#### 505611483 08/07/2019

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT5658285

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

## **CONVEYING PARTY DATA**

Name	Execution Date
SIGURD SCHELSTRAETE	06/24/2019
HOSSEIN DEHGHAN	06/24/2019
DEBASHIS DASH	06/25/2019

# **RECEIVING PARTY DATA**

Name:	QUANTENNA COMMUNICATIONS, INC.		
Street Address:	1704 AUTOMATION PARKWAY		
Internal Address:	MAILDROP A700		
City:	SAN JOSE		
State/Country:	CALIFORNIA		
Postal Code:	95131		

## **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	16403073

# **CORRESPONDENCE DATA**

Fax Number: (602)244-3169

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.

Phone: 6022443574

Email: patents@onsemi.com

**Correspondent Name:** SEMICONDUCTOR COMPONENTS INDUSTRIES, LLC

Address Line 1: 5005 E. MCDOWELL ROAD

Address Line 2: MAILDROP A700

Address Line 4: PHOENIX, ARIZONA 85008

ATTORNEY DOCKET NUMBER:	QTNA115US		
NAME OF SUBMITTER:	SHARRON CASTILLO		
SIGNATURE:	/Sharron Castillo/		
DATE SIGNED:	08/07/2019		

**Total Attachments: 3** 

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**PATENT** REEL: 049994 FRAME: 0259 505611483

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PATENT REEL: 049994 FRAME: 0260 U.S. Patent Application No.: 16/403,073

Docket No. QtnaP115us

# PATENT ASSIGNMENT

**PARTIES** 

(name)

(city/state)

Assignor(s):

Sigurd SCHELSTRAETE

of

Menlo Park, California

Hossein DEHGHAN

of

Diablo, California

Debashis DASH

of

Fremont, California

Assignee:

QUANTENNA COMMUNICATIONS, INC.

1704 Automation Parkway, San Jose, CA 95131, United States

## AGREEMENT

WHEREAS, ASSIGNOR(S) (listed above) am/are the original joint inventors of claimed invention(s) in a patent application entitled:

Application:

TITLE: Beamformer Solicited Sounding

Application Serial Number: 16/403.073

Filed: May 3, 2019

(ASSIGNOR hereby authorizes and requests ASSIGNEE'S legal representatives, associated with Customer No. 157858, to insert above this APPLICATION'S U.S. Serial Number and filing date, when known.)

# DECLARATION

WHEREAS, ASSIGNOR(S) believe I am/we are the original joint inventors of a claimed invention in the above titled patent application.

I/we ASSIGNOR(S) made, authorized to make, or will make or authorize to make, and hereby do make and authorize to make, the above-identified patent application at the U.S. Patent and Trademark Office.

I/we ASSIGNOR(S) have reviewed and understand the contents of the above-identified patent application, including the claims.

I/we ASSIGNOR(S) are aware of the duty to disclose to the U.S. Patent and Trademark Office all information known to me to be material to patentability as defined in 37 CFR § 1.56.

I/we ASSIGNOR(S) hereby acknowledge that any willful false statement made in the above declaration is punishable under 18 USC §1001 by fine or imprisonment of not more than five (5) years, or both.

# ASSIGNMENT

I/we ASSIGNOR(S) assign to QUANTENNA COMMUNICATIONS, INC., a Delaware corporation having a principal place of business at 1704 Automation Parkway, San Jose, CA 95131, United States, and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest in and to said inventions and applications for Letters Patent of the United States, and in and to any Letters Patent or Patents, United States or foreign, together with the entire right, title, and interest throughout the world in any and all inventions and improvements which are described in the Application to be obtained therefor and thereon.

This assignment includes the entire right, title and interest in the Application, all legal equivalents and corresponding applications thereof in any country, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions and improvements, including, but not limited to, all patents, utility models, and design registrations, and certificates granted on all

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divisional, continuation (including continuation-in-part), reissue, and reexamination applications, any and all certificates and other documents issued in any post grant proceeding, and extensions of said applications and patents of the United States, foreign patents, utility models, and design registrations, and the right to claim priority based on the filing date of the Application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties Of like purposes, and the right to seek relief and recover all damages, including, but not limited to, a reasonable royalty, by reason of infringement or any other violation of patent or patent application rights. We authorize the Assignee to apply in all countries in our names or in the name of the Assignee for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements.

In addition, we hereby confirm the sale, assignment, and transfer to the Assignee of the entire right, title and interest throughout the world in said inventions and improvements that occurred by operation of an employment agreement between us and the Assignee existing at the time said inventions and improvements were made. Should we have any remaining right, title or interest in or to said inventions and improvements anywhere in the world, we hereby sell, assign, and transfer such remaining right, title and interest to the Assignee.

The foregoing assignments, sale and transfer have been made for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged.

I/we ASSIGNOR(S) hereby represent and covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into that would conflict with the assignment of said inventions and improvements to the Assignee.

I/we ASSIGNOR(S) further covenant for ourselves and our respective heirs, legal representatives and assigns, and agrees to cooperate and assist the Assignee in handling various procedures, tasks and documentation in connection with this assignment, including, but not limited to, providing to the Assignee promptly upon request of counsel of said Assignee, or the counsel of its successors, legal representatives and assigns, all pertinent facts and documents relating to said invention and improvements, and said patents, said legal equivalents or other legal instrument as may be known and accessible to me and testifying as to the same in any interference, litigation, or proceeding relating thereto, and promptly executing and delivering to the Assignee or its legal representative any and all papers, documents, instruments or affidavits in connection with obtaining, maintaining, issuing or enforcing said application, said inventions and improvements, and said patents, said equivalents and other legal instrument which may be necessary or desirable to carry out the purposes thereof without charge to said Assignee, its successors, legal representatives and assigns, but at the cost and expense of said Assignee, its successors, legal representatives and assigns.

I/we ASSIGNOR(S) hereby authorize and request the Commissioner of Patents and Trademarks to issue one or more patents in the United States for said inventions and improvements to QUANTENNA COMMUNICATIONS, INC., as Assignee of the entire interest, for the sole use and benefit of Assignee, its successors and assigns.

I/we ASSIGNOR(S) am/are competent to execute the above declaration and assignment. I/we hereby have duly executed the declaration and assignment below with our names.

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INVENTOR ASSIGNOR 1

Sigurd SCHELSTRAETE

Inventor Signature

Witnessed by:

Witness Name

Witness Signature: Hossin Delighan

**INVENTOR ASSIGNOR 2** 

Hossein DEHGHAN

Inventor Signature

Witnessed by:

Witnessed Name Steam scarces Witness Signature:

**INVENTOR ASSIGNOR 3** 

Debashis DASH

Date

Witnessed by:

Witnessed Name UNIONSA GARCIA

Witnessed Signature: