

TRADEMARK ASSIGNMENT COVER SHEET

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Stylesheet Version v1.2

ETAS ID: TM350187

SUBMISSION TYPE:	NEW ASSIGNMENT		
NATURE OF CONVEYANCE:	Partial Release of Security Interest in Patents and Trademarks		
CONVEYING PARTY DATA			
Name	Formerly	Execution Date	Entity Type
Morgan Stanley Senior Funding, Inc., as collateral agent for the Secured Parties		08/03/2015	CORPORATION:
RECEIVING PARTY DATA			
Name:	Cypress Semiconductor Corporation		
Street Address:	198 Champion Court		
City:	San Jose		
State/Country:	CALIFORNIA		
Postal Code:	95134		
Entity Type:	CORPORATION: DELAWARE		
PROPERTY NUMBERS Total: 2			
Property Type	Number	Word Mark	
Registration Number:	3944837	TRUETOUCH	
Registration Number:	3581787	SLIM	
CORRESPONDENCE DATA			
Fax Number:	6504936811		
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>			
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ATTORNEY DOCKET NUMBER:	3483.278		
NAME OF SUBMITTER:	Qui Lu		
SIGNATURE:	/s/ Qui Lu		
DATE SIGNED:	08/03/2015		
Total Attachments: 14			
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PARTIAL RELEASE OF SECURITY INTEREST IN PATENTS AND TRADEMARKS

This PARTIAL RELEASE OF SECURITY INTEREST IN PATENTS AND TRADEMARKS (this "Release") is made and executed by Morgan Stanley Senior Funding, Inc., as collateral agent for the Secured Parties (as defined in the Pledge and Security Agreement referred to below) (the "Collateral Agent"), in favor of Cypress Semiconductor Corporation, a Delaware corporation ("Cypress Semiconductor"). Capitalized terms used but not defined herein shall have the meanings ascribed to such terms in the Pledge and Security Agreement.

A. Pursuant to that certain Amended and Restated Pledge and Security Agreement, dated March 12, 2015 (as further amended and/or restated, supplemented or otherwise modified from time to time, (the "Pledge and Security Agreement"), as security for the prompt and complete payment and performance in full when due (whether at stated maturity, by required prepayment, declaration, acceleration, demand or otherwise, including the payment of amounts that would be become due but for the operation of the automatic stay under Section 362(a) of the Bankruptcy Code) of all Secured Obligations, Cypress Semiconductor pledged and granted to the Collateral Agent, for its benefit and for the benefit of the Secured Parties, a continuing security interest in and Lien on all of its right, title, and interest in, to and under the Collateral.

B. Morgan Stanley Senior Funding recorded its security interest in patents and trademarks with the United States Patent and Trademark Office as follows:

<u>Assignor</u>	<u>Assignee</u>	<u>Trademark / Patents</u>	<u>Reel/Frame</u>	<u>Recordation Date</u>
Cypress Semiconductor Corporation	Morgan Stanley Senior Funding, Inc.	Patents	028863/0870	August 28, 2012
Cypress Semiconductor Corporation	Morgan Stanley Senior Funding, Inc.	Patents	031636/0105	November 14, 2013
(1) Cypress Semiconductor Corporation (2) Spansion LLC	Morgan Stanley Senior Funding, Inc.	Patents	035240/0429	March 21, 2015
Cypress Semiconductor Corporation	Morgan Stanley Senior Funding, Inc.	Trademarks	4850/0905	August 28, 2012
(1) Cypress Semiconductor Corporation (2) Spansion LLC	Morgan Stanley Senior Funding, Inc.	Trademarks	5479/0532	March 17, 2015

C. Cypress Semiconductor has requested that the Collateral Agent release its continuing security interest in and Lien on all of Cypress Semiconductor's right, title and interest in, to and under the patents and trademarks, and applications therefor, set forth on Exhibit A (the "Specified IP").

D. The Collateral Agent agrees to release its continuing security interest in and Lien on all of Cypress Semiconductor's right, title and interest in, to and under the Specified IP.

NOW, THEREFORE, for valuable consideration received, by its execution of this Release, the Collateral Agent hereby irrevocably and unconditionally releases, without representation, warranty or recourse, its continuing security interest in and Lien on all of Cypress Semiconductor's right, title and interest in, to and under the Specified IP.

For the avoidance of doubt, the Collateral Agent continues to maintain its continuing security interest in and Lien on all of Cypress Semiconductor's right, title and interest in, to and under all Collateral other than the Specified IP. The provisions of the Pledge and Security Agreement shall, except as modified by this Release, continue in full force and effect.

This Release is governed by the law of the State of New York, excluding its choice of law principles that would result in the application of any law other than the law of the State of New York. This Release shall be binding upon, and inure to the benefit of, Cypress Semiconductor and its successors and assigns with respect to the Specified IP (including any purchaser thereof).

[Signature page follows]

IN WITNESS WHEREOF, the undersigned has executed this Partial Release of Security Interest in Patents and Trademarks on this 3rd day of August, 2015.

Morgan Stanley Senior Funding, Inc., as Collateral Agent

By: _____

Name: SEPPHEN B. KING

Title: VP

[Signature page to Partial Release of Security Interest in Patents and Trademarks]

Exhibit A

Specified IP

Patents:

Description	Registration/Application Number	Registration/Application Date
Method for Improving Scan Time and Sensitivity in Touch Sensitive User Interface Device	8,508,244	8/13/2013
Method for Improving Scan Time and Sensitivity in Touch Sensitive User Interface Device	13/965,587	8/13/2013
Method for Improving Scan Time and Sensitivity in any Array of Capacitive Sensors	60/947,895	7/3/2007
Methods and Circuits for Measuring Mutual and Self Capacitance	8,358,142	1/22/2013
Methods and Circuits for Measuring Mutual and Self Capacitance	8,692,563	4/8/2014
Methods and Circuits for Measuring Mutual and Self Capacitance	14/203,145	3/10/2014
Methods and Circuits for Measuring Mutual and Self Capacitance	61/067,539	2/27/2008
Multiple Touch Resolve	8,564,546	10/22/2013
Multi-Touch Resolve	61/067,502	2/27/2008
Method for Multiple Touch Position Estimation	8,797,277	8/5/2014
Method for Multiple Touch Positions Estimation	61/067,541	2/27/2008
Resolving Multiple Presences over a Touch Sensor Array	8,902,174	12/2/2014
Method for Multi-Touch Resolve	61/067,744	2/29/2008
Finger Gesture Recognition for Touch Sensing Surface	8,184,102	12/17/2008
Finger Gesture Recognition for Touch Sensing Surface	8,629,851	4/17/2012
Finger Gesture Recognition for Touch Sensing Surface	14/153,996	1/13/2014
Capacitive Touch Screen	8,174,510	5/8/2012
Capacitive Touch Screen	8,638,310	1/28/2014
Capacitive Touch Screen	14/152,882	1/10/2014
Compensation Circuit for a TX-RX Capacitive Sensor	8,093,914	12/11/2008
Compensation Circuit for a TX-RX Capacitive Sensor	8,890,547	11/18/2014
Compensation Circuit for a TX-RX Capacitive Sensor	14/543,529	11/17/2014
Multi-Touch TX-RX Switched Capacitor Circuit with Parasitic Capacitance and Mutual Capacitance Offset Correction	61/013,986	12/14/2007

Description	Registration/Application Number	Registration/Application Date
Method and Apparatus for Testing Projected Capacitance Matrices and Determining the Location and Types of Faults	8,519,722	8/27/2013
Method and Apparatus for Testing Projected Capacitance Matrixes and Determining the Location and Types of Faults	61/107,620	10/22/2008
Methods and Circuits for Measuring Mutual and Self Capacitance	8,319,505	11/27/2012
Methods and Circuits for Measuring Mutual and Self Capacitance	8,570,052	10/22/2013
Methods and Circuits for Measuring Mutual and Self Capacitance	14/037,098	9/25/2013
Alternative Realizations of the CSX (TxRx-I) Sensing Scheme for ITO Panels	61/108,450	10/24/2008
Receive Demodulator for Capacitive Sensing	8,487,639	7/16/2013
Receive Demodulator for Capacitive Sensing	8,575,947	11/5/2013
Receive Demodulator for Capacitive Sensing	14/071,107	11/4/2013
Rx Demodulator for Capsense using a Quasi Differential Channel	61/117,031	11/21/2008
Touch Identification for Multi-Touch Technology	8,633,904	4/26/2010
Touch Identification for Multi-Touch Technology	14/140,909	12/26/2013
Fingers Identification for Multi-Touch Technology	61/172,338	4/24/2009
Techniques for sorting data that represents touch positions on a sensing device	8,730,187	5/20/2014
Finger sorting algorithm	61/256,290	10/29/2009
Multi-functional capacitance sensing circuit with a current conveyor	8,866,500	10/21/2014
Multi-functional capacitance sensing circuit with a current conveyor	14/514,204	10/14/2014
Multifunctional Capacitance Sensing Front-end Circuit with Current Conveyor	61/163,531	3/26/2009
Gesture Recognition System for a Touch-Sensing Surface	8,830,181	9/9/2014
System and Method for Detecting Single and Multi Touch Gestures	61/057,867	6/1/2008
Method and Apparatus for Identification of Touch Panels	8,698,760	4/15/2014
Method and Apparatus for Identification of Touch Panels	14/201,520	3/7/2014
Method and Apparatus for Run-Time Identification of Touch Panels	61/256,296	10/29/2009
CURRENT SENSING APPARATUS AND METHOD FOR A CAPACITANCE SENSING DEVICE	8,786,295	7/22/2014

Description	Registration/Application Number	Registration/Application Date
Dynamic Mode Switching for Fast Touch Response	12/844,798	7/27/2010
Dynamic Mode Switching for Fast Touch Response	9,007,342	4/14/2015
Predictive Touch Surface Scanning	8,723,825	5/13/2014
Predictive Touch Surface Scanning	8,723,827	5/13/2014
Predictive Touch Surface Scanning	14/275,387	5/12/2014
Dynamic Mode Switching for Fast First-Touch Response	61/229,236	7/28/2009
METHOD AND APPARATUS FOR REDUCING COUPLED NOISE INFLUENCE IN TOUCH SCREEN CONTROLLERS	8,947,373	2/3/2015
METHOD AND APPARATUS FOR REDUCING COUPLED NOISE INFLUENCE IN TOUCH SCREEN CONTROLLERS	14/612,255	2/2/2015
System, Apparatus and Method for Reducing Noise Susceptibility in a Touch Panel	61/253,142	10/20/2009
Waterproof Scanning of a Capacitance Sense Array	8,773,146	7/8/2014
SELF AND MUTUAL CAPACITANCE MEASUREMENT IN A TOUCH SCREEN	14/325,582	7/8/2014
Waterproof Scanning of a Capacitance Sensing Array	61/325,124	4/16/2010
ALL POINTS ADDRESSABLE TOUCH SENSING SURFACE	8,810,543	8/19/2014
ALL POINTS ADDRESSABLE TOUCH SENSING SURFACE	14/463,240	8/19/2014
All Points Addressable Tablet Touchscreen	61/345,061	5/14/2010
SELF SHIELDING CAPACITANCE SENSING PANEL	8,482,546	7/9/2013
SELF SHIELDING CAPACITANCE SENSING PANEL	13/923,037	6/20/2013
Capacitance Sensing Panel	61/360,305	6/30/2010
Self Shielding Capacitance Sensing Panel	61/478,346	4/22/2011
Capacitance Scanning Proximity Detection	13/183,263	7/14/2011
Capacitance Scanning Proximity Detection	9,019,226	4/28/2015
Capacitance Scanning Proximity Detection	14/678,823	4/3/2015
Capacitance Sensing Proximity Detector	61/376,161	8/23/2010
Mutual Capacitance Sensing Circuits, Methods and Systems	9,013,195	4/21/2015
Mutual Capacitance Sensing Method and Apparatus	14/692,506	4/21/2015
Mutual Capacitance Sensing Method and Apparatus	61/376,184	8/23/2010

Description	Registration/Application Number	Registration/Application Date
Smart Scanning for a Capacitive Sensing Array	9,013,441	4/21/2015
Smart Scanning for a Capacitance Sensing Array	61/376,347	8/24/2010
Multi-Phase Scanning	12/981,332	12/29/2010
Capacitance Sensing System, Method and Apparatus	61/376,377	8/24/2010
Capacitance Sensing System, Method and Apparatus	61/376,762	8/25/2010
REDUCING WATER INFLUENCE ON A TOUCH-SENSING DEVICE	8,717,331	5/6/2014
Single Layer Capacitance Sensing Array	61/376,400	8/24/2010
AC Line Synchronization for Capacitive Sensing	8,576,189	11/5/2013
AC Line Synchronization for Capacitance Sensing	61/376,412	8/24/2010
CAPACITANCE SENSING SYSTEMS, CIRCUITS AND METHODS THAT INCLUDE CURRENT CONVEYOR BASED OSCILLATORS	8,729,913	5/20/2014
Mutual Capacitance Sensing Using First Order Relaxation Oscillators	61/376,460	8/24/2010
EDGE POSITIONING ACCURACY IN A MUTUAL CAPACITIVE SENSE ARRAY	8,593,431	11/26/2013
Method and Apparatus for Improved Edge Performance in a Capacitance Sensing Array	61/376,533	8/24/2010
CONTACT IDENTIFICATION AND TRACKING ON A CAPACITANCE SENSING ARRAY	8,692,795	4/8/2014
CONTACT IDENTIFICATION AND TRACKING ON A CAPACITANCE SENSING ARRAY	14/137,020	12/20/2013
Location Detection Tracking in Capacitive Sensor Arrays	61/376,656	8/24/2010
CAPACITIVE STYLUS WITH PALM REJECTION	13/213,895	8/19/2011
Data Transmission in a Capacitive Stylus	61/407,522	10/28/2010
SYNCHRONIZING A STYLUS WITH A CAPACITIVE SENSE ARRAY	13/213,981	8/19/2011
SYNCHRONIZING A STYLUS WITH A CAPACITIVE SENSE ARRAY	14/680,403	4/7/2015
Capacitive Stylus with Synchronization	61/407,906	10/28/2010
CAPACITIVE STYLUS FOR A TOUCH SCREEN	8,493,359	7/23/2013
CAPACITIVE STYLUS FOR A TOUCH SCREEN	13/947,596	7/22/2013
Capacitive Active Stylus for Touchscreen	61/385,463	9/22/2010

Description	Registration/Application Number	Registration/Application Date
FLEXIBLE CAPACITIVE SENSOR ARRAY	13/091,132	4/21/2011
Force Sensing Capacitive Hybrid Touch Sensor	13/247,590	9/28/2011
Single Layer Capacitance Sensing Apparatus and Method	61/392,034	10/12/2010
EDGE ACCURACY IN A CAPACITIVE SENSE ARRAY	13/223,702	9/1/2011
VARIABLE PROFILE COMMON MODE FILTER	13/247,727	9/28/2011
Variable Profile Common Mode Filter for Capacitance Sensing	61/515,605	8/5/2011
Multiplexer for a TX/RX Capacitance Sensing Panel	13/360,296	1/27/2012
Multiplexor for a TXRX Capacitance Sensing Panel	61/491,809	5/31/2011
STIMULUS SIGNAL FOR A CAPACITIVE SENSE ARRAY	8,847,911	10/20/2011
Signal Generation for a Capacitance Sensing Panel	61/472,152	4/5/2011
ACTIVE INTEGRATOR FOR A CAPACITIVE SENSE ARRAY	13/249,514	9/30/2011
Signal Receiver for a TXRX Capacitance Sensing Panel	61/472,161	4/5/2011
NOISE DETECTION FOR A CAPACITANCE SENSING PANEL	13/309,674	12/2/2011
Method and Apparatus for Automating Noise Reduction Tuning in Real Time	13/436,535	3/30/2012
Noise Detection Method and Apparatus for a Capacitance Sensing Panel	61/472,172	4/5/2011
METHOD AND APPARATUS FOR PIPELINED CONVERSIONS IN TOUCH SENSING SYSTEMS	13/341,285	12/30/2011
Method and Apparatus for Pipelined Conversions in a Capacitance Sensing Panel	61/472,178	4/5/2011
SYSTEM AND METHOD FOR SYNCHRONIZATION OF TOUCH PANEL DEVICES	8,947,377	2/3/2015
MULTI-CHIP SYNCHRONIZATION	61/472,603	4/6/2011
Sensor Patterns With Reduced Noise Coupling	13/248,705	9/29/2011
NOISE FILTERING DEVICES, SYSTEMS AND METHODS FOR CAPACITANCE SENSING DEVICES	13/247,951	9/28/2011
Charger Noise Solution for Touchscreens	61/440,327	2/7/2011
ACCURACY IN A CAPACITIVE SENSE ARRAY	8,903,679	12/2/2014
ACCURACY IN A CAPACITIVE SENSE ARRAY	14/557,202	12/1/2014

Description	Registration/Application Number	Registration/Application Date
METHOD AND APPARATUS TO IMPROVE NOISE IMMUNITY OF A TOUCH SENSE ARRAY	13/246,565	9/27/2011
FREQUENCY HOPPING FOR NARROW-BAND FRC	61/477,146	4/19/2011
TOUCH ORIENTATION CALCULATION	13/538,122	6/29/2012
Methods and Apparatus to Associate a Detected Presence of a Conductive Object	13/240,938	9/22/2011
Quadrature Signal Receiver Using Synchronized Oscillator	8,493,360	7/23/2013
QUADRATURE SIGNAL RECEIVER USING SYNCHRONIZED OSCILLATOR	13/949,102	7/23/2013
Quadrature Signal Receiver Using Synchronized Oscillator	61/509,230	7/19/2011
Negative Touch Recovery for Mutual Capacitance Scanning Systems	13/429,878	3/26/2012
Negative Touch Recovery for Mutual Capacitance Sensors	61/512,794	7/28/2011
METHODS AND APPARATUS TO PERFORM A DETECTION OPERATION	13/340,971	12/30/2011
Active Stylus to Host Data Transmitting Method	8,797,301	8/5/2014
Active Stylus to Host Data Transmitting Method	14/332,727	7/16/2014
Active Stylus to Host Data Transmitting Method	61/599,302	2/15/2012
TOUCH LOCATION INTERPOLATION USING EMULATED TOUCHES	13/693,905	12/4/2012
Touch Location Interpolation Using Iterative Emulated Touch	61/674,604	7/23/2012
ENHANCED LINEARITY OF GESTURES ON A TOUCH-SENSITIVE SURFACE	13/428,721	3/23/2012
Multi-touch Linearity	61/536,536	9/19/2011
Close Touch Detection and Tracking	8,823,664	9/2/2014
Method of seeking lost touches and linearization of close fingers	61/602,809	2/24/2012
FREQUENCY HOPPING ALGORITHM FOR CAPACITANCE SENSING DEVICES	13/429,869	3/26/2012
FREQUENCY SELECTION WITH TWO FREQUENCY SETS OF MULTIPLE OPERATING FREQUENCIES IN A MUTUAL CAPACITANCE SENSING DEVICES	13/629,281	9/27/2012
Multiple Frequency Bands in a Mutual Capacitance Sensor	61/677,651	7/31/2012
Frequency Hopping Algorithm Improvements	61/602,750	2/24/2012
FALSE TOUCH FILTERING FOR CAPACITANCE SENSING SYSTEMS	8,294,687	10/23/2012

Description	Registration/Application Number	Registration/Application Date
FALSE TOUCH FILTERING FOR CAPACITANCE SENSING SYSTEMS	8,766,944	10/23/2012
Z Coordinate Filtering for Noise Suppression (or RX Line Filter)	61/602,283	2/23/2012
CIRCUITS, SYSTEMS, AND METHODS FOR PROCESSING THE PROXIMITY OF LARGE OBJECTS, INCLUDING LARGE OBJECTS ON TOUCH SCREENS	13/431,401	3/27/2012
Method of improving the processing of Large Object for touchscreen panels	61/602,385	2/23/2012
MULTI-STAGE STYLUS SCANNING	13/741,090	1/14/2013
Capacitive Stylus Noise Immunity Using Tracking Scan	61/587,509	1/17/2012
Self-Synchronized Active Stylus Receiver with Data Communication for GEN 4 LS-AS	61/676,256	7/26/2012
Slew rate and bandwidth enhancement in reset	8,791,753	7/29/2014
ADAPTIVE DRIVE SYSTEM	8,411,062	4/2/2013
ADAPTIVE DRIVE SYSTEM	13/855,582	4/2/2013
10V PFET Drive using 5V CMOS	61/610,761	3/14/2012
INTEGRATED CAPACITANCE MODEL CIRCUIT	8,432,170	4/30/2013
CR Correlation Concept	61/610,917	3/14/2012
Baseline Charge Compensation	13/612,696	9/12/2012
Baseline Charge Compensation Method and Control	61/610,927	3/14/2012
Touch Sensor Driver With Selectable Charge Source	13/536,255	6/28/2012
Increase of a Touchscreen Sensor Driver Strength	61/612,166	3/16/2012
RECONFIGURABLE CHARGE PUMP	8,384,467	6/27/2012
Reconfigurable Charge Pump	13/776,244	2/25/2013
Reconfigurable Charge Pump	61/727,410	11/16/2012
Reconfigurable Charge Pump	61/614,432	3/22/2012
SINGLE LAYER TOUCH SENSOR	13/405,071	2/24/2012
METHOD FOR CONSTRUCTING A CAPACITANCE SENSING DEVICE	8,484,838	6/20/2012
SINGLE LAYER TOUCH SENSOR	13/528,739	6/20/2012
SINGLE LAYER TOUCH SENSOR	14/666,764	3/24/2015
TOUCH SENSOR DEVICE	14/229,524	3/28/2014
SLIM Sensor Design with Minimum Tail Effect	14/318,354	6/27/2014
METHODS AND APPARATUS TO DETERMINE POSITION OF AN INPUT OBJECT	13/538,991	6/29/2012
Peak Detection Schemes for Touch Position Detection	13/564,099	8/1/2012

Description	Registration/Application Number	Registration/Application Date
SENSE POSITION PREDICTION FOR TOUCH SENSING METHODS, CIRCUITS AND SYSTEMS	13/605,092	9/6/2012
Rejection of False Touches Upon Fast Single Finger Tracking by Means of Prediction Algorithm	61/662,700	6/21/2012
MULTI-TOUCH GHOST DISCRIMINATION	13/628,033	9/26/2012
Method of Two Finger Touch with No Ghosting	61/672,707	7/17/2012
SENSOR PATTERN WITH INACTIVE ELECTRODES IN TRANSMIT (TX) LAYER FOR MUTUAL CAPACITANCE	13/693,927	12/4/2012
Sensor Pattern with Dummies in Tx Layer for Mutual Cap Adjustment or Reduction	61/662,525	6/21/2012
HARDWARE ACCELERATOR FOR TOUCHSCREEN DATA PROCESSING	13/829,734	3/14/2013
TOUCHSCREEN DATA PROCESSING	13/927,054	6/25/2013
TOUCHSCREEN DATA PROCESSING	14/018,596	9/5/2013
SYSTEM LEVEL FILTERING AND CONFIDENCE CALCULATION	13/727,944	12/27/2012
System Level Filtering	61/726,595	11/15/2012
ASSIGNING ISSUES TO TECHNICAL SUPPORT GROUPS BASED ON SKILL AND PRODUCT KNOWLEDGE	13/912,028	6/6/2013
Method and Apparatus for Eliminating Common Mode Noise in Touch Applications	61/776,086	3/11/2013
Discontinuous Integration using Half Periods	13/671,246	11/7/2012
Discontinuous Integration using Half Periods	61/672,698	7/17/2012
GLOVE TOUCH DETECTION FOR TOUCH DEVICES	13/895,110	5/15/2013
Dynamic Thresholds for Multiple Input Types in a Capacitance Sensing System	61/890,784	10/14/2013
Threshold Establishment for Multi-Touch Object Supporting System	62/039,760	8/20/2014
Finger Identification and Gestures in a Touchscreen Device	61/658,524	6/12/2012
Glove Touch Detection for Capacitive Touchscreen Devices	61/776,252	3/11/2013
Gain Correction for Fast Panel Scanning	13/630,645	9/28/2012
Gain Correction for Fast Panel Scanning	61/672,614	7/17/2012
EDGE-BY-EDGE INTEGRATION AND CONVERSION	13/629,432	9/27/2012
Edge-by-edge Integration and Conversion	61/670,730	7/12/2012
Methods and Apparatus to Detect a Touch Pattern	8,816,985	8/26/2014
Methods and Apparatus to Detect a Touch Pattern	14/463,015	8/19/2014
Low Power, But on Free, Wake-up for Touchscreen Devices	61/703,376	9/20/2012

Description	Registration/Application Number	Registration/Application Date
TOUCHSCREEN PANEL FREQUENCY RESPONSE DETERMINATION	8,810,546	8/19/2014
Method of Touchscreen Panel Time Constant Determination	61/706,032	9/26/2012
Method of Touchscreen Panel Time Constant Determination	61/730,703	11/28/2012
INTERFACE AND SYNCHRONIZATION METHOD BETWEEN TOUCH CONTROLLER AND DISPLAY DRIVER FOR OPERATION WITH TOUCH INTEGRATED DISPLAYS	8,780,065	7/15/2014
INTERFACE AND SYNCHRONIZATION METHOD BETWEEN TOUCH CONTROLLER AND DISPLAY DRIVER FOR OPERATION WITH TOUCH INTEGRATED DISPLAYS	14/299,136	6/9/2014
Interface and synchronization method between touch controller and display driver for operation with in-cell panels	61/673,680	7/19/2012
Injected Touch Noise Analysis	8,874,396	10/28/2014
Injected Touch Noise Analysis	14/525,025	10/27/2014
Injected Touch Noise Metric	61/692,836	8/24/2012
Injected Touch Noise Metric	61/861,192	8/1/2013
Flipped Cell Sensor Pattern	8,754,662	6/17/2014
Flipped Cell Sensor Pattern	14/303,881	6/13/2014
SLIM- Flip Pattern Design	61/776,405	3/11/2013
REDUCING COMMON MODE NOISE IN TOUCH APPLICATIONS	14/018,360	9/4/2013
REDUCING COMMON MODE NOISE IN TOUCH APPLICATIONS	14/023,342	9/10/2013
2D Correlated Scanning for Mutual Capacitance Touchscreens	61/697,046	9/5/2012
2D Correlated Scanning for Mutual Capacitance Touchscreens	61/835,306	6/14/2013
POSITION SENSING METHODS AND DEVICES WITH DYNAMIC GAIN FOR EDGE POSITIONING	13/928,695	6/27/2013
Dynamic Gain in a Capacitance Sensing Panel	61/716,917	10/22/2012
Dynamic Gain in a Capacitance Sensing Panel	61/776,554	3/11/2013
METHOD AND APPARATUS FOR CALCULATING COORDINATES WITH HIGH NOISE IMMUNITY IN TOUCH APPLICATIONS	8,692,802	4/8/2014
Method and Apparatus for Calculation Coordinates with High Noise Immunity in Touch Applications	61/859,969	7/30/2013
Method and Apparatus for Eliminating Tail Effect in Touch Applications	8,866,490	10/21/2014

Description	Registration/Application Number	Registration/Application Date
Tail Effect Correction for SLIM Pattern Touch Panels	8,866,491	10/21/2014
Tail Effect Correction for SLIM Pattern Touch Panels	14/514,654	10/15/2014
Tail Effect Correction for the SLIM Pattern Touch Panels	61/785,131	3/14/2013
Method and Apparatus for Eliminating Tail Effect in Touch Applications	61/754,028	1/18/2013
DETECTING TOUCHDOWNS AND LIFTOFFS OF TOUCH OBJECTS	8,773,396	7/8/2014
Adaptive Active Distance for Touchdown and Lift of Events	61/774,336	3/7/2013
Single Layer Sensor Pattern	13/904,481	5/29/2013
Layer Sensor with Reduced Routing Channels	61/762,550	2/8/2013
Hard Press Rejection	8,577,644	11/5/2013
Hard Press Rejection	14/059,200	10/21/2013
Hard Press Rejection Algorithm for Capacitive Touch Solutions	61/775,962	3/11/2013
METHOD AND APPARATUS FOR ACCURATE COORDINATE CALCULATION OF OBJECTS IN TOUCH APPLICATIONS	8,674,958	3/18/2014
Method and Apparatus for Calculation Coordinates of Big Fingers with High Accuracy in Touch Applications	61/777,087	3/12/2013
WATER REJECTION ON CAPACITIVE SENSORS	8,982,097	3/17/2015
WATER REJECTION ON CAPACITIVE SENSORS	14/660,664	3/17/2015
WATER REJECTION AND WET FINGER TRACKING ALGORITHMS for TrueTouch panels and SelfCap buttons	61/910,751	12/2/2013
CAPACITANCE SENSING CIRCUITS AND METHODS	8,614,587	12/24/2013
CAPACITANCE SENSING CIRCUITS AND METHODS	14/107,871	12/16/2013
Capacitance sensing channel noise suppression improvement with quadrature listening channels	61/777,314	3/12/2013
CHARGE BALANCING CONVERTER USING A PASSIVE INTEGRATOR CIRCUIT	14/262,614	4/25/2014
Simple Charge Balanced Convertor with quantization error accumulation	61/866,693	8/16/2013
HIGH RESOLUTION CAPACITANCE TO CODE CONVERTER	8,836,669	9/16/2014
HIGH RESOLUTION CAPACITANCE TO CODE CONVERTER	14/475,034	9/2/2014
High resolution capacitance to code convertor	61/877,773	9/13/2013
High resolution capacitance to code convertor	61/890,622	10/14/2013

Description	Registration/Application Number	Registration/Application Date
ATTENUATOR CIRCUIT OF A CAPACITANCE-SENSING CIRCUIT	8,610,443	5/15/2013
ATTENUATOR CIRCUIT OF A CAPACITANCE-SENSING CIRCUIT	8,866,494	12/4/2013
Charge balancing converter with active integrators and input attenuator	61/777,462	3/12/2013
ADAPTIVE RESOLUTION CIRCUIT	8,810,263	9/10/2013
Dynamic Capacitance Resolution Circuit	61/777,633	3/12/2013
HARDWARE DE-CONVOLUTION BLOCK FOR MULTI-PHASE SCANNING	8,860,682	9/11/2013
HARDWARE DE-CONVOLUTION BLOCK FOR MULTI-PHASE SCANNING	14/512,598	10/13/2014
Hardware De-convolution Block for TX multi-phase scanning on a TouchScreen Controller	61/814,508	4/22/2013
In-Cell Touch Scanning Modes for Simultaneous Touch and Display	14/497,170	9/25/2014
In-Cell Touch Scanning Modes for Simultaneous Touch and Display	62/004,671	5/29/2014
Tunable Baseline Compensation Scheme for Touchscreen Controllers	14/317,696	6/27/2014
Tunable Baseline Compensation Scheme for Touchscreen Controllers	61/912,436	12/5/2013
Hover Position Calculation in a Touchscreen Device	14/513,179	10/13/2014
Processing for Hover Detection	61/890,753	10/14/2013
Processing for Hover Detection	62/042,678	8/27/2014
Virtual Buttons for a Touch Interface	14/495,547	9/24/2014
System and Method for Detecting But on Presses on a Device	61/943,799	2/24/2014
Virtual Buttons to implement side keys	62/005,095	5/30/2014
Single Layer Touchscreen with Ground Insertion	14/491,807	9/19/2014
Single Layer Touchscreen with Ground Insertion	62/004,324	5/29/2014
Contact Detection Mode Switching in a Touchscreen Device	14/513,189	10/13/2014

Trademarks:

Description	Registration/Application Number	Registration/Application Date
TRUETOUCH	3,944,837	4/12/2011
SLIM	3,581,787	2/24/2009