PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT7381769

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SCA IPLA HOLDINGS INC.	02/20/2020

RECEIVING PARTY DATA

Name:	INTERDIGITAL VC HOLDINGS, INC.
Street Address:	200 BELLEVUE PARKWAY
Internal Address:	SUITE 300
City:	WILMINGTON
State/Country:	DELAWARE
Postal Code:	19809

PROPERTY NUMBERS Total: 1

Property Type	Number
Patent Number:	9521038

CORRESPONDENCE DATA

Fax Number: (215)564-3439

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: 2155683100
Email: assignments@bakerlaw.com
Correspondent Name: BAKERHOSTETLER
Address Line 1: 1735 MARKET STREET
Address Line 2: SUITE 3300
Address Line 4: PHILADELPHIA, PENNSYLVANIA 19103-7501

ATTORNEY DOCKET NUMBER:	106693.300483
NAME OF SUBMITTER:	FAITH POORE HOUSER
SIGNATURE:	/Faith Poore Houser/
DATE SIGNED:	06/14/2022

Total Attachments: 15
source=2b_Confirmatory_Patent_Assignment_-_SCA_IPLAH_-_IDVCH_-_21Feb2020_Exec#page1.tif
source=2b_Confirmatory_Patent_Assignment_-_SCA_IPLAH_-_IDVCH_-_21Feb2020_Exec#page2.tif
source=2b_Confirmatory_Patent_Assignment_-_SCA_IPLAH_-_IDVCH_-_21Feb2020_Exec#page3.tif
source=2b_Confirmatory_Patent_Assignment_-_SCA_IPLAH_-_IDVCH_-_21Feb2020_Exec#page4.tif

source=2b_Confirmatory_Patent_Assignment_-_SCA_IPLAH_-_IDVCH_-_21Feb2020_Exec#page5.tif
source=2b_Confirmatory_Patent_Assignment_-_SCA_IPLAH_-_IDVCH_-_21Feb2020_Exec#page6.tif
source=2b_Confirmatory_Patent_Assignment_-_SCA_IPLAH_-_IDVCH_-_21Feb2020_Exec#page7.tif
source=2b_Confirmatory_Patent_Assignment_-_SCA_IPLAH_-_IDVCH_-_21Feb2020_Exec#page8.tif
source=2b_Confirmatory_Patent_Assignment_-_SCA_IPLAH_-_IDVCH_-_21Feb2020_Exec#page9.tif
source=2b_Confirmatory_Patent_Assignment_-_SCA_IPLAH_-_IDVCH_-_21Feb2020_Exec#page10.tif
source=2b_Confirmatory_Patent_Assignment_-_SCA_IPLAH_-_IDVCH_-_21Feb2020_Exec#page11.tif
source=2b_Confirmatory_Patent_Assignment_-_SCA_IPLAH_-_IDVCH_-_21Feb2020_Exec#page12.tif
source=2b_Confirmatory_Patent_Assignment_-_SCA_IPLAH_-_IDVCH_-_21Feb2020_Exec#page13.tif
source=2b_Confirmatory_Patent_Assignment_-_SCA_IPLAH_-_IDVCH_-_21Feb2020_Exec#page14.tif
source=2b_Confirmatory_Patent_Assignment_-_SCA_IPLAH_-_IDVCH_-_21Feb2020_Exec#page15.tif

CONFIRMATORY PATENT ASSIGNMENT

This CONFIRMATORY PATENT ASSIGNMENT, effective as of July 31, 2019, is made by and between **SCA IPLA Holdings Inc.**, a corporation existing under the laws of Japan with its principal place of business located at 25 Madison Avenue, New York, NY 10010 (hereinafter "Assignor"), and **InterDigital VC Holdings, Inc.**, a Delaware corporation having a place of business at 200 Bellevue Parkway, Suite 300, Wilmington, DE 19809 (hereinafter "Assignee").

WHEREAS:

Assignor previously executed a Patent Assignment, dated July 31, 2019 ("Patent Assignment") with respect to certain United States and/or foreign patents and/or patent applications listed in Exhibit A attached hereto (hereinafter "Patents");

Assignee previously acquired the entire right, title and interest in, to and under the Patents as a result of said Patent Assignment; and

Assignor and Assignee are desirous of memorializing and confirming the prior transfer of the Patents.

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, and intending to be legally bound hereby, Assignor hereby confirms that as of July 31, 2019, intended to and previously has sold, assigned, transferred and conveyed to Assignee the entire right, title and interest in and to any and all of the following:

(i) the Patents, including any and all inventions, invention disclosures, improvements and discoveries disclosed or claimed therein (hereinafter "Inventions"), for the United States, its possessions and territories and all foreign countries, regions and territories;

(ii) the rights of priority created by the Patents under any treaty relating thereto, including the rights to apply for patents and patent applications covering the Inventions in any and all countries, regions and territories;

(iii) any and all patents and patent applications, certificates of invention, utility models and any other grants by any governmental entity for the protection of inventions resulting from the Patents, in any and all countries, regions and territories, including any and all patents and patent applications disclosing the Inventions and any patents issuing from such applications, including provisionals, non-provisionals, divisionals, continuations, continuations-in-part, reissues, extensions, renewals, substitutions and re-examinations of the Patents; and

(iv) all past, present and future causes of action and enforcement rights, whether currently pending, filed or otherwise, in connection with the Patents, the patents and patent applications resulting from the Patents and the Inventions, including without limitation, all rights to sue for any past, present or future infringement thereof, including the rights to license and to collect and receive any damages, royalties, injunctive relief, and/or any other settlements or remedies for such infringements, and including any provisional rights having arisen from any publication of any of the Patents or any patent application resulting therefrom,

the same to be held and enjoyed by Assignee for its own use and enjoyment, and for the use and enjoyment of its successors, assigns and other legal representatives, as fully and entirely as the same would have been held and enjoyed by Assignor, if this Confirmatory Assignment had not been made.

AND, this Confirmatory Assignment may be executed in multiple counterparts, each of which shall be deemed to be an original of this Confirmatory Assignment.

IN WITNESS WHEREOF, Assignor and Assignee, by and through their respective authorized representative, have executed this instrument on the date indicated below.

SIGNED for and on behalf of **SCA IPLA Holdings Inc.**

By _____ February 20, 2020
(Signature) (Date)

Peter C. Toto Senior Vice President
(Print Name) (Print Title)

SIGNED for and on behalf of **InterDigital VC Holdings, Inc.**

By _____ 21 February 2020
(Signature) (Date)

Christos Ioannidi Senior Patent Executive
(Print Name) (Print Title)

EXHIBIT A

Country	Application No.	Patent No.	Filing Date	Title
CN	201380019446.2	ZL201380019446	4/10/2013	CSMA Type Un-Synchronous Reception for MTC within Synchronous Systems-Trasmitter
DE	13715439.9	602013038124.0	4/10/2013	CSMA Type Un-Synchronous Reception for MTC within Synchronous Systems-Trasmitter
EP	13715439.9	2837251	4/10/2013	CSMA Type Un-Synchronous Reception for MTC within Synchronous Systems-Trasmitter
ES	13715439.9	2837251	4/10/2013	CSMA Type Un-Synchronous Reception for MTC within Synchronous Systems-Trasmitter
FR	13715439.9	2837251	4/10/2013	CSMA Type Un-Synchronous Reception for MTC within Synchronous Systems-Trasmitter
GB	1206344.2		4/11/2012	CSMA Type Un-Synchronous Reception for MTC within Synchronous Systems-Trasmitter
GB	13715439.9	2837251	4/10/2013	CSMA Type Un-Synchronous Reception for MTC within Synchronous Systems-Trasmitter
IT	13715439.9	502018000024538	4/10/2013	CSMA Type Un-Synchronous Reception for MTC within Synchronous Systems-Trasmitter
JP	2015505021	6138235	4/10/2013	CSMA Type Un-Synchronous Reception for MTC within Synchronous Systems-Trasmitter
KR	20147028178	10-1999417	4/10/2013	CSMA Type Un-Synchronous Reception for MTC within Synchronous Systems-Trasmitter
NL	13715439.9	2837251	4/10/2013	CSMA Type Un-Synchronous Reception for MTC within Synchronous Systems-Trasmitter
SE	13715439.9	2837251	4/10/2013	CSMA Type Un-Synchronous Reception for MTC within Synchronous Systems-Trasmitter
US	14/389809		4/10/2013	CSMA Type Un-Synchronous Reception for MTC within Synchronous Systems-Trasmitter

Country	Application No.	Patent No.	Filing Date	Title
US	16/258946		1/28/2019	CSMA Type Un-Synchronous Reception for MTC within Synchronous Systems-Trasmitter
WO	PCT/GB2013/050914		4/10/2013	CSMA Type Un-Synchronous Reception for MTC within Synchronous Systems-Trasmitter
CN	201380019453.2	ZL201380019453	4/10/2013	CSMA Type Un-Synchronous Reception for MTC within Synchronous Systems-Receiver
DE	13717825.7	602013040791.6	4/10/2013	CSMA Type Un-Synchronous Reception for MTC within Synchronous Systems-Receiver
EP	13717825.7	2837252	4/10/2013	CSMA Type Un-Synchronous Reception for MTC within Synchronous Systems-Receiver
FR	13717825.7	2837252	4/10/2013	CSMA Type Un-Synchronous Reception for MTC within Synchronous Systems-Receiver
GB	1206347.5	2501081	4/11/2012	CSMA Type Un-Synchronous Reception for MTC within Synchronous Systems-Receiver
GB	13717825.7	2837252	4/10/2013	CSMA Type Un-Synchronous Reception for MTC within Synchronous Systems-Receiver
JP	2015505020	6266591	4/10/2013	CSMA Type Un-Synchronous Reception for MTC within Synchronous Systems-Receiver
US	14/388603	9756567	4/10/2013	CSMA Type Un-Synchronous Reception for MTC within Synchronous Systems-Receiver
WO	PCT/GB2013/050913		4/10/2013	CSMA Type Un-Synchronous Reception for MTC within Synchronous Systems-Receiver
CN	201280040506.4	ZL201280040506	8/15/2012	Mechanism to signal grants made to MTC UEs to relay nodes and general UL relaying functionality-Base St
DE	12754078.9	602012045347.8	8/15/2012	Mechanism to signal grants made to MTC UEs to relay nodes and general UL relaying functionality-Base St

Country	Application No.	Patent No.	Filing Date	Title
EP	12754078.9	2745590	8/15/2012	Mechanism to signal grants made to MTC UEs to relay nodes and general UL relaying functionality-Base St
FR	12754078.9	2745590	8/15/2012	Mechanism to signal grants made to MTC UEs to relay nodes and general UL relaying functionality-Base St
GB	1114346.8	2493784	8/19/2011	Mechanism to signal grants made to MTC UEs to relay nodes and general UL relaying functionality-Base St
GB	12754078.9	2745590	8/15/2012	Mechanism to signal grants made to MTC UEs to relay nodes and general UL relaying functionality-Base St
JP	2014525497	6022568	8/15/2012	Mechanism to signal grants made to MTC UEs to relay nodes and general UL relaying functionality-Base St
US	14/239713	9538510	8/15/2012	Mechanism to signal grants made to MTC UEs to relay nodes and general UL relaying functionality-Base St
US	15/351680	10251164	11/15/2016	Mechanism to signal grants made to MTC UEs to relay nodes and general UL relaying functionality-Base St
US	16/289682		3/1/2019	Mechanism to signal grants made to MTC UEs to relay nodes and general UL relaying functionality-Base St
WO	PCT/GB2012/051993		8/15/2012	Mechanism to signal grants made to MTC UEs to relay nodes and general UL relaying functionality-Base St
CN	201280040509.8	ZL201280040509	8/15/2012	Mechanism to signal grants made to MTC UEs to relay nodes and general UL relaying functionality-UE

Country	Application No.	Patent No.	Filing Date	Title
EP	12754079.7		8/15/2012	Mechanism to signal grants made to MTC UEs to relay nodes and general UL relaying functionality-UE
GB	1114348.4	2493785	8/19/2011	Mechanism to signal grants made to MTC UEs to relay nodes and general UL relaying functionality-UE
JP	2014525498	6022569	8/15/2012	Mechanism to signal grants made to MTC UEs to relay nodes and general UL relaying functionality-UE
KR	20147006958		8/15/2012	Mechanism to signal grants made to MTC UEs to relay nodes and general UL relaying functionality-UE
US	14/238671	9526088	8/15/2012	Mechanism to signal grants made to MTC UEs to relay nodes and general UL relaying functionality-UE
US	15/332431	9973258	10/24/2016	Mechanism to signal grants made to MTC UEs to relay nodes and general UL relaying functionality-UE
WO	PCT/GB2012/051994		8/15/2012	Mechanism to signal grants made to MTC UEs to relay nodes and general UL relaying functionality-UE
CN	201280040517.2	ZL201280040517	8/10/2012	Multicast Hybrid ARQ Mechanism for virtual Carrier operation-UE
DE	12754075.5	602012048093.9	8/10/2012	Multicast Hybrid ARQ Mechanism for virtual Carrier operation-UE
EP	12754075.5	2745449	8/10/2012	Multicast Hybrid ARQ Mechanism for virtual Carrier operation-UE
FR	12754075.5	2745449	8/10/2012	Multicast Hybrid ARQ Mechanism for virtual Carrier operation-UE
GB	1114335.1	2493917	8/19/2011	Multicast Hybrid ARQ Mechanism for virtual Carrier operation-UE

Country	Application No.	Patent No.	Filing Date	Title
GB	12754075.5	2745449	8/10/2012	Multicast Hybrid ARQ Mechanism for virtual Carrier operation-UE
JP	2014526544	6031517	8/10/2012	Multicast Hybrid ARQ Mechanism for virtual Carrier operation-UE
KR	20147006633		8/10/2012	Multicast Hybrid ARQ Mechanism for virtual Carrier operation-UE
NL	12754075.5	2745449	8/10/2012	Multicast Hybrid ARQ Mechanism for virtual Carrier operation-UE
US	14/179254	9585122	2/12/2014	Multicast Hybrid ARQ Mechanism for virtual Carrier operation-UE
US	15/434902	10200972	2/16/2017	Multicast Hybrid ARQ Mechanism for virtual Carrier operation-UE
US	16/258669		1/28/2019	Multicast Hybrid ARQ Mechanism for virtual Carrier operation-UE
WO	PCT/GB2012/051949		8/10/2012	Multicast Hybrid ARQ Mechanism for virtual Carrier operation-UE
CN	201280040332.1	ZL201280040332	8/10/2012	Multicast Hybrid ARQ Mechanism for virtual Carrier operation-BS
DE	12754076.3	602012052045.0	8/10/2012	Multicast Hybrid ARQ Mechanism for virtual Carrier operation-BS
EP	12754076.3	2745450	8/10/2012	Multicast Hybrid ARQ Mechanism for virtual Carrier operation-BS
FR	12754076.3	2745450	8/10/2012	Multicast Hybrid ARQ Mechanism for virtual Carrier operation-BS
GB	1114333.6	2493780	8/19/2011	Multicast Hybrid ARQ Mechanism for virtual Carrier operation-BS
GB	12754076.3	2745450	8/10/2012	Multicast Hybrid ARQ Mechanism for virtual Carrier operation-BS

Country	Application No.	Patent No.	Filing Date	Title
JP	2014526545	6031518	8/10/2012	Multicast Hybrid ARQ Mechanism for virtual Carrier operation-BS
NL	12754076.3	2745450	8/10/2012	Multicast Hybrid ARQ Mechanism for virtual Carrier operation-BS
US	14/170153	9288786	1/31/2014	Multicast Hybrid ARQ Mechanism for virtual Carrier operation-BS
WO	PCT/GB2012/051951		8/10/2012	Multicast Hybrid ARQ Mechanism for virtual Carrier operation-BS
CN	201280037474.2	ZL201280037474	7/26/2012	Introduction of new 'ECM Messaging Connected' state into the Evolved Packet Core-UE
DE	12754060.7	602012018626.7	7/26/2012	Introduction of new 'ECM Messaging Connected' state into the Evolved Packet Core-UE
EP	12754060.7	2737730	7/26/2012	Introduction of new 'ECM Messaging Connected' state into the Evolved Packet Core-UE
GB	1113148.9	2493216	7/29/2011	Introduction of new 'ECM Messaging Connected' state into the Evolved Packet Core-UE
IN	10618/DELNP/2013		7/26/2012	Introduction of new 'ECM Messaging Connected' state into the Evolved Packet Core-UE
JP	2014523385	6143750	7/26/2012	Introduction of new 'ECM Messaging Connected' state into the Evolved Packet Core-UE
JP	2017027236	6317491	2/16/2017	Introduction of new 'ECM Messaging Connected' state into the Evolved Packet Core-UE
KR	20147001775	101920954	7/26/2012	Introduction of new 'ECM Messaging Connected' state into the Evolved Packet Core-UE
US	14/163803	9491614	1/24/2014	Introduction of new 'ECM Messaging Connected' state into the Evolved Packet Core-UE
US	15/343724	10299108	11/4/2016	Introduction of new 'ECM Messaging Connected' state into the Evolved Packet Core-UE

Country	Application No.	Patent No.	Filing Date	Title
US	16/410099		5/13/2019	Introduction of new 'ECM Messaging Connected' state into the Evolved Packet Core-UE
WO	PCT/GB2012/051805		7/26/2012	Introduction of new 'ECM Messaging Connected' state into the Evolved Packet Core-UE
CN	201280024705.6	ZL201280024705	6/13/2012	Uplink / Downlink Asymmetric Network Topology for MTC
DE	12730239.6	602012049448.4	6/13/2012	Uplink / Downlink Asymmetric Network Topology for MTC
EP	12730239.6	2721868	6/13/2012	Uplink / Downlink Asymmetric Network Topology for MTC
FR	12730239.6	2721868	6/13/2012	Uplink / Downlink Asymmetric Network Topology for MTC
GB	1109982.7	2491856	6/14/2011	Uplink / Downlink Asymmetric Network Topology for MTC
GB	12730239.6	2721868	6/13/2012	Uplink / Downlink Asymmetric Network Topology for MTC
JP	2014515283		6/13/2012	Uplink / Downlink Asymmetric Network Topology for MTC
NL	12730239.6	2721868	6/13/2012	Uplink / Downlink Asymmetric Network Topology for MTC
US	14/122017	9560636	6/13/2012	Uplink / Downlink Asymmetric Network Topology for MTC
US	14/801461	10182425	7/16/2015	Uplink / Downlink Asymmetric Network Topology for MTC
US	15/344051	10231224	11/4/2016	Uplink / Downlink Asymmetric Network Topology for MTC
WO	PCT/GB2012/051332		6/13/2012	Uplink / Downlink Asymmetric Network Topology for MTC

Country	Application No.	Patent No.	Filing Date	Title
US	14/122049	9622166	6/13/2012	Uplink / Downlink Asymmetric Network Topology for MTC
CN	201280040334.0	ZL201280040334	8/9/2012	Random access procedure in UL only relay systems and means for detecting need for UE to be served by relay node.-UE
DE	12753217.4	602012044767.2	8/9/2012	Random access procedure in UL only relay systems and means for detecting need for UE to be served by relay node.-UE
EP	12753217.4	2745610	8/9/2012	Random access procedure in UL only relay systems and means for detecting need for UE to be served by relay node.-UE
FR	12753217.4	2745610	8/9/2012	Random access procedure in UL only relay systems and means for detecting need for UE to be served by relay node.-UE
GB	1114345.0		8/19/2011	Random access procedure in UL only relay systems and means for detecting need for UE to be served by relay node.-UE
GB	12753217.4	2745610	8/9/2012	Random access procedure in UL only relay systems and means for detecting need for UE to be served by relay node.-UE
JP	2014525491	5990585	8/9/2012	Random access procedure in UL only relay systems and means for detecting need for UE to be served by relay node.-UE
KR	20147006957		8/9/2012	Random access procedure in UL only relay systems and means for detecting need for UE to be served by relay node.-UE
US	14/239605	9144033	8/9/2012	Random access procedure in UL only relay systems and means for detecting need for UE to be served by relay node.-UE
US	14/809796	9622248	7/27/2015	Random access procedure in UL only relay systems and means for detecting need for UE to be served by relay node.-UE

Country	Application No.	Patent No.	Filing Date	Title
US	15/414665	10129890	1/25/2017	Random access procedure in UL only relay systems and means for detecting need for UE to be served by relay node.-UE
WO	PCT/GB2012/051928		8/9/2012	Random access procedure in UL only relay systems and means for detecting need for UE to be served by relay node.-UE
CN	201280037961.9	ZL201280037961	7/23/2012	Context less routing in the EPC-BS
CN	201280038336.6	ZL201280038336	7/23/2012	Context less routing in the EPC-UE
DE	12743205.2	602012050666.0	7/23/2012	Context less routing in the EPC-BS
DE	12743206.0	602012047651.6	7/23/2012	Context less routing in the EPC-UE
EP	12743205.2	2737735	7/23/2012	Context less routing in the EPC-BS
EP	12743206.0	2737736	7/23/2012	Context less routing in the EPC-UE
EP	18156126.7		2/9/2018	Context less routing in the EPC-BS
EP	18168034.9		4/18/2018	Context less routing in the EPC-UE
FR	12743205.2	2737735	7/23/2012	Context less routing in the EPC-BS
FR	12743206.0	2737736	7/23/2012	Context less routing in the EPC-UE
GB	1113145.5	2493347	7/29/2011	Introdution of new RRC messaging Connected state into the LTE RAN-UE
GB	1113144.8	2493346	7/29/2011	Context less routing in the EPC-UE
GB	1209526.1	2493240	5/29/2012	Context less routing in the EPC-BS
GB	1209525.3	2493239	5/29/2012	Context less routing in the EPC-UE
GB	12743205.2	2737735	7/23/2012	Context less routing in the EPC-BS
GB	12743206.0	2737736	7/23/2012	Context less routing in the EPC-UE
IN	10898/DELNP/2013		7/23/2012	Context less routing in the EPC-BS

Country	Application No.	Patent No.	Filing Date	Title
IN	10802/DELNP/2013		7/23/2012	Context less routing in the EPC-UE
JP	2014523381	6147254	7/23/2012	Context less routing in the EPC-BS
JP	2014523382	6149035	7/23/2012	Context less routing in the EPC-UE
NL	12743205.2	2737735	7/23/2012	Context less routing in the EPC-BS
NL	12743206.0	2737736	7/23/2012	Context less routing in the EPC-UE
SE	12743205.2	2737735	7/23/2012	Context less routing in the EPC-BS
US	14/165322	9363139	1/27/2014	Context less routing in the EPC-BS
US	14/165298	9521038	1/27/2014	Context less routing in the EPC-UE
US	15/349083	9716654	11/11/2016	Context less routing in the EPC-UE
WO	PCT/GB2012/051764		7/23/2012	Context less routing in the EPC-BS
WO	PCT/GB2012/051766		7/23/2012	Context less routing in the EPC-UE
AT	12702869.4	2671341	2/1/2012	Provision of a Virtual Carrier within an LTE Carrier
BR	112013019317.4		2/1/2012	Provision of a Virtual Carrier within an LTE Carrier
CN	201280007748.3	ZL201280007748	2/1/2012	Provision of a Virtual Carrier within an LTE Carrier
CN	201610154617.8	ZL201610154617	3/17/2016	Provision of a Virtual Carrier within an LTE Carrier
DE	12702869.4	602012038889.7	2/1/2012	Provision of a Virtual Carrier within an LTE Carrier
DE	17185909.3	602012058718.0	8/11/2017	Provision of a Virtual Carrier within an LTE Carrier
EP	12702869.4	2671341	2/1/2012	Provision of a Virtual Carrier within an LTE Carrier
EP	17185909.3	3261284	8/11/2017	Provision of a Virtual Carrier within an LTE Carrier
EP	18213480.9		12/18/2018	Provision of a Virtual Carrier within an LTE Carrier
ES	12702869.4	2671341	2/1/2012	Provision of a Virtual Carrier within an LTE Carrier
FR	12702869.4	2671341	2/1/2012	Provision of a Virtual Carrier within an LTE Carrier

Country	Application No.	Patent No.	Filing Date	Title
FR	17185909.3	3261284	8/11/2017	Provision of a Virtual Carrier within an LTE Carrier
GB	1101972.6	2487782	2/4/2011	Provision of a Virtual Carrier within an LTE Carrier
GB	12702869.4	2671341	2/1/2012	Provision of a Virtual Carrier within an LTE Carrier
GB	17185909.3	3261284	8/11/2017	Provision of a Virtual Carrier within an LTE Carrier
IN	6089/DELNP/2013		2/1/2012	Provision of a Virtual Carrier within an LTE Carrier
IT	12702869.4	502017000145813	2/1/2012	Provision of a Virtual Carrier within an LTE Carrier
JP	2013552267	5976681	2/1/2012	Provision of a Virtual Carrier within an LTE Carrier
JP	2016142536		7/20/2016	Provision of a Virtual Carrier within an LTE Carrier
MX	MX/a/2013/008294	334416	2/1/2012	Provision of a Virtual Carrier within an LTE Carrier
NL	12702869.4	2671341	2/1/2012	Provision of a Virtual Carrier within an LTE Carrier
NL	17185909.3	3261284	8/11/2017	Provision of a Virtual Carrier within an LTE Carrier
PL	12702869.4	2671341	2/1/2012	Provision of a Virtual Carrier within an LTE Carrier
RU	2013140766	2595268	2/1/2012	Provision of a Virtual Carrier within an LTE Carrier
SE	12702869.4	2671341	2/1/2012	Provision of a Virtual Carrier within an LTE Carrier
TR	12702869.4	2671341	2/1/2012	Provision of a Virtual Carrier within an LTE Carrier
US	13/983455	9516633	2/1/2012	Provision of a Virtual Carrier within an LTE Carrier
US	15/333273	9860032	10/25/2016	Provision of a Virtual Carrier within an LTE Carrier
US	15/834695		12/7/2017	Provision of a Virtual Carrier within an LTE Carrier
WO	PCT/GB2012/050212		2/1/2012	Provision of a Virtual Carrier within an LTE Carrier
CN	201280029326.6	ZL201280029326	6/11/2012	Carrier selection Methods
CN	201711339829.4		12/14/2017	Carrier selection Methods
DE	12727407.4	602012055103.8	6/11/2012	Carrier selection Methods

Country	Application No.	Patent No.	Filing Date	Title
EP	12727407.4	2721873	6/11/2012	Carrier selection Methods
EP	18206812.2		11/16/2018	Carrier selection Methods
FR	12727407.4	2721873	6/11/2012	Carrier selection Methods
GB	1110077.3	2492062	6/15/2011	Carrier selection Methods
GB	12727407.4	2721873	6/11/2012	Carrier selection Methods
JP	2014515278	5964417	6/11/2012	Carrier selection Methods
JP	2016128360	6346225	6/29/2016	Carrier selection Methods
KR	20147000597	101908165	6/11/2012	Carrier selection Methods
NL	12727407.4	2721873	6/11/2012	Carrier selection Methods
US	14/126203	9713146	6/11/2012	Carrier selection Methods
US	15/623096		6/14/2017	Carrier selection Methods
WO	PCT/GB2012/051309		6/11/2012	Carrier selection Methods
BR	112013031237.8		6/11/2012	Carrier selection Methods
CN	201280029386.8	ZL201280029386	6/11/2012	Carrier selection Methods
DE	12727408.2	602012052019.1	6/11/2012	Carrier selection Methods
EP	12727408.2	2721874	6/11/2012	Carrier selection Methods
EP	18195671.5		9/20/2018	Carrier selection Methods
FR	12727408.2	2721874	6/11/2012	Carrier selection Methods
GB	1110085.6	2491866	6/15/2011	Carrier selection Methods
GB	12727408.2	2721874	6/11/2012	Carrier selection Methods
IN	10090/DELNP/2013		6/11/2012	Carrier selection Methods
IT	12727408.2	502018000038924	6/11/2012	Carrier selection Methods

Country	Application No.	Patent No.	Filing Date	Title
JP	2014515279	5964418	6/11/2012	Carrier selection Methods
JP	2016128389	6280958	6/29/2016	Carrier selection Methods
NL	12727408.2	2721874	6/11/2012	Carrier selection Methods
RU	2014101073	2602387	6/11/2012	Carrier selection Methods
US	14/126118	9209954	6/11/2012	Carrier selection Methods
US	14/944832	9432997	11/18/2015	Carrier selection Methods
US	15/236753	9801183	8/15/2016	Carrier selection Methods
WO	PCT/GB2012/051310		6/11/2012	Carrier selection Methods