PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT3346379

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ANALOG DEVICES, INC.	10/31/2013

RECEIVING PARTY DATA

Name:	INVENSENSE, INC.
Street Address:	1745 TECHNOLOGY DR., SUITE 200
City:	SAN JOSE
State/Country:	CALIFORNIA
Postal Code:	95110

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14592844

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ATTORNEY DOCKET NUMBER:	INVENSENSE-0151D-IVS-355D
NAME OF SUBMITTER:	MARYAM IMAM
SIGNATURE:	/maryam imam/
DATE SIGNED:	05/08/2015

Total Attachments: 26
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OMB No. 0651-0027 (exp. 04/30/2015)

U.S. DEPARTMENT OF COMMERCE
United States Patent and Trademark Office

RECORDATION FORM COVER SHEET
PATENTS ONLY

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

1. Name of conveying party(ies)

Analog Devices, Inc.

Additional name(s) of conveying party(ies) attached? ☐ Yes ☐ No

2. Name and address of receiving party(ies)

Name: Invensense, Inc.
Internal Address:
Street Address: 1745 Technology Dr., Suite 200
City: San Jose
State: CA
Country: US Zip: 95110

Additional name(s) & address(es) attached? ☐ Yes ☒ No

3. Nature of conveyance/Execution Date(s):

Execution Date(s) 10/31/2013

☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Joint Research Agreement
☐ Government Interest Assignment
☐ Executive Order 9424, Confirmatory License
☐ Other

4. Application or patent number(s): ☐ This document serves as an Oath/Declaration (37 CFR 1.63).

A. Patent Application No.(s)
14/592,844 which is a div. of application no. 13/795,861

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☐ No

5. Name and address to whom correspondence concerning document should be mailed:

Name: Maryam Imam
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6. Total number of applications and patents involved:

7. Total fee (37 CFR 1.21(h) & 3.41) $

☐ Authorized to be charged to deposit account
☐ Enclosed
☐ None required (government interest not affecting title)

8. Payment Information

Deposit Account Number
Authorized User Name

9. Signature: /maryam imam/ 2015-05-08
Signature Date

Maryam Imam
Name of Person Signing

Total number of pages including cover sheet, attachments, and documents: 26

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

PATENT ASSIGNMENT
(Analog Devices, Inc.)

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Analog Devices, Inc., a Massachusetts corporation ("Assignor"), hereby assigns to InvenSense, Inc., a Delaware corporation, having a place of business at 1745 Technology Dr., San Jose, California 95110 ("Buyer"), all of Assignor's right, title and interest in and to the patents, patent registrations and patent applications identified on Schedule 1 hereto (the "Assigned Patents"), including all rights to sue for past infringement, the same to be held and enjoyed by Buyer, its successors and assigns.

The Assigned Patents shall include any divisional, continuation, continuation-in-part, foreign counterpart, or reissue of the Assigned Patents; and any patent to which a terminal disclaimer for any of the Assigned Patents is directed.

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Executed as of the 31st day of October, 2013.

ANALOG DEVICES, INC.

By: _____

Print Name: William A. Martin

Print Title: Treasurer and Director of Mergers and Acquisitions

[Signature Page to ADI Patent Assignment]

Schedule 1

Assigned Patents

Docket Number	Title	Filing Date	Application #	Patent Number	Country
APD4035-1-US	Apparatus and Method of Forming a MEMS Acoustic Transducer with Layer Transfer Processes	8/28/2009	61/237,982		US
APD4035-2-US	Apparatus and Method of Forming a MEMS Acoustic Transducer with Layer Transfer Processes	8/27/2010	12/870,266		US
APD4252-1-US	Auto-Detection and Mode Switching for Digital Interface	11/1/2010	61/408,834		US
APD4252-2-US	Auto-Detection and Mode Switching for Digital Interface	11/1/2011	13/286,388		US
APD4243-1-US	CIRCUIT AND APPARATUS FOR CONNECTING A MEMS MICROPHONE WITH A SINGLE LINE	9/20/2011	13/237,482		US

Docket Number	Title	Filing Date	Application #	Patent Number	Country
APD4243-1-PCT	CIRCUIT AND APPARATUS FOR CONNECTING A MEMS MICROPHONE WITH A SINGLE LINE	9/6/2012	PCT/US2012/053856		WO
APD4742-1-US	Distributed Automatic Level Control for a Microphone Array	3/8/2013	13/790,081		US
APD4033-1-US	Dual Single-Crystal Backplate Microphone System and Method of Fabricating Same	8/28/2009	61/238,014		US
APD4033-2-US	Dual Single-Crystal Backplate Microphone System and Method of Fabricating Same	8/27/2010	12/870,288		US
APD4033-1-PCT	Dual Single-Crystal Backplate Microphone System and Method of Fabricating Same	8/27/2010	PCT/US2010/046954		WO
APD4033-1-CN	Dual Single-Crystal Backplate Microphone System and Method of Fabricating Same	8/27/2010	201080036868.7		CN

Docket Number	Title	Filing Date	Application #	Patent Number	Country
APD4033-1-TW	Dual Single-Crystal Backplate Microphone System and Method of Fabricating Same	8/27/2010	99128851		TW
APD4961-1-US	High efficiency one wire control interface with dynamic pilot				US
APD2581-1-US	Impurity Localizer	5/17/2004	60/571,724		US
APD2581-1-PCT	Impurity Localizer	4/28/2005	PCT/US2005/014801		WO
APD2581-2-US	Integrated Circuit with Impurity Barrier	1/27/2005	60/044,612		US
APD3130-1-US	Integrated Microphone	1/9/2006	60/757,703		US
APD3130-2-US	Integrated Microphone	9/27/2006	11/535,804	7,795,695	US
APD3130-3-US	Integrated Microphone	7/28/2010	12/845,348	8,169,042	US
APD3130-1-PCT	Integrated Microphone	12/19/2006	PCT/US2006/048420		WO
APD3130-1-CN	Integrated Microphone	12/19/2006	200680050789.5	ZL200680050789.5	CN
ACQ156-2-US	Integrated Microphone Package	6/20/2013	13/922,955		US

Docket Number	Title	Filing Date	Application #	Patent Number	Country
APD3882-1-EP	Low Flow Resistance Vent Hole for MEMS Microphone	11/4/2010	10781759.5		EP
APD3882-1-CN	Low Flow Resistance Vent Hole for MEMS Microphone				CN
APD4767-1-US	Low Frequency Response Microphone Diaphragm Structures And Methods For Producing The Same	3/12/2013	13/795,861		US
APD3365-2-US	MEMS Device with Surface Having a Low Roughness Exponent	2/6/2008	12/026,844	8,131,006	US
APD4450-1-PCT	MEMS Microphone Package with top housing	10/26/2012	PCT/US2012/062075		WO
APD4668-1-US	MEMS Microphone Plastic Top & Bottom Port Package	9/10/2012	61/698,966		US
APD4583-1-US	MEMS Microphone System for Harsh Environments	10/1/2012	13/632,205		US
APD4583-1-CN	MEMS Microphone System for Harsh Environments	9/13/2013	201310416784.1		CN
APD4046-2-US	MEMS Microphone with Programmable Sensitivity	12/7/2010	12/962,136		US

Docket Number	Title	Filing Date	Application #	Patent Number	Country
APD3881-1-US	MEMS Microphone with Spring Suspended Backplate	5/6/2009	61/175,997		US
APD3881-3-US	MEMS Microphone with Spring Suspended Backplate	12/19/2012	13/719,466		US
APD3881-2-US	MEMS Microphone with Spring Suspended Backplate	5/5/2010	12/774,263	8,363,860	US
APD4426-1-US	MEMS Microphone with Springs and Interior Support	1/11/2012	13/348,400		US
APD4426-1-PCT	MEMS Microphone with Springs and Interior Support	12/5/2012	PCT/US2012/067906		WO
APD4349-1-US	METHOD FOR ETCHING MATERIAL LONGITUDINALLY SPACED FROM ETCH MASK	9/14/2011	13/232,282	8,455,288	US
APD4349-1-PCT	METHOD FOR ETCHING MATERIAL LONGITUDINALLY SPACED FROM ETCH MASK	9/6/2012	PCT/US2012/053854		WO

Docket Number	Title	Filing Date	Application #	Patent Number	Country
APD4869-1-US	Method for improving of overload characteristics of acoustic transducer modules				US
APD4019-1-US	Method of Making "Macromolecular-free" MEMS Structure with Self Anti-Stiction Function by using Silicon Carbide Thin Film	9/28/2009			US
APD2868-1-US	Micromachined Microphone and Multisensor and Method for Producing Same	4/25/2005	11/113,925	7,825,484	US
APD2868-2-US	Micromachined Microphone and Multisensor and Method for Producing Same	7/16/2010	12/804,213	8,129,803	US
APD2868-1-PCT	Micromachined Microphone and Multisensor and Method for Producing Same	4/21/2006	PCT/US2006/14982		WO
APD2868-1-CN	Micromachined Microphone and Multisensor and Method for Producing Same	4/21/2006	200680022953.1	ZL200680022953.1	CN

Docket Number	Title	Filing Date	Application #	Patent Number	Country
APD2868-2-CN	Micromachined Microphone and Multisensor and Method for Producing Same	4/21/2006	201210028878.7		CN
APD2868-1-DE	Micromachined Microphone and Multisensor and Method for Producing Same	4/21/2006			DE
APD2868-1-EP	Micromachined Microphone and Multisensor and Method for Producing Same	4/21/2006	06 750 896.0		EP
APD2868-1-GB	Micromachined Microphone and Multisensor and Method for Producing Same	4/21/2006			GB
APD2868-1-JP	Micromachined Microphone and Multisensor and Method for Producing Same	4/21/2006	2008-508951	4812139	JP
APD2868-2-JP	Micromachined Microphone and Multisensor and Method for Producing Same	4/21/2006	2011-164611		JP

Docket Number	Title	Filing Date	Application #	Patent Number	Country
APD2868-3-JP	Micromachined Microphone and Multisensor and Method for Producing Same	4/21/2006	2013-97305		JP
APD3332-1-PCT	Microphone ASIC with Internal Noise Suppression	10/11/2007	PCT/US07/81019		WO
APD2868-2-DE	Micromachined Microphone and Multisensor and Method for Producing Same	4/21/2006			DE
APD2868-2-EP	Micromachined Microphone and Multisensor and Method for Producing Same	4/21/2006			EP
APD2868-2-GB	Micromachined Microphone and Multisensor and Method for Producing Same	4/21/2006			GB
APD3334-1-US	Microphone Microchip Device with Differential Mode Noise Suppression	10/11/2006	60/828,996		US

Docket Number	Title	Filing Date	Application #	Patent Number	Country
APD3334-2-US	Microphone Microchip Device with Differential Mode Noise Suppression	10/11/2007	11/870,468		US
APD3334-1-PCT	Microphone Microchip Device with Differential Mode Noise Suppression	10/11/2007	PCT/US07/081026		WO
APD3334-1-EP	Microphone Microchip Device with Differential Mode Noise Suppression	10/11/2007	07853938.4		EP
APD3332-2-US	Microphone Microchip Device with Internal Noise Suppression	10/11/2007	11/870,434		US
APD4450-1-US	Microphone Module with Sound Pipe	11/17/2011	61/561,121		US
APD4450-2-US	Microphone Module with Sound Pipe	10/26/2012	13/661,401		US
ACQ053-1-US	Microphone Package with Embedded ASIC	10/12/2010	61/392,322		US
ACQ053-2-US	Microphone Package with Embedded ASIC	10/12/2011	13/272,045		US
ACQ053-1-PCT	Microphone Package with Embedded ASIC	10/12/2011	PCT/US11/56017		WO

Docket Number	Title	Filing Date	Application #	Patent Number	Country
APD4804-1-US	Microphone System with a Stop Member	4/16/2013	13/863,807		US
APD4701-1-US	Microphone System with Mechanically-Coupled Diaphragms	11/9/2012	13/673,324		US
APD4743-1-US	Microphone System with Non-Orthogonally Mounted Microphone Die	1/22/2013	13/746,488		US
APD4705-1-US	Microphone System with Offset Apertures	3/12/2013	13/795,026		US
APD3419-1-US	Microphone with Aligned Apertures	6/6/2007	60/942,315		US
APD3419-2-US	Microphone with Aligned Apertures	6/5/2008	12/133,599		US
APD3882-1-US	Microphone with Backplate Having Specially Shaped Through-Holes	11/16/2009	61/261,442		US
APD3882-2-US	Microphone with Backplate Having Specially Shaped Through-Holes	11/4/2010	12/939,504		US
APD3882-1-PCT	Microphone with Backplate Having Specially Shaped Through-Holes	11/4/2010	PCT/US2010/055404		WO

Docket Number	Title	Filing Date	Application #	Patent Number	Country
APD3882-1-TW	Microphone with Backplate Having Specially Shaped Through-Holes	11/15/2010	99139134		TW
APD3533-2-US	Microphone with Backside Cavity that Impedes Bubble Formation	1/16/2009	12/355,432	8,208,671	US
APD3096-1-US	Microphone with Irregular Diaphragm	8/23/2005	60/710,517		US
APD3096-4-US	Microphone with Irregular Diaphragm	12/19/2012	13/719,858		US
APD3096-3-US	Microphone with Irregular Diaphragm	3/14/2011	13/047,220	8,358,793	US
APD3096-2-US	Microphone with Irregular Diaphragm	6/28/2006	11/476,378	7,961,897	US
APD3096-1-PCT	Microphone with Irregular Diaphragm	8/23/2006	PCT/US2006/032909		WO
APD4607-1-US	Microphone with Parasitic Capacitance Cancelation	9/11/2012	13/609,872		US
APD4607-1-CN	Microphone with Parasitic Capacitance Cancelation	9/9/2013	201310404760.4		CN
APD3363-1-US	Microphone with Pressure Relief	1/17/2007	60/885,314		US
APD3363-2-US	Microphone with Pressure Relief	1/17/2008	12/015,903	8,111,871	US

Docket Number	Title	Filing Date	Application #	Patent Number	Country
APD3363-1-PCT	Microphone with Pressure Relief	1/17/2008	PCT/US08/51310		WO
APD3363-1-CN	MICROPHONE WITH PRESSURE RELIEF	1/17/2008	200880001956.6		CN
APD3363-1-DE	Microphone with Pressure Relief	1/17/2008	8727831.3	2103173	DE
APD3363-1-EP	Microphone with Pressure Relief	1/17/2008	08727831.3	2103173	EP
APD3363-1-GB	Microphone with Pressure Relief	1/17/2008	8727831.3	2103173	GB
APD4295-1-US	Microphone with Programmable Frequency Response	9/25/2012	13/626,532		US
APD4295-1-CN	Microphone with Programmable Frequency Response	9/13/2013	201310416793.0		CN
APD3419-3-US	Microphone with Reduced Parasitic Capacitance	3/26/2009			US
APD3875-1-US	Microphone with Reduced Parasitic Capacitance	3/26/2009	12/411,768	8,103,027	US
APD3533-1-US	Microphone with Supporting Backside Cavity	1/16/2008	61/021,420		US

Docket Number	Title	Filing Date	Application #	Patent Number	Country
APD4013-1-US	Microphone with Variable Low Frequency Cutoff	11/11/2009	61/260,092		US
APD4013-2-US	Microphone with Variable Low Frequency Cutoff	10/22/2010	12/909,933	8,447,054	US
APD3108-1-US	Multi-Microphone System	8/23/2005	60/710,624		US
APD3108-2-US	Multi-Microphone System	8/23/2006	11/466,669	8,477,983	US
APD3108-3-US	Multi-Microphone System	4/26/2013	13/871,177		US
APD3108-1-PCT	Multi-Microphone System	8/23/2006	PCT/US2006/032856		WO
APD3295-1-US	Multiple Microphone System	7/25/2006	60/833,032		US
APD3295-3-US	Multiple Microphone System	4/24/2012	13/454,508		US
APD3295-2-US	Multiple Microphone System	7/25/2007	11/828,049	8,270,634	US
APD3295-1-PCT	Multiple Microphone System	7/25/2007	PCT/US07/74328		WO
APD3295-1-DE	Multiple Microphone System	7/25/2007	DE(EP) 07813345.1	602007029378.2	DE
APD3295-1-EP	Multiple Microphone System	7/25/2007	07813345.1	2044802	EP

Docket Number	Title	Filing Date	Application #	Patent Number	Country
APD3295-1-FR	Multiple Microphone System	7/25/2007	07813345.1	EP(FR) 2044802	FR
APD3295-1-GB	Multiple Microphone System	7/25/2007	GB(EP) 07813345.1	GB(EP) 2044802	GB
APD3295-1-JP	Multiple Microphone System	7/25/2007	2009-521983	4951067	JP
APD4744-1-US	Noise Mitigating Microphone System	1/31/2013	13/755,795		US
APD3101-2-US	Noise Mitigating Microphone System and Method	7/25/2006	11/492,314	8,130,979	US
APD3101-1-US	Noise Mitigating Microphone System and Method	8/24/2009	60/710,515		US
APD3101-4-US	Noise Mitigating Microphone System and Method	12/12/2012	13/712,325		US
APD3101-3-US	Noise Mitigating Microphone System and Method	8/24/2009	12/546,073	8,351,632	US
APD3101-1-PCT	Noise Mitigating Microphone System and Method	8/24/2009	PCT/US2006/032931		WO
APD3101-1-CN	Noise Mitigating Microphone System and Method	8/23/2006	200680031071.1	ZL200680031071.1	CN

Docket Number	Title	Filing Date	Application #	Patent Number	Country
APD3101-1-DE	Noise Mitigating Microphone System and Method	8/23/2006	06802166.6	602006030977.5	DE
APD3101-1-EP	Noise Mitigating Microphone System and Method	8/23/2006	06 802 166.6	1917836	EP
APD3101-1-GB	Noise Mitigating Microphone System and Method	8/23/2006	06802166.2	1917836	GB
APD3101-1-JP	Noise Mitigating Microphone System and Method	8/23/2006	2008-528115	4864089	JP
APD3365-1-US	Open Package Device with Roughened Surface	2/6/2007	60/888,417		US
ACQ156-1-US	Packaged Microphone	12/17/2012	61/738,209		US
APD4681-1-US	Packaged Microphone System with Integrated Passive Device Die	10/16/2012	13/652,950		US
APD4681-1-PCT	Packaged Microphone System with Integrated Passive Device Die	9/6/2013	PCT/US12013/058381		WO
APD4761-1-US	Packaged Microphone with Frame Having Die Mounting Concavity	2/15/2013	13/769,013		US

Docket Number	Title	Filing Date	Application #	Patent Number	Country
APD4236-1-US	Packaged Microphone with Reduced Parasitics	1/24/2011	61/435,469		US
APD4236-2-US	Packaged Microphone with Reduced Parasitics	1/24/2012	13/357,158		US
APD4236-1-PCT	PACKAGED MICROPHONE WITH REDUCED PARASITICS	1/24/2012	PCT/US2012/022359		WO
APD4144-1-US	PACKAGES AND METHODS FOR PACKAGING MEMS MICROPHONE DEVICES	2/15/2011	61/305,874		US
APD4144-2-US	PACKAGES AND METHODS FOR PACKAGING MEMS MICROPHONE DEVICES	2/15/2011	13/027,737	8,577,063	US
APD4048-1-US	PACKAGES AND METHODS FOR PACKAGING MEMS MICROPHONE DEVICES	3/18/2011	13/051,253	8,447,057	US
APD4144-3-US	PACKAGES AND METHODS FOR PACKAGING MEMS MICROPHONE DEVICES	10/1/2013	14/043,628		US

Docket Number	Title	Filing Date	Application #	Patent Number	Country
APD4319-2-US	PACKAGES AND METHODS FOR PACKAGING MICROPHONE DEVICES	10/27/2011	13/282,990		US
APD4319-1-CN	PACKAGES AND METHODS FOR PACKAGING MICROPHONE DEVICES	12/16/2011	201110421770.X		CN
APD4668-2-US	Pre-Molded MEMS Device Package	3/12/2013	13/795,874		US
APD4668-3-US	Pre-Molded MEMS Device Package with Conductive Shell	3/12/2013	13/795,902		US
APD3102-1-CN	Process for Forming a Microphone using Support Member	12/21/2006	200680049998.8	ZL200680049998.8	CN
APD3102-4-US	Process of Forming a Microphone Using Support Member	11/6/2012	13/669,857		US
APD3102-1-DE	Process of Forming a Microphone using Support Member	12/21/2006			DE
APD3102-2-DE	Process of Forming a Microphone using Support Member	12/21/2006			DE

Docket Number	Title	Filing Date	Application #	Patent Number	Country
APD3102-3-DE	Process of Forming a Microphone using Support Member	12/21/2006			DE
APD3102-1-EP	Process of Forming a Microphone using Support Member	12/21/2006	06 849 089.5		EP
APD3102-3-EP	Process of Forming a Microphone Using Support Member	12/21/2006	11155785.6		EP
APD3102-2-EP	Process of Forming a Microphone Using Support Member	12/21/2006	11155786.4		EP
APD3102-1-GB	Process of Forming a Microphone using Support Member	12/21/2006			GB
APD3102-2-GB	Process of Forming a Microphone using Support Member	12/21/2006			GB
APD3102-3-GB	Process of Forming a Microphone using Support Member	12/21/2006			GB
APD3102-2-JP	Process of Forming a Microphone Using Support Member	12/21/2006	2012-243414		JP
APD3102-1-KR	Process of Forming a Microphone Using Support Member	12/21/2006	10-2008-7018667	10-1004516	KR

Docket Number	Title	Filing Date	Application #	Patent Number	Country
APD3102-3-US	Process of Forming Microphone Using Support Member	10/3/2008	12/244,840	8,309,386	US
APD3102-2-US	Process of Forming Microphone Using Support Member	12/19/2006	11/613,003	7,449,356	US
APD3102-1-PCT	Process of Forming Microphone Using Support Member	12/21/2006	PCT/US2006/048788		WO
APD4093-1-US	Reduced Footprint Microphone System with Spacer Member Having Through-Hole	7/30/2010	12/847,682		US
APD4093-1-PCT	Reduced Footprint Microphone System with Spacer Member Having Through-Hole	7/11/2011	PCT/US2011/043513		WO
APD4093-1-EP	Reduced Footprint Microphone System with Spacer Member Having Through-Hole	7/11/2011	11748503.7		EP
APD4093-1-TW	Reduced Footprint Microphone System with Spacer Member Having Through-Hole	7/21/2011	100125818		TW
APD4019-2-US	Reduced Stiction MEMS Device with Exposed Silicon Carbide	9/27/2010	12/891,173	8,507,306	US

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APD4019-3-US	Reduced Stiction MEMS Device with Exposed Silicon Carbide				US
APD4695-1-US	Side Port Microphone with Leads on Any Side	8/7/2013	13/960,974		US
APD3848-1-US	Side-Ported MEMS Microphone Assembly	11/26/2008	12/323,703	8,351,634	US
APD3848-1-PCT	Side-Ported MEMS Microphone Assembly	11/19/2009	PCT/US09/65041		WO
APD3178-1-CN	Support Apparatus for Microphone Daiphragm	1/22/2007	200780002789.2		CN
APD3178-1-US	Support Apparatus for Microphone Diaphragm	1/20/2006	60/760,854		US
APD3178-2-US	Support Apparatus for Microphone Diaphragm	1/22/2007	11/625,553	7,885,423	US
APD3178-3-US	Support Apparatus for Microphone Diaphragm	12/30/2010	12/981,949	8,422,703	US
APD3178-4-US	Support Apparatus for Microphone Diaphragm	4/1/2013	13/854,438		US

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APD3178-1-PCT	Support Apparatus for Microphone Diaphragm	1/22/2007	PCT/US2007/60852		WO
APD3178-1-JP	Support Apparatus for Microphone Diaphragm	1/22/2007	2008-551569	5215871	JP
APD3955-1-US	Switchable Attenuation Circuit for MEMS Microphone Systems	5/20/2009	61/179,757		US
APD3955-2-US	Switchable Attenuation Circuit for MEMS Microphone Systems	5/20/2010	12/784,143		US
APD4314-2-US	Synchronization, Re-Synchronization, Addressing, and Serialized Signal Processing for Daisy-Chained Communication Devices	3/22/2012	13/426,918		US
APD4299-1-US	System, Apparatus, and Method for Time-Division Multiplexed Communication	3/25/2011	13/071,836		US
APD3332-1-US	The Use of LC Tank Structure on a Microphone ASIC	10/11/2006	60/829,000		US

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APD4314-1-US	three different address assignment methods for slave devices with programmable device addresses in a TDM daisy-chain without any additional pins	3/25/2011	61/467,538		US
APD4314-1-PCT	three different address assignment methods for slave devices with programmable device addresses in a TDM daisy-chain without any additional pins	3/22/2012	PCT/US2012/030058		WO
APD4314-1-CN	three different address assignment methods for slave devices with programmable device addresses in a TDM daisy-chain without any additional pins				CN
APD4592-1-US	Transducer with Enlarged Back Volume	6/27/2012	61/664,780		US
APD4592-2-US	Transducer with Enlarged Back Volume	6/24/2013	13/925,076		US

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APD4319-1-US	Use of flexible PCB to change ECM and MEMS microphones from top port type to bottom port type (and vice-versa).	4/4/2011	61/471,604		US
APD4047-1-US	Very Low Power MEMS Microphone	12/14/2009	61/356,075		US
APD4047-2-US	Very Low Power MEMS Microphone	6/17/2011	13/162,903		US
APD3654-1-US	Wide Dynamic Range Microphone	5/23/2008	61/055,611		US
APD3654-2-US	Wide Dynamic Range Microphone	5/22/2009	12/470,986	8,223,981	US
APD3654-3-US	Wide Dynamic Range Microphone	6/22/2012	13/530,227		US
APD3654-1-PCT	Wide Dynamic Range Microphone	5/22/2009	PCT/US2009/044997		WO
APD3654-1-EP	Wide Dynamic Range Microphone	5/22/2009	09751662.9		EP
APD3654-4-US	Wide Dynamic Range Microphone	5/23/2008			US
APD3654-1-GB	Wide Dynamic Range Microphone				GB
APD3654-1-DE	Wide Dynamic Range Microphone				DE