

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT3036355

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

## CONVEYING PARTY DATA

Name	Execution Date
KNOWLES ELECTRONICS ASIA PTE. LTD.	12/31/2013

## RECEIVING PARTY DATA

Name:	KNOWLES IPC (M) SDN. BHD.
Street Address:	SUITE 18.01, 18TH FLOOR
Internal Address:	MWE PLAZA, NO. 8 LEBUH FARQUHAR
City:	PULAU PINANG
State/Country:	MALAYSIA
Postal Code:	10200

## PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13264751

## CORRESPONDENCE DATA

Fax Number: (312)876-1155

*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.*

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Correspondent Name: STEVEN MCMAHON ZELLER

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Address Line 2: 10 S. WACKER DR., STE. 2300

Address Line 4: CHICAGO, ILLINOIS 60606

NAME OF SUBMITTER:	STEVEN MCMAHON ZELLER
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SIGNATURE:	/Steven McMahon Zeller/
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DATE SIGNED:	09/24/2014
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## Total Attachments: 33

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PATENT

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DATED

31 DEC 2013

**INTELLECTUAL PROPERTY  
ASSIGNMENT AGREEMENT**

between

**KNOWLES ELECTRONICS ASIA PTE. LTD.**

and

**KNOWLES IPC (M) SDN. BHD.**

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THIS INTELLECTUAL PROPERTY ASSIGNMENT is dated 31 DEC 2013

**PARTIES**

- (1) KNOWLES ELECTRONICS ASIA PTE. LTD. incorporated and registered in Singapore with company number 201107045G whose registered office is at 50, Havelock Road, #02-767, Singapore 160050 (**Assignor**).
- (2) KNOWLES IPC (M) SDN BHD incorporated and registered in Malaysia with company number 641240-U whose registered office is at Suite 18.01, 18th Floor, MWE Plaza, No. 8 Lebuh Farquhar, Pulau Pinang, 10200 Malaysia (**Assignee**).

**BACKGROUND**

- (A) The Assignor is the sole legal and beneficial owner of rights, title and interests to certain Intellectual Property Rights, Technology and Know-How and Patents pursuant to an IPTLA (each of the terms as defined below).
- (B) The Assignor has agreed to assign such Intellectual Property Rights, Technology and Know-How and Patents to the Assignee on the terms and conditions set out in this agreement.

**AGREED TERMS**

**1. INTERPRETATION**

- 1.1 The definitions and rules of interpretation in this clause apply in this agreement.

<b>Affiliates</b>	shall mean: (a) in respect to a Party, any and all persons with respect to which, now or hereafter, such Party; or (b) in respect to NXP, any and all persons with respect to which, now or hereafter, NXP, directly or indirectly, holds more than 50% of the nominal value of, or more than 50% of the voting power at general meetings, or has the power to appoint and to dismiss a majority of the directors or otherwise to direct the activities of such person, or any other person qualifying as a 'subsidiary' in accordance with local law of any country, excluding in the case of Affiliates of NXP, Trident Microsystems, Inc.
<b>Business</b>	shall mean the Sound Solutions business conducted by the Assignor and its' Affiliates, comprising research into and development of, and the production, marketing, sale and distribution of audio transducer and audio transducer modules specifically for (i) dynamic speakers/receiver and MEMS microphone applications; (ii) mobile phone headset devices; and (iii) joystick sensor devices (subject to the exclusion in the next sentence. For the avoidance of doubt, (a) the semiconductor integrated circuits that are part of the components and devices mentioned in (i), (ii) and (iii) above and that are supplied to the Business either by semiconductor suppliers or NXP businesses, are not part of the Business, and (b) with regard to MEMS technology, intellectual property that is specific to MEMS microphone applications is included in the

	Business, while intellectual property which relates to both a MEMS microphone application and an application outside of MEMS microphones, is not included in the Business.
<b>Effective Date</b>	shall mean <u>01 JAN 2014</u>
<b>Assigned Rights</b>	shall have the meaning as defined in Clause 2.1.
<b>Deed of Transfer of Patents</b>	shall mean the Deed of Transfer of Patents dated 4 July 2011 between NXP B.V. and the Assignor.
<b>Excluded Patents</b>	shall mean the patents set out in Schedule 1-A.
<b>Improvements</b>	shall mean any and all improvements, updates, revisions, enhancements or modifications to the Patents and Technology and Know-How as well as any and all inventions, innovations and discoveries, technologies, know-how, trade secrets, copyrighted materials, processes, procedures, designs, product and marketing ideas and materials, equipment, technical information, software systems, specifications, formulae, preparation methods, techniques, standards, training materials, whether patentable or not, and other information and data relating to the Patents and Technology and Know-How, that may be developed, adopted or created after the Effective Date and from time to time, together with all Intellectual Property Rights in or based on any such Improvements.
<b>Intellectual Property Rights</b>	shall mean patents, know-how, trade secrets and other proprietary or confidential information, registered designs, copyrights, designs rights, moral rights, trade marks, service marks, trade dress, business names, exclusively used in relation to the Sound Solutions Products and owned by the Assignor immediately prior to the Effective Date, including registrations of, applications to register and rights to apply for registration of any of the aforesaid items, rights in the nature of any of the aforesaid items and any other intellectual property rights in any country, and rights in the nature of unfair competition rights and rights to sue for passing off.
<b>NXP</b>	shall mean NXP B. V., a private limited liability company incorporated under the laws of the Netherlands, with corporate seat in Eindhoven, the Netherlands.
<b>IPTLA</b>	shall mean the Intellectual Property Transfer and License Agreement dated 22 December 2010 (as amended by Addendum dated 30 June 2011) between NXP B.V., NXP Semiconductors Beijing Limited, NXP Semiconductors Austria GmbH and Dover Corporation.
<b>Patents</b>	shall mean all patents and patent applications as set out in Schedule 1, including all divisionals, continuations-in-part, re-issues, re-examinations or extensions thereof owned by the Assignor and which is exclusively used within the Business immediately prior to the Effective Date but does not include the Excluded Patents.
<b>Sound Solutions Products</b>	shall mean certain audio transducer and also audio transducer modules primarily for use in dynamic speakers/receivers applications, MEMS microphone applications, mobile phone headset devices and joystick sensor devices manufactured in the course of the Business using the Patents and Technology and Know-How and including Improvements thereof.

<b>Technology and Know-How</b>	shall mean any and all technical information and knowledge owned by the Assignor and which is exclusively used within the Business immediately prior to the Effective Date, including existing and future inventions, improvements and discoveries, technologies, know-how, trade secrets, copyrighted materials, processes, procedures, designs, product and marketing ideas and materials, equipment, technical information, software systems, specifications, formulae, preparation methods, techniques, standards, training materials, whether patentable or not, and other information and data relating to the Sound Solutions Products, the Patents and related Intellectual Property Rights.
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- 1.2 Clause and Schedule headings shall not affect the interpretation of this agreement.
- 1.3 The Schedules form part of this agreement and shall have effect as if set out in full in the body of this agreement. Any reference to this agreement includes the Schedules.
- 1.4 References to Clauses and Schedules are to the clauses and Schedules of this agreement.
- 1.5 Unless the context otherwise requires, words in the singular include the plural and in the plural include the singular.
- 1.6 Unless the context otherwise requires, a reference to one gender shall include a reference to the other genders.
- 1.7 A reference to a statute or statutory provision shall include any subordinate legislation made from time to time under that statute or statutory provision.
- 1.8 Any words following the terms **including, include, in particular** or any similar expression shall be construed as illustrative and shall not limit the sense of the words preceding those terms.
- 1.9 A **person** includes a natural person, corporate or unincorporated body (whether or not having separate legal personality) and that person's legal and personal representatives, successors and permitted assigns.

## 2. ASSIGNMENT

- 2.1 In consideration of the sum of US\$7,500,000 receipt of which the Assignor expressly acknowledges, the Assignor hereby assigns to the Assignee, absolutely with full title guarantee, from and with effect from the Effective Date, all its right, title and interest in and to the Intellectual Property Rights, the Technology and Know-How and the Patents ("Assigned Rights"), including the right to bring, make, oppose, defend, appeal proceedings, claims or actions and obtain relief (and to retain any damages recovered) in respect of any infringement, or any other cause of action arising from

ownership, of any of the Assigned Rights whether occurring before, on, or after the date of this assignment.

2.2 Without limiting the generality of clause 2.1 above, in relation to the Patents, the Assigned Rights include:

- (a) in respect of any and each application in the Patents:
  - (i) the right to claim priority from and to prosecute and obtain grant of patent; and
  - (ii) the right to file divisional applications based thereon and to prosecute and obtain grant of patent on each and any such divisional application;
- (b) in respect of each and any invention disclosed in the Patents, the right to file an application, claim priority from such application, and prosecute and obtain grant of patent or similar protection in or in respect of any country or territory in the world;
- (c) the right to extend to or register in or in respect of any country or territory in the world each and any of the Patents, and each and any of the applications comprised in the Patents or filed as aforesaid, and to extend to or register in, or in respect of, any country or territory in the world any patent or like protection granted on any of such applications.
- (d) the absolute entitlement to any patents granted pursuant to any of the applications comprised in the Patents or filed as aforesaid; and
- (e) the right to bring, make, oppose, defend, appeal proceedings, claims or actions and obtain relief (and to retain any damages recovered) in respect of any infringement, or any other cause of action arising from ownership, of any of the Patents or any patents granted on any of the applications in the Patents or filed as aforesaid, whether occurring before or after the date of this agreement.

2.3 If at any time after the Effective date, the Assignee gives notice to the Assignor that there are in its view certain patents or patent applications owned by the Assignor with regard to which it is reasonably clear that they are exclusively related to the Sound Solutions Products or the Business and which have not been listed in Schedule 1, the Assignor agrees to execute appropriate documents to confirm the transfer of such patents or patent applications to the Assignee from and with effect from the Effective Date.

### 3. IMPROVEMENTS

If the Assignor makes, devises, or discovers, or otherwise acquires rights in, any Improvement after the date of this agreement, it shall, to the extent that it is not prohibited by law or by any obligation to any other person, promptly notify the Assignee in writing, giving details of the Improvement and shall, if the Assignee so requests, assign its rights in the Improvement to the Assignee.

#### **4. WARRANTIES**

The Assignor warrants that:

- (a) it is the sole legal and beneficial owner of the Assigned Rights;
- (b) all application, registration and renewal fees in respect of each of the Assigned Rights have been paid;
- (c) it has not assigned or licensed any of the rights in respect of the Assigned Rights, except as set out in 0;
- (d) each of the Assigned Rights is free from any security interest, option, mortgage, charge or lien;
- (e) it is unaware of any infringement or likely infringement of, or any challenge or likely challenge to the validity of, any of the Assigned Rights or of anything that might render any of the Assigned Rights invalid or subject to a compulsory licence order or prevent any application in the Patents proceeding to grant; and
- (f) so far as it is aware, exploitation of the Assigned Rights will not infringe the rights of any third party.

#### **5. INDEMNITY**

- 5.1 The Assignor shall indemnify and hold the Assignee harmless against all and any loss, damages, liability and costs (including reasonable legal expenses) that the Assignee suffers or incurs as a result of or in connection with any breach by the Assignor of the warranties in clause 4 above. At the request of the Assignee and at the Assignor's own expense, it shall provide all reasonable assistance to enable the Assignee to resist any claim, action or proceedings brought against the Assignee as a consequence of that breach.
- 5.2 Subject to clause 5.4 below, this indemnity shall apply whether or not the Assignee has been negligent or at fault.
- 5.3 If a payment due from the Assignor under this clause is subject to tax (whether by way of direct assessment or withholding at its source), the Assignee shall be entitled to receive from the Assignor such amounts as shall ensure that the net receipt, after tax, to the Assignee in respect of the payment is the same as it would have been were the payment not subject to tax.
- 5.4 Nothing in this agreement shall have the effect of excluding or limiting any liability for death or personal injury caused by negligence or for fraud.

## **6. FURTHER ASSURANCE**

6.1 The Assignor shall, at the Assignee's cost, perform (or procure the performance of) all further acts and things, and execute and deliver (or procure the execution or delivery of) all further documents, required by law or which the Assignee requests to vest in the Assignee the full benefit of the right, title and interest assigned to the Assignee under this agreement, including but not limited to:

- (a) registration of the Assignee as applicant for, or proprietor of, the Patents; and
- (b) assisting the Assignee in obtaining, defending and enforcing the Patents[, and assisting with any other proceedings which may be brought by or against the Assignee against or by any third party relating to the rights assigned by this agreement.

6.2 The Assignor irrevocably appoints the Assignee to be its attorney in his name and on its behalf to execute documents, use the Assignor's name and do all things which are necessary or desirable for the Assignee to obtain for itself or its nominee the full benefit of this clause. This power of attorney is irrevocable as long as the Assignor's obligations under this agreement remain undischarged.

## **7. WAIVER**

No failure or delay by a party to exercise any right or remedy provided under this agreement or by law shall constitute a waiver of that or any other right or remedy, nor shall it preclude or restrict the further exercise of that or any other right or remedy. No single or partial exercise of such right or remedy shall preclude or restrict the further exercise of that or any other right or remedy.

## **8. ENTIRE AGREEMENT**

8.1 This agreement constitutes the whole agreement between the parties and supersedes all previous agreements between the parties relating to its subject matter.

8.2 Each party acknowledges that, in entering into this agreement, it has not relied on, and shall have no right or remedy in respect of, any statement, representation, assurance or warranty (whether made negligently or innocently) other than as expressly set out in this agreement.

8.3 Nothing in this clause shall limit or exclude any liability for fraud.

## **9. VARIATION**

No variation of this agreement shall be effective unless it is in writing and signed by the parties (or their authorised representatives).

**10. SEVERANCE**

If any term or other provision of this agreement is invalid, illegal or incapable of being enforced under any law or as a matter of public policy, all other provisions of this agreement shall nevertheless remain in full force and effect so long as the economic or legal substance of the transactions contemplated by this agreement is not affected in any manner materially adverse to any party. Upon such determination that any term or other provision is invalid, illegal or incapable of being enforced, the parties to this agreement shall negotiate in good faith to modify this agreement so as to effect the original intent of the parties as closely as possible in a mutually acceptable manner in order that the transactions contemplated by this agreement be consummated as originally contemplated to the greatest extent possible.

**11. COUNTERPARTS**

This agreement may be executed in any number of counterparts, each of which when executed and delivered shall constitute an original of this agreement, but all the counterparts shall together constitute the same agreement. No counterpart shall be effective until each party has executed at least one counterpart. Delivery of an executed counterpart of a signature page to this Agreement by facsimile, .pdf or other electronic transmission shall be as effective as delivery of a manually executed counterpart of any such Agreement.

**12. THIRD PARTY RIGHTS**

No person other than a party to this agreement shall have any rights to enforce any term of this agreement by virtue of the Contracts (Rights of Third Parties) Act (Cap 53B) or any such equivalent legislation.

**13. NOTICES**

All notices and other communications between the Parties shall be in writing and sent by facsimile or email, by registered mail, postage prepaid and return receipt requested, or by overnight courier. All such communications shall be sent to a Party at the address shown at the beginning of this agreement or to such other address of which the receiving Party has given prior notice to the sending Party. All such communications shall be effective upon receipt by the sender of confirmation of the delivery, or where no such confirmation is possible, when received.

**14. GOVERNING LAW AND JURISDICTION**

- 14.1 This agreement is governed by, and construed in accordance with, the laws of Singapore.
- 14.2 Any dispute arising out of or in connection with this Agreement, including any question regarding its existence, validity or termination, shall be referred to and

finally resolved by arbitration in accordance with the Arbitration Rule of the Singapore International Arbitration Center (“SIAC Rules”) for the time being in force, which rules are deemed to be incorporated by reference in this clause. The seat of the arbitration shall be Singapore. The number of arbitrators shall be one. The language of arbitration shall be English.

*[The remainder of the page is intentionally left blank]*

Schedule 1 Patents

Status	Case Type	Country	Title	Filing Date	App. No.	Publ. Date	Publ. No.	Issue Date	Pat. No.
Granted	Designated PCT	CN	Improved Membrane For An Electroacoustic Transducer	23-Nov-07	200680018033.2	14-May-08	101180915 A	05-Sep-12	ZL200680018033.2
Granted	Designated PCT	CN	Diaphragm For An Electroacoustic Transducer, And Electroacoustic Transducer	14-Jun-06	200680023845.6	02-Jul-08	101213871 A	02-Jul-08	101213871
Granted	Designated PCT	CN	Asymmetrical Moving System For A Piezoelectric Speaker And Asymmetrical Speaker	14-Nov-06	200680042355.0	19-Nov-08	101310561 A	11-Apr-12	ZL200680042355.0
Granted	Designated PCT	CN	Acoustic Device And Method Of Manufacturing Same	16-May-07	200780021300.6	24-Jun-09	101467468	05-Sep-12	ZL200780021300.6
Granted	Designated PCT	CN	Method Of Determining The Harmonic And Anharmonic Portions Of A Response Signal Of A Device	16-Oct-07	200780041473.4	16-Sep-09	101536551 A	10-Oct-12	ZL200780041473.4
Published	Designated PCT	CN	Compound Membrane, Method Of Manufacturing The Same, And Acoustic Device	16-Oct-07	200780041481.9	16-Sep-09	101536543 A		
Published	Designated PCT	CN	Microphone	20-Apr-10	201080017052.X	04-Apr-12	102405654 A		
Published	Designated PCT	CN	Microphone With Adjustable Characteristics	15-Apr-10	201080016492.3	01-Aug-12	102625992 A		

Status	Case Type	Country	Title	Filing Date	App. No.	Publ. Date	Publ. No.	Issue Date	Pat. No.
Published	Secondary	CN	Thermo-Acoustic Loudspeaker	01-Nov-10	201010535037.6	11-May-11	102056066 A		
Published	Designated PCT	CN	Diaphragm for a Micro Loudspeaker	23-Jun-10	201080036571.0	23-May-12	102474684 A		
Application	Designated PCT	CN	Joystick Input Device	07-Feb-12					
Published	Designated PCT	CN	Microphone	05-Apr-11	201180019841.1	02-Jan-13	102860038 A		
Published	Designated PCT	CN	Loudspeaker	23-Nov-11	201180056449.4	24-Jul-13	103222280 A		
Published	Designated PCT	CN	Loudspeaker System With Improved Sound Packaging Of Acoustic Volume Increasing Materials For Loudspeaker Devices	23-Aug-11	201180040808.7	08-May-13	103098490 A		
Application	Designated PCT	CN							
Granted	Designated PCT	CN	Method For Manufacturing An Electroacoustical Transducer Comprising A Membrane Configuration	31-Jan-02	02800290.3	13-Apr-05	1606896 A	06-May-09	ZL02800290.3
Granted	Designated PCT	CN	Electroacoustic Transducer Having A Moving Coil And Having Movable Holding Elements For The Connecting Leads Of The Moving Coil	30-Sep-02	02819511.6	12-Jan-05	1565146 A	12-May-10	ZL02819511.6

Status	Case Type	Country	Title	Filing Date	App. No.	Publ. Date	Publ. No.	Issue Date	Pat. No.
Granted	Designated PCT	CN	Electroacoustic Transducer With Built-In Transducer Circuit	18-Jul-03	03818225.4	21-Sep-05	1672458	30-Sep-09	ZL03818225.4
Granted	Designated PCT	CN	Electroacoustic Transducer Comprising A Membrane With A Middle Area Comprising Stiffening Grooves	31-Oct-03	200380103958.3	28-Dec-05	1714597 A	11-May-11	ZL200380103958.3
Granted	Designated PCT	CN	Holding Device For Holding At Least Two Separate Electroacoustic Transducers	26-Feb-04	200480005531.4	05-Apr-06	1757259	13-Oct-10	ZL200480005531.4
Granted	Designated PCT	CN	Communication Device Comprising Sound-Conveying Means For Two Sound-Producing Modes	14-Jul-04	200480020115.1	23-Aug-06	1823517 A	07-Oct-09	ZL200480020115.1
Granted	Designated PCT	CN	An Electro-Acoustic Transducer Comprising An Rnd Circuit	12-Nov-04	200480033508.6	20-Dec-06	1883227	11-Jul-12	ZL200480033508.6
Granted	Designated PCT	CN	Method Of And Device For Modifying The Properties Of A Membrane For An Electroacoustic Transducer	08-Feb-05	200580005098.9	28-Feb-07	1922923 A	31-Oct-12	ZL200580005098.9
Granted	Designated PCT	CN	Oval Speaker Membrane With Reduced Lateral Forces	19-Apr-05	200580013340.7	18-Jul-07	101002502 A	20-Jul-11	ZL200580013340.7
Granted	Designated PCT	CN	Vibrating Element For An Electroacoustic	20-Sep-05	200580039839.5	24-Oct-07	101061748 A	18-Jul-12	ZL200580039839.5

Status	Case Type	Country	Title	Filing Date	App. No.	Publ. Date	Publ. No.	Issue Date	Pat. No.
			Transducer						
Granted	Designated PCT	CN	Membrane With High Resistance Against Buckling And/Or Crinkling	01-Mar-06	20068007620.1	19-Mar-08	101147422	21-Nov-12	ZL200680007620.1
Granted	Designated EP	DE	Improved Membrane For An Electroacoustic Transducer	19-May-06	06765689.2			25-Aug-10	602006016438.6
Granted	Designated EP	DE	Improved Membrane For An Electroacoustic Transducer	25-Jun-10	10167414.1	08-Sep-10	2227036	10-Jul-13	602006037503.1
Granted	Designated EP	DE	Diaphragm for an Electroacoustice Transducer, and Electroacoustic Transducer	14-Jun-06	06765746.0	19-Mar-08	1900248	02-Jan-13	602006033976.3
Granted	Designated EP	DE	Acoustic Device And Method Of Manufacturing Same	16-May-07	07735947.9			20-Oct-10	602007009988.9
Granted	Designated EP	DE	Magnet System And Method Of Manufacturing The Same	03-Apr-09	09732142.6	26-Jan-11	2277325	19-Jun-13	602009016534.8
Granted	Designated EP	DE	Microphone	08-Oct-10	10187007.9	26-Oct-11	2381699	24-Jul-13	602010008785.9
Granted	Designated EP	DE	Electroacoustic Transducer Having Diaphragm With Coil Mounting Projections And Interposed Stabilizing Walls	27-Dec-00	00987447.0			05-Mar-08	60038247.8
Granted	Designated EP	DE	Electroacoustic Transducer Having Spring Contacts	09-Oct-01	01983533.9			28-Jan-09	60137585.8

Status	Case Type	Country	Title	Filing Date	App. No.	Publ. Date	Publ. No.	Issue Date	Pat. No.
Granted	Designated EP	DE	Method For Manufacturing An Electroacoustical Transducer Comprising A Membrane Configuration	31-Jan-02	02715674.4			25-Nov-09	60234505.7
Granted	Designated EP	DE	Electroacoustic Transducer Having A Moving Coil And Having Movable Holding Elements For The Connecting Leads Of The Moving Coil	30-Sep-02	02772675.1			19-Jan-11	60239006.0
Granted	Designated EP	DE	Electroacoustic Transducer With Built In Transducer Circuit	18-Jul-03	03766559.3			03-Mar-10	60331549.6
Granted	Designated EP	DE	Generating Device For Generating A Useful Stream Of A Medium, In Particular For Generating Sound	26-Feb-04	04714868.9			02-Aug-06	6020401764.7
Granted	Designated EP	DE	Electro-Acoustic Transducer Comprising An Electronic Circuit	12-Nov-04	04799132.8			09-Mar-11	60204031753.5
Granted	Designated EP	DE	Electro-Acoustic Apparatus With A Channel Means To Change The Acoustic Output	24-Nov-04	04799222.7			22-Sep-10	602040429276.1
Granted	Designated EP	DE	Method Of Manufacturing A Coil	16-Aug-05	05774788.3			1784843	602005025502.8
Granted	Designated EP	DE	Electroacoustic Transducer Having A Mask	18-Feb-94	94200416.9	14-Sep-94	0615398 A1	13-May-98	59405929.1

Status	Case Type	Country	Title	Filing Date	App. No.	Publ. Date	Publ. No.	Issue Date	Pat. No.
Granted	Designated EP	DE	Electroacoustic Transducer Having A Cover Part	18-Feb-94	94200412.8	21-Sep-94	0616483 A 1	22-Oct-97	59404378.6
Granted	Designated EP	DE	Electroacoustic Transducer Comprising Spring Contacts Formed With At Least One Bend	05-Feb-98	98900975.8	22-Sep-99	0943224 A 1	25-Jun-03	69815808.3
Granted	Designated EP	DE	Device Including A Built-In Electroacoustic Transducer For Optimum Speech Reproduction	06-Jul-98	98928489.8	06-Oct-99	0947121 A 1	27-Apr-05	69829943.4
Granted	Designated EP	DE	An Electroacoustic Transducer And A Diaphragm For An Electroacoustic Transducer	11-Feb-99	99902732.9	26-Jan-00	0974243 A 1	08-Oct-03	69911861.1
Granted	Designated EP	DE	Apparatus Having A Housing Which Accommodates A Sound Transducer And Which Has A Passage	24-Dec-99	99967015.1	31-Jan-01	1072167 A 1	29-Oct-03	69912416.6
Granted	Designated EP	DE	Apparatus For Hands-Free Operation With Two Sound Reproduction Transducers	07-Aug-00	00956410.5			18-Jan-06	60025620
Granted	Divisional	EP	Improved Membrane For An Electroacoustic Transducer	25-Jun-10	10167414.1	08-Sep-10	2227036	10-Jul-13	2227036
Granted	Designated PCT	EP	Diaphragm For An Electroacoustic Transducer, And Electroacoustic Transducer	14-Jun-06	06765746.0	19-Mar-08	1900248	02-Jan-13	1900248

Status	Case Type	Country	Title	Filing Date	App. No.	Publ. Date	Publ. No.	Issue Date	Pat. No.
Published	Designated PCT	EP	Membrane For An Acoustic Device And Acoustic Device	20-Jun-08	08763402.8	24-Mar-10	2165565		
Published	Designated PCT	EP	Electro-Acoustic Transducer Comprising A MEMS Sensor	29-Jul-08	08789478.8	21-Apr-10	2177049		
Granted	Designated PCT	EP	Magnet System And Method Of Manufacturing The Same	03-Apr-09	09732142.6	26-Jan-11	2277325	19-Jun-13	2,277,325
Published	Priority	EP	Microphone With Adjustable Characteristics	15-Apr-09	09157977.1	20-Oct-10	2242288		
Published	Priority	EP	Diaphragm For A Micro Loudspeaker	26-Jun-09	09163935.1	29-Dec-10	2268058		
Granted	Priority	EP	Apparatus And Method For Detecting Usage Profiles Of Mobile Devices	02-Jul-09	09164442.7	26-Jan-11	2278356	09-Oct-13	2,278,356
Granted	Secondary	EP	Microphone	08-Oct-10	10187007.9	26-Oct-11	2381699	24-Jul-13	2,381,699
Published	Priority	EP	Microphone	02-Jul-10	1018354.8	21-Mar-12	2432249		
Published	Priority	EP	Loudspeaker	26-Nov-10	10192756.4	30-May-12	2458893		
Published	Priority	EP	Loudspeaker System With Improved Sound	23-Aug-10	10173765.8	29-Feb-12	2424270		

Status	Case Type	Country	Title	Filing Date	App. No.	Publ. Date	Publ. No.	Issue Date	Pat. No.
Published	Priority	EP	Receiver With Magnetic Dust Insensitivity	03-May-11	111646113	07-Nov-12	2521375		
Published	Priority	EP	Packaging Of Acoustic Volume Increasing Materials For Loudspeaker Devices	04-Mar-11	11157097.4	05-Sep-12	2495991		
Published	Designated PCT	EP	Membrane With High Resistance Against Buckling And/Or Crinkling	01-Mar-06	06710992.6	28-Nov-07	1859649		
Published	Designated PCT	IN	Improved Membrane For A MEMS Condenser Microphone	25-Apr-06	9715/DELNP/2007	20-Jun-08	9715/DELNP/2007 A		
Published	Designated PCT	IN	Vibrating Element For An Electroacoustic Transducer	20-Sep-05	2998/DELNP/2007	17-Aug-07	2006/033075		
Published	Designated PCT	IN	Membrane With High Resistance Against Buckling And/Or Crinkling	01-Mar-06	7711/DELNP/2007	04-Jul-08	7711/DELNP/2007		
Granted	Designated PCT	JP	Electroacoustic Transducer Having Diaphragm With Coil Mounting Projections And Interposed Stabilizing Walls	27-Dec-00	2001-554656	08-Jul-03	03-521185	09-Dec-11	4876293
Granted	Designated PCT	JP	Electroacoustic Transducer Having A Moving Coil Elastic Holding Elements For The Connecting Leads Of The Moving Coil	27-Dec-00	2001-554655	08-Jul-03	2003/521184	09-Dec-11	4876292

Status	Case Type	Country	Title	Filing Date	App. No.	Publ. Date	Publ. No.	Issue Date	Pat. No.
Granted	Designated PCT	JP	Electroacoustic Transducer Having Spring Contacts	09-Oct-01	2002-537076	22-Apr-04	04-512753	06-Oct-06	3863109
Granted	Designated PCT	JP	Electroacoustic Transducer Comprising A Membrane With An Improved Pleats Area	26-Jun-02	2003-514846	28-Apr-05		09-May-08	4121953
Granted	Designated PCT	JP	Electroacoustic Transducer Comprising A Closing Member For Closing The Rear Volume Of The Transducer Improved Membrane For A MEMS Condenser Microphone	05-Feb-98	98-529240	02-Aug-00	2000/509935	23-May-08	4126620
Granted	Designated PCT	KR	Improved Membrane For An Electroacoustic Transducer Asymmetrical Moving System For A Piezoelectric Speaker And Asymmetrical Speaker	25-Apr-06	10-2007-7029284	06-May-13		29-Apr-13	10-1261079
Granted	Designated PCT	KR	Membrane For An Acoustic Device And Acoustic Device	19-May-06	10-2007-7030147			07-Jun-12	10-1156366
Granted	Designated PCT	KR	Membrane For An Acoustic Device And Acoustic Device	14-Nov-06	10-2008-7014240			08-Jun-11	1041711
Granted	Designated PCT	KR	Electro-Acoustic Transducer Comprising A MEMS Sensor	20-Jun-08	10-2010-7002048	18-Mar-10	2010/0030558	09-Feb-12	10-1117425
Granted	Designated PCT	KR	Membrane With High Resistance Against Buckling	01-Mar-06	10-2007-7023010	17-Dec-07	10200701186 27	24-May-12	10-1152071
Granted	Designated PCT	KR						02-Nov-12	10-1199689

Status	Case Type	Country	Title	Filing Date	App. No.	Publ. Date	Publ. No.	Issue Date	Pat. No.
			And/or Crinkling						
Published	Secondary	TW	Loudspeaker System With Improved Sound	23-Aug-11	100130219	01-Apr-12	201213237		
Granted	Designated PCT	US	Improved Membrane For A MEMS Condenser Microphone	25-Apr-06	11/914,741	04-Sep-08	2008/0212409 A1	06-Dec-11	8,072,010
Granted	Designated PCT	US	Improved Membrane For An Electroacoustic Transducer	19-May-06	11/915,543	25-Sep-08	2008/0230304 A1	11-Jan-11	7,866,439
Granted	Continuation	US	Improved Membrane For An Electroacoustic Transducer	23-Sep-10	12/889,120	27-Jan-11	2011/0019866 A1	24-May-11	7,946,378
Granted	Designated PCT	US	Diaphragm For An Electroacoustic Transducer, And Electroacoustic Transducer	14-Jun-06	11/993,650	24-Jun-10	2010/0158304 A1	03-Jan-12	8,090,139
Published	Designated PCT	US	Asymmetrical Moving System For A Piezoelectric Speaker And Asymmetrical Speaker	14-Nov-06	12/093,633	27-Nov-08	2008/0292119 A1		
Granted	Designated PCT	US	Acoustic Device And Method Of Manufacturing Same	16-May-07	12/303,770	24-Sep-10	2010/0239109 A1	31-Jul-12	8,233,646
Granted	Designated PCT	US	Method Of Determining The Harmonic And Anharmonic Portions Of A Response Signal Of A Device	16-Oct-07	12/513,867	30-Sep-10	2010/0246840 A1	12-Mar-13	8,396,227

Status	Case Type	Country	Title	Filing Date	App. No.	Publ. Date	Publ. No.	Issue Date	Pat. No.
Granted	Designated PCT	US	Compound Membrane, Method Of Manufacturing The Same, And Acoustic Device	16-Oct-07	12/1513,881	18-Feb-10	2010/0040246 A1	09-Oct-12	8,284,964
Granted	Designated PCT	US	Membrane For An Acoustic Device And Acoustic Device	20-Jun-08	12/1666,818	26-Aug-10	2010/0215209 A1	07-May-13	8,437,496
Granted	Designated PCT	US	Input Device For An Electronic Device	21-Nov-08	12/744,497	31-Mar-11	2011/0074678 A1	09-Jul-13	8,482,524
Granted	Designated PCT	US	Electro-Acoustic Transducer Comprising A MEMS Sensor	29-Jul-08	12/671,031	05-Aug-10	2010/0195864 A1	03-Sep-13	8526665
Published	Designated PCT	US	Microphone With Adjustable Characteristics	15-Apr-10	13/264,751	09-Feb-12	2012-0033831 A1		
Published	Designated PCT	US	Diaphragm for a Micro Loudspeaker	23-Jun-10	13/380,428	19-Apr-12	2012-0093353 A1		
Application	Designated PCT	US	Joystick Input Device	08-Aug-13	13/984,440				
Published	Designated PCT	US	Microphone	05-Apr-11	13/642,499	28-Feb-13	2013/0051598 A1		
Published	Designated PCT	US	Microphone	22-Jun-11	13/808,075	02-May-13	2013/0108074 A1		
Published	Designated PCT	US	Loudspeaker	23-Nov-11	13/989,742	12-Sep-13	2013/0237291 A1		

Status	Case Type	Country	Title	Filing Date	App. No.	Publ. Date	Publ. No.	Issue Date	Pat. No.
Published	Priority	US	Ported MEMS Microphone	14-Feb-11	13/027,043	16-Aug-12	2012/0207335 A1		
Published	Designated PCT	US	Loudspeaker System With Improved Sound	23-Aug-11	13/818,374	04-Jul-13	2013/0170687 A1		
Application	Designated PCT	US	Packaging Of Acoustic Volume Increasing Materials For Loudspeaker Devices	05-Mar-12	14/003,217				
Granted	Secondary	US	Electroacoustic Transducer Having Diaphragm With Coil Mounting Projections And Interposed Stabilizing Walls	25-Jan-01	09/769,183	02-Aug-01	2001/0010725 A1	21-Jan-03	6510232
Granted	Secondary	US	Electroacoustic Transducer Having A Moving Coil Elastic Holding Elements For The Connecting Leads Of The Moving Coil	25-Jan-01	09/769,181	02-Aug-01	2001/0010728 A1	25-Feb-03	6526152
Granted	Secondary	US	Electroacoustic Transducer Having Spring Contacts	17-Oct-01	09/982261	13-Jun-02	2002/0071589 A1	08-Oct-02	6463161
Granted	Secondary	US	Method For Manufacturing An Electroacoustical Transducer Comprising A Membrane Configuration	08-Feb-02	10/071371	15-Aug-02	2002/0110257 A1	05-Oct-04	6799361

Status	Case Type	Country	Title	Filing Date	App. No.	Publ. Date	Publ. No.	Issue Date	Pat. No.
Granted	Divisional	US	Method For Manufacturing An Electroacoustical Transducer Comprising A Membrane Configuration	30-Aug-04	11/373,341	13-Jul-06	2006/0150395 A1	01-Mar-11	7,895,727
Granted	Divisional	US	Method For Manufacturing An Electroacoustical Transducer Comprising A Membrane Configuration	30-Aug-04	10/931111	02-Oct-05	2005/0028348 A1	09-May-06	7043046
Granted	Secondary	US	Electroacoustic Transducer Comprising A Membrane With An Improved Pleats Area	11-Jul-02	10/194,161	19-Jun-03	2003/0112995 A1	24-Feb-04	6697496
Granted	Secondary	US	Electroacoustic Transducer Having A Moving Coil And Having Movable Holding Elements For The Connecting Leads Of The Moving Coil	02-Oct-02	10/262797	10-Apr-03	2003/0068065 A1	14-Dec-04	6831989
Granted	Designated PCT	US	Electroacoustic Transducer With Built In Transducer Circuit	18-Jul-03	10/523,435	03-Nov-05	2005/0244028 A1	02-Oct-07	7277555
Granted	Designated PCT	US	Electroacoustic Transducer Comprising A Membrane With A Middle Area Comprising Stiffening Grooves	31-Oct-03	10/535,297	06-Apr-06	2006/0070796 A1	11-Dec-07	7306073

Status	Cass Type	Country	Title	Filing Date	App. No.	Publ. Date	Publ. No.	Issue Date	Pat. No.
Granted	Designated PCT	US	Generating Device For Generating A Useful Stream Of A Medium, In Particular For Generating Sound	26-Feb-04	10/546,306	14-Aug-08	2008/0191582 A1	23-Feb-10	7,667,370
Granted	Designated PCT	US	Device For Generating A Medium Stream	28-Jun-04	10/562,873	20-Jul-06	2006/0159568 A1	15-Feb-11	7,889,877
Granted	Designated PCT	US	Communication Device Comprising Sound-Conveying Means For Two Sound-Producing Modes	14-Jul-04	10/564542	03-Aug-06	2006/0171551 A1	14-Sep-10	7,796,773
Granted	Designated PCT	US	Electro-Acoustic Apparatus Comprising An Electro-Acoustic Transducer	24-Nov-04	10/580,055	28-Jun-07	2007/0147646 A1	21-Apr-09	7522741
Published	Designated PCT	US	Method Of And Device For Modifying The Properties Of A Membrane For An Electroacoustic Transducer	08-Feb-05	10/589,923	02-Aug-07	2007/0178242 A1		
Granted	Designated PCT	US	Diaphragm For A Loudspeaker With A Moving Coil	19-Apr-05	11/587,236	13-Sep-07		26-Aug-08	7416047
Granted	Designated PCT	US	Method Of Manufacturing A Coil	16-Aug-05	11/574,246	03-Jan-08	2008/0001016 A1	19-Apr-11	7,926,168
Granted	Designated PCT	US	Vibrating Element For An Electroacoustic Transducer	20-Sep-05	11/575,933	28-Aug-08	2008/0205689 A1	26-Apr-11	7,933,429

Status	Case Type	Country	Title	Filing Date	App. No.	Publ. Date	Publ. No.	Issue Date	Pat. No.
Granted	Designated PCT	US	Membrane With High Resistance Against Buckling And/or Crinkling Loudspeaker And Telephone Device Comprising Such A Loudspeaker	01-Mar-06	11/908,288	28-Aug-08	2008/0202845 A1	12-Jan-10	7,644,801
Granted	Secondary	US	Loudspeaker And Telephone Device Comprising Such A Loudspeaker	25-Feb-98	09/030483			18-Apr-00	6052463
Application	Secondary	US	Acoustic Transducer Basket Assembly	18-Apr-13	13/865,882				
Application	Secondary	US	Acoustic Transducer Basket	18-Apr-13	13/865,888				
Application	Priority	US	Double Coil Speaker	26-Apr-13	13/871,726				
Application	Priority	US	Hearing Aid Compatible Mobile Speaker	25-Jun-13	61/839,358				
Application	Priority	US	Speaker With Grained Zeolite Material	11-Sep-13	14/023,727				
Proposed	Priority	US	Multi-Layer Membrane for Miniature Loudspeaker						
Proposed	Priority	US	Apparatus with a Speaker used as Second Microphone						
Granted	Continuation	US	Electroacoustic Transducer Having A Mask	10-Apr-95	08/422666			04-Jun-96	5524151

Status	Case Type	Country	Title	Filing Date	App. No.	Publ. Date	Publ. No.	Issue Date	Pat. No.
Granted	Continuation	US	Electroacoustic Transducer Comprising A Closing Member	20-Dec-96	087772189			10-Mar-98	5727077
Granted	Secondary	US	Electroacoustic Transducer Comprising Spring Contacts Formed With At Least One Bend	02-Mar-98	09/033200			06-Jun-00	6072886
Granted	Secondary	US	Electroacoustic Transducer Comprising A Closing Member For Closing The Rear Volume Of The Transducer	02-Mar-98	09/033201			14-Mar-00	6038327
Granted	Secondary	US	Device Including A Built-In Electroacoustic Transducer For Optimum Speech Reproduction	04-Aug-98	09/128835	15-Nov-01	2001/0040975 A1	20-Jan-04	6681024
Granted	Secondary	US	An Electroacoustic Transducer And A Diaphragm For An Electroacoustic Transducer	16-Feb-99	09/251234			13-Jun-00	6075866
Granted	Secondary	US	Apparatus For Operation In An On-Ear Mode And An Off-Ear Mode	11-May-99	09/307909			12-Dec-00	6160897
Granted	Secondary	US	Apparatus Having A Housing Which Accommodates A Sound Transducer And Which Has A Passage	26-Jan-00	09/491627			03-Dec-02	6490361

Status	Case Type	Country	Title	Filing Date	App. No.	Publ. Date	Publ. No.	Issue Date	Pat. No.
Granted	Secondary	US	Apparatus Including An Electroacoustic Transducer Having Terminal Contacts Which Extend In The Direction Of The Transducer Axis And Including A Printed Circuit Board Having Mating Contacts	02-Mar-00	09/517725			09-Apr-02	6370257
Granted	Secondary	US	Apparatus Having An Electroacoustic Transducer Mounted On A P.C. Board With The Aid Of A Holding Means	23-Mar-00	09/533490			30-Dec-03	6671384
Granted	Secondary	US	Apparatus For Hands-Free Operation With Two Sound Reproduction Transducers	28-Aug-00	09/649671			30-Sep-03	6628790
Published	Secondary	WO	Loudspeaker	03-May-12	EP2012/058060	08-Nov-12	2012/150277		
Published	Secondary	WO	Packaging of Acoustic Volume Increasing Materials For Loudspeaker Devices	05-Mar-12	EP2012/053719	13-Sep-12	2012/119975		
Published	Secondary	WO	Transducer with Motion Control	01-Mar-13	SG2013/000085	12-Sep-13	2013/133765		

Schedule 1-A Excluded Patents

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PatentId	NPI Reference	Title	Region	Status [11024]	App/Station Number	Filing Date	Publication Number	Patent Number	Priority Date	Issue Date	Comments
81375266	00398101	Sound reduction with intermixed resonance	CH	Published	2007802021325	14-2-2007	10150677004		17-8-2006	17-8-2006	MEMS multi-applications
\$1375670	00398102	Sound reduction with intermixed resonance	EP	Published	7853298 *						MEMS multi-applications
\$1375670	00398103	Hf amper for driving a resonance device with different resonance	US	Published	131017722	23-6-2007	20091046159-44		17-8-2006	17-8-2006	MEMS multi-applications
21305825	\$1375670C2	Effectuation of tasks of a resonance device by parameter variation of MEMS resonators	Y-EU	Published	18120915126	15-5-2007	20091046159-42		18-5-2007	18-5-2007	MEMS multi-applications
00398104	00398104	Effectuation of tasks of a resonance device by parameter variation of MEMS resonators	CH	Published	2007802021325	10-12-2007	20091046159-44		2-12-2006	2-12-2006	MEMS multi-applications
\$1375670	00398105	Carrying out of tasks of a resonance device by parameter variation of MEMS resonators	EP	Application	20091049975	10-12-2007			1-12-2006	1-12-2006	MEMS multi-applications
81375260	00398106	Effectuation of MEMS device variations by phase deformation of MEMS	EP	Published	18-2007014579	10-12-2007			12-12-2006	12-12-2006	MEMS multi-applications
81375264	00398107	Effectuation of MEMS device variations by plane deformation of MEMS	EP	Published	7859372	10-12-2007	20091046159-4		12-12-2006	12-12-2006	MEMS multi-applications
81375265	00398108	Effectuation of MEMS device variations by plastic deformation of MEMS	US	Application	127518580	10-12-2007	20091046159-41		12-12-2005	12-12-2005	MEMS multi-applications
21305826	\$1375670C3	Effectuation of tasks of a resonance device by parameter variation of sound EP	Published	9152217	2-7-2009	20112114		2-7-2009	2-7-2009	MEMS multi-applications	
41307350	81375170	Effectuation of tasks of a resonance device by parameter variation of sound EP	EP	Published	9364213	27-2-2009	2159716		2-7-2008	2-7-2008	MEMS multi-applications
21305828	81375170C1	Effectuation of tasks of a resonance device by parameter variation of sound EP	Published	9372962	23-10-2009	2229578		23-10-2009	23-10-2009	MEMS multi-applications	
81375226	00398109	Importance of the significance of MEMS microphones by EP	Y-EU	Published	18120915126	16-9-2009	201001051204-1		23-9-2008	24-11-2008	Sensor + Sem IC
81375226	00398109	Importance of the significance of MEMS microphones by EP	US	Published	121671537	24-11-2009	20110121261-1		24-11-2008	24-11-2008	MEMS multi-applications
\$13751556	00398109	Importance of the significance of MEMS microphones by EP	EP	Published	3120055498	10-12-2009	201001051204-3		23-11-2008	23-11-2008	MEMS multi-applications
81375227	00398109C1	Importance of the significance of MEMS microphones by EP	EP	Application	215151216	12-2-2010			12-2-2009	12-2-2009	MEMS multi-applications
81375227	00398109C1	Importance of the significance of MEMS microphones by EP	US	Application	157701381	5-7-2010			12-3-2010	12-3-2010	Sensor + Sem IC
\$13570703	00398109C2	Importance of the significance of MEMS microphones by EP	Y-EU	Application	18201008565	5-7-2010			9-5-2009	9-5-2009	Sensor + Sem IC
81375267	00398109C3	Importance of the significance of MEMS microphones by EP	EP	Application	18201008565	5-7-2010			15-5-2010	15-5-2010	MEMS multi-applications
81375228	00398110	Micro-Electromechanical System Microphone	US	Published	121671537	24-11-2009	20110121261-1		23-9-2008	24-11-2008	Sensor + Sem IC
\$13751556	00398110	Micro-Electromechanical System Microphone	EP	Published	3120055498	10-12-2009	201001051204-3		23-11-2008	23-11-2008	MEMS multi-applications
81375229	00398110C1	Micro-Electromechanical System Microphone	EP	Application	215151216	12-2-2010			12-2-2009	12-2-2009	MEMS multi-applications
81375229	00398110C1	Micro-Electromechanical System Microphone	US	Application	157701381	5-7-2010			12-3-2010	12-3-2010	Sensor + Sem IC
\$13751556	00398110C1	Micro-Electromechanical System Microphone	EP	Application	18201008565	5-7-2010			9-5-2009	9-5-2009	Sensor + Sem IC
81375230	00398110C2	Micro-Electromechanical System Microphone	US	Published	121671537	24-11-2009	20110121261-1		23-9-2008	24-11-2008	Sensor + Sem IC
\$13751556	00398110C2	Micro-Electromechanical System Microphone	EP	Published	3120055498	10-12-2009	201001051204-3		23-11-2008	23-11-2008	MEMS multi-applications
81375231	00398110C3	Micro-Electromechanical System Microphone	EP	Published	152221053299	16-5-2010			23-9-2008	23-9-2008	MEMS multi-applications
81375231	00398110C3	Micro-Electromechanical System Microphone	US	Published	101703116	16-5-2010			18-5-2009	18-5-2009	MEMS multi-applications
81375231	00398110C3	Micro-Electromechanical System Microphone	EP	Application	191703116	16-5-2010			18-5-2009	18-5-2009	MEMS multi-applications
81375232	00398110C4	Micro-Electromechanical System Microphone	EP	Published	912005632	2-4-2008	2110121261-1		8-4-2008	8-4-2008	Sensor + Sem IC
81375232	00398110C4	Micro-Electromechanical System Microphone	US	Application	31151513	3-4-2009	2112121261-1		8-4-2008	8-4-2008	MEMS multi-applications
81375232	00398110C4	Micro-Electromechanical System Microphone	EP	Published	111942007	3-4-2010	20110121261-1		13-1-2008	13-1-2008	MEMS multi-applications
81375233	00398110C5	Micro-Electromechanical System Microphone	EP	Published	121505632	5-2-2011			5-2-2010	5-2-2010	MEMS multi-applications
81375233	00398110C5	Micro-Electromechanical System Microphone	US	Published	10100558272	2-1-2010	1220158464-5		18-12-2009	18-12-2009	MEMS multi-applications
81375233	00398110C5	Micro-Electromechanical System Microphone	EP	Published	30100558272	2-1-2010	1220158464-5		18-12-2009	18-12-2009	MEMS multi-applications
81375234	00398110C6	Micro-Electromechanical System Microphone	EP	Published	3120055498	10-1-2009	2229578		24-11-2008	24-11-2008	MEMS multi-applications
81375234	00398110C6	Micro-Electromechanical System Microphone	US	Published	111942007	10-1-2009	2229578		24-11-2008	24-11-2008	MEMS multi-applications
81375235	00398110C7	Micro-Electromechanical System Microphone	EP	Published	121505632	2-1-2010	1220158464-5		26-5-2008	26-5-2008	MEMS multi-applications
81375235	00398110C7	Micro-Electromechanical System Microphone	US	Published	111942007	2-1-2010	1220158464-5		26-5-2008	26-5-2008	MEMS multi-applications
81375236	00398110C8	Micro-Electromechanical System Microphone	EP	Published	121505632	2-1-2010	1220158464-5		26-5-2008	26-5-2008	MEMS multi-applications
81375236	00398110C8	Micro-Electromechanical System Microphone	US	Published	111942007	2-1-2010	1220158464-5		26-5-2008	26-5-2008	MEMS multi-applications
81375237	00398110C9	Micro-Electromechanical System Microphone	EP	Published	121505632	2-1-2010	1220158464-5		26-5-2008	26-5-2008	MEMS multi-applications
81375237	00398110C9	Micro-Electromechanical System Microphone	US	Published	111942007	2-1-2010	1220158464-5		26-5-2008	26-5-2008	MEMS multi-applications
81375238	00398110C10	Micro-Electromechanical System Microphone	EP	Published	121505632	2-1-2010	1220158464-5		26-5-2008	26-5-2008	MEMS multi-applications
81375238	00398110C10	Micro-Electromechanical System Microphone	US	Published	111942007	2-1-2010	1220158464-5		26-5-2008	26-5-2008	MEMS multi-applications
81375239	00398110C11	Micro-Electromechanical System Microphone	EP	Published	121505632	2-1-2010	1220158464-5		26-5-2008	26-5-2008	MEMS multi-applications
81375239	00398110C11	Micro-Electromechanical System Microphone	US	Published	111942007	2-1-2010	1220158464-5		26-5-2008	26-5-2008	MEMS multi-applications
81375240	00398110C12	Micro-Electromechanical System Microphone	EP	Published	121505632	2-1-2010	1220158464-5		26-5-2008	26-5-2008	MEMS multi-applications
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81375241	00398110C13	Micro-Electromechanical System Microphone	EP	Published	121505632	2-1-2010	1220158464-5		26-5-2008	26-5-2008	MEMS multi-applications
81375241	00398110C13	Micro-Electromechanical System Microphone	US	Published	111942007	2-1-2010	1220158464-5		26-5-2008	26-5-2008	MEMS multi-applications
81375242	00398110C14	Micro-Electromechanical System Microphone	EP	Published	121505632	2-1-2010	1220158464-5		26-5-2008	26-5-2008	MEMS multi-applications
81375242	00398110C14	Micro-Electromechanical System Microphone	US	Published	111942007	2-1-2010	1220158464-5		26-5-2008	26-5-2008	MEMS multi-applications
81375243	00398110C15	Micro-Electromechanical System Microphone	EP	Published	121505632	2-1-2010	1220158464-5		26-5-2008	26-5-2008	MEMS multi-applications
81375243	00398110C15	Micro-Electromechanical System Microphone	US	Published	111942007	2-1-2010	1220158464-5		26-5-2008	26-5-2008	MEMS multi-applications
81375244	00398110C16	Micro-Electromechanical System Microphone	EP	Published	121505632	2-1-2010	1220158464-5		26-5-2008	26-5-2008	MEMS multi-applications
81375244	00398110C16	Micro-Electromechanical System Microphone	US	Published	111942007	2-1-2010	1220158464-5		26-5-2008	26-5-2008	MEMS multi-applications
81375245	00398110C17	Micro-Electromechanical System Microphone	EP	Published	121505632	2-1-2010	1220158464-5		26-5-2008	26-5-2008	MEMS multi-applications
81375245	00398110C17	Micro-Electromechanical System Microphone	US	Published	111942007	2-1-2010	1220158464-5		26-5-2008	26-5-2008	MEMS multi-applications
81375246	00398110C18	Micro-Electromechanical System Microphone	EP	Published	121505632	2-1-2010	1220158464-5		26-5-2008	26-5-2008	MEMS multi-applications
81375246	00398110C18	Micro-Electromechanical System Microphone	US	Published	111942007	2-1-2010	1220158464-5		26-5-2008	26-5-2008	MEMS multi-applications
81375247	00398110C19	Micro-Electromechanical System Microphone	EP	Published	121505632	2-1-2010	1220158464-5		26-5-2008	26-5-2008	MEMS multi-applications
81375247	00398110C19	Micro-Electromechanical System Microphone	US	Published	111942007	2-1-2010	1220158464-5		26-5-2008	26-5-2008	MEMS multi-applications
81375248	00398110C20	Micro-Electromechanical System Microphone	EP	Published	121505632	2-1-2010	1220158464-5		26-5-2008	26-5-2008	MEMS multi-applications
81375248	00398110C20	Micro-Electromechanical System Microphone	US	Published	111942007	2-1-2010	1220158464-5		26-5-2008	26-5-2008	MEMS multi-applications
81375249	00398110C21	Micro-Electromechanical System Microphone	EP	Published	121505632	2-1-2010	1220158464-5		26-5-2008	26-5-2008	MEMS multi-applications
81375249	00398110C21	Micro-Electromechanical System Microphone	US	Published	111942007	2-1-2010	1220158464-5		26-5-2008	26-5-2008	MEMS multi-applications
81375250	00398110C22	Micro-Electromechanical System Microphone	EP	Published	121505632	2-1-2010	1220158464-5		26-5-2008	26-5-2008	MEMS multi-applications
81375250	00398110C22	Micro-Electromechanical System Microphone	US	Published	111942007	2-1-2010	1220158464-5		26-5-2008	26-5-2008	MEMS multi-applications
81375251	00398110C23	Micro-Electromechanical System Microphone	EP	Published	121505632	2-1-2010	1220158464-5		26-5-2008	26-5-2008	MEMS multi-applications
81375251	00398110C23	Micro-Electromechanical System Microphone	US	Published	111942007	2-1-2010	1220158464-5		26-5-2008	26-5-2008	MEMS multi-applications
81375252	00398110C24	Micro-Electromechanical System Microphone	EP	Published	121505632	2-1-2010	1220158464-5		26-5-2008	26-5-2008	MEMS multi-applications
81375252	00398110C24	Micro-Electromechanical System Microphone	US	Published	111942007	2-1-2010	1220158464-5		26-5-2008	26-5-2008	MEMS multi-applications
81375253	00398110C25	Micro-Electromechanical System Microphone	EP	Published	121505632	2-1-2010	1220158464-5		26-5-2008	26-5-2008	MEMS multi-applications
81375253	00398110C25	Micro-Electromechanical System Microphone	US	Published	111942007	2-1-2010	1220158464-5		26-5-2008	26-5-2008	MEMS multi-applications
81375254	00398110C26	Micro-Electromechanical System Microphone	EP	Published	121505632	2-1-2010	1220158464-5		26-5-2008	26-5-2008	MEMS multi-applications
81375254	00398110C26	Micro-Electromechanical System Microphone	US	Published	1119420						



## **Schedule 2 Licences and other third party rights**

1. Pursuant to a Licence Agreement between the Assignor and Knowles Electronics (Beijing) Co Ltd dated 4 July 2011, the Assignor has granted a non-exclusive, non-transferable licence, with right to sub-liscence only to Affiliates (as such term is defined in the licence agreement), to use the Patents, Technical Information (as such term is defined in the licence agreement) for and in connection with the manufacture, sale, marketing, advertising, promotion and distribution of Sound Solutions Products worldwide.
2. Pursuant to a Licence Agreement between the Assignor and Knowles Electronics Austria GmbH dated 4 July 2011, the Assignor has granted a non-exclusive, non-transferable licence, with right to sub-liscence only to Affiliates (as such term is defined in the licence agreement), to use the Patents, Technical Information (as such term is defined in the licence agreement) for and in connection with the manufacture, sale, marketing, advertising, promotion and distribution of Sound Solutions Products worldwide.
3. Pursuant to a Research & Development Services Agreement dated 4 July 2011 between Knowles Electronics (Beijing) Co Ltd and the Assignor has granted the right and licence to use the Technology and Know-How for the performance of certain research and development services during the term of the Agreement.
4. Pursuant to a Research & Development Services Agreement dated 4 July 2011 between Knowles Electronics Austria GmbH and the Assignor has granted the right and licence to use the Technology and Know-How for the performance of certain research and development services during the term of the Agreement.
5. Pursuant to the IPTLA, the Assignor has granted to NXP B.V. and its Affiliates a non-exclusive, perpetual, non-transferable (except as set forth in clause 16 of the IPTLA) irrevocable, world-wide, royalty-free, fully paid-up licence, without the right to grant sub-licences, in respect of the Patents, to make, have made, use (in the broadest sense), sell and offer to sell, import and export, promote or commercialise in any other way products and services in all fields other than and outside of the Business.

In witness whereof, the Parties have executed this agreement on the day and year first above written:

**ASSIGNOR**

KNOWLES ELECTRONICS ASIA PTE. LTD.

By: PHANG BOON HBONG

Designation: DIRECTOR

Signature: 

In the presence of:

Name: TAN WEI WEI

Signature: 

**ASSIGNEE**

KNOWLES IPC (M) SDN BHD

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

Designation: \_\_\_\_\_

In the presence of:

Name: \_\_\_\_\_

Signature: \_\_\_\_\_

In witness whereof, the Parties have executed this agreement on the day and year first above written:

**ASSIGNOR**

KNOWLES ELECTRONICS ASIA PTE. LTD.

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

Signature: \_\_\_\_\_

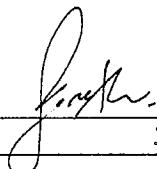
In the presence of:

Name: \_\_\_\_\_  
Signature: \_\_\_\_\_

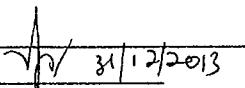
**ASSIGNEE**

KNOWLES IPC (M) SDN BHD

By: JONATHAN LEE TEONG SOD  
Designation: DIRECTOR

  
31/12/2013

In the presence of:

Name: TAN HONG GUAT  
Signature: MANAGER   
31/12/2013