHOD, ELECTRICITY STORAGE DEVICE, POWER STORAGE DEVICE, POWER SYSTEM, AND ELECTRIC VEHICLE
3712174.03862	14/569025	12/12/2014	CATHODE ACTIVE MATERIAL, ITS MANUFACTURING METHOD, AND NON-AQUEOUS ELECTROLYTE SECONDARY BATTERY
3712174.03844	14/567263	12/11/2014	ANODE ACTIVE MATERIAL AND BATTERY
3712174.03837	14/422835	2/20/2015	BATTERY PACK AND ELECTRIC VEHICLE
3712174.03806	14/635202	3/2/2015	BATTERY AND ELECTRONIC APPARATUS
3712174.03805	14/617180	2/9/2015	NEGATIVE ELECTRODE ACTIVE MATERIAL, BATTERY, BATTERY PACK, ELECTRONIC APPARATUS, ELECTRIC VEHICLE, ELECTRICAL STORAGE APPARATUS AND ELECTRICITY SYSTEM
3712174.03804	14/596741	1/14/2015	NON-AQUEOUS ELECTROLYTIC SOLUTION, SECONDARY BATTERY, BATTERY PACK, ELECTRIC VEHICLE, ELECTRIC POWER STORAGE SYSTEM, ELECTRIC POWER TOOL, AND ELECTRONIC APPARATUS
3712174.03801	14/627135	2/20/2015	BATTERY, ELECTRONIC DEVICE, ELECTRIC VEHICLE, ELECTRICAL STORAGE DEVICE, ELECTRICAL STORAGE SYSTEM AND WEARABLE TERMINAL
3712174.03798	14/618040	2/10/2015	CHARGING CONTROL APPARATUS, BATTERY, ELECTRONIC DEVICE, VEHICLE, CHARGING CONTROL METHOD, AN ELECTRIC STORAGE SYSTEM AND CHARGING CONTROL UNIT
3712174.03797	14/592621	1/8/2015	SECONDARY BATTERY, BATTERY PACK, ELECTRIC VEHICLE, POWER STORAGE SYSTEM, POWER TOOL, AND ELECTRONIC DEVICE
3712174.03796	14/622988	2/16/2015	BATTERY REMAINING-LIFE ESTIMATION APPARATUS, BATTERY PACK, CAPACITOR, ELECTRIC VEHICLE, AND BATTERY REMAINING-LIFE ESTIMATION METHOD

3712174.03795	14/622061	2/13/2015	NONAQUEOUS ELECTROLYTE SOLUTION FOR SECONDARY BATTERY, SECONDARY BATTERY, BATTERY PACK, ELECTRICALLY DRIVEN VEHICLE, POWER STORAGE SYSTEM, ELECTRICALLY DRIVEN TOOL, AND ELECTRONIC APPARATUS
3712174.03793	14/637539	3/4/2015	ELECTRODE AND SECONDARY BATTERY
3712174.03792	14/636634	3/3/2015	VOLTAGE EQUALIZATION APPARATUS AND ELECTRICITY STORAGE APPARATUS
3712174.03756	14/448429	7/31/2014	SPIRALLY WOUND NON-AQUEOUS ELECTROLYTE SECONDARY BATTERY
3712174.03752	14/509617	10/8/2014	OPEN-CIRCUIT VOLTAGE ESTIMATION DEVICE, POWER STORAGE APPARATUS, AND OPEN-CIRCUIT VOLTAGE ESTIMATION METHOD
3712174.03751	14/564307	12/9/2014	ELECTRODE, SECONDARY BATTERY, BATTERY PACK, ELECTRIC VEHICLE, ELECTRIC POWER STORAGE SYSTEM, ELECTRIC POWER TOOL, AND ELECTRONIC APPARATUS
3712174.03750	14/535594	11/7/2014	SECONDARY BATTERY, BATTERY PACK, ELECTRIC VEHICLE, AND ELECTRIC POWER STORAGE SYSTEM
3712174.03749	14/568767	12/12/2014	BATTERY, BATTERY PACK, ELECTRONIC DEVICE, ELECTRIC VEHICLE, ELECTRIC STORAGE DEVICE, AND ELECTRIC POWER SYSTEM
3712174.03748	14/522982	10/24/2014	NON-AQUEOUS ELECTROLYTIC SOLUTION, SECONDARY BATTERY, BATTERY PACK, ELECTRIC VEHICLE, ELECTRIC POWER STORAGE SYSTEM, ELECTRIC POWER TOOL, AND ELECTRONIC APPARATUS
3712174.03747	14/507082	10/6/2014	SECONDARY BATTERY, BATTERY PACK, ELECTRIC VEHICLE, ELECTRIC POWER STORAGE SYSTEM, ELECTRIC POWER TOOL, AND ELECTRONIC APPARATUS
3712174.03746	14/506892	10/6/2014	SECONDARY BATTERY INCLUDING A GEL ELECTROLYTE, BATTERY PACK, ELECTRIC VEHICLE, ELECTRIC POWER STORAGE SYSTEM, ELECTRIC POWER TOOL, AND ELECTRONIC APPARATUS INCLUDING THE SAME
3712174.03745	14/522972	10/24/2014	BATTERY STORAGE SYSTEM AND CONTROLLING METHOD OF THE SAME
3712174.03744	14/534420	11/6/2014	POWER STORAGE MEMBER MONITORING DEVICE, POWER STORAGE APPARATUS, AND POWER STORAGE MEMBER MONITORING METHOD
3712174.03735	15/022140	3/15/2016	POWER SUPPLY DEVICE, POWER SUPPLY SYSTEM, AND METHOD OF CONTROLLING POWER SUPPLY
3712174.03734	15/030418	4/19/2016	BATTERY AND ASSEMBLED BATTERY

3712174.03732	14/908194	1/28/2016	SECONDARY BATTERY, BATTERY PACK, ELECTRIC VEHICLE, ELECTRIC POWER STORAGE SYSTEM, ELECTRIC POWER TOOL, AND ELECTRONIC APPARATUS
3712174.03721	14/370669	7/3/2014	SEPARATOR, BATTERY, BATTERY PACK, ELECTRONIC DEVICE, ELECTRIC VEHICLE, POWER STORAGE DEVICE, AND POWER SYSTEM
3712174.03720	14/371630	7/10/2014	SEPARATOR, NONAQUEOUS ELECTROLYTE BATTERY, BATTERY PACK, ELECTRONIC DEVICE, ELECTRIC VEHICLE, POWER STORAGE DEVICE, AND POWER SYSTEM
3712174.03692	14/454178	8/7/2014	ELECTRLYTIC SOLUTION MATERIAL, ELECTRLYTIC SOLUTION, AND SECONDARY BATTERY
3712174.03670	14/297178	6/5/2014	ELECTRODE, SECONDARY BATTERY, BATTERY PACK, ELECTRIC VEHICLE, ELECTRIC POWER STORAGE SYSTEM, ELECTRIC POWER TOOL, AND ELECTRONIC APPARATUS
3712174.03668	14/306490	6/17/2014	SECONDARY BATTERY, METHOD OF MANUFACTURING THE SAME, BATTERY PACK, ELECTRIC VEHICLE, ELECTRIC POWER STORAGE SYSTEM, ELECTRIC POWER TOOL, AND ELECTRONIC APPARATUS
3712174.03646	14/249027	4/9/2014	INSPECTION APPARATUS, INSPECTION METHOD, AND BATTERY-INSPECTING CHAMBER
3712174.03643	14/182826	2/18/2014	GEL ELECTRODE SECONDARY CELL
3712174.03629	14/084316	11/19/2013	NONAQUEOUS ELECTROLYTE SECONDARY BATTERY
3712174.03612	14/192461	2/27/2014	ACTIVE MATERIAL, ELECTRODE, SECONDARY BATTERY, BATTERY PACK, ELECTRIC VEHICLE, ELECTRIC POWER STORAGE SYSTEM, ELECTRIC POWER TOOL, AND ELECTRONIC APPARATUS
3712174.03587	13/974907	8/23/2013	MAGNESIUM BATTERY COMPRISING POSITIVE-ELECTRODE MIXTURE WITH GRAPHITE FLUORIDE AND COPPER
3712174.03578	14/049324	10/9/2013	BATTERY, ELECTRODE, BATTERY PACK, ELECTRONIC DEVICE, ELECTRIC VEHICLE, POWER STORAGE DEVICE, AND POWER SYSTEM
3712174.03541	14/356356	5/5/2014	ELECTRODE MATERIAL, METHOD FOR MANUFACTURING ELECTRODE MATERIAL, AND SECONDARY BATTERY
3712174.03525	13/960997	8/7/2013	CATHODE ACTIVE MATERIAL, CATHODE, BATTERY, BATTERY PACK, ELECTRONIC APPARATUS, ELECTRIC VEHICLE, ELECTRIC STORAGE APPARATUS, AND ELECTRIC POWER SYSTEM
3712174.03460	13/856907	4/4/2013	SECONDARY BATTERY, BATTERY PACK, ELECTRIC VEHICLE, ELECTRIC POWER STORAGE SYSTEM, ELECTRIC POWER TOOL, AND ELECTRONIC APPARATUS

3712174.03414	13/773910	2/22/2013	SECONDARY BATTERY, BATTERY PACK, ELECTRIC VEHICLE, ENERGY STORAGE SYSTEM, ELECTRIC POWER TOOL, AND ELECTRONIC UNIT
3712174.03412	13/774523	2/22/2013	SECONDARY BATTERY, BATTERY PACK, ELECTRIC VEHICLE, ELECTRIC POWER STORAGE SYSTEM, ELECTRIC POWER TOOL, AND ELECTRONIC APPARATUS
3712174.03356	14/364410	6/11/2014	SECONDARY BATTERY-USE ACTIVE MATERIAL, SECONDARY BATTERY, AND ELECTRONIC APPARATUS
3712174.03308	13/654122	10/17/2012	BATTERY, METHOD OF FORMING A BATTERY CELL CONTAINER, AND ELECTRONIC DEVICE
3712174.03262	13/472241	5/15/2012	CATHODE ACTIVE MATERIAL, ITS MANUFACTURING METHOD, CATHODE, ITS MANUFACTURING METHOD, AND SECONDARY BATTERY
3712174.03196	13/558005	7/25/2012	ACTIVE MATERIAL, METHOD OF MANUFACTURING THE SAME, ELECTRODE, SECONDARY BATTERY, BATTERY PACK, ELECTRIC VEHICLE, ELECTRIC POWER STORAGE SYSTEM, ELECTRIC POWER TOOL, AND ELECTRONIC DEVICE
3712174.03151	13/527288	6/19/2012	LITHIUM-ION SECONDARY BATTERY, NEGATIVE ELECTRODE FOR LITHIUM-ION SECONDARY BATTERY, BATTERY PACK, ELECTRIC VEHICLE, POWER STORAGE SYSTEM, ELECTRIC TOOL, AND ELECTRONIC DEVICE
3712174.03092	13/437661	4/2/2012	SEPARATOR AND NONAQUEOUS ELECTROLYTE BATTERY, AND BATTERY PACK, ELECTRONIC APPARATUS, ELECTRIC VEHICLE, ELECTRIC POWER STORAGE DEVICE, AND ELECTRIC POWER SYSTEM
3712174.03044	13/290709	11/7/2011	Non-Aqueous Electrolyte Battery
3712174.03038	13/271786	10/12/2011	SHRINK RESISTANT MICROPOROUS MEMBRANE AND BATTERY SEPARATOR
3712174.03023	13/879584	4/15/2013	ELECTROLYTE AND SECONDARY BATTERY
3712174.02887	13/822534	3/12/2013	BATTERY PACK AND METHOD OF INSPECTING STORAGE STATE OF SECONDARY BATTERY IN BATTERY PACK
3712174.02553	13/033130	2/23/2011	NONAQUEOUS ELECTROLYTE BATTERY
3712174.02490	13/011067	1/21/2011	NONAQUEOUS ELECTROLYTE BATTERY
3712174.02480	12/985826	1/6/2011	SEPARATOR AND NONAQUEOUS ELECTROLYTE BATTERY
3712174.02461	13/513473	8/6/2012	SECONDARY BATTERY, ELECTROLYTIC SOLUTION, BATTERY PACK, ELECTRONIC DEVICE, AND ELECTRICAL VEHICLE
3712174.02438	12/959638	12/3/2010	SEPARATOR AND BATTERY

3712174.02418	12/953018	11/23/2010	SEPARATOR, BATTERY USING THE SAME, METHOD FOR PRODUCING SEPARATOR, MICROPOROUS MEMBRANE, AND METHOD FOR PRODUCING A MICROPOROUS MEMBRANE
3712174.01983	13/378523	8/24/2012	NON-AQUEOUS ELECTROLYTE BATTERY INCLUDING AN AMORPHOUS MATERIAL
3712174.01974	12/774821	5/6/2010	BATTERY PACK HAVING OUTER PACKAGING MEMBER
3712174.01898	12/710036	2/22/2010	NONAQUEOUS ELECTROLYTE SECONDARY BATTERY
3712174.01893	12/705186	2/12/2010	BATTERY AND BATTERY PACK
3712174.01891	12/703505	2/10/2010	NONAQUEOUS ELECTROLYTE SECONDARY BATTERY
3712174.01888	12/697458	2/1/2010	SEPARATOR AND BATTERY
3712174.01520	12/357173	1/21/2009	NONAQUEOUS ELECTROLYTE BATTERY
3712174.01487	12/744579	5/25/2010	FUEL CELL, MANUFACTURING METHOD THEREOF, ELECTRONIC APPARATUS, ENZYME-IMMOBILIZED ELECTRODE, MANUFACTURING METHOD THEREOF, WATER-REPELLENT AGENT, AND ENZYME IMMOBILIZING MATERIAL
3712174.01338	12/143524	6/20/2008	CATHODE MIX AND NONAQUEOUS ELECTROLYTE BATTERY
3712174.01209	11/957004	12/14/2007	CATHODE MIXTURE, NON-AQUEOUS ELECTROLYTE SECONDARY BATTERY, AND ITS MANUFACTURING METHOD
3712174.01200	11/932885	10/31/2007	ANODE AND BATTERY
3712174.01197	11/932704	10/31/2007	ELECTROLYTIC SOLUTION AND BATTERY
3712174.01177	11/941602	11/16/2007	CATHODE ACTIVE MATERIAL INCLUDING A COMPOSITE OXIDE PARTICLE AND A COATING LAYER CONTAINING LITHIUM, NICKEL AND MANGANESE, NON-AQUEOUS ELECTROLYTE SECONDARY BATTERY USING THE SAME, AND MANUFACTURING METHOD OF CATHODE ACTIVE MATERIAL INCLUDING A COMPOSITE OXIDE PARTICLE AND A COATING LAYER CONTAINING LITHIUM, NICKEL AND MANGANESE
3712174.01163	11/866875	10/3/2007	SECONDARY BATTERY HAVING AN OPEN CIRCUIT VOLTAGE OF 4.25 V to 6.00 V
3712174.01110	11/763222	6/14/2007	CATHODE ACTIVE MATERIAL, ITS MANUFACTURING METHOD, CATHODE, ITS MANUFACTURING METHOD, AND SECONDARY BATTERY
3712174.01069	11/695419	4/2/2007	BATTERY PACK
3712174.00703	11/574116	03-30-2007	FUEL CELLS, METHODS OF USING FUEL CELLS, CATHODES FOR FUEL CELLS, ELECTRONIC DEVICES, DEVICES USING ELECTRODE REACTIONS, AND ELECTRODES FOR DEVICES USING ELECTRODE REACTIONS
3712174.04157	15/728990	10-10-2017	SECONDARY BATTERY, ELECTROLYTIC SOLUTION, BATTERY PACK, ELECTRONIC DEVICE, AND ELECTRICAL VEHICLE

PATENT

RECORDED: 12/19/2018

REEL: 047894 FRAME: 0462