

## PATENT ASSIGNMENT COVER SHEET

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
SONY CORPORATION	03/25/2013
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	JAPAN DISPLAY WEST INC.
<b>Street Address:</b>	50 AZA KAMIFUNAKI, O-AZA OGAWA, HIGASHIURA-CHO
<b>City:</b>	CHITA-GUN, AICHI-KEN
<b>State/Country:</b>	JAPAN
<b>Postal Code:</b>	470-2102
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	17241368
<b>CORRESPONDENCE DATA</b>	
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<b>ATTORNEY DOCKET NUMBER:</b>	3724078.04324
<b>NAME OF SUBMITTER:</b>	NOLAN R. HUBBARD
<b>SIGNATURE:</b>	/Nolan R. Hubbard/
<b>DATE SIGNED:</b>	04/28/2021
<b>Total Attachments: 9</b>	
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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 in the United States Patent and Trademark Office.

AND WHEREAS, Japan Display West Inc. (hereinafter "ASSIGNEE"), having its principal office and place of business at 50 Aza Kamifunaki, O-Aza Ogawa, Higashiura-cho, Chita-gun, Aichi-ken, 470-2102 Japan, 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

March 25, 2013

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By: \_\_\_\_\_

Name:

Fumihiko Moriya

Title:

VP, Senior General Manager,  
Intellectual Property Division,

Sony Corporation

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1-7-1 Konan, Minato-ku,  
Tokyo, 108-0075 Japan

List of Applications

K&L Ref. No.	Serial number	Filing Date	Title
3712174-00982	11/610218	12/13/2006	DISPLAY THAT IMPLEMENTS IMAGE DISPLAYING AND LIGHT RECEPTION CONCURRENTLY OR ALTERNATELY
3712174-01124	11/782395	7/24/2007	ANTIREFLECTION FILM, METHOD FOR HEATING METAL FILM, AND HEATING APPARATUS
3712174-01181	11/842727	8/21/2007	IMAGING AND DISPLAY APPARATUS, INFORMATION INPUT APPARATUS, OBJECT DETECTION MEDIUM, AND OBJECT DETECTION METHOD
3712174-01190	11/940187	11/14/2007	DISPLAY APPARATUS, DISPLAY-APPARATUS CONTROL METHOD AND PROGRAM
3712174-01270	12/048088	3/13/2008	DISPLAY APPARATUS AND METHOD FOR CONTROLLING THE SAME
3712174-01443	12/270281	11/13/2008	DISPLAY DEVICE AND ELECTRONIC APPARATUS
3712174-01444	12/263858	11/3/2008	DISPLAY APPARATUS
3712174-01460	12/598540	11/2/2009	DISPLAY DEVICE INCLUDING PHOTODIODES FOR DETECTING AMBIENT LIGHT AND DARK CURRENT FOR ADJUSTING A BACKLIGHT, AND DISPLAY CONTROL METHOD THEREOF
3712174-01462	12/522512	7/8/2009	DISPLAY DEVICE, DISPLAY CONTROL METHOD, AND ELECTRONIC APPARATUS
3712174-01470	12/329812	12/8/2008	DISPLAY AND ELECTRONIC APPARATUS
3712174-01475	12/330703	12/9/2008	DISPLAY AND ELECTRONIC APPARATUS
3712174-01561	12/369428	2/11/2009	DISPLAY APPARATUS AND IMAGE PICKUP APPARATUS
3712174-01593	12/994662	11/24/2010	DISPLAY APPARATUS
3712174-01740	12/571634	10/1/2009	DISPLAY PANEL AND DISPLAY DEVICE
3712174-01826	12/642312	12/18/2009	LIQUID CRYSTAL PANEL AND ELECTRONIC APPARATUS
3712174-01827	12/642346	12/18/2009	LIQUID CRYSTAL PANEL AND PIXEL STRUCTURE THEREOF
3712174-01828	12/640906	12/17/2009	LIQUID CRYSTAL PANEL AND ELECTRONIC APPARATUS
3712174-01829	12/640740	12/17/2009	LIQUID CRYSTAL DISPLAY PANEL AND ELECTRONIC APPARATUS INCLUDING A LIQUID CRYSTAL DISPLAY PANEL
3712174-01830	12/644841	12/22/2009	DISPLAY APPARATUS AND DISPLAY METHOD
3712174-01972	12/820685	6/22/2010	DISPLAY DEVICE
3712174-02004	13/056315	1/28/2011	TOUCH SENSOR, DISPLAY AND ELECTRONIC DEVICE
3712174-02038	12/850372	8/4/2010	DETECTING DEVICE, DISPLAY DEVICE, AND OBJECT PROXIMITY DISTANCE MEASURING METHOD
3712174-02040	12/851757	8/6/2010	SENSOR DEVICE, METHOD OF DRIVING SENSOR ELEMENT, DISPLAY DEVICE WITH INPUT FUNCTION AND ELECTRONIC UNIT
3712174-02041	12/854344	8/11/2010	STEREOSCOPIC IMAGE DISPLAYING APPARATUS
3712174-02059	11/287210	11/28/2005	Liquid crystal display panel
3712174-02074	12/363068	1/30/2009	LIQUID CRYSTAL DEVICE, METHOD OF MANUFACTURING LIQUID CRYSTAL DEVICE, AND ELECTRONIC APPARATUS
3712174-02077	11/492014	7/25/2006	ELECTRO-OPTICAL DEVICE AND ELECTRONIC APPARATUS INCLUDING A SEALED WIRING PORTION CONNECTED TO AN ELECTROSTATIC PROTECTION CIRCUIT
3712174-02078	11/492088	7/25/2006	Semi-transmissive liquid crystal display device
3712174-02081	11/523629	9/20/2006	Liquid crystal display device including a light-blocking member
3712174-02082	11/510557	8/28/2006	LIQUID CRYSTAL DISPLAY DEVICE UTILIZING A PHOTODIODE

K&L Ref. No.	Serial number	Filing Date	Title
3712174-02084	11/514210	9/1/2006	Electro-optical device and electronic apparatus comprising an address line
3712174-02107	11/727005	3/23/2007	Fringe field switching mode liquid crystal display panel
3712174-02109	11/701498	2/2/2007	Display
3712174-02121	11/812348	6/18/2007	Liquid crystal device, method of driving liquid crystal device, and electronic apparatus
3712174-02122	12/145944	6/25/2008	LIQUID CRYSTAL DEVICE AND ELECTRONIC APPARATUS
3712174-02123	11/812502	6/19/2007	Electro-optical device and electronic apparatus
3712174-02124	11/790408	4/25/2007	PHOTORECEPTOR DEVICE, LIQUID CRYSTAL APPARATUS, AND ELECTRONIC APPARATUS
3712174-02129	11/831553	7/31/2007	ILLUMINATION SYSTEM, LIQUID CRYSTAL DEVICE, AND ELECTRONIC DEVICE
3712174-02131	11/878579	7/25/2007	Liquid crystal display device
3712174-02133	11/882831	8/6/2007	Electrooptic device, driving circuit, and electronic device
3712174-02146	11/974027	10/11/2007	Display apparatus
3712174-02149	12/003722	12/31/2007	Liquid crystal device and electronic apparatus
3712174-02154	12/008822	1/14/2008	Display device
3712174-02155	12/000175	12/10/2007	LIQUID CRYSTAL DEVICE
3712174-02158	11/984971	11/26/2007	Liquid crystal device and electronic apparatus
3712174-02160	11/979001	10/30/2007	LIQUID CRYSTAL DEVICE AND ELECTRONIC APPARATUS
3712174-02166	12/117265	5/8/2008	DISPLAY DEVICE AND ELECTRONIC APPARATUS INCLUDING DISPLAY DEVICE
3712174-02168	12/127863	5/28/2008	LIQUID CRYSTAL DISPLAY, ELECTRONIC DEVICE, AND METHOD FOR CONTROLLING BRIGHTNESS OF ILLUMINATION UNIT OF LIQUID CRYSTAL DISPLAY
3712174-02170	12/057865	3/28/2008	CAPACITIVE INPUT DEVICE
3712174-02171	12/179773	7/25/2008	LIQUID CRYSTAL DISPLAY PANEL AND MANUFACTURING METHOD THEREOF
3712174-02173	12/143122	6/20/2008	LIQUID-CRYSTAL DISPLAY
3712174-02175	12/211499	9/16/2008	TRANSFLECTIVE LIQUID CRYSTAL DISPLAY PANEL COMPRISING STRIPS OF A BLUE COLOR FILTER LAYER FORMED ON THE RED AND GREEN COLOR FILTER LAYERS IN THE RED AND GREEN FILTER PIXEL AREAS RESPECTIVELY
3712174-02178	12/179168	7/24/2008	LIQUID CRYSTAL DISPLAY DEVICE, METHOD FOR PRODUCING SAME, AND ELECTRONIC APPARATUS
3712174-02179	12/237135	9/24/2008	LIQUID CRYSTAL DISPLAY DEVICE AND LIGHT DETECTOR HAVING FIRST AND SECOND TFT AMBIENT LIGHT PHOTO-SENSORS ALTERNATIVELY ARRANGED ON THE SAME ROW
3712174-02180	12/192157	8/15/2008	DISPLAY UNIT
3712174-02182	12/256923	10/23/2008	LIQUID CRYSTAL DISPLAY DEVICE
3712174-02183	12/136237	6/10/2008	DISPLAY DEVICE AND ELECTRONIC APPARATUS
3712174-02186	12/397408	3/4/2009	LIQUID CRYSTAL DEVICE AND ELECTRONIC APPARATUS
3712174-02187	12/349250	1/6/2009	LIQUID CRYSTAL DEVICE AND ELECTRONIC APPARATUS
3712174-02191	12/336015	12/16/2008	LIQUID CRYSTAL DEVICE, METHOD OF MANUFACTURING LIQUID CRYSTAL DEVICE AND ELECTRONIC APPARATUS
3712174-02192	12/330881	12/9/2008	DISPLAY DEVICE
3712174-02193	12/361597	1/29/2009	LIQUID CRYSTAL DISPLAY APPARATUS COMPRISING A LIGHT-DETECTING AND CONTROLLING UNIT THAT SENSE AND CONTROL THE BRIGHTNESS OF THE DISPLAY
3712174-02197	12/405632	3/17/2009	LIQUID CRYSTAL DEVICE AND ELECTRONIC APPARATUS
3712174-02200	12/405471	3/17/2009	ELECTRO-OPTIC APPARATUS AND ELECTRONIC INSTRUMENT

K&L Ref. No.	Serial number	Filing Date	Title
3712174-02206	12/481160	6/9/2009	PHOTODETECTOR, ELECTRO-OPTICAL DEVICE, AND ELECTRONIC APPARATUS
3712174-02207	12/417157	4/2/2009	CAPACITANCE TYPE INPUT DEVICE AND DISPLAY DEVICE WITH INPUT FUNCTION
3712174-02208	12/414726	3/31/2009	INPUT DEVICE AND DISPLAY DEVICE WITH INPUT FUNCTION
3712174-02210	12/472946	5/27/2009	LIQUID CRYSTAL DISPLAY PANEL
3712174-02215	11/957047	12/14/2007	INPUT-CAPABLE DISPLAY DEVICE
3712174-02217	12/037590	2/26/2008	LIQUID CRYSTAL DEVICE, ELECTRONIC APPARATUS AND POSITION IDENTIFICATION METHOD FOR IDENTIFYING A POSITION OF AN OBJECT
3712174-02226	12/248216	10/9/2008	LIQUID CRYSTAL DEVICE AND ELECTRONIC APPARATUS
3712174-02228	12/270936	11/14/2008	ELECTRO-OPTICAL DEVICE AND ELECTRONIC APPARATUS
3712174-02229	12/368729	2/10/2009	SENSING DEVICE, DISPLAY DEVICE, ELECTRONIC APPARATUS, AND SENSING METHOD
3712174-02231	12/416361	4/1/2009	LIQUID CRYSTAL DISPLAY AND ELECTRONIC APPARATUS
3712174-02233	12/427506	4/21/2009	SENSING CIRCUIT, METHOD OF DRIVING SENSING CIRCUIT, DISPLAY DEVICE, METHOD OF DRIVING DISPLAY DEVICE, AND ELECTRONIC APPARATUS
3712174-02234	12/412584	3/27/2009	ELECTRO-OPTICAL DEVICE, ELECTRONIC APPARATUS, AND CONTACT DETECTION METHOD
3712174-02236	12/851766	8/6/2010	TOUCH SENSOR METHODS AND APPARATUS
3712174-02251	11/730257	3/30/2007	Liquid crystal display
3712174-02313	11/976175	10/22/2007	ELECTRO-OPTICAL DEVICE, SCAN LINE DRIVING CIRCUIT, AND ELECTRONIC APPARATUS
3712174-02316	12/003020	12/19/2007	Liquid crystal device with pixel electrode under the common electrode and thinner than drain electrode, method of manufacturing liquid crystal device, and electronic apparatus
3712174-02317	12/044585	3/7/2008	INPUT DEVICE, AND ELECTRO-OPTICAL DEVICE
3712174-02318	12/193795	8/19/2008	INPUT DEVICE, DISPLAY DEVICE WITH INPUT FUNCTION, AND ELECTRONIC APPARATUS
3712174-02319	12/193809	8/19/2008	TOUCH PANEL, DISPLAY DEVICE WITH INPUT FUNCTION, AND ELECTRONIC APPARATUS
3712174-02322	12/363205	1/30/2009	DISPLAY DEVICE
3712174-02323	12/391322	2/24/2009	ELECTRICAL CAPACITANCE INPUT DEVICE, DISPLAY APPARATUS WITH INPUT FUNCTION AND ELECTRONIC APPARATUS
3712174-02324	12/362531	1/30/2009	CAPACITIVE INPUT DEVICE, DISPLAY DEVICE WITH INPUT FUNCTION, AND ELECTRONIC APPARATUS
3712174-02328	12/533833	7/31/2009	TRANSVERSE ELECTRIC FIELD MODE LIQUID CRYSTAL DISPLAY PANEL CAPABLE OF PREVENTING BRIGHT REGIONS OF THE CIRCUMFERENCES OF SLIT-SHAPED OPENINGS OF AN UPPER ELECTRODE
3712174-02329	12/487027	6/18/2009	RESISTIVE FILM TYPE INPUT DEVICE, DISPLAY DEVICE WITH INPUT FUNCTION, AND ELECTRONIC APPARATUS
3712174-02331	12/540028	8/12/2009	LIQUID CRYSTAL DEVICE, ELECTRONIC APPARATUS, AND METHOD OF MANUFACTURING LIQUID CRYSTAL DEVICE
3712174-02332	12/539873	8/12/2009	LIQUID CRYSTAL DEVICE AND ELECTRONIC APPARATUS
3712174-02333	12/560681	9/16/2009	ELECTRO-OPTICAL DEVICE, AND ELECTRONIC APPARATUS HAVING THE SAME
3712174-02334	12/574984	10/7/2009	ELECTRO-OPTICAL DEVICE AND DRIVING CIRCUIT
3712174-02335	12/547738	8/26/2009	LIQUID CRYSTAL DISPLAY DEVICE

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3712174-02336	12/610414	11/2/2009	TOUCH PANEL DEVICE HAVING AN OUTER EDGE FRAME BODY, AN ELECTRO-OPTICAL DEVICE USING THE SAME, AND AN ELECTRONIC APPARATUS USING THE SAME
3712174-02338	12/549427	8/28/2009	DISPLAY DEVICE
3712174-02340	12/634243	12/9/2009	LIQUID CRYSTAL DISPLAY DEVICE AND ELECTRONIC APPARATUS
3712174-02342	12/717991	3/5/2010	SCANNER, ELECTRO-OPTICAL PANEL, ELECTRO-OPTICAL DISPLAY DEVICE AND ELECTRONIC APPARATUS
3712174-02364	12/829007	7/1/2010	INPUT DEVICE AND INPUT FUNCTION-EQUIPPED DISPLAY DEVICE
3712174-02365	12/831413	7/7/2010	LIQUID CRYSTAL DISPLAY DEVICE, LIQUID CRYSTAL DISPLAY DEVICE MANUFACTURING METHOD, AND ELECTRONIC DEVICE
3712174-02366	12/828979	7/1/2010	LIQUID CRYSTAL DISPLAY PANEL
3712174-02368	12/898142	10/5/2010	INFORMATION INPUT DEVICE, INFORMATION INPUT PROGRAM, AND ELECTRONIC INSTRUMENT
3712174-02386	12/839790	7/20/2010	ELECTROSTATIC CAPACITANCE INPUT DEVICE AND ELECTRO-OPTICAL DEVICE HAVING INPUT DEVICE
3712174-02403	12/838821	7/19/2010	ELECTROSTATIC CAPACITANCE TYPE INPUT APPARATUS AND DISPLAY APPARATUS WITH INPUT FUNCTION INCLUDING THE SAME
3712174-02406	12/917915	11/2/2010	DISPLAY DEVICE WITH IMAGE PICKUP FUNCTION, DRIVING METHOD, AND ELECTRONIC DEVICE
3712174-02408	12/947038	11/16/2010	SENSOR DEVICE, METHOD OF DRIVING SENSOR ELEMENT, DISPLAY DEVICE WITH INPUT FUNCTION AND ELECTRONIC UNIT
3712174-02429	12/862263	8/24/2010	LIQUID CRYSTAL DEVICE AND ELECTRONIC APPARATUS
3712174-02430	12/877402	9/8/2010	LIQUID CRYSTAL DEVICE AND ELECTRONIC APPARATUS
3712174-02431	12/884758	9/17/2010	LIQUID CRYSTAL DISPLAY DEVICE
3712174-02432	12/870005	8/27/2010	LIQUID CRYSTAL DISPLAY PANEL
3712174-02433	12/884487	9/17/2010	LIQUID CRYSTAL DISPLAY PANEL
3712174-02455	12/959628	12/3/2010	DISPLAY DEVICE
3712174-02456	12/961843	12/7/2010	ELECTROSTATIC CAPACITANCE-TYPE INPUT DEVICE, METHOD OF TESTING ELECTROSTATIC CAPACITANCE-TYPE INPUT DEVICE, AND DRIVING DEVICE FOR ELECTROSTATIC CAPACITANCE-TYPE INPUT DEVICE
3712174-02457	12/962043	12/7/2010	ELECTROSTATIC CAPACITANCE-TYPE INPUT DEVICE AND METHOD OF MANUFACTURING THEREOF
3712174-02458	12/965268	12/10/2010	IMAGE DISPLAY APPARATUS, ITS DRIVING METHOD AND APPARATUS DRIVING PROGRAM
3712174-02459	12/969824	12/16/2010	ELECTRO-OPTICAL DEVICE AND ELECTRONIC EQUIPMENT
3712174-02460	12/973042	12/20/2010	CAPACITIVE INPUT DEVICE AND ELECTRO-OPTICAL APPARATUS WITH INPUT FUNCTION
3712174-02465	12/892369	9/28/2010	MOUNTING STRUCTURE, ELECTRO-OPTICAL APPARATUS, AND TOUCH PANEL
3712174-02466	12/903609	10/13/2010	LIQUID-CRYSTAL DISPLAY APPARATUS COMPRISING DISPLAY PIXELS AND VISION-ANGLE CONTROL PIXELS HAVING A VISION-ANGLE CONTROL CIRCUIT
3712174-02468	12/899964	10/7/2010	INPUT APPARATUS, DISPLAY APPARATUS HAVING AN INPUT FUNCTION, INPUT METHOD, AND METHOD OF CONTROLLING A DISPLAY APPARATUS HAVING AN INPUT FUNCTION



K&L Ref. No.	Serial number	Filing Date	Title
3712174-02470	12/908142	10/20/2010	ELECTROSTATIC CAPACITANCE-TYPE INPUT DEVICE, METHOD OF MANUFACTURING ELECTROSTATIC CAPACITANCE-TYPE INPUT DEVICE, AND ELECTRO-OPTICAL APPARATUS PROVIDED WITH INPUT FUNCTION
3712174-02471	12/978906	12/27/2010	LIQUID CRYSTAL DISPLAY DEVICE AND DRIVING METHOD OF THE SAME
3712174-02472	12/984767	1/5/2011	DISPLAY DEVICE, SWITCHING CIRCUIT AND FIELD EFFECT TRANSISTOR
3712174-02473	12/983614	1/3/2011	LIQUID CRYSTAL DISPLAY MANUFACTURING METHOD, LIQUID CRYSTAL DISPLAY, AND ELECTRONIC APPARATUS
3712174-02475	13/005199	1/12/2011	LIQUID CRYSTAL DISPLAY DEVICE AND ELECTRONIC APPARATUS
3712174-02477	13/013287	1/25/2011	LIQUID CRYSTAL DISPLAY DEVICE
3712174-02494	12/913268	10/27/2010	METHOD FOR MANUFACTURING LIQUID CRYSTAL DISPLAY DEVICE
3712174-02495	12/910555	10/22/2010	HORIZONTAL-ELECTRIC-FIELD LIQUID CRYSTAL DISPLAY APPARATUS
3712174-02496	12/898344	10/5/2010	ELECTROSTATIC CAPACITANCE-TYPE INPUT DEVICE AND INPUT DEVICE-ATTACHED ELECTRO-OPTICAL APPARATUS
3712174-02497	12/906309	10/18/2010	LIQUID CRYSTAL DISPLAY MODULE
3712174-02503	13/024985	2/10/2011	DISPLAY DEVICE WITH TOUCH SENSOR, TOUCH PANEL, METHOD OF DRIVING TOUCH PANEL, AND ELECTRONIC DEVICE
3712174-02509	12/944277	11/11/2010	LIQUID CRYSTAL DISPLAY PANEL COMPRISING A DISPLAY SUB-PIXEL AND A VIEWING ANGLE CONTROL SUB-PIXEL WHEREIN A SLIT APERTURE IS INCLINED TO A DIRECTION OF THE RUBBING TREATMENT OF AN ALIGNMENT FILM
3712174-02510	13/014824	1/27/2011	LIQUID CRYSTAL DISPLAY PANEL AND ELECTRONIC APPARATUS
3712174-02512	13/022845	2/8/2011	DISPLAY DEVICE AND ELECTRONIC APPARATUS
3712174-02513	13/022084	2/7/2011	DISPLAY DEVICE AND ELECTRONIC APPARATUS
3712174-02514	13/021320	2/4/2011	LIQUID CRYSTAL DISPLAY PANEL AND ELECTRONIC APPARATUS
3712174-02515	13/023099	2/8/2011	LIQUID CRYSTAL LENS AND DISPLAY DEVICE
3712174-02516	13/023869	2/9/2011	DISPLAY DEVICE AND ELECTRONIC APPARATUS
3712174-02517	13/027405	2/15/2011	LIQUID CRYSTAL DISPLAY PANEL
3712174-02518	13/028559	2/16/2011	PIXEL CIRCUIT, LIQUID-CRYSTAL DEVICE, AND ELECTRONIC DEVICE
3712174-02519	13/028567	2/16/2011	INPUT DEVICE AND ELECTRONIC APPARATUS
3712174-02520	13/030710	2/18/2011	LIQUID CRYSTAL DISPLAY PANEL AND ELECTRONIC APPARATUS
3712174-02521	13/030409	2/18/2011	SHIFT REGISTER, SCANNING LINE DRIVE CIRCUIT, ELECTRO-OPTICAL DEVICE, AND ELECTRONIC APPARATUS
3712174-02539	13/037451	3/3/2011	LIQUID CRYSTAL DISPLAY PANEL
3712174-02540	13/042551	3/8/2011	LIQUID CRYSTAL DEVICE, METHOD OF DRIVING THE SAME, AND ELECTRONIC APPLIANCE
3712174-02541	13/040485	3/4/2011	TWO-IMAGE DISPLAY APPARATUS
3712174-02542	13/039985	3/3/2011	LIQUID CRYSTAL DISPLAY PANEL
3712174-02543	13/043744	3/9/2011	DISPLAY DEVICE AND ELECTRONIC APPARATUS
3712174-02544	13/048092	3/15/2011	TOUCH PANEL AND MANUFACTURING METHOD THEREFOR
3712174-02545	13/049356	3/16/2011	TOUCH PANEL AND ELECTRO-OPTICAL APPARATUS WITH INPUTTING FUNCTION

K&L Ref. No.	Serial number	Filing Date	Title
3712174-02546	13/048084	3/15/2011	DISPLAY DEVICE AND ELECTRONIC APPARATUS
3712174-02547	13/048504	3/15/2011	ELECTROOPTIC DEVICE HAVING INPUT FUNCTION
3712174-02549	12/986513	1/7/2011	LIQUID CRYSTAL DISPLAY PANEL
3712174-02586	12/976365	12/22/2010	LIQUID CRYSTAL DISPLAY PANEL
3712174-02588	12/987224	1/10/2011	PHOTOELECTRIC CONVERSION DEVICE AND RADIATION DETECTION DEVICE
3712174-02589	13/010423	1/20/2011	LIQUID CRYSTAL DISPLAY PANEL
3712174-02590	13/010442	1/20/2011	LIQUID CRYSTAL DISPLAY PANEL
3712174-02591	13/081880	4/7/2011	MANUFACTURING METHOD FOR LIQUID CRYSTAL APPARATUS
3712174-02592	13/088676	4/18/2011	ELECTRO-OPTICAL DEVICE AND ELECTRONIC APPARATUS
3712174-02597	13/030564	2/18/2011	LIQUID CRYSTAL MODULE AND ELECTRONIC APPARATUS
3712174-02601	13/091621	4/21/2011	DISPLAY DEVICE WITH TOUCH DETECTION, DRIVE CIRCUIT, DRIVING METHOD, AND ELECTRONIC UNIT
3712174-02602	13/093057	4/25/2011	TOUCH DETECTION DEVICE, DISPLAY DEVICE HAVING TOUCH DETECTION FUNCTION, ELECTRONIC UNIT, AND TOUCH DETECTION CIRCUIT
3712174-02626	13/072274	3/25/2011	DISPLAY APPARATUS, AUTHENTICATION METHOD, AND PROGRAM
3712174-02629	13/006647	1/14/2011	LIQUID CRYSTAL DEVICE AND ELECTRONIC APPARATUS HAVING THE SAME
3712174-02631	13/077317	3/31/2011	DISPLAY DEVICE AND INFORMATION PROCESSING APPARATUS
3712174-02641	13/025680	2/11/2011	ELECTRO-OPTICAL DEVICE AND ELECTRONIC EQUIPMENT
3712174-02642	13/025701	2/11/2011	ELECTRO-OPTIC DEVICE AND ELECTRONIC APPARATUS
3712174-02643	13/084953	4/12/2011	LIQUID-CRYSTAL DISPLAY APPARATUS
3712174-02644	13/083208	4/8/2011	LIQUID CRYSTAL DISPLAY
3712174-02647	12/423395	4/14/2009	ELECTRO-OPTICAL DEVICE AND ELECTRONIC APPARATUS
3712174-02669	11/384435	3/21/2006	ELECTRO-OPTICAL DEVICE AND ELECTRONIC APPARATUS
3712174-02679	11/512101	8/30/2006	LIQUID CRYSTAL DEVICE AND METHOD OF MANUFACTURING LIQUID CRYSTAL DEVICE HAVING SURFACE GROOVES AND ALIGNMENT FILM WITH IMPROVED THICKNESS UNIFORMITY
3712174-02680	11/467650	8/28/2006	IMPACT RESISTANT ELECTRO-OPTICAL MODULE AND ELECTRONIC DEVICE
3712174-02692	11/640838	12/19/2006	Electro-optical device, driving method thereof, and electronic apparatus
3712174-02697	11/680138	2/28/2007	ELECTRO-OPTIC DEVICE AND ELECTRONIC APPARATUS
3712174-02702	12/796805	6/9/2010	ARRAY SUBSTRATE FOR LIQUID CRYSTAL PANEL AND LIQUID CRYSTAL PANEL
3712174-02708	11/854487	9/12/2007	ELECTRO-OPTICAL DEVICE AND ELECTRONIC APPARATUS
3712174-02722	12/003455	12/26/2007	LIQUID CRYSTAL DISPLAY DEVICE HAVING IMPROVED ELECTROSTATIC DISCHARGE RESISTANCE
3712174-02727	12/022829	1/30/2008	DISPLAY DEVICE AND ELECTRONIC EQUIPMENT THEREWITH
3712174-02728	12/068808	2/12/2008	ELECTRO-OPTICAL DEVICE AND SUBSTRATE WITH HOLDING CAPACITANCE LINE
3712174-02729	12/044121	3/7/2008	ELECTRO-OPTIC DEVICE AND ELECTRONIC APPARATUS
3712174-02732	12/000426	12/12/2007	METHOD FOR DRIVING ELECTRO-OPTIC DEVICE, ELECTRO-OPTIC DEVICE, AND ELECTRONIC APPARATUS
3712174-02735	12/103380	4/15/2008	ELECTRO-OPTICAL DEVICE, DRIVING CIRCUIT OF ELECTRO-OPTICAL DEVICE, AND ELECTRONIC APPARATUS

K&L Ref. No.	Serial number	Filing Date	Title
3712174-02740	12/137142	6/11/2008	SCAN LINE DRIVING CIRCUIT, ELECTRO-OPTICAL DEVICE, AND ELECTRONIC APPARATUS
3712174-02741	12/208863	9/11/2008	LIQUID CRYSTAL DISPLAY DEVICE AND DRIVING METHOD THEREOF
3712174-02742	12/179229	7/24/2008	ELECTRO-OPTICAL DEVICE AND ELECTRONIC APPARATUS
3712174-02745	12/211425	9/16/2008	ELECTRO-OPTICAL DEVICE
3712174-02748	12/025493	2/4/2008	LIQUID CRYSTAL DEVICE, ELECTRONIC APPARATUS AND POSITION DETECTING METHOD
3712174-02749	12/032088	2/15/2008	LIQUID CRYSTAL DEVICE, METHOD OF DRIVING LIQUID CRYSTAL DEVICE AND ELECTRONIC APPARATUS
3712174-02750	12/174692	7/17/2008	LIQUID CRYSTAL DEVICE AND ELECTRONIC APPARATUS
3712174-02753	12/560839	9/16/2009	LIQUID CRYSTAL DISPLAY DEVICE AND ELECTRONIC APPARATUS
3712174-02754	12/571650	10/1/2009	CRYSTAL DISPLAY AND ELECTRONIC APPARATUS
3712174-02760	13/159625	6/14/2011	DISPLAY DEVICE, METHOD FOR DRIVING DISPLAY DEVICE, AND ELECTRONIC APPARATUS
3712174-02761	13/159617	6/14/2011	LIQUID CRYSTAL DISPLAY DEVICE, DRIVING METHOD OF THE SAME AND ELECTRONIC EQUIPMENT
3712174-02802	13/176262	7/5/2011	IMAGING DEVICE, DISPLAY-IMAGING DEVICE, AND ELECTRONIC EQUIPMENT
3712174-02824	13/215561	8/23/2011	LIQUID CRYSTAL DEVICE AND ELECTRONIC APPARATUS
3712174-02849	13/149456	5/31/2011	LIQUID CRYSTAL DISPLAY DEVICE THAT INCLUDES BOTH A TRANSMISSIVE PORTION AND A REFLECTIVE PORTION
3712174-02852	13/165193	6/21/2011	LIQUID CRYSTAL DISPLAY DEVICE
3712174-02892	13/161725	6/16/2011	THIN FILM SEMICONDUCTOR DEVICE AND METHOD FOR MANUFACTURING THIN FILM SEMICONDUCTOR DEVICE
3712174-02896	13/242862	9/23/2011	LIQUID CRYSTAL DISPLAY AND ELECTRONIC DEVICE
3712174-02897	13/269057	10/7/2011	LIQUID CRYSTAL DISPLAY DEVICE AND METHOD FOR MANUFACTURING LIQUID CRYSTAL DISPLAY DEVICE
3712174-02898	13/249563	9/30/2011	LIQUID CRYSTAL DISPLAY DEVICE AND METHOD FOR MANUFACTURING LIQUID CRYSTAL DISPLAY DEVICE
3712174-02927	13/264619	10/14/2011	BACKLIGHT UNIT
3712174-02970	13/398565	2/16/2012	DISPLAY AND LIGHTING DEVICE
3712174-02980	13/402224	2/22/2012	DISPLAY DEVICE AND ILLUMINATION UNIT
3712174-02982	13/408595	2/29/2012	DISPLAY AND ELECTRONIC UNIT
3712174-02983	13/408588	2/29/2012	DISPLAY DEVICE AND ELECTRONIC UNIT
3712174-02989	13/415615	3/8/2012	DISPLAY AND ELECTRONIC UNIT
3712174-02999	13/271479	10/12/2011	LIQUID CRYSTAL DEVICE AND ELECTRONIC APPARATUS
3712174-03029	13/330150	12/19/2011	LIQUID CRYSTAL DISPLAY PANEL
3712174-03030	13/269248	10/7/2011	LIQUID CRYSTAL DISPLAY DEVICE
3712174-03031	13/239825	9/22/2011	LIQUID CRYSTAL DISPLAY PANEL
3712174-03072	13/429537	3/26/2012	LIQUID CRYSTAL DEVICE, METHOD OF MANUFACTURING LIQUID CRYSTAL DEVICE AND ELECTRONIC APPARATUS
3712174-03131	13/469344	5/11/2012	SEMICONDUCTOR DEVICE AND MANUFACTURING METHOD THEREOF, DISPLAY APPARATUS AND ELECTRONIC APPARATUS
3712174-03136	13/480186	5/24/2012	DISPLAY APPARATUS AND VARIABLE LENS ARRAY
3712174-03158	13/419923	3/14/2012	DISPLAY DEVICE
3712174-03181	13/533515	6/26/2012	DISPLAY
3712174-03265	13/493618	6/11/2012	LIQUID CRYSTAL DISPLAY DEVICE

**PATENT**

**RECORDED: 04/28/2021**

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