

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT3828948

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
SOCOWAVE TECHNOLOGIES LIMITED	07/08/2015
SOCOWAVE LIMITED	07/08/2015
RECEIVING PARTY DATA	
Name:	ANALOG DEVICES INTERNATIONAL
Street Address:	BAY F1
Internal Address:	CO. LIMERICK
City:	RAHEEN INDUSTRIAL ESTATE
State/Country:	IRELAND
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	14897602
CORRESPONDENCE DATA	
Fax Number:	(949)760-9502
<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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Email:	efiling@knobbe.com
Correspondent Name:	KNOBBE, MARTENS, OLSON & BEAR, LLP
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Address Line 4:	IRVINE, CALIFORNIA 92614
ATTORNEY DOCKET NUMBER:	ADIRE.154APC
NAME OF SUBMITTER:	AARON M. DAVIS
SIGNATURE:	/Aaron M. Davis/
DATE SIGNED:	04/13/2016
Total Attachments: 7	
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PATENT

REEL: 038272 FRAME: 0788

DEED OF ASSIGNMENT

THIS DEED OF ASSIGNMENT is made the ^{8th}... of July 2015 between **SOCOWAVE TECHNOLOGIES LIMITED**, a limited liability company incorporated under the laws of Ireland with company registration number 454472 and having its registered office at 3 Rathdown Park, Terenure, Dublin 6, Ireland (hereinafter called "**STL**") of the first part, **SOCOWAVE LIMITED**, a limited liability company incorporated under the laws of Ireland with company registration number 454473 and having its registered office at 3 Rathdown Park, Terenure, Dublin 6, Ireland (hereinafter called the "**Assignor**") and Analog Devices International, a private unlimited company incorporated under the laws of Ireland with company registration number 519435 and having its registered office at Bay F1, Raheen Industrial Estate, Co. Limerick, Ireland (hereinafter called the "**Assignee**") of the other part.

WHEREAS:

- (a) The Assignor is the sole beneficial proprietor of Patent Rights which are set out in the attached "Assignment Schedule" and all patents and patent applications that directly or indirectly claim priority and/or form a basis for priority of the Patent Rights, and which are hereinafter referred to as the "**Patents**". STL is a wholly owned subsidiary of the Assignor and the sole legal owner of the Patents, which it holds as nominee for and on trust for the Assignor.
- (b) The parties hereto have agreed that all right, title and interest in the Patents and any inventions disclosed therein (hereinafter referred to as the "**Inventions**"), should be transferred from the Assignor to the Assignee for the consideration hereinafter set forth.

NOW THIS ASSIGNMENT WITNESSETH as follows:

In consideration of the sum of the mutual promises made between the parties and other good and valuable consideration (the receipt and sufficiency of which the Assignor hereby acknowledges) the Assignor as beneficial owner, and STL, as legal owner, together hereby sell, assign, transfer, and deliver to the Assignee all the benefit of the said Patents, the Inventions, the subject-matter thereof, the right, title and interest in the same that exist today or may exist in the future in, to and under the Patents, the inventions disclosed in the Patents and in and to all letters patent and other patent rights of the United States of America and all

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other jurisdictions which may or shall be granted on said inventions, or any parts thereof, or any divisional, continuations, continuations in part, continuing prosecution applications, requests for continuing examinations, reexaminations, extensions, reissue or other applications based in whole or in part on said inventions or Patents, all rights to apply in any or all countries of the world for patents, certificates of invention, utility models, industrial design protections, design patent protections, or other governmental grants or issuances related to any of the Patents, the right to claim priority under the Paris Convention, the right to enter national and regional phases in respect of International patent applications (PCT applications) and all the rights, powers, liberties and immunities arising or to arise therefrom including the right to sue for past and future infringements, to hold unto the Assignee absolutely, and the Assignor and STL each hereby undertake at their own expense to do all acts and execute all documents necessary or desirable for securing and executing all rights in or under said Patents and for assuring the title of the Assignee to the Patents.

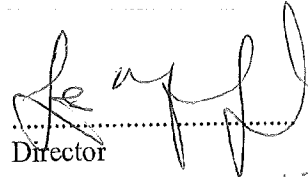
The Assignor does hereby request and authorize the Commissioner of Patents and Trademarks of the United States of America and all other corresponding patent offices or authorities of other jurisdictions to issue letters patent, certificates of invention, utility models, or other governmental grants or issuances that may be granted upon any of the Patents and the inventions included in the Patents to the Assignee or the Assignee's nominee, successor or assign.

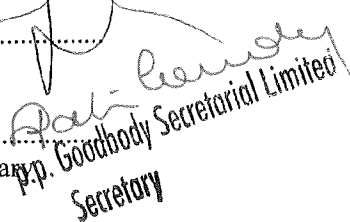
This Patent Assignment may be executed in multiple counterparts and either Party may execute any such counterpart, each of which when executed and delivered shall be deemed to be an original and all of which counterparts taken together shall constitute but one and the same instrument. For purposes of this Patent Assignment, facsimile signatures (including by electronic scans delivered by electronic mail) shall be deemed originals, and the Parties agree to exchange original signatures as promptly as possible following delivery of such facsimile signatures.

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In witness whereof the parties have executed this Deed the day and year first above written.

GIVEN under the **COMMON SEAL** of
ANALOG DEVICES
INTERNATIONAL
and **DELIVERED** as a **DEED**


.....
Director


.....
Director/Secretary
P.P. Goodbody Secretarial Limited
Secretary

GIVEN under the **COMMON SEAL** of
SOCOWAVE LIMITED
and **DELIVERED** as a **DEED**

.....
Director

.....
Director/Secretary

GIVEN under the **COMMON SEAL** of
SOCOWAVE TECHNOLOGIES
LIMITED
and **DELIVERED** as a **DEED**

.....
Director

.....
Director/Secretary

Execution version

In witness whereof the parties have executed this Deed the day and year first above written.

GIVEN under the **COMMON SEAL** of
ANALOG DEVICES
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.....
Director

.....
Director/Secretary

GIVEN under the **COMMON SEAL** of
SOCOWAVE LIMITED
and **DELIVERED** as a **DEED**

Joseph Moore
.....
Director

[Signature]
.....
Director/Secretary

GIVEN under the **COMMON SEAL** of
SOCOWAVE TECHNOLOGIES
LIMITED
and **DELIVERED** as a **DEED**

Andy Moore
.....
Director

Joseph Moore
.....
Director/Secretary

Assignment Schedule

This is the Assignment Schedule to the Deed of Assignment made the day of July 2015 between Socowave Technologies Limited, Socowave Limited and Analog Devices International. The patents and/patent applications listed below are herein referred to as the "Patents":

<u>Country</u>	<u>Application No.</u>	<u>Filing Date</u>	<u>Patent Number</u>	<u>Title</u>
China	200780024527.6	18/05/2007	101479885	Antenna Array Calibration
USA	12/304,711	18/05/2007	7,714,776	Antenna Array Calibration
Europe	07764539.8	18/05/2007	2033263	Antenna Array Calibration
Europe	10720554.4	12/02/2010		Communication System, Network Element And Method For Antenna Array Beam-Forming
International PCT	PCT/EP2010/051824	12/02/2010		Communication System, Network Element And Method For Antenna Array Beam-Forming
United Kingdom	0902408.4	13/02/2009	2467771	Communication System, Network Element And Method For Antenna Array Beam-Forming
USA	13/201,559	12/02/2010	8,665,845	Communication System, Network Element And Method For Antenna Array Beam-Forming
Europe	10711853.1	12/02/2010		Communication System, Network Element And Method For Antenna Array Calibration
International PCT	PCT/EP2010/051639	10/02/2010		Communication System, Network Element And Method For Antenna Array Calibration
United Kingdom	0902409.2	13/02/2009	2467772	Communication System, Network Element And Method For Antenna Array Calibration
USA	13/201,561	10/02/2010	8,976,845	Communication System, Network Element And Method For Antenna Array Calibration
China	201080016606.4	10/02/2010	102396105	Communication System, Apparatus For Antenna Array Control
Europe	10711854.9	10/02/2010	2396902	Communication System, Apparatus For Antenna Array Control
India	7007/DELNP/2011	10/02/2010		Communication System, Apparatus For Antenna Array Control
International PCT	PCT/EP2010/051643	10/02/2010		Communication System, Apparatus For Antenna Array Control
United Kingdom	0902407.6	13/02/2009	2467770	Communication System, Apparatus And Method For Antenna Array Control
USA	13/201,587	10/02/2010	8,665,846	Communication System, Apparatus For Antenna Array Control
China	201080016607.9	10/02/2010	102396163	Communication System, Apparatus And Methods For Calibrating Antenna Array
Europe	10711855.6	10/02/2010		Communication System, Apparatus And Methods For Calibrating Antenna Array

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India	7009/DELNP/ 2011	10/02/2010		Communication System, Apparatus And Methods For Calibrating Antenna Array
International PCT	PCT/EP2010/ 051649	10/02/2010		Communication System, Apparatus And Methods For Calibrating Antenna Array
United Kingdom	0902410.0	13/02/2009	2467773	Communication System, Apparatus And Methods For Calibrating An Antenna Array
USA	13/201,566	10/02/2010	9,035,828	Communication System, Apparatus And Methods For Calibrating Antenna Array
China	201080030393.0	15/06/2010		Wireless Network Element And Method For Antenna Array Control
Europe	10744539.7	15/06/2010		Wireless Network Element And Method For Antenna Array Control
India	713/CHENP/ 2012	15/6/2010		Wireless Network Element And Method For Antenna Array Control
International PCT	PCT/EP2010/ 058402	15/06/2010		Wireless Network Element And Method For Antenna Array Control
United Kingdom	0911694.8	06/07/2009	2471669	Wireless Network Element And Method For Antenna Array Control
USA	13/382,616	15/06/2010		Wireless Network Element And Method For Antenna Array Control
Europe	10798995.6	08/12/2010		Communication Unit, Integrated Circuit And Method Of Diverse Polarisation
India	6110/DELNP/ 2012	08/12/2010		Communication Unit, Integrated Circuit And Method Of Diverse Polarisation
International PCT	PCT/EP2010/ 069153	08/12/2010		Communication Unit, Integrated Circuit And Method Of Diverse Polarisation
United Kingdom	0921956.9	17/12/2009	2476252	Communication Unit, Integrated Circuit And Method Of Diverse Polarization
USA	13/515,916	08/12/2010	8,913,699	Communication Unit, Integrated Circuit And Method Of Diverse Polarisation
International PCT	PCT/EP2011/ 064271	19/08/2011		Polarisation Control Device, Integrated Circuit And Method For Compensating Phase Mismatch
United Kingdom	1013970.7	20/08/2010		Polarisation Control Device, Integrated Circuit And Method For Compensating Phase Mismatch
USA	13/818,074	20/02/2013		Polarisation Control Device, Integrated Circuit And Method For Compensating Phase Mismatch
International PCT	PCT/EP2011/ 070142	15/11/2011		Mimo Antenna Calibration Device, Integrated Circuit And Method For Compensating Phase Mismatch
United Kingdom	1019369.6	17/11/2010	2485543	Mimo Antenna Calibration Device, Integrated Circuit And Method For Compensating Phase Mismatch
USA	13/885,221	15/11/2011		Mimo Antenna Calibration Device, Integrated Circuit And Method For Compensating Phase Mismatch
International PCT	PCT/EP2014/ 061686	05/06/2014		Network Element, Integrated Circuit And Method Of Assigning Channels
United Kingdom	1310435.1	12/06/2013		Network Element, Integrated Circuit And Method Of Assigning Channels
International PCT	PCT/EP2014/ 067477	15/08/2014		Active Antenna System And Methods Of Testing
United Kingdom	1319058.2	29/10/2013		Active Antenna System And Methods Of Testing

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International PCT	PCT/EP2014/067480	15/08/2014		Communication Unit, Integrated Circuit And Method For Generating A Plurality Of Sectorized Beams
United Kingdom	1314729.3	16/08/2013		Communication Unit, Integrated Circuit And Method For Generating A Plurality Of Sectorized Beams
International PCT	PCT/EP2014/067482	15/08/2014		Communication Unit And Method Of Antenna Array Calibration
United Kingdom	1314730.1	16/08/2013		Communication Unit And Method Of Antenna Array Calibration
International PCT	PCT/EP2015/057598	08/04/2015		Active Antenna System And Methods Of Determining Intermodulation Distortion Performance
United Kingdom	1406330.9	08/04/2014		Active Antenna System And Methods Of Determining Intermodulation Distortion Performance
International PCT	PCT/EP2014/067484	15/08/2014		Network Element, Radio Frequency Mast-Top Module And Methods Therefor
United Kingdom	1317117.8	26/09/2013		Network Element, Radio Frequency Mast-Top Module And Methods Therefor