

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT5395061

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
QUINTEL TECHNOLOGY LIMITED	12/07/2018
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	QUINTEL CAYMAN LIMITED
<b>Street Address:</b>	WALKERS CORPORATE LIMITED, CAYMAN CORPORATE CENTRE
<b>Internal Address:</b>	27 HOSPITAL ROAD
<b>City:</b>	GEORGE TOWN, GRAND CAYMAN
<b>State/Country:</b>	CAYMAN ISLANDS
<b>Postal Code:</b>	KY1-9008
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	12201688
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	
<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>	
<b>Phone:</b>	732-542-2280
<b>Email:</b>	dlane@trbkllaw.com
<b>Correspondent Name:</b>	TONG, REA, BENTLEY & KIM, LLC
<b>Address Line 1:</b>	12 CHRISTOPHER WAY
<b>Address Line 2:</b>	SUITE 105
<b>Address Line 4:</b>	EATONTOWN, NEW JERSEY 07724
<b>ATTORNEY DOCKET NUMBER:</b>	QUIN/P7155CON
<b>NAME OF SUBMITTER:</b>	DIANE V. LANE
<b>SIGNATURE:</b>	/Diane V. Lane/
<b>DATE SIGNED:</b>	02/27/2019
<b>Total Attachments: 29</b>	
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DATED

2018

(1) QUINTEL TECHNOLOGY LIMITED

AND

(2) QUINTEL CAYMAN LIMITED

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ASSIGNMENT OF INTELLECTUAL  
PROPERTY

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## CONTENTS

	Page No.
1 DEFINITIONS AND INTERPRETATION.....	1
2 ASSIGNMENT .....	2
3 KNOW-HOW.....	2
4 IMPROVEMENTS.....	3
5 VAT .....	3
6 FURTHER ASSURANCE .....	3
7 WARRANTIES.....	3
8 INDEMNITY .....	4
9 ENTIRE AGREEMENT .....	4
10 CONFIDENTIAL INFORMATION .....	4
11 NOTICES .....	5
12 ANNOUNCEMENTS.....	5
13 VARIATION .....	5
14 TRANSFER OF RIGHTS.....	5
15 SEVERANCE.....	5
16 WAIVER.....	5
17 THIRD PARTY RIGHTS .....	5
18 DISPUTE RESOLUTION.....	6
19 GOVERNING LAW .....	6
20 JURISDICTION.....	6
21 COUNTERPARTS.....	6
SCHEDULE 1 .....	7
Patents .....	7
SCHEDULE 2 .....	25
Trade Marks .....	25

THIS AGREEMENT is made on 7 December 2018

**BETWEEN:**

- (1) **QUINTEL TECHNOLOGY LIMITED** a company incorporated in England and Wales under company number 04416865 whose registered office is at 2 Temple Back East, Temple Quay, Bristol, BS1 6EG (“Assignor”); and
- (2) **QUINTEL CAYMAN LIMITED** a company incorporated in the Cayman Island under company number 204337 whose registered office is of Walkers Corporate Limited, Cayman Corporate Centre, 27 Hospital Road, George Town, Grand Cayman KY1-9008, Cayman Islands (“Assignee”);

each of the “Assignor” and the “Assignee” being a party and together the “Assignor” and the “Assignee” are the parties.

**BACKGROUND**

- A The Assignor is the proprietor of or applicant for the Patents (as defined below) and the Trade Marks (as defined below).
- B The Assignor has agreed to assign the Patents and the Trade Marks to the Assignee on the terms set out in this Assignment.

**IT IS AGREED** as follows

**1 DEFINITIONS AND INTERPRETATION**

**1.1 In this Assignment:**

“**Business Day**” means a day, other than a Saturday, Sunday or public holiday, when banks are open for business in London;

“**Confidential Information**” means any and all confidential information (whether in oral, written or electronic form) including technical or other information imparted in confidence or disclosed by one party to the other or otherwise obtained by one party relating to the other's business, finance or technology, Know-how, intellectual property, assets, strategy, products and customers, including information relating to manufacturing or other processes, management, financial, marketing, technical and other arrangements or operations of any associate, person, firm, or organisation associated with that party;

“**Improvements**” means any improvement, development, invention or patent right in relation to the technology that is the subject of any of the Patents;

“**Know-how**” means all information and know-how, including clinical, technical, scientific, and medical information, practices, techniques, methods, processes, inventions, developments, specifications, formulations, chemical structures, nucleic acid sequences, protein sequences, protein structures, trade secrets, analytical and quality control information and procedures, pharmacological, toxicological, and clinical test data and results, stability data, studies and procedures, and regulatory information;

“**Patents**” means the patents and patent applications listed in schedule 1 to this Assignment including all renewals, extensions and continuations thereof, wherever existing;

**"Trade Marks"** means all Trade Marks owned by the Assignor, whether registered or unregistered, including those Trade Marks listed in schedule 2 to this Assignment including any subsequent renewals (in the case of registered Trade Marks); and

**"VAT"** means United Kingdom value added tax and any other tax imposed in substitution for it and any equivalent or similar tax imposed outside the United Kingdom.

**1.2 In this Assignment:**

1.2.1 a reference to this Assignment includes its schedules, appendices and annexes (if any);

1.2.2 a reference to a 'party' includes that party's personal representatives, successors and permitted assigns;

1.2.3 a reference to a 'person' includes a natural person, corporate or unincorporated body (in each case whether or not having separate legal personality) and that person's personal representatives, successors and permitted assigns;

1.2.4 a reference to a gender encompasses said gender as well as all genders;

1.2.5 words in the singular include the plural and vice versa;

1.2.6 any words that follow 'include', 'includes', 'including', 'in particular' or any similar words and expressions shall be construed as illustrative only and shall not limit the sense of any word, phrase, term, definition or description preceding those words;

1.2.7 the table of contents, background section and any clause, schedule or other headings in this Assignment are included for convenience only and shall have no effect on the interpretation of this Assignment; and

1.2.8 a reference to legislation is a reference to that legislation amended, extended, re-enacted or consolidated from time to time [except to the extent that any such amendment, extension or re-enactment would increase or alter the liability of a party under this Assignment.

**2 ASSIGNMENT**

In consideration of [the sum of USD Eight Million (USD 8,000,000) (the receipt and sufficiency of which is hereby acknowledged by the Assignor), the Assignor hereby assigns to the Assignee with full title guarantee all of its right, title and interest in and to the Patents and the Trade Marks, including without limitation the right to claim priority therefrom, the right to apply for patent and Trade Marks protection, or any similar protection in relation to any application in respect of the Patents and the Trade Marks in any part of the world together with the right to bring, make, oppose, defend and appeal proceedings, claims or actions and obtain relief and recover damages in respect of all infringements and threatened infringements of the Patents and the Trade Marks, whether occurring before, on or after the date of this Assignment.

**3 KNOW-HOW**

The Assignor also assigns to the Assignee with full title guarantee all of its right, title and interest in any Know-how necessary or useful for the Assignee to utilise, exploit or work any aspect of the inventions encompassed by the Patents.

#### **4 IMPROVEMENTS**

The Assignor shall, unless prohibited by law or by any obligation to any third party, promptly give written notification to the Assignee of any Improvement made, developed, discovered or acquired (which notification shall be made in confidence pending filing of one or more patent application(s)) and it shall, at the request of the Assignee, provide details of the Improvement and enter into good faith negotiations with a view to assigning its rights in the Improvement to the Assignee.

#### **5 VAT**

All sums paid under this Assignment to the Assignor are exclusive of VAT. To the extent that any sums paid to the Assignor under this Assignment are taxable supplies and subject to VAT, the Assignee agrees to increase such sums by an amount equal to any such VAT chargeable following receipt by the Assignee of a valid VAT invoice in respect of such VAT from the Assignor.

#### **6 FURTHER ASSURANCE**

- 6.1 The Assignee shall be solely responsible for recording the change of ownership of the Patents and the Trade Marks with all relevant registries and shall do so as soon as reasonably practicable following the execution of this Assignment.
- 6.2 The Assignor agrees (at the Assignee's request) to, at its own cost, use all reasonable endeavours to promptly execute such documents and perform such acts as may reasonably be required or desired by the Assignee to give effect to this Assignment.
- 6.3 The Assignor hereby appoints the Assignee to be its attorney and to execute documents on its behalf and to do all things necessary or desirable to obtain the benefit of this Assignment. This power of attorney is irrevocable and may not be revoked by the Assignor without the written consent of the Assignee. This power of attorney entitles the Assignee to take all steps and all actions that this Assignment requires the Assignor to take.
- 6.4 The Assignee may appoint substitute attorney(s) as it sees fit to exercise the power of attorney granted under this clause 6.
- 6.5 The Assignor agrees to ratify in writing any and all actions taken by the Assignee (or any substitute attorney) in the exercise of the power of attorney granted under this clause 6.

#### **7 WARRANTIES**

- 7.1 The Assignor warrants and represents that:
  - 7.1.1 it has the right, power and authority to enter into this Assignment and will perform its obligations hereunder;
  - 7.1.2 it is the sole and exclusive owner of all right, title and interest in and to the Patents, Know-how and the Trade Marks, such rights are not subject to any option, mortgage, charge, lien or claim of ownership by any third party;
  - 7.1.3 no assignment or licence has been granted to any third party in respect of such rights;
  - 7.1.4 all application, registration and renewal fees in respect of each of the Patents and the Trade Marks, where applicable, have been paid;

- 7.1.5 it is unaware of any infringement or likely infringement of, or any challenge or likely challenge to the validity of, any of the Patents or the Trade Marks, of anything that might render any of the Patents or the Trade Marks invalid or subject to a compulsory licence order or prevent any application in the Patents or the Trade Marks proceeding to grant;
- 7.1.6 so far as it is aware, the exploitation of the Patents and the Trade Marks will not infringe the rights of any third party; and
- 7.1.7 [all previous assignments of the Patents and Trade Marks are valid and were registered within applicable time limits.]

## **8 INDEMNITY**

- 8.1 The Assignor shall indemnify the Assignee against all liabilities, losses, damages, costs and expenses, including any direct or indirect consequential losses, loss of profit, loss of reputation and all interest, penalties and legal costs (calculated on a full indemnity basis) and all other reasonable professional costs and expenses arising from or occurring as a result of (a) material breach by the Assignor of its obligations under this Assignment or (b) the enforcement of this Assignment.
- 8.2 At the Assignee's request, the Assignor shall, at its own expense, provide such assistance as may be reasonably required to enable the Assignee to resist any claim, action or proceedings brought against the Assignee as a consequence of such material breach.
- 8.3 If a payment due from the Assignor under this clause 8 is subject to tax (whether directly or by withholding at its source), the Assignee shall be entitled to receive from the Assignor such amounts as will be required to ensure that the net receipt, after tax, to the Assignee in respect of the payment is the same as it would have been if the payment had not been subject to tax.
- 8.4 The provisions of this clause 8 shall not restrict or limit the Assignee's general obligation under any applicable law to mitigate any loss arising out of an incident which may give rise to a claim under this indemnity.
- 8.5 The Assignor's obligations under this clause 8 shall apply regardless of any fault or negligence by the Assignee.

## **9 ENTIRE AGREEMENT**

This Assignment contains the entire understanding of each of the parties hereto with respect to the transactions and matters contemplated hereby and supersedes all prior agreements and understandings relating to the subject matter hereof.

## **10 CONFIDENTIAL INFORMATION**

- 10.1 Each party agrees that it may use the other party's confidential information only in the exercise of its rights and performance of its obligations under this Assignment and it shall not disclose the other party's Confidential Information except in accordance with this clause 10.
- 10.2 Each party may disclose the other party's Confidential Information to those of its employees, officers, advisers, agents or representatives who need to know the other party's Confidential Information in order to exercise the disclosing party's rights or perform its obligations under this Assignment, provided that the disclosing party shall ensure that each of its employees, officers, advisers, agents or representatives to whom Confidential Information is disclosed is aware of its confidential nature and complies with this clause 10 as if it were a party.



- 10.3 Each party may disclose any Confidential Information required by law, any court, any governmental, regulatory or supervisory authority (including any regulated investment exchange) or any other authority of competent jurisdiction.

## **11 NOTICES**

- 11.1 Notices under this Assignment shall be in writing and sent to a party's registered office as set out on the first page of this Assignment (or to the email address set out below). Notices may be given, and shall be deemed received:

11.1.1 by first-class post: **two**Business Days after posting;

11.1.2 by airmail: **seven**Business Days after posting;

11.1.3 by hand: on delivery; and

11.1.4 by email to [address] in the case of [party] and [address] in the case of [party]: on receipt of a reply or read return email.

- 11.2 This clause does not apply to notices given in legal proceedings or arbitration.

## **12 ANNOUNCEMENTS**

No announcement or other public disclosure concerning this Assignment or any of the matters contained in it shall be made by, or on behalf of, a party without the prior written consent of the other party (such consent not to be unreasonably withheld or delayed), except as required by law, any court, any governmental, regulatory or supervisory authority (including any recognised investment exchange) or any other authority of competent jurisdiction.

## **13 VARIATION**

No variation of this Assignment shall be valid or effective unless it is in writing, refers to this Assignment and is duly signed or executed by, or on behalf of, each party.

## **14 TRANSFER OF RIGHTS**

No party may assign, subcontract or encumber any right or obligation under this Assignment, in whole or in part, without the other's prior written consent (such consent not to be unreasonably withheld or delayed).

## **15 SEVERANCE**

If any provision of this Assignment (or part of any provision) is or becomes illegal, invalid or unenforceable, the legality, validity and enforceability of any other provision of this Assignment shall not be affected.

## **16 WAIVER**

No failure, delay or omission by either party in exercising any right, power or remedy provided by law or under this Assignment shall operate as a waiver of that right, power or remedy, nor shall it preclude or restrict any future exercise of that or any other right or remedy. No single or partial exercise of any right, power or remedy provided by law or under this Assignment shall prevent any future exercise of it or the exercise of any other right, power or remedy.

## **17 THIRD PARTY RIGHTS**

No one other than a party to this Assignment their successors and permitted assignees shall have any right to enforce any of its provisions.

## **18 DISPUTE RESOLUTION**

- 18.1 If any dispute arises between the parties out of or in connection with this Assignment, the matter shall be referred to senior representatives of each party who shall use their reasonable endeavours to resolve it.
- 18.2 If the dispute is not resolved within 14 days of the referral being made under clause 18.1, the parties shall resolve the matter through mediation in accordance with the London Court of International Arbitration Mediation Rules.

## **19 GOVERNING LAW**

This Assignment and any dispute or claim arising out of, or in connection with, it, its subject matter or formation (including non-contractual disputes or claims) shall be governed by, and construed in accordance with, the laws of England and Wales.

## **20 JURISDICTION**

The parties irrevocably agree that the courts of England and Wales shall have exclusive jurisdiction to settle any dispute or claim arising out of, or in connection with, this Assignment, its subject matter or formation (including non-contractual disputes or claims).

## **21 COUNTERPARTS**

- 21.1 This Assignment may be executed in any number of separate counterparts, each of which when executed and delivered shall be an original, and such counterparts taken together shall constitute one and the same Assignment.
- 21.2 Each party may evidence their execution of this Assignment by transmitting by fax or by email a signed signature page of this Assignment in PDF format together with the final version of this Assignment in PDF or Word format, which shall constitute an original signed counterpart of this Assignment. Each party adopting this method of execution will, following circulation by fax or by email, provide the original, hard copy signed signature page to the other parties as soon as reasonably practicable.
- 21.3 This Assignment shall not be effective until each party has executed and delivered one counterpart.

# SCHEDULE 1

## Patents

Title	Patent number	Application number	Date filed	Date granted	Country
METHOD AND APPARATUS FOR ANTENNA RADIATION PATTERN SWEEPING	9,190,715	13/009,614	19/01/2011	17/11/2015	United States
METHOD AND APPARATUS FOR ANTENNA RADIATION PATTERN SWEEPING		11735113.0	19/01/2011		EPC
METHOD AND APPARATUS FOR ANTENNA RADIATION PATTERN SWEEPING		PCT/US2011/021720	19/01/2011		Patent Cooperation Treaty
METHOD AND APPARATUS FOR ANTENNA RADIATION PATTERN SWEEPING		61/296,394	19/01/2010		United States
METHOD AND APPARATUS FOR SUPPORTING SISO, MISO AND MIMO COMMUNICATIONS TO A MIXED POPULATION OF SISO, MISO AND MIMO CAPABLE TERMINALS		61/313,523	12/03/2010		United States
METHOD AND APPARATUS FOR SUPPORTING SISO, MISO AND MIMO COMMUNICATIONS TO A MIXED POPULATION OF SISO, MISO AND MIMO CAPABLE TERMINALS		61/486,062	13/05/2011		United States
METHOD AND APPARATUS FOR ANTENNA RADIATION CROSS POLAR SUPPRESSION	201280024 671.0	2012800246 71.0	23/03/2012	14/09/2016	China P.R.
METHOD AND APPARATUS FOR ANTENNA RADIATION CROSS POLAR SUPPRESSION	602012042 546.6	12765944.9	23/03/2012	31/01/2018	Germany
METHOD AND APPARATUS FOR ANTENNA RADIATION CROSS POLAR SUPPRESSION	2689493	12765944.9	23/03/2012	31/01/2018	EPC
METHOD AND APPARATUS FOR ANTENNA RADIATION CROSS POLAR SUPPRESSION	2689493	12765944.9	23/03/2012	31/01/2018	Spain

METHOD AND APPARATUS FOR ANTENNA RADIATION CROSS POLAR SUPPRESSION	2689493	12765944.9	23/03/2012	31/01/2018	France
METHOD AND APPARATUS FOR ANTENNA RADIATION CROSS POLAR SUPPRESSION	2689493	12765944.9	23/03/2012	31/01/2018	Great Britain
METHOD AND APPARATUS FOR ANTENNA RADIATION CROSS POLAR SUPPRESSION	2689493	5020180000 11629	23/03/2012	31/01/2018	Italy
METHOD AND APPARATUS FOR ANTENNA RADIATION CROSS POLAR SUPPRESSION		PCT/US2012 /030418	23/03/2012		Patent Cooperation Treaty
METHOD AND APPARATUS FOR ANTENNA RADIATION CROSS POLAR SUPPRESSION	8,879,997	13/429,042	23/03/2012	04/11/2014	United States
METHOD AND APPARATUS FOR ANTENNA RADIATION CROSS POLAR SUPPRESSION		61/467,915	25/03/2011		United States
METHOD AND APPARATUS FOR PROVIDING ELEVATION PLANE SPATIAL BEAMFORMING	201280050 976.9	2012800509 76.9	18/08/2012	27/04/2016	China P.R.
METHOD AND APPARATUS FOR PROVIDING ELEVATION PLANE SPATIAL BEAMFORMING		2016101852 65.2	18/08/2012		China P.R.
METHOD AND APPARATUS FOR PROVIDING ELEVATION PLANE SPATIAL BEAMFORMING		15/156,018	16/05/2016		United States
METHOD AND APPARATUS FOR PROVIDING ELEVATION PLANE SPATIAL BEAMFORMING		12825400.0	18/08/2012		EPC
METHOD AND APPARATUS FOR PROVIDING ELEVATION PLANE SPATIAL BEAMFORMING	6113166	2014-527212	18/08/2012	24/03/2017	Japan
METHOD AND APPARATUS FOR PROVIDING ELEVATION PLANE SPATIAL BEAMFORMING		2017-048687	14/03/2017		Japan

METHOD AND APPARATUS FOR PROVIDING ELEVATION PLANE SPATIAL BEAMFORMING		10-2014-7004092	18/08/2012		South Korea
METHOD AND APPARATUS FOR PROVIDING ELEVATION PLANE SPATIAL BEAMFORMING		PCT/US2012/051514	18/08/2012		Patent Cooperation Treaty
METHOD AND APPARATUS FOR PROVIDING ELEVATION PLANE SPATIAL BEAMFORMING	9,344,176	13/589,121	18/08/2012	17/05/2016	United States
METHOD AND APPARATUS FOR PROVIDING ELEVATION PLANE SPATIAL BEAMFORMING		61/525,625	19/08/2011		United States
MULTI ARRAY ANTENNA		2014002226 8.3	21/02/2014		China P.R.
MULTI ARRAY ANTENNA		14753700.5	21/02/2014		EPC
MULTI ARRAY ANTENNA		2015-559018	21/02/2014		Japan
MULTI ARRAY ANTENNA					South Korea
MULTI ARRAY ANTENNA		PCT/US2014/017808	21/02/2014		Patent Cooperation Treaty
MULTI ARRAY ANTENNA	9,438,278	14/186,524	21/02/2014	06/09/2016	United States
MULTI ARRAY ANTENNA		61/767,964	22/02/2013		United States
COMPACT ANTENNA ARRAY USING VIRTUAL ROTATION OF RADIATING VECTORS	9,960,500	14/659,123	16/03/2015	01/05/2018	United States
COMPACT ANTENNA ARRAY USING VIRTUAL ROTATION OF RADIATING VECTORS		2015800144 82.9	16/03/2015		China P.R.
COMPACT ANTENNA ARRAY USING VIRTUAL ROTATION OF RADIATING VECTORS		15765512.7	16/03/2015		EPC
COMPACT ANTENNA ARRAY USING VIRTUAL ROTATION OF RADIATING VECTORS		2016-557243	16/03/2015		Japan
COMPACT ANTENNA ARRAY USING VIRTUAL ROTATION OF RADIATING VECTORS		10-2016-7025212	16/03/2015		South Korea
COMPACT ANTENNA ARRAY USING VIRTUAL ROTATION OF RADIATING VECTORS		PCT/US2015/020781	16/03/2015		Patent Cooperation Treaty

COMPACT ANTENNA ARRAY USING VIRTUAL ROTATION OF RADIATING VECTORS		61/954,344	17/03/2014		United States
ANTENNA SYSTEM WITH ENHANCED INTER- SECTOR INTERFERENCE MITIGATION		2015800122 08.8	06/01/2015		China P.R.
ANTENNA SYSTEM WITH ENHANCED INTER- SECTOR INTERFERENCE MITIGATION		15735143.8	06/01/2015		EPC
ANTENNA SYSTEM WITH ENHANCED INTER- SECTOR INTERFERENCE MITIGATION		2016-545276	06/01/2015		Japan
ANTENNA SYSTEM WITH ENHANCED INTER- SECTOR INTERFERENCE MITIGATION		10-2016- 7018336	06/01/2015		South Korea
ANTENNA SYSTEM WITH ENHANCED INTER- SECTOR INTERFERENCE MITIGATION		PCT/US2015 /010341	06/01/2015		Patent Cooperation Treaty
ANTENNA SYSTEM WITH ENHANCED INTER- SECTOR INTERFERENCE MITIGATION		14/590,729	06/01/2015		United States
ANTENNA SYSTEM WITH ENHANCED INTER- SECTOR INTERFERENCE MITIGATION		61/924,567	07/01/2014		United States
ANTENNA SYSTEM WITH BEAMWIDTH CONTROL		2015800175 64.9	30/01/2015		China P.R.
ANTENNA SYSTEM WITH BEAMWIDTH CONTROL		16/117,212	30/08/2018		United States
ANTENNA SYSTEM WITH BEAMWIDTH CONTROL		15743325.1	30/01/2015		EPC
ANTENNA SYSTEM WITH BEAMWIDTH CONTROL		2016-549505	30/01/2015		Japan
ANTENNA SYSTEM WITH BEAMWIDTH CONTROL		PCT/US2015 /013948	30/01/2015		Patent Cooperation Treaty
ANTENNA SYSTEM WITH BEAMWIDTH CONTROL	10,069,213	14/610,987	30/01/2015	04/09/2018	United States
ANTENNA SYSTEM WITH BEAMWIDTH CONTROL		61/934,472	31/01/2014		United States

APPARATUS AND METHOD TO REDUCE WIND LOAD EFFECTS ON BASE STATION ANTENNAS		2016800230 77.8	22/02/2016		China P.R.
APPARATUS AND METHOD TO REDUCE WIND LOAD EFFECTS ON BASE STATION ANTENNAS		16756131.5	22/02/2016		EPC
APPARATUS AND METHOD TO REDUCE WIND LOAD EFFECTS ON BASE STATION ANTENNAS		2017-562957	22/02/2016		Japan
APPARATUS AND METHOD TO REDUCE WIND LOAD EFFECTS ON BASE STATION ANTENNAS		PCT/US2016 /018979	22/02/2016		Patent Cooperation Treaty
APPARATUS AND METHOD TO REDUCE WIND LOAD EFFECTS ON BASE STATION ANTENNAS		1-2017- 501531	22/02/2016		Philippines
APPARATUS AND METHOD TO REDUCE WIND LOAD EFFECTS ON BASE STATION ANTENNAS	9,979,079	15/050,312	22/02/2016	22/05/2018	United States
APPARATUS AND METHOD TO REDUCE WIND LOAD EFFECTS ON BASE STATION ANTENNAS		15/983,708	18/05/2018		United States
APPARATUS AND METHOD TO REDUCE WIND LOAD EFFECTS ON BASE STATION ANTENNAS		62/119,702	23/02/2015		United States
ANTENNA SYSTEM WITH ENHANCED RADIATION PATTERN TRACKING		15/662,577	28/07/2017		United States
ANTENNA SYSTEM WITH ENHANCED RADIATION PATTERN TRACKING		62/368,364	29/07/2016		United States
ANTENNA SYSTEM WITH ENHANCED RADIATION PATTERN TRACKING		PCT/US2017 /044303	28/07/2017		Patent Cooperation Treaty
BASE STATION ANTENNA SYSTEM WITH ENHANCED ARRAY SPACING		15/632,443	26/06/2017		United States
BASE STATION ANTENNA SYSTEM WITH OPTIMAL ARRAY SPACING		PCT/US2017 /042637	18/07/2017		Patent Cooperation Treaty

BASE STATION ANTENNA SYSTEM WITH OPTIMAL ARRAY SPACING		62/364,173	19/07/2016		United States
BASE STATION ANTENNA SYSTEM WITH ENHANCED ARRAY SPACING		PCT/US2017 /039179	26/06/2017		Patent Cooperation Treaty
COUPLING MECHANISM BETWEEN RF TRANSMISSION LINES		62/434,337	14/12/2016		United States
CELLULAR ANTENNA FOR ELEVATED AND OBSTRUCTED DEPLOYMENT		16/158,876	12/10/2018		United States
CELLULAR ANTENNA OPTIMIZED FOR ROOFTOP DEPLOYMENT		62/572,149	13/10/2017		United States
CELLULAR ANTENNA FOR ELEVATED AND OBSTRUCTED DEPLOYMENT		PCT/US2018 /055613	12/10/2018		Patent Cooperation Treaty
MULTI-BAND CELLULAR ANTENNA SYSTEM		62/670,488	11/05/2018		United States
TRANSMIT NETWORK FOR A CELLULAR BASE- STATION	200225118 9	2002251189	22/03/2009	23/06/2005	Australia
TRANSMIT NETWORK FOR A CELLULAR BASE- STATION		PI0208599-2	22/03/2002		Brazil
TRANSMIT NETWORK FOR A CELLULAR BASE- STATION	ZL0281129 3.8	028112923.8	22/03/2002	01/08/2007	China P.R.
TRANSMIT NETWORK FOR A CELLULAR BASE- STATION		02720119.3	22/03/2009		EPC
BASE STATION TRANSMITTER		0108456.5	04/04/2001		Great Britain
TRANSMIT NETWORK FOR A CELLULAR BASE- STATION	2391768	0322518.2	22/03/2002	21/07/2004	Great Britain
TRANSMIT NETWORK FOR A CELLULAR BASE- STATION	1070225	05101995.8	22/03/2002	23/05/2008	Hong Kong
TRANSMIT NETWORK FOR A CELLULAR BASE- STATION	ID0018526	W-00 2003 01918	22/03/2002	18/12/2006	Indonesia
TRANSMIT NETWORK FOR A CELLULAR BASE- STATION	217592	1564/DELNP /2003	22/03/2002	27/03/2008	India
TRANSMIT NETWORK FOR A CELLULAR BASE- STATION	3961957	2002-580434	22/03/2002	25/05/2007	Japan



TRANSMIT NETWORK FOR A CELLULAR BASE-STATION	128238	PI20021057	25/03/2002	31/01/2007	Malaysia
TRANSMIT NETWORK FOR A CELLULAR BASE-STATION		PCT/GB02/01401	22/03/2002		Patent Cooperation Treaty
TRANSMIT NETWORK FOR A CELLULAR BASE-STATION	2280335	2003132172	22/03/2002	20/07/2006	Russian Federation
TRANSMIT NETWORK FOR A CELLULAR BASE-STATION	100235	200305565-4	22/03/2002	31/10/2007	Singapore
TRANSMIT NETWORK FOR A CELLULAR BASE-STATION	NI187903	91105413	21/03/2002	21/09/2003	Taiwan
TRANSMIT NETWORK FOR A CELLULAR BASE-STATION	7,181,175	10/473,883	22/03/2002	20/02/2007	United States
Split diamond antenna element for controlling azimuth pattern in different array configurations		62/712,925	31/07/2018		United States
Parasitic Elements for Isolating Orthogonal Signal Paths and Generating Additional Resonance in a Dual-Polarized Antenna		62/714,421	03/08/2018		United States
OPTIMIZED ANTENNA ARRAY TOPOLOGY FOR MULTI-BAND OPERATION					United States
ANTENNA ASSEMBLY	2382928	0226314.3	12/11/2002	13/10/2004	Great Britain
ANTENNA SYSTEM	200810181703.3	200810181703.3	12/09/2002	19/06/2013	China P.R.
ANTENNA SYSTEM	60242586.7	06006094.4	24/03/2006	04/04/2012	Germany
ANTENNA SYSTEM	1684378	06006094.4	24/03/2006	04/04/2012	EPC
ANTENNA SYSTEM	1684378	06006094.4	24/03/2006	04/04/2012	Spain
ANTENNA SYSTEM	1684378	06006094.4	24/03/2006	04/04/2012	France
ANTENNA SYSTEM	1684378	06006094.4	24/03/2006	04/04/2012	Great Britain
ANTENNA SYSTEM		09110792.0	12/09/2002		Hong Kong
ANTENNA SYSTEM	1684378	502012902065081	24/03/2006	04/04/2012	Italy
ANTENNA SYSTEM	5186343	2008-305931	12/09/2002	25/01/2013	Japan
ANTENNA SYSTEM	200910203519.9	200910203519.9	12/09/2002	22/04/2015	China P.R.
ANTENNA SYSTEM		10181721.1	29/09/2010		EPC
ANTENNA SYSTEM		10103134.9	12/09/2002		Hong Kong
ANTENNA SYSTEM	2002321653	2002321653	12/09/2002	11/01/2007	Australia
ANTENNA SYSTEM		2,461,480	12/09/2002		Canada
ANTENNA SYSTEM	ZL02820866.8	02820866.8	12/09/2002	01/07/2009	China P.R.
ANTENNA SYSTEM	60212682.7	02755364.3	12/09/2002	21/06/2006	Germany
ANTENNA SYSTEM	1442501	02755364.3	12/09/2002	21/06/2006	EPC
ANTENNA SYSTEM	1442501	02755364.3	12/09/2002	21/06/2006	Spain

ANTENNA SYSTEM	1442501	02755364.3	12/09/2002	21/06/2006	Finland
ANTENNA SYSTEM	1442501	02755364.3	12/09/2002	21/06/2006	France
ANTENNA SYSTEM		0125349.1	22/10/2001		Great Britain
ANTENNA SYSTEM	1442501	02755364.3	12/09/2002	21/06/2006	Great Britain
ANTENNA SYSTEM	1074534	05106391.7	12/09/2002	12/03/2010	Hong Kong
ANTENNA SYSTEM	1442501	02755364.3	12/09/2002	21/06/2006	Ireland
ANTENNA SYSTEM		00816/DELN P/2004	12/09/2002		India
ANTENNA SYSTEM	1442501	5020069014 46794	12/09/2002	21/06/2006	Italy
ANTENNA SYSTEM		2003-539131	12/09/2002		Japan
ANTENNA SYSTEM	248567	PA/a/2004/0 03126	12/09/2002	31/08/2007	Mexico
ANTENNA SYSTEM		PCT/GB02/0 4166	12/09/2002		Patent Cooperation Treaty
ANTENNA SYSTEM		P-367739	12/09/2002		Poland
ANTENNA SYSTEM	2277740	2004115500	12/09/2002	10/06/2006	Russian Federation
ANTENNA SYSTEM	1442501	02755364.3	12/09/2002	21/06/2006	Sweden
ANTENNA SYSTEM	107696	200402017-8	12/09/2002	31/07/2006	Singapore
ANTENNA SYSTEM	7,365,695	10/492,248	12/09/2002	29/04/2008	United States
APPARATUS FOR STEERING AN ANTENNA SYSTEM		02770087.1	22/10/2002		EPC
APPARATUS FOR STEERING AN ANTENNA SYSTEM	7,224,246	10/491,179	22/10/2002	29/05/2007	United States
ANTENNA SYSTEM	4796595	2008-036485	31/10/2002	05/08/2011	Japan
ANTENNA SYSTEM	E367000	02772596.9	31/10/2002	11/07/2007	Austria
ANTENNA SYSTEM	200233735 4	2002337354	31/10/2002	05/10/2006	Australia
ANTENNA SYSTEM	ZL0282266 3.1	02822663.1	31/10/2002	11/03/2009	China P.R.
ANTENNA SYSTEM	60221150.6	02772596.9	31/10/2002	11/07/2007	Germany
ANTENNA SYSTEM	1454380	02772596.9	31/10/2002	11/07/2007	EPC
ANTENNA SYSTEM	1454380	02772596.9	31/10/2002	11/07/2007	Spain
ANTENNA SYSTEM	1454380	02772596.9	31/10/2002	11/07/2007	Finland
ANTENNA SYSTEM	1454380	02772596.9	31/10/2002	11/07/2007	France
ANTENNA SYSTEM		0127355.6	14/11/2001		Great Britain
ANTENNA SYSTEM	1454380	02772596.9	31/10/2002	11/07/2007	Great Britain
ANTENNA SYSTEM	1074699	05106895.8	31/10/2002	13/11/2009	Hong Kong
ANTENNA SYSTEM	250092	1715/DELNP /2004	31/10/2002	06/12/2011	India
ANTENNA SYSTEM	1454380	02772596.9	31/10/2002	11/07/2007	Italy
ANTENNA SYSTEM		2003-544848	31/10/2002		Japan
ANTENNA SYSTEM		PCT/GB02/0 4930	31/10/2002		Patent Cooperation Treaty
ANTENNA SYSTEM		P-369524	31/10/2002		Poland
ANTENNA SYSTEM	2273923	2004117886	31/10/2002	10/04/2006	Russian Federation
ANTENNA SYSTEM	1454380	02772596.9	31/10/2002	11/07/2007	Sweden
ANTENNA SYSTEM	104807	200403419-5	31/10/2002	30/03/2007	Singapore

ANTENNA SYSTEM	7,230,570	10/495,478	31/10/2002	12/06/2007	United States
MOBILE RADIO BASE STATION	200380101585.6	200380101585.6	15/10/2003	06/02/2013	China P.R.
MOBILE RADIO BASE STATION	60331159.8	03753790.9	15/10/2003	27/01/2010	Germany
MOBILE RADIO BASE STATION	1552578	03753790.9	15/10/2003	27/01/2010	EPC
MOBILE RADIO BASE STATION	1552578	03753790.9	15/10/2003	27/01/2010	Spain
MOBILE RADIO BASE STATION	1552578	03753790.9	15/10/2003	27/01/2010	France
MOBILE RADIO BASE STATION	1552578	03753790.9	15/10/2003	27/01/2010	Great Britain
MOBILE RADIO BASE STATION		0224341.8	19/10/2002		Great Britain
MOBILE RADIO BASE STATION	HK1086391	06106281.9	15/10/2003	16/08/2013	Hong Kong
MOBILE RADIO BASE STATION	1552578	03753790.9	15/10/2003	27/01/2010	Italy
MOBILE RADIO BASE STATION	4468816	2004-544457	15/10/2003	05/03/2010	Japan
MOBILE RADIO BASE STATION		PCT/GB2003/004447	15/10/2003		Patent Cooperation Treaty
MOBILE RADIO BASE STATION	1552578	03753790.9	15/10/2003	27/01/2010	Sweden
MOBILE RADIO BASE STATION	7,433,713	10/529,589	15/10/2003	07/10/2008	United States
MOBILE RADIO BASE STATION	8,185,161	12/201,688	29/08/2008	22/05/2012	United States
PHASED ARRAY ANTENNA SYSTEM WITH VARIABLE ELECTRICAL TILT	2004226625	2004226625	25/03/2004	04/01/2008	Australia
PHASED ARRAY ANTENNA SYSTEM WITH VARIABLE ELECTRICAL TILT		PI0408933-2	25/03/2004		Brazil
PHASED ARRAY ANTENNA SYSTEM WITH VARIABLE ELECTRICAL TILT	2,520,905	2,520,905	25/03/2004	29/03/2011	Canada
PHASED ARRAY ANTENNA SYSTEM WITH VARIABLE ELECTRICAL TILT	200480014536.3	200480014536.3	25/03/2004	09/06/2010	China P.R.
PHASED ARRAY ANTENNA SYSTEM WITH VARIABLE ELECTRICAL TILT	602004005687.1	04723238.4	25/03/2004	04/04/2007	Germany
PHASED ARRAY ANTENNA SYSTEM WITH VARIABLE ELECTRICAL TILT	1609208	04723238.4	25/03/2004	04/04/2007	EPC

PHASED ARRAY ANTENNA SYSTEM WITH VARIABLE ELECTRICAL TILT	1609208	04723238.4	25/03/2004	04/04/2007	Spain
PHASED ARRAY ANTENNA SYSTEM WITH VARIABLE ELECTRICAL TILT	1609208	04723238.4	25/03/2004	04/04/2007	Finland
PHASED ARRAY ANTENNA SYSTEM WITH VARIABLE ELECTRICAL TILT	1609208	04723238.4	25/03/2004	04/04/2007	France
PHASED ARRAY ANTENNA SYSTEM WITH VARIABLE ELECTRICAL TILT	1609208	04723238.4	25/03/2004	04/04/2007	Great Britain
PHASED ARRAY ANTENNA SYSTEM WITH VARIABLE ELECTRICAL TILT	1609208	04723238.4	25/03/2004	04/04/2007	Ireland
PHASED ARRAY ANTENNA SYSTEM WITH VARIABLE ELECTRICAL TILT	233619	4457/DELNP /2005	25/03/2004	31/03/2009	India
PHASED ARRAY ANTENNA SYSTEM WITH VARIABLE ELECTRICAL TILT	1609208	5020079015 28551	25/03/2004	04/04/2007	Italy
PHASED ARRAY ANTENNA SYSTEM WITH VARIABLE ELECTRICAL TILT	4384658	2006-506022	25/03/2004	02/10/2009	Japan
PHASED ARRAY ANTENNA SYSTEM WITH VARIABLE ELECTRICAL TILT	10- 1130142	10-2005- 7018911	25/03/2004	19/03/2012	South Korea
PHASED ARRAY ANTENNA SYSTEM WITH VARIABLE ELECTRICAL TILT		PA/a/2005/0 10469	25/03/2004		Mexico
PHASED ARRAY ANTENNA SYSTEM WITH VARIABLE ELECTRICAL TILT	MY- 134520-A	PI20040969	18/03/2004	31/12/2007	Malaysia
PHASED ARRAY ANTENNA SYSTEM WITH VARIABLE ELECTRICAL TILT		PCT/GB2004 /001297	25/03/2004		Patent Cooperation Treaty
PHASED ARRAY ANTENNA SYSTEM WITH VARIABLE ELECTRICAL TILT		P-378541	25/03/2004		Poland
PHASED ARRAY ANTENNA SYSTEM WITH VARIABLE ELECTRICAL TILT	2304829	2005133717	25/03/2004	20/08/2007	Russian Federation
PHASED ARRAY ANTENNA SYSTEM WITH VARIABLE ELECTRICAL TILT	1609208	04723238.4	25/03/2004	04/04/2007	Sweden

PHASED ARRAY ANTENNA SYSTEM WITH VARIABLE ELECTRICAL TILT	115268	200506310-2	25/03/2004	30/11/2006	Singapore
PHASED ARRAY ANTENNA SYSTEM WITH VARIABLE ELECTRICAL TILT		0401001046	24/03/2004		Thailand
PHASED ARRAY ANTENNA SYSTEM WITH VARIABLE ELECTRICAL TILT	1369813	093108654	30/03/2004	01/08/2012	Taiwan
PHASED ARRAY ANTENNA SYSTEM WITH VARIABLE ELECTRICAL TILT	7,400,296	10/551,798	25/03/2004	15/07/2008	United States
PHASED ARRAY ANTENNA SYSTEM WITH VARIABLE ELECTRICAL TILT	7,868,823	12/111,901	29/04/2008	11/01/2011	United States
PHASED ARRAY ANTENNA SYSTEM WITH VARIABLE ELECTRICAL TILT	8,174,442	12/987,874	10/01/2011	08/05/2012	United States
PHASED ARRAY ANTENNA SYSTEM WITH ADJUSTABLE ELECTRICAL TILT		10185468.5	01/10/2010		EPC
PHASED ARRAY ANTENNA SYSTEM WITH ADJUSTABLE ELECTRICAL TILT		0311739.7	22/05/2003		Great Britain
PHASED ARRAY ANTENNA SYSTEM WITH ADJUSTABLE ELECTRICAL TILT	200423989 5	2004239895	10/05/2004	03/04/2008	Australia
PHASED ARRAY ANTENNA SYSTEM WITH ADJUSTABLE ELECTRICAL TILT		PI 0410393-9	10/05/2004		Brazil
PHASED ARRAY ANTENNA SYSTEM WITH ADJUSTABLE ELECTRICAL TILT	2,523,747	2,523,747	10/05/2004	24/04/2007	Canada
PHASED ARRAY ANTENNA SYSTEM WITH ADJUSTABLE ELECTRICAL TILT		2004800134 81.4	10/05/2004		China P.R.
PHASED ARRAY ANTENNA SYSTEM WITH ADJUSTABLE ELECTRICAL TILT	602004035 511.9	04731959.5	10/05/2004	30/11/2011	Germany
PHASED ARRAY ANTENNA SYSTEM WITH ADJUSTABLE ELECTRICAL TILT	1642357	04731959.5	10/05/2004	30/11/2011	EPC

PHASED ARRAY ANTENNA SYSTEM WITH ADJUSTABLE ELECTRICAL TILT	1642357	04731959.5	10/05/2004	30/11/2011	Spain
PHASED ARRAY ANTENNA SYSTEM WITH ADJUSTABLE ELECTRICAL TILT	1642357	04731959.5	10/05/2004	30/11/2011	France
PHASED ARRAY ANTENNA SYSTEM WITH ADJUSTABLE ELECTRICAL TILT		0311371.9	17/05/2003		Great Britain
PHASED ARRAY ANTENNA SYSTEM WITH ADJUSTABLE ELECTRICAL TILT	1642357	04731959.5	10/05/2004	30/11/2011	Great Britain
PHASED ARRAY ANTENNA SYSTEM WITH ADJUSTABLE ELECTRICAL TILT	235927	4673/DELNP /2005	10/05/2004	08/09/2009	India
PHASED ARRAY ANTENNA SYSTEM WITH ADJUSTABLE ELECTRICAL TILT	1642357	5020129020 27297	10/05/2004	30/11/2011	Italy
PHASED ARRAY ANTENNA SYSTEM WITH ADJUSTABLE ELECTRICAL TILT	4841435	2006-530483	10/05/2004	14/10/2011	Japan
PHASED ARRAY ANTENNA SYSTEM WITH ADJUSTABLE ELECTRICAL TILT	10- 1195778	10-2005- 7021962	10/05/2004	24/10/2012	South Korea
PHASED ARRAY ANTENNA SYSTEM WITH ADJUSTABLE ELECTRICAL TILT	250524	PA/a/2005/0 11801	10/05/2004	19/10/2007	Mexico
PHASED ARRAY ANTENNA SYSTEM WITH ADJUSTABLE ELECTRICAL TILT		PI 20041508	23/04/2004		Malaysia
PHASED ARRAY ANTENNA SYSTEM WITH ADJUSTABLE ELECTRICAL TILT		PCT/GB2004 /002016	10/05/2004		Patent Cooperation Treaty
PHASED ARRAY ANTENNA SYSTEM WITH ADJUSTABLE ELECTRICAL TILT		P-378709	10/05/2004		Poland
PHASED ARRAY ANTENNA SYSTEM WITH ADJUSTABLE ELECTRICAL TILT	2346363	2005139553	10/05/2004	10/02/2009	Russian Federation

PHASED ARRAY ANTENNA SYSTEM WITH ADJUSTABLE ELECTRICAL TILT	1642357	04731959.5	10/05/2004	30/11/2011	Sweden
PHASED ARRAY ANTENNA SYSTEM WITH ADJUSTABLE ELECTRICAL TILT	117315	200507635-1	10/05/2004	30/06/2009	Singapore
PHASED ARRAY ANTENNA SYSTEM WITH ADJUSTABLE ELECTRICAL TILT	38783	0401001639	06/05/2004	10/01/2014	Thailand
PHASED ARRAY ANTENNA SYSTEM WITH ADJUSTABLE ELECTRICAL TILT	1332729	93113391	13/05/2004	01/11/2010	Taiwan
PHASED ARRAY ANTENNA SYSTEM WITH ADJUSTABLE ELECTRICAL TILT	7,450,066	10/553,308	10/05/2004	11/11/2008	United States
ARRAY ANTENNA SYSTEM WITH CONTROLLABLE ELECTRICAL TILT	E377851	04791623.4	29/10/2004	07/11/2007	Austria -
PHASED ARRAY ANTENNA SYSTEM WITH CONTROLLABLE ELECTRICAL TILT	200431021 3	2004310213	29/10/2004	23/04/2009	Australia
PHASED ARRAY ANTENNA SYSTEM WITH CONTROLLABLE ELECTRICAL TILT		2,545,220	29/10/2004		Canada
PHASED ARRAY ANTENNA SYSTEM WITH CONTROLLABLE ELECTRICAL TILT	200480032 853.8	2004800328 53.8	29/10/2004	09/05/2012	China P.R.
ARRAY ANTENNA SYSTEM WITH CONTROLLABLE ELECTRICAL TILT	602004009 959.7	04791623.4	29/10/2004	07/11/2007	Germany
ARRAY ANTENNA SYSTEM WITH CONTROLLABLE ELECTRICAL TILT	1680834	04791623.4	29/10/2004	07/11/2007	EPC
ARRAY ANTENNA SYSTEM WITH CONTROLLABLE ELECTRICAL TILT	1680834	04791623.4	29/10/2004	07/11/2007	Spain
ARRAY ANTENNA SYSTEM WITH CONTROLLABLE ELECTRICAL TILT	1680834	04791623.4	29/10/2004	07/11/2007	France
PHASED ARRAY ANTENNA SYSTEM WITH CONTROLLABLE ELECTRICAL TILT		032598.6	07/11/2003		Great Britain

ARRAY ANTENNA SYSTEM WITH CONTROLLABLE ELECTRICAL TILT	1680834	04791623.4	29/10/2004	07/11/2007	Great Britain
PHASED ARRAY ANTENNA SYSTEM WITH CONTROLLABLE ELECTRICAL TILT	HK1099412	07105398.0	29/10/2004	14/12/2012	Hong Kong
PHASED ARRAY ANTENNA SYSTEM WITH CONTROLLABLE ELECTRICAL TILT	255812	2170/DELNP /2006	29/10/2004	25/03/2013	India
PHASED ARRAY ANTENNA SYSTEM WITH CONTROLLABLE ELECTRICAL TILT	4420928	2006-537428	29/10/2004	11/12/2009	Japan
PHASED ARRAY ANTENNA SYSTEM WITH CONTROLLABLE ELECTRICAL TILT	10-1111467	10-2006-7008888	29/10/2004	26/01/2012	South Korea
PHASED ARRAY ANTENNA SYSTEM WITH CONTROLLABLE ELECTRICAL TILT	259730	PA/a/2006/004930	29/10/2004	19/08/2008	Mexico
PHASED ARRAY ANTENNA SYSTEM WITH CONTROLLABLE ELECTRICAL TILT		PCT/GB2004 /004586	29/10/2004		Patent Cooperation Treaty
PHASED ARRAY ANTENNA SYSTEM WITH CONTROLLABLE ELECTRICAL TILT		P-379763	29/10/2004		Poland
PHASED ARRAY ANTENNA SYSTEM WITH CONTROLLABLE ELECTRICAL TILT	121537	200602583-7	29/10/2004	30/05/2007	Singapore
PHASED ARRAY ANTENNA SYSTEM WITH CONTROLLABLE ELECTRICAL TILT		0401004277	29/10/2004		Thailand
PHASED ARRAY ANTENNA SYSTEM WITH CONTROLLABLE ELECTRICAL TILT	7,420,507	10/577,206	29/10/2004	02/09/2008	United States
ANTENNA SYSTEM FOR SHARED OPERATION	200580030385.5	200580030385.5	07/07/2005	19/12/2012	China P.R.
ANTENNA SYSTEM FOR SHARED OPERATION		05758988.9	07/07/2005		EPC
ANTENNA SYSTEM FOR SHARED OPERATION		0415811.9	15/07/2004		Great Britain
ANTENNA SYSTEM FOR SHARED OPERATION		08101087.4	07/07/2005		Hong Kong
ANTENNA SYSTEM FOR SHARED OPERATION		PCT/GB2005 /002694	07/07/2005		Patent Cooperation



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ANTENNA SYSTEM FOR SHARED OPERATION		0501002911	23/06/2005		Thailand
ANTENNA SYSTEM FOR SHARED OPERATION	8,208,962	11/632,233	07/07/2005	26/06/2012	United States
SECTORISATION OF CELLULAR RADIO		2005800414 00.6	24/11/2005		China P.R.
SECTORISATION OF CELLULAR RADIO		05809436.8	24/11/2005		EPC
SECTORISATION OF CELLULAR RADIO		0426354.7	01/12/2004		Great Britain
SECTORISATION OF CELLULAR RADIO		PCT/GB2005 /004531	24/11/2005		Patent Cooperation Treaty
SECTORISATION OF CELLULAR RADIO		0501005102	28/10/2005		Thailand
SECTORISATION OF CELLULAR RADIO		11/791,686	24/11/2005		United States
ANTENNA SYSTEM FOR SHARING OF OPERATION		06744248.3	19/06/2006		EPC
ANTENNA SYSTEM FOR SHARING OF OPERATION		0512805.3	23/06/2005		Great Britain
ANTENNA SYSTEM FOR SHARING OF OPERATION		W002007042 63	19/06/2006		Indonesia
ANTENNA SYSTEM FOR SHARING OF OPERATION		10166/DELN P/2007	19/06/2006		India
ANTENNA SYSTEM FOR SHARING OF OPERATION		2008-517579	19/06/2006		Japan
ANTENNA SYSTEM FOR SHARING OF OPERATION		PI20062460	29/05/2006		Malaysia -
ANTENNA SYSTEM FOR SHARING OF OPERATION		PCT/GB/200 6/002223	19/06/2006		Patent Cooperation Treaty
ANTENNA SYSTEM FOR SHARING OF OPERATION		095120890	13/06/2006		Taiwan
ANTENNA SYSTEM FOR SHARING OF OPERATION	7,663,544	11/917,814	19/06/2006	16/02/2010	United States
PHASED ARRAY ANTENNA SYSTEM WITH MULTIPLE BEAMS		07705110.0	01/02/2007		EPC
PHASED ARRAY ANTENNA SYSTEM WITH MULTIPLE BEAMS		0602530.8	09/02/2006		Great Britain
PHASED ARRAY ANTENNA SYSTEM WITH MULTIPLE BEAMS		PCT/GB2007 /000348	01/02/2007		Patent Cooperation Treaty

PHASED ARRAY ANTENNA SYSTEM WITH MULTIPLE BEAMS	9,118,361	12/278,814	01/02/2007	25/08/2015	United States
MULTIPLE BEAM PHASED ARRAY ANTENNA SYSTEM		0602529.0	09/02/2006		Great Britain
DIVERSITY ANTENNA SYSTEM WITH ELECTRICAL TILT	201310231 868.8	2013102318 68.8	10/08/2007	10/08/2016	China P.R.
DIVERSITY ANTENNA SYSTEM WITH ELECTRICAL TILT		PI 0715973-0	10/08/2007		Brazil
DIVERSITY ANTENNA SYSTEM WITH ELECTRICAL TILT	200780030 552.5	2007800305 52.5	10/08/2007	17/07/2013	China P.R.
DIVERSITY ANTENNA SYSTEM WITH ELECTRICAL TILT		07789176.0	10/08/2007		EPC
DIVERSITY ANTENNA SYSTEM WITH ELECTRICAL TILT		0616449.5	18/08/2006		Great Britain
DIVERSITY ANTENNA SYSTEM WITH ELECTRICAL TILT		631/DELNP/ 2009	10/08/2007		India
DIVERSITY ANTENNA SYSTEM WITH ELECTRICAL TILT	5088902	2009-524223	10/08/2007	21/09/2012	Japan
DIVERSITY ANTENNA SYSTEM WITH ELECTRICAL TILT		PCT/GB2007 /003047	10/08/2007		Patent Cooperation Treaty
DIVERSITY ANTENNA SYSTEM WITH ELECTRICAL TILT		96128391	02/08/2007		Taiwan
DIVERSITY ANTENNA SYSTEM WITH ELECTRICAL TILT	8,269,668	12/280,813	10/08/2007	18/09/2012	United States
PHASED ARRAY ANTENNA SYSTEM WITH ELECTRICAL TILT CONTROL	200780049 659.4	2007800496 59.4	07/11/2007	28/08/2013	China P.R.
PHASED ARRAY ANTENNA SYSTEM WITH ELECTRICAL TILT CONTROL	602007054 997.3	07824462.1	07/11/2007	30/05/2018	Germany
PHASED ARRAY ANTENNA SYSTEM WITH ELECTRICAL TILT CONTROL	2092601	07824462.1	07/11/2007	30/05/2018	EPC
PHASED ARRAY ANTENNA SYSTEM WITH ELECTRICAL TILT CONTROL	2092601	07824462.1	07/11/2007	30/05/2018	France

PHASED ARRAY ANTENNA SYSTEM WITH ELECTRICAL TILT CONTROL		0622411.7	10/11/2006		Great Britain
PHASED ARRAY ANTENNA SYSTEM WITH ELECTRICAL TILT CONTROL	2092601	07824462.1	07/11/2007	30/05/2018	Great Britain
PHASED ARRAY ANTENNA SYSTEM WITH ELECTRICAL TILT CONTROL		3044/DELNP /2009	07/11/2007		India
PHASED ARRAY ANTENNA SYSTEM WITH ELECTRICAL TILT CONTROL		2009-535790	07/11/2007		Japan
PHASED ARRAY ANTENNA SYSTEM WITH ELECTRICAL TILT CONTROL		PCT/GB2007 /004227	07/11/2007		Patent Cooperation Treaty
PHASED ARRAY ANTENNA SYSTEM WITH ELECTRICAL TILT CONTROL	9,252,485	12/514,287	07/11/2007	02/02/2016	United States
PHASED ARRAY ANTENNA SYSTEM WITH ELECTRICAL TILT CONTROL		15/012,363	01/02/2016		United States
ELECTRICALLY TILTED ANTENNA SYSTEM WITH POLARISATION DIVERSITY		PI 0718719-0	07/11/2007		Brazil
ELECTRICALLY TILTED ANTENNA SYSTEM WITH POLARISATION DIVERSITY	200780049 733.2	2.0078E+11	07/11/2007	13/02/2013	China P.R.
ELECTRICALLY TILTED ANTENNA SYSTEM WITH POLARISATION DIVERSITY		7824470.4	07/11/2007		EPC
ELECTRICALLY TILTED ANTENNA SYSTEM WITH POLARISATION DIVERSITY		622435.6	10/11/2006		Great Britain
ELECTRICALLY TILTED ANTENNA SYSTEM WITH POLARISATION DIVERSITY		10105180.7	26/05/2010		Hong Kong
ELECTRICALLY TILTED ANTENNA SYSTEM WITH POLARISATION DIVERSITY		3043/DELNP /2009	07/11/2007		India
ELECTRICALLY TILTED ANTENNA SYSTEM WITH POLARISATION DIVERSITY		2009-535792	07/11/2007		Japan

ELECTRICALLY TILTED ANTENNA SYSTEM WITH POLARISATION DIVERSITY		PCT/GB2007 /004237	07/11/2007		Patent Cooperation Treaty
ELECTRICALLY TILTED ANTENNA SYSTEM WITH POLARISATION DIVERSITY	8,185,162	12/514,292	07/11/2007	22/05/2012	United States

## SCHEDULE 2

### Trade Marks

Description or approved form of Trade Mark	Registration number	Date of registration	Territory in which registration is effective	Classes of goods/services for which Trade Marks is registered (or used)
QUINTEL	3429207	20/05/2018	United States	Class 009 covering: Telecommunications apparatus and instruments, namely, wireless base station antennas and tower mounted amplifiers; telecommunications apparatus and instruments for use in connection with the mobile telecommunications industry, namely, wireless base station antennas and tower mounted amplifiers and wireless base stations relating thereto
MultiServ	Unregistered			Telecommunications apparatus and instruments, namely, wireless base station antennas and tower mounted amplifiers; telecommunications apparatus and instruments for use in connection with the mobile telecommunications industry, namely, wireless base station antennas and tower mounted amplifiers and wireless base stations relating thereto
QTilt	Unregistered			Telecommunications apparatus and instruments, namely, wireless base station antennas and tower mounted amplifiers; telecommunications apparatus and instruments for use in connection with the mobile telecommunications industry, namely, wireless base station antennas and tower mounted amplifiers and wireless base stations relating thereto
SONWav	Unregistered			Telecommunications apparatus and instruments, namely, wireless base station antennas and tower mounted amplifiers; telecommunications apparatus and instruments

Description or approved form of Trade Mark	Registration number	Date of registration	Territory in which registration is effective	Classes of goods/services for which Trade Marks is registered (or used)
				for use in connection with the mobile telecommunications industry, namely, wireless base station antennas and tower mounted amplifiers and wireless base stations relating thereto
New Dimensions in Wireless	Unregistered			Telecommunications apparatus and instruments, namely, wireless base station antennas and tower mounted amplifiers; telecommunications apparatus and instruments for use in connection with the mobile telecommunications industry, namely, wireless base station antennas and tower mounted amplifiers and wireless base stations relating thereto

This Assignment has been executed as a deed, but not delivered until the date stated at the beginning of it.

EXECUTED as a DEED by .....)  
QUINTEL TECHNOLOGY LIMITED .....)  
acting by ROBERTO JUANCHITO T. DISPO, .....)  
a Director in the presence of: .....)



.....  
Director

Witness Signature.....

Witness Name RAZEL JEA SOTTO

Witness Address BLK 3 LOT 38 PH 2

MARCO POLO PLACE, TAGAPO, STA. ROSA

CITY, LAGUNA, PHILIPPINES 4026

Witness Occupation EXECUTIVE ASSISTANT

EXECUTED as a DEED on behalf of .....)  
QUINTEL CAYMAN LIMITED, .....)  
a company incorporated in the Cayman Islands, )  
by MICHAEL LIU, being a person .....)  
who, in accordance with the laws of that .....)  
territory, is acting under the authority .....)  
of the company, in the presence of: .....)

  
.....  
Director or Authorised Signatory

Witness Signature.....

Witness Name EMELITA P. CRUZADA

Witness Address BLK 7 LOT 1 ST PENEGRINE

ST. ANDAS VILL. 2 MOLINO BACOR

CAVITE, PHIL.

Witness Occupation HR DIRECTOR