# 505961705 03/11/2020

### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6008412

SUBMISSION TYPE:	:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:		ASSIGNMENT	
CONVEYING PART	Υ DATA		
		Name E	xecution Date
JIAN YANG		02	/21/2020
THOMAS EMANUELSSON		02	/20/2020
ASHRAF UZ ZAMAN		02	/20/2020
RECEIVING PARTY	/ DATA		
Name:	GAPW	GAPWAVES AB	
Street Address:	BANE	ANEHAGSGATAN 22	
City:	GÖTEI	GÖTEBORG	
State/Country:	SWED	SWEDEN	
Postal Code:	414 51	414 51	
	ERS Total: 1		
Property Ty Application Numbe	уре	<b>Number</b> 16646282	
Property Ty Application Numbe	ype er:	Number	
Property Ty Application Numbe CORRESPONDENC	ype er:	Number	
Property Ty Application Numbe CORRESPONDENC Fax Number: <i>Correspondence w</i>	ype er: CE DATA vill be sent to	Number 16646282	will be sent
Property Ty Application Number CORRESPONDENC Fax Number: <i>Correspondence w</i> <i>using a fax number</i> Phone:	ype er: CE DATA vill be sent to	Number   16646282   (703)836-2021   o the e-mail address first; if that is unsuccessful, it   d; if that is unsuccessful, it will be sent via US Mail.   7038366620	will be sent
Property Ty Application Number CORRESPONDENC Fax Number: <i>Correspondence w</i> <i>using a fax number</i> Phone: Email:	ype er: CE DATA fill be sent to r, if provideo	Number   16646282   (703)836-2021   o the e-mail address first; if that is unsuccessful, it   d; if that is unsuccessful, it will be sent via US Mail.   7038366620   mayra.castillo@bipc.com	will be sent
Property Ty Application Number CORRESPONDENC Fax Number: <i>Correspondence w</i> <i>using a fax number</i> Phone: Email: Correspondent Nar	ype er: CE DATA fill be sent to r, if provideo	Number   16646282   (703)836-2021   o the e-mail address first; if that is unsuccessful, it   d; if that is unsuccessful, it will be sent via US Mail.   7038366620   mayra.castillo@bipc.com   BUCHANAN INGERSOLL & ROONEY PC	will be sent
Property Ty Application Number CORRESPONDENC Fax Number: <i>Correspondence w</i> <i>using a fax number</i> Phone: Email:	ype er: CE DATA fill be sent to r, if provideo	Number   16646282   (703)836-2021   o the e-mail address first; if that is unsuccessful, it   d; if that is unsuccessful, it will be sent via US Mail.   7038366620   mayra.castillo@bipc.com	will be sent
Property Ty Application Number CORRESPONDENC Fax Number: <i>Correspondence w</i> <i>using a fax number</i> Phone: Email: Correspondent Nar Address Line 1:	ype er: CE DATA vill be sent to r, if provided me:	Number   16646282   (703)836-2021 <b>D the e-mail address first; if that is unsuccessful, it is unsuccessful, it will be sent via US Mail.</b> 7038366620   mayra.castillo@bipc.com   BUCHANAN INGERSOLL & ROONEY PC   P.O. BOX 1404   ALEXANDRIA, VIRGINIA 22314-1404	will be sent
Property Ty Application Number CORRESPONDENC Fax Number: Correspondence w using a fax number Phone: Email: Correspondent Nar Address Line 1: Address Line 4:	ype er: CE DATA vill be sent to r, if provided me: T NUMBER:	Number   16646282   (703)836-2021 <b>D the e-mail address first; if that is unsuccessful, it is unsuccessful, it will be sent via US Mail.</b> 7038366620   mayra.castillo@bipc.com   BUCHANAN INGERSOLL & ROONEY PC   P.O. BOX 1404   ALEXANDRIA, VIRGINIA 22314-1404	will be sent
Property Ty Application Number CORRESPONDENC Fax Number: Correspondence w using a fax number Phone: Email: Correspondent Nar Address Line 1: Address Line 4:	ype er: CE DATA vill be sent to r, if provided me: T NUMBER:	Number16646282(703)836-2021o the e-mail address first; if that is unsuccessful, itd; if that is unsuccessful, it will be sent via US Mail.7038366620mayra.castillo@bipc.comBUCHANAN INGERSOLL & ROONEY PCP.O. BOX 1404ALEXANDRIA, VIRGINIA 22314-14041003301-000696	will be sent
Property Ty Application Number CORRESPONDENC Fax Number: <i>Correspondence w</i> <i>using a fax number</i> Phone: Email: Correspondent Nar Address Line 1: Address Line 4: ATTORNEY DOCKE	ype er: CE DATA vill be sent to r, if provided me: T NUMBER:	Number16646282(703)836-2021o the e-mail address first; if that is unsuccessful, ito the e-mail address first; if that is unsuccessful, itof; if that is unsuccessful, it will be sent via US Mail.7038366620mayra.castillo@bipc.comBUCHANAN INGERSOLL & ROONEY PCP.O. BOX 1404ALEXANDRIA, VIRGINIA 22314-14041003301-000696MAYRA E. CASTILLO	will be sent

Attorney Docket No. <u>1003301-000696</u> Client Reference No. <u>PC-US-21113526</u> Application No. <u>Unassigned</u>

## COMBINED DECLARATION AND ASSIGNMENT (JOINT)

As one of the below named inventors, I hereby declare that this Combined Declaration and Assignment is directed to:

- (1) U.S. application number or PCT application number <u>PCT/EP2018/075791</u>, filed on <u>September 24, 2018</u>, entitled <u>PHASED ARRAY ANTENNA</u>; or
- (2) the attached application entitled PHASED ARRAY ANTENNA.

### DECLARATION

As one of the below named inventors, I further declare that:

The above-identified application was made or authorized to be made by me.

I believe that I am an original joint inventor of a claimed invention in the application.

I have reviewed and understand the contents of the above-identified application, including the claims.

I acknowledge 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 Title 37, Code of Federal Regulations, § 1.56.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

#### <u>ASSIGNMENT</u>

THIS ASSIGNMENT, by the undersigned inventors (hereinafter referred to as "the Assignors"), respectively, witnesseth:

WHEREAS, the Assignors have invented certain new and useful improvements set forth in an application for Letters Patent of the United States, which is a nonprovisional application;

WHEREAS, <u>Gapwaves AB</u>, a corporation duly organized under and pursuant to the laws of <u>Sweden</u> and having a principal place of business at <u>Banehausspatan 22, 414 51 Göteborg</u>. <u>Sweden</u> (hereinafter referred to as "the Assignee"), is desirous of acquiring the entire right, title, and interest in and to said inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications, including provisional applications for Letters Patent of the United States or other countries claiming priority to said application, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefor and thereon.

NOW, THEREFORE, for good and sufficient consideration, the receipt of which is hereby acknowledged, the Assignors have sold, assigned, transferred, and set over, and by these presents do sell, assign, transfer, and set over, unto the Assignee, its successors, legal representatives, and assigns the entire right, title, and interest in and to the above-mentioned inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications for Letters Patent of the United States or other countries claiming priority to said applications, and any and all Letters Patent or Patents of the United States of America and all foreign countries that may be granted therefor and thereon, and in and to any and all

#### Buchanan Ingersoll & Rooney PC

Page 1 of 2

PATENT REEL: 052082 FRAME: 0600

Attorney Docket No. 1003301-000696 Client Reference No. PC-US-21113526 Application No. Unassigned

applications claiming priority to said applications, divisions, continuations, and continuations-in-part of said applications, and reissues and extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by the Assignee, for its own use and behoof and the use and behoof of its successors, legal representatives, and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted as fully and entirely as the same would have been held and enjoyed by the Assignors had this sale and assignment not been made;

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns, that, at the time of execution and delivery of these presents, the Assignors are the sole and lawful owners of the entire right, title, and interest in and to the inventions set forth in said applications and said applications, including provisional applications, above-mentioned, and that the same are unencumbered, and that the Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth;

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns that the Assignors will, whenever counsel of the Assignee, or the counsel of its successors, legal representatives, and assigns, shall advise that any proceeding in connection with said inventions or said applications for Letters Patent or Patents, or any proceeding in connection with Letters Patent or Patents for said inventions in any country, including interference proceedings, is lawful and desirable, or that any application claiming priority to said application, division, continuation, or continuation-inpart of any applications for Letters Patent or Patents, or any reissue or extension of any Letters Patent or Patents to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement, and defense of Letters Patent or Patents for said inventions, without charge to the Assignee, its successors, legal representatives, and assigns, but at the cost and expense of the Assignee, its successors, legal representatives, and assigns;

AND the Assignors hereby request the Commissioner of Patents to issue any and all said Letters Patent of the United States to the Assignee as the Assignee of said inventions, the Letters Patent to be issued for the sole use and behoof of the Assignee, its successors, legal representatives, and assigns.

2020-02-2 Date

-62-20

Date

Name

ASHRAF UZ ZAMAN

JIAN YANG

Name

THOMAS EMANUELSSON

Name

Signature

2-12-34 Signature

Page 2 of 2

**RECORDED: 03/11/2020**