

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT6174335

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
INTEL CORPORATION	11/30/2019

RECEIVING PARTY DATA

Name:	APPLE INC.
Street Address:	ONE APPLE PARK WAY
City:	CUPERTINO
State/Country:	CALIFORNIA
Postal Code:	95014

PROPERTY NUMBERS Total: 175

Property Type	Number
Application Number:	14575733
Application Number:	14575876
Application Number:	14575939
Application Number:	14577419
Application Number:	14578961
Application Number:	14580024
Application Number:	14580685
Application Number:	14580735
Application Number:	14580779
Application Number:	14581619
Application Number:	14581770
Application Number:	14581938
Application Number:	14582376
Application Number:	14582379
Application Number:	14582492
Application Number:	14582580
Application Number:	14582611
Application Number:	14582612
Application Number:	14582879
Application Number:	14583027

PATENT

Property Type	Number
Application Number:	14583036
Application Number:	14583057
Application Number:	14583168
Application Number:	14583263
Application Number:	14583281
Application Number:	14583595
Application Number:	14583653
Application Number:	14593024
Application Number:	14623574
Application Number:	14652478
Application Number:	14652590
Application Number:	14653221
Application Number:	14653451
Application Number:	14653455
Application Number:	14653779
Application Number:	14656811
Application Number:	14659655
Application Number:	14661074
Application Number:	14668655
Application Number:	14668663
Application Number:	14669366
Application Number:	14669662
Application Number:	14669908
Application Number:	14670498
Application Number:	14670519
Application Number:	14670692
Application Number:	14670769
Application Number:	14670967
Application Number:	13927715
Application Number:	14671998
Application Number:	14692510
Application Number:	14693653
Application Number:	14695800
Application Number:	14696587
Application Number:	14697369
Application Number:	14701380
Application Number:	14701520
Application Number:	14704195

Property Type	Number
Application Number:	14704848
Application Number:	14705669
Application Number:	14706020
Application Number:	14706152
Application Number:	14711701
Application Number:	14711847
Application Number:	14723284
Application Number:	14729511
Application Number:	14739815
Application Number:	14747085
Application Number:	14747663
Application Number:	14748802
Application Number:	14751195
Application Number:	14753158
Application Number:	14763123
Application Number:	14764540
Application Number:	14764547
Application Number:	14765285
Application Number:	14765524
Application Number:	14766728
Application Number:	14766850
Application Number:	14766873
Application Number:	14769187
Application Number:	14084946
Application Number:	14771853
Application Number:	14771859
Application Number:	14771869
Application Number:	14772495
Application Number:	14773296
Application Number:	14093769
Application Number:	14776625
Application Number:	14778037
Application Number:	14778040
Application Number:	14778983
Application Number:	14779228
Application Number:	14781497
Application Number:	14782781
Application Number:	14782783

Property Type	Number
Application Number:	14782784
Application Number:	14783043
Application Number:	14784256
Application Number:	14784257
Application Number:	14786145
Application Number:	14124217
Application Number:	14801872
Application Number:	14125258
Application Number:	14807294
Application Number:	14125330
Application Number:	14828071
Application Number:	14134632
Application Number:	14140823
Application Number:	14835944
Application Number:	14141220
Application Number:	14845019
Application Number:	14141265
Application Number:	14142021
Application Number:	14142572
Application Number:	14859633
Application Number:	14861828
Application Number:	14871499
Application Number:	14178930
Application Number:	14902292
Application Number:	14903575
Application Number:	14903576
Application Number:	14911262
Application Number:	14912587
Application Number:	14912588
Application Number:	14914331
Application Number:	14916843
Application Number:	14917154
Application Number:	14918990
Application Number:	14927965
Application Number:	14930702
Application Number:	14934257
Application Number:	14230275
Application Number:	14948488

Property Type	Number
Application Number:	14957488
Application Number:	14958365
Application Number:	14963372
Application Number:	14964600
Application Number:	14975884
Application Number:	14976240
Application Number:	14276555
Application Number:	14977463
Application Number:	14303945
Application Number:	14986245
Application Number:	14991696
Application Number:	14317435
Application Number:	15006758
Application Number:	15013520
Application Number:	15022484
Application Number:	15023063
Application Number:	15026174
Application Number:	15026753
Application Number:	15026788
Application Number:	15047733
Application Number:	15056965
Application Number:	15060120
Application Number:	15060390
Application Number:	15070461
Application Number:	14411498
Application Number:	15076500
Application Number:	15079119
Application Number:	15083897
Application Number:	15084521
Application Number:	15086252
Application Number:	15088179
Application Number:	15088388
Application Number:	15088959
Application Number:	15096504
Application Number:	15111762
Application Number:	15111880
Application Number:	15112116
Application Number:	15113481

Property Type	Number
Application Number:	15114718
Application Number:	15115770
Application Number:	14445146

CORRESPONDENCE DATA

Fax Number: (216)579-6073

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: 216-579-1700

Email: lhawkins@pearne.com

Correspondent Name: JOHN P. MURTAUGH/PEARNE & GORDON LLP

Address Line 1: 1801 EAST 9TH STREET, SUITE 1200

Address Line 4: CLEVELAND, OHIO 44114-3108

ATTORNEY DOCKET NUMBER:	BRAQ-J8613
NAME OF SUBMITTER:	JOHN P. MURTAUGH
SIGNATURE:	/johnpmurtaugh/
DATE SIGNED:	06/26/2020

Total Attachments: 168

source=MAA_443 APP_US_redacted (002)#page1.tif
source=MAA_443 APP_US_redacted (002)#page2.tif
source=MAA_443 APP_US_redacted (002)#page3.tif
source=MAA_443 APP_US_redacted (002)#page4.tif
source=MAA_443 APP_US_redacted (002)#page5.tif
source=MAA_443 APP_US_redacted (002)#page6.tif
source=MAA_443 APP_US_redacted (002)#page7.tif
source=MAA_443 APP_US_redacted (002)#page8.tif
source=MAA_443 APP_US_redacted (002)#page9.tif
source=MAA_443 APP_US_redacted (002)#page10.tif
source=MAA_443 APP_US_redacted (002)#page11.tif
source=MAA_443 APP_US_redacted (002)#page12.tif
source=MAA_443 APP_US_redacted (002)#page13.tif
source=MAA_443 APP_US_redacted (002)#page14.tif
source=MAA_443 APP_US_redacted (002)#page15.tif
source=MAA_443 APP_US_redacted (002)#page16.tif
source=MAA_443 APP_US_redacted (002)#page17.tif
source=MAA_443 APP_US_redacted (002)#page18.tif
source=MAA_443 APP_US_redacted (002)#page19.tif
source=MAA_443 APP_US_redacted (002)#page20.tif
source=MAA_443 APP_US_redacted (002)#page21.tif
source=MAA_443 APP_US_redacted (002)#page22.tif
source=MAA_443 APP_US_redacted (002)#page23.tif
source=MAA_443 APP_US_redacted (002)#page24.tif
source=MAA_443 APP_US_redacted (002)#page25.tif
source=MAA_443 APP_US_redacted (002)#page26.tif

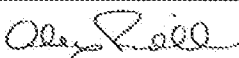
source=MAA_443 APP_US_redacted (002)#page27.tif
source=MAA_443 APP_US_redacted (002)#page28.tif
source=MAA_443 APP_US_redacted (002)#page29.tif
source=MAA_443 APP_US_redacted (002)#page30.tif
source=MAA_443 APP_US_redacted (002)#page31.tif
source=MAA_443 APP_US_redacted (002)#page32.tif
source=MAA_443 APP_US_redacted (002)#page33.tif
source=MAA_443 APP_US_redacted (002)#page34.tif
source=MAA_443 APP_US_redacted (002)#page35.tif
source=MAA_443 APP_US_redacted (002)#page36.tif
source=MAA_443 APP_US_redacted (002)#page37.tif
source=MAA_443 APP_US_redacted (002)#page38.tif
source=MAA_443 APP_US_redacted (002)#page39.tif
source=MAA_443 APP_US_redacted (002)#page40.tif
source=MAA_443 APP_US_redacted (002)#page41.tif
source=MAA_443 APP_US_redacted (002)#page42.tif
source=MAA_443 APP_US_redacted (002)#page43.tif
source=MAA_443 APP_US_redacted (002)#page44.tif
source=MAA_443 APP_US_redacted (002)#page45.tif
source=MAA_443 APP_US_redacted (002)#page46.tif
source=MAA_443 APP_US_redacted (002)#page47.tif
source=MAA_443 APP_US_redacted (002)#page48.tif
source=MAA_443 APP_US_redacted (002)#page49.tif
source=MAA_443 APP_US_redacted (002)#page50.tif
source=MAA_443 APP_US_redacted (002)#page51.tif
source=MAA_443 APP_US_redacted (002)#page52.tif
source=MAA_443 APP_US_redacted (002)#page53.tif
source=MAA_443 APP_US_redacted (002)#page54.tif
source=MAA_443 APP_US_redacted (002)#page55.tif
source=MAA_443 APP_US_redacted (002)#page56.tif
source=MAA_443 APP_US_redacted (002)#page57.tif
source=MAA_443 APP_US_redacted (002)#page58.tif
source=MAA_443 APP_US_redacted (002)#page59.tif
source=MAA_443 APP_US_redacted (002)#page60.tif
source=MAA_443 APP_US_redacted (002)#page61.tif
source=MAA_443 APP_US_redacted (002)#page62.tif
source=MAA_443 APP_US_redacted (002)#page63.tif
source=MAA_443 APP_US_redacted (002)#page64.tif
source=MAA_443 APP_US_redacted (002)#page65.tif
source=MAA_443 APP_US_redacted (002)#page66.tif
source=MAA_443 APP_US_redacted (002)#page67.tif
source=MAA_443 APP_US_redacted (002)#page68.tif
source=MAA_443 APP_US_redacted (002)#page69.tif
source=MAA_443 APP_US_redacted (002)#page70.tif
source=MAA_443 APP_US_redacted (002)#page71.tif
source=MAA_443 APP_US_redacted (002)#page72.tif
source=MAA_443 APP_US_redacted (002)#page73.tif
source=MAA_443 APP_US_redacted (002)#page74.tif

source=MAA_443 APP_US_redacted (002)#page75.tif
source=MAA_443 APP_US_redacted (002)#page76.tif
source=MAA_443 APP_US_redacted (002)#page77.tif
source=MAA_443 APP_US_redacted (002)#page78.tif
source=MAA_443 APP_US_redacted (002)#page79.tif
source=MAA_443 APP_US_redacted (002)#page80.tif
source=MAA_443 APP_US_redacted (002)#page81.tif
source=MAA_443 APP_US_redacted (002)#page82.tif
source=MAA_443 APP_US_redacted (002)#page83.tif
source=MAA_443 APP_US_redacted (002)#page84.tif
source=MAA_443 APP_US_redacted (002)#page85.tif
source=MAA_443 APP_US_redacted (002)#page86.tif
source=MAA_443 APP_US_redacted (002)#page87.tif
source=MAA_443 APP_US_redacted (002)#page88.tif
source=MAA_443 APP_US_redacted (002)#page89.tif
source=MAA_443 APP_US_redacted (002)#page90.tif
source=MAA_443 APP_US_redacted (002)#page91.tif
source=MAA_443 APP_US_redacted (002)#page92.tif
source=MAA_443 APP_US_redacted (002)#page93.tif
source=MAA_443 APP_US_redacted (002)#page94.tif
source=MAA_443 APP_US_redacted (002)#page95.tif
source=MAA_443 APP_US_redacted (002)#page96.tif
source=MAA_443 APP_US_redacted (002)#page97.tif
source=MAA_443 APP_US_redacted (002)#page98.tif
source=MAA_443 APP_US_redacted (002)#page99.tif
source=MAA_443 APP_US_redacted (002)#page100.tif
source=MAA_443 APP_US_redacted (002)#page101.tif
source=MAA_443 APP_US_redacted (002)#page102.tif
source=MAA_443 APP_US_redacted (002)#page103.tif
source=MAA_443 APP_US_redacted (002)#page104.tif
source=MAA_443 APP_US_redacted (002)#page105.tif
source=MAA_443 APP_US_redacted (002)#page106.tif
source=MAA_443 APP_US_redacted (002)#page107.tif
source=MAA_443 APP_US_redacted (002)#page108.tif
source=MAA_443 APP_US_redacted (002)#page109.tif
source=MAA_443 APP_US_redacted (002)#page110.tif
source=MAA_443 APP_US_redacted (002)#page111.tif
source=MAA_443 APP_US_redacted (002)#page112.tif
source=MAA_443 APP_US_redacted (002)#page113.tif
source=MAA_443 APP_US_redacted (002)#page114.tif
source=MAA_443 APP_US_redacted (002)#page115.tif
source=MAA_443 APP_US_redacted (002)#page116.tif
source=MAA_443 APP_US_redacted (002)#page117.tif
source=MAA_443 APP_US_redacted (002)#page118.tif
source=MAA_443 APP_US_redacted (002)#page119.tif
source=MAA_443 APP_US_redacted (002)#page120.tif
source=MAA_443 APP_US_redacted (002)#page121.tif
source=MAA_443 APP_US_redacted (002)#page122.tif

[illegible]

State of California Secretary of State

This Certificate is not valid for use anywhere within the United States of America, its territories or possessions.

APOSTILLE (Convention de La Haye du 5 octobre 1961)			
1. Country: Pays / País:		United States of America	
This public document Le présent acte public / El presente documento público			
2. has been signed by a été signé par ha sido firmado por		Kathryn Frances Hall	
3. acting in the capacity of agissant en qualité de quien actúa en calidad de		Notary Public, State of California	
4. bears the seal / stamp of est revêtu du sceau / timbre de y está revestido del sello / timbre de		Kathryn Frances Hall, Notary Public, State of California	
Certified Attesté / Certificado			
5. at à / en		Sacramento, California	6. the le / el día
			28th day of February 2020
7. by par / por		Secretary of State, State of California	
8. No sous n° bajo el número		77171	
9. Seal / stamp: Sceau / timbre: Sello / timbre:			10. Signature: Signature: Firma:
			



This Apostille only certifies the authenticity of the signature and the capacity of the person who has signed the public document, and, where appropriate, the identity of the seal or stamp which the public document bears.
 This Apostille does not certify the content of the document for which it was issued.
 To verify the issuance of this Apostille, see: apostille.search.sos.ca.gov/.
 This certificate does not constitute an Apostille under the Hague Convention of 5 October 1961, when it is presented in a country which is not a party to the Convention. In such cases, this certificate should be presented to the consular section of the mission representing that country.

Cette Apostille atteste uniquement la véracité de la signature, la qualité en laquelle le signataire de l'acte a agi et, le cas échéant, l'identité du sceau ou timbre dont l'acte public est revêtu.
 Cette Apostille ne certifie pas le contenu de l'acte pour lequel elle a été émise.
 Cette Apostille peut être vérifiée à l'adresse suivante: apostille.search.sos.ca.gov/.
 Ce certificat ne constitue pas une Apostille en vertu de la Convention de La Haye du 5 Octobre 1961, lorsque présenté dans un pays qui n'est pas partie à cette Convention. Dans ce cas, le certificat doit être présenté à la section consulaire de la mission qui représente ce pays.

Esta Apostille certifica únicamente la autenticidad de la firma, la calidad en que el signatario del documento haya actuado y, en su caso, la identidad del sello o timbre del que el documento público está revestido.
 Esta Apostille no certifica el contenido del documento para el cual se expidió.
 Esta Apostille se puede verificar en la dirección siguiente: apostille.search.sos.ca.gov/.
 Este certificado no constituye una Apostilla en virtud del Convenio de La Haya de 5 de octubre de 1961 cuando se presenta en un país que no es parte en el Convenio. En estos casos, el certificado debe ser presentado a la sección consular de la misión que representa a ese país.

orState Form NP-45 SAC (rev. 09/2019)

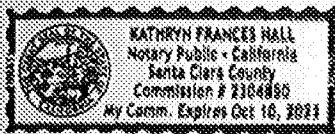
CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

CIVIL CODE §1189

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)
County of Santa Clara)

On February 24, 2020 before me, Kathryn Frances Hall, Notary Public, personally appeared Leticia R. Block, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.



I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature

Kathryn Frances Hall

OPTIONAL

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of the attached document

Title or Type of Document: _____
Document Date: _____

Number of Pages: _____ Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____

☐ Corporate Officer - Title(s): _____
☐ Partner - ☐ Limited ☐ General
☐ Individual ☐ Attorney in Fact
☐ Trustee ☐ Guardian or Conservator
☐ Other: _____

Signer is Representing: _____

Signer's Name: _____
☐ Corporate Officer - Title(s): _____

☐ Partner - ☐ Limited ☐ General
☐ Individual ☐ Attorney in Fact
☐ Trustee ☐ Guardian or Conservator
☐ Other: _____

Signer is Representing: _____

STATEMENT OF TRUE COPY

I, Leticia R. Block, hereby state that the attached document is a true copy of the original assignment executed by and between Apple Inc. and Intel Corporation.

Leticia R. Block

Leticia R. Block

Date: 02-24-2020

PATENT ASSIGNMENT

This PATENT ASSIGNMENT, dated as of November 30, 2019 (this "Assignment"), is by and between Apple Inc., a California corporation, with an address at One Apple Park Way, Cupertino, CA 95014 (the "Assignee") and Intel Corporation, a Delaware corporation, with an address at 2200 Mission College Boulevard, Santa Clara, CA 95054 (the "Assignor"). Each of the Assignee and the Assignor are referred to herein as a "Party." Unless otherwise specifically provided herein, each capitalized term used but not defined herein shall have the meaning given to such term in the Purchase Agreement (as defined below).

RECITALS

WHEREAS, the Assignee and Intel are parties to that certain Master Asset Purchase Agreement, dated as of July 25, 2019 (as it may be amended from time to time) (the "Purchase Agreement"), by and among the Assignee and Intel; and

WHEREAS, pursuant to the Purchase Agreement, Intel has agreed to, and has agreed to cause certain of its Affiliates to, assign, transfer and convey to the Assignee all of Intel's and certain of its Affiliates' right, title, and interest in and to the Transferred Patents, and the Assignee has agreed to purchase the Transferred Patents.

AGREEMENT

NOW, THEREFORE, in consideration of the premises and the mutual promises and conditions hereinafter set forth and set forth in the Purchase Agreement and the Ancillary Agreements, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties, intending to be legally bound, do hereby agree as follows:

1. Conveyance and Acceptance. In accordance with and subject to the provisions of the Purchase Agreement, the Assignor hereby sells, assigns, transfers, conveys and delivers to the Assignee, and the Assignee hereby purchases, all of the Assignor's right, title and interest in and to, the Transferred Patents, including those Patents set forth on Schedule 1 hereto, along with any and all rights to sue and recover for past, present and future infringement, misappropriation, misuse or violation with respect to the Transferred Patents, together with all rights under international treaties relating to the Transferred Patents. The foregoing rights include the right to claim priority to the Transferred Patents. Without limiting the foregoing, with respect to any Transferred Patents that are registered to or otherwise in the name of an Affiliate of the Assignor, including as indicated on Schedule 1 hereto, the Assignor shall cause such Affiliate to effect the assignment of such Transferred Patents to the Assignee in accordance herewith and subject to the terms and conditions hereof, it being understood and agreed that the Assignee shall own such Transferred Patents as if assigned to it by the Assignor hereunder as of the date hereof.
2. Acknowledgement. To the extent that Schedule 1 hereto contains any typographical or administrative error but it is clear which patent or patent application was intended to be included in the sale, assignment, transfer and conveyance under this Assignment, the Assignor and the Assignee each acknowledge and agree that the intended patent or patent application is hereby

sold, assigned, transferred and conveyed, along with all other rights, privileges and claims enumerated above with respect to such intended patent or patent application.

3. Recordation. The Assignor hereby authorizes the Commissioner of Patents and Trademarks in the United States Patent and Trademark Office, and the corresponding entities or agencies in any applicable foreign countries or multinational authorities, to record the Assignee as the assignee and owner of the Transferred Patents and to deliver to the Assignee, and to the Assignee's attorneys, agents, successors or assigns, all official documents and communications as may be warranted by this Assignment.

4. Disclaimer of Representations and Warranties. EXCEPT AS AND SOLELY TO THE EXTENT SET FORTH IN THE PURCHASE AGREEMENT, THE ASSIGNEE (ON BEHALF OF ITSELF AND EACH OF ITS SUBSIDIARIES) UNDERSTANDS AND AGREES THAT THE ASSIGNOR (ON BEHALF OF ITSELF AND ITS AFFILIATES) MAKES NO REPRESENTATIONS OR WARRANTIES IN ANY WAY PURSUANT TO OR IN CONNECTION WITH THIS ASSIGNMENT.

5. Purchase Agreement Controls. This Assignment is and shall be subject to and governed entirely by and in accordance with the terms and conditions of the Purchase Agreement. Notwithstanding any other provision of this Assignment to the contrary, nothing contained herein shall in any way supersede, modify, replace, amend, change, rescind, waive, exceed, expand, enlarge or in any way affect the provisions of the Purchase Agreement, including any representation, warranty, covenant, agreement, obligation or condition contained therein or the rights or remedies contemplated thereby. To the extent this Assignment conflicts with the Purchase Agreement, the Purchase Agreement will control.

6. Governing Law; Dispute Resolution.

(a) This Assignment, and all claims or causes of action based upon, arising out of, or related to this Assignment or the transactions contemplated hereby, shall be governed by and construed in accordance with the Laws of the State of Delaware applicable to contracts executed and to be performed wholly within such State and without reference to the choice-of-law principles that would result in the application of the Laws of a different jurisdiction.

(b) Sections 11.3(b) and 11.3(c) of the Purchase Agreement are hereby incorporated by reference, *mutatis mutandis*.

7. Further Assurances. The Assignor shall, and shall cause their Affiliates to, from time to time at the request of the Assignee, without any additional consideration, furnish the Assignee such further information or assurances, execute and deliver such additional documents, instruments and conveyances, and take such other actions and do such other things, as may be reasonably necessary or appropriate to carry out the provisions of this Assignment and give effect to the assignments herein, including all acts reasonably necessary to perfect, record or effectuate the assignment to the Assignee of ownership of the Transferred Patents.

8. Counterparts. This Assignment may be executed in multiple counterparts, and by any of the Parties in separate counterparts, each of which when executed shall be deemed to be an original but all of which taken together shall constitute one and the same Assignment. Delivery

of an executed counterpart of a signature page to this Assignment by .pdf, .tif, .gif or similar attachment to electronic mail shall be as effective as delivery of a manually executed counterpart of this Assignment.

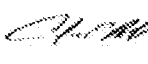
[Signature Page Follows]

00932.0X-PATSUB1A

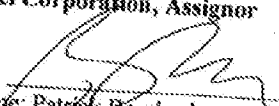
3

M3W - Draft November 27, 2019 - 4:47 PM

IN WITNESS WHEREOF, the Parties have each caused this Assignment to be duly executed as of the date first written above.

LEGAL OK	
	11/30/2019
Carlos Rivas	

Intel Corporation, Assignor

By: 
Name: Patrick Bombach
Title: Authorized Signatory

STATE OF _____)
COUNTY OF _____) ss.

On this _____ day of _____, 2019 before me _____

Personally appeared _____, proved to me on the basis of satisfactory evidence to the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of _____ that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature of Notary Public

[Signature Page to Patent Assignment]

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

CIVIL CODE § 1169

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)
 County of Santa Clara)
 On November 30, 2019 before me, Kevin Marston, Notary Public
 Date Here Insert Name and Title of the Officer
 personally appeared Patrick Bombach
 Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.



Signature Kevin Marston
 Signature of Notary Public

Place Notary Seal Above

OPTIONAL

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title or Type of Document: _____
 Document Date: _____ Number of Pages: _____
 Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____	Signer's Name: _____
☐ Corporate Officer — Title(s): _____	☐ Corporate Officer — Title(s): _____
☐ Partner — ☐ Limited ☐ General	☐ Partner — ☐ Limited ☐ General
☐ Individual ☐ Attorney in Fact	☐ Individual ☐ Attorney in Fact
☐ Trustee ☐ Guardian or Conservator	☐ Trustee ☐ Guardian or Conservator
☐ Other: _____	☐ Other: _____
Signer is Representing: _____	Signer is Representing: _____

AGREED TO AND ACCEPTED:

Apple Inc., Assignee

By: [Signature]
Name: ADRIAN E. PERICA
Title: VP

STATE OF CALIFORNIA)
COUNTY OF SANTA CLARA) ss.

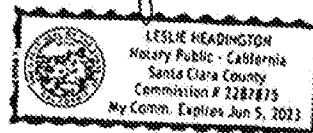
On this 2 day of DEC, 2019 before me LESLIE HEADINGTON, NOTARY PUBLIC

Personally appeared ADRIAN PERICA, proved to me on the basis of satisfactory evidence to the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/~~she~~/they executed the same in his/~~her~~/their authorized capacity(ies), and that by his/~~her~~/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of CA that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

[Signature]
Signature of Notary Public



[Signature Page to Patent Assignment]

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
9957										
9958										
9959										
9960										
9961										
9962										
9963										
9964										
9965										
9966										
9967										
9968										
9969										
9970										
9971										
9972										
9973										
9974										
9975										
9976										
9977										
9978										
9979										
9980										
9981										
9982	TECHNIQUES TO PERFORM A RANDOM ACCESS CHANNEL PROCEDURE FOR HANDOVERS IN A WIRELESS COMMUNICATION ENVIRONMENT			PCT	APP-Pending	US	16/464768		US-2019-0313300-A1	
9983	CIRCUIT AND A METHOD FOR OPERATING A CIRCUIT			NP	APP-Pending	US	15/937966		US-2019-0305732-A1	
9984	UE (User Equipment) Assisted Measurement Gap in NR (New Radio)			NP	APP-Pending	US	16/136813		US-2019-0097877-A1	
9985	GENERATION NODE-B (GNB) USER EQUIPMENT (UE) AND METHODS FOR INTERLEAVING IN MULTIPLE-INPUT MULTIPLE-OUTPUT (MIMO) ARRANGEMENTS			PCT	APP-Pending	US	16/475753		US-2019-0334585-A1	
9986	SYSTEMS METHODS AND DEVICES FOR MEETING CELLULAR DATA TURNAROUND TIME			PCT	APP-Pending	US	16/475637		US-2019-0327024-A1	
9987	CONNECTION POINT RELATED PERFORMANCE MEASUREMENTS IN A NETWORK FUNCTION VIRTUALIZATION ENVIRONMENT			NP	APP-Pending	US	16/126162		US-2019-0044838-A1	
9988	POWER HEADROOM OF GRANTLESS UPLINK			NP	APP-Pending	US	15/139443		US-2019-0045459-A1	
9989	NEXT GENERATION NODE-B (GNB) AND METHODS FOR MOBILITY MANAGEMENT WITH SEPARATE USER PLANE AND CONTROL PLANE IN NEW RADIO (NR) SYSTEMS			NP	APP-Pending	US	16/141440		US-2019-0055027-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
9990	DEVICE REQUESTED PROTOCOL DATA UNIT SESSION MODIFICATION IN THE 5G SYSTEM			NP	APP-Pending	US	16/158486		US-2019-0118512-A1	
9991	Activation of Secondary Cell containing Bandwidth Parts			NP	APP-Pending	US	16/142488		US-2019-0045491-A1	
9992	Bandwidth Part Signaling and Measurement Handling			NP	APP-Pending	US	16/146009		US-2019-0044689-A1	
9993	SYSTEMS METHODS AND APPARATUSES FOR PROVIDING AND OBTAINING SCHEDULING INFORMATION FOR SIB3-RP DURING HANDOVER			NP	APP-Pending	US	16/142115		US-2019-0045419-A1	
9994	SIGNALING RADIO BEARER TYPE 3 (SRB3) AND SECONDARY CELL GROUP (SCG) FAILURE HANDLING			NP	APP-Pending	US	16/132596		US-2019-0045568-A1	
9995	VEHICLE TO EVERYTHING SYNCHRONIZATION REFERENCE SELECTION AND RESELECTION			NP	APP-Pending	US	16/148785		US-2019-0045470-A1	
9996	EVOLVED NODE-B (ENB) FOR MANAGEMENT OF LONG TERM EVOLUTION (LTE) WIRELESS LOCAL AREA NETWORK (WLAN) AGGREGATION (LWA) AND LTE WLAN INTERNET PROTOCOL (LWIP)			NP	APP-Pending	US	16/151018		US-2019-0045950-A1	
9997	RADIO LINK MONITORING (RLM) EVALUATION MECHANISM FOR NEW RADIO (NR) SYSTEMS			NP	APP-Pending	US	16/154767		US-2019-0052380-A1	
9998	MULTI-CARRIER OPERATION FOR ENHANCED MACHINE TYPE COMMUNICATIONS IN UNLICENSED MEDIUM (EMTC-U)			NP	APP-Pending	US	16/160950		US-2019-0053064-A1	
9999	APPARATUSES FOR SELECTING COMMUNICATION BEAMS BASED ON NORMALIZED TIME OF ARRIVAL (TOA) OF REFERENCE SIGNALS			NP	APP-Pending	US	16/163379		US-2019-0053234-A1	
10000	ENABLING NETWORK SLICING IN A 5G NETWORK WITH CPE/UP SEPARATION			NP	APP-Pending	US	16/175084		US-2019-0075652-A1	
10001	ESTABLISHMENT OF RANDOM ACCESS CHANNEL COMMUNICATIONS			PCT	APP-Pending	US	16/476180		US-2019-0357277-A1	
10002	FILTER COEFFICIENT CONFIGURATION IN NEW RADIO SYSTEMS			NP	PAT-Active	US	16/162543	#####	US-2019-0058508-A1	
10003	FILTER COEFFICIENT CONFIGURATION IN NEW RADIO SYSTEMS			CNT	APP-Pending	US	16/407126			
10004	TRANSPORT NETWORK LAYER ASSOCIATIONS ON THE F1 INTERFACE			NP	APP-Pending	US	16/182016		US-2019-0075023-A1	
10005	TRANSPORT NETWORK LAYER ASSOCIATIONS ON THE F1 INTERFACE			CNT	APP-Pending	US	16/408296			
10006	METHODS AND DEVICES FOR RADIO RESOURCE ALLOCATION			NP	APP-Pending	US	15/937943		US-2019-0303903-A1	
10007	FLEXIBLE FLOW CONTROL MECHANISM FOR NG-RAN INTERFACES			NP	APP-Pending	US	16/191760		US-2019-0156224-A1	
10008	SEMI-PERSISTENT SCHEDULING FOR AUTONOMOUS TRANSMISSION ACTIVATION AND RELEASE			PCT	APP-Pending	US	15/476038		US-2019-0349508-A1	
10009	SYSTEMS METHODS AND DEVICES FOR USING S-MEASURE WITH NEW RADIO			NP	PAT-Active	US	16/173386	#####	US-2019-0074887-A1	
10010	SYSTEMS METHODS AND DEVICES FOR USING S-MEASURE WITH NEW RADIO			CNT	APP-Pending	US	16/448951			
10011	ANCHOR CHANNEL DESIGN FOR UNLICENSED INTERNET OF THINGS (IOT)			PCT	APP-Pending	US	16/465978			
10012	TRANSMISSION OF GROUP COMMON PDCCH (PHYSICAL DOWNLINK CONTROL CHANNEL) FOR NR (NEW RADIO)			PCT	APP-Pending	US	16/464814		US-2019-0345904-A1	
10013	RESOURCE MAPPING AND MULTIPLEXING OF UPLINK CONTROL CHANNEL AND UPLINK DATA CHANNEL			PCT	APP-Pending	US	16/476040		US-2019-0335449-A1	
10014	CONCATENATION OF SERVICE DATA UNITS ABOVE A PACKET DATA CONVERGENCE PROTOCOL LAYER			PCT	APP-Pending	US	16/475817			
10015	GENERATION NODE-B (GNB) USER EQUIPMENT (UE) AND METHODS FOR HANDOVER BASED ON MULTI-CONNECTIVITY IN NEW RADIO (NR) SYSTEMS			PCT	APP-Pending	US	16/479176			

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
10016	USER EQUIPMENT (UE) INVOLVED NODE-B (NB) AND METHODS OF PAGING IN ACCORDANCE WITH A RELAY ARRANGEMENT			PCT	APP-Pending	US	16/487778			
10017	CONTROL RESOURCE BLOCK SET SEARCH SPACE DESIGN			PCT	APP-Pending	US	16/473558		US-2019-035049-A1	
10018	PHYSICAL DOWNLINK CONTROL CHANNEL (PDCCH) DEMODULATION REFERENCE SIGNAL (DMRS) TRANSMISSION AND RECEPTION			PCT	APP-Pending	US	16/478456			
10019	TECHNIQUES FOR CONTROLLING SPECIFIC ABSORPTION RATE OF RADIO ENERGY TRANSMISSION			NP	APP-Pending	US	16/381354		US-2019-0345017-A1	
10020	SYSTEM INFORMATION ACQUISITION ENHANCEMENTS FOR WIRELESS DEVICES			PCT	APP-Pending	US	16/480837			
10021	EXIT CONDITIONS FOR CONDITIONAL HANDOVERS AND BEAM-BASED MOBILITY STATE ESTIMATION			PCT	APP-Pending	US	16/479482			
10022	SINGLE REGISTRATION MODE SUPPORT FOR INTERWORKING BETWEEN 5GC AND EPC			NP	PAT-Active	US	16/195147	#####	US-2019-0156157-A1	
10023	PHASE MODULATION SYSTEMS AND METHODS			NP	APP-Pending	US	16/035148			
10024	BUFFER STATUS REPORT ENHANCEMENTS FOR TCP FLOW			PCT	APP-Pending	US	16/481792			
10025	ELECTROMAGNETIC INTERFERENCE SHIELDING FOR A CIRCUIT BOARD			NP	APP-Pending	US	16/146503			
10026	APPARATUS DEVICE METHOD AND COMPUTER PROGRAM FOR CALIBRATING A TIME-INTERLEAVED ANALOG-TO-DIGITAL CONVERTER			PSP	APP-Pending	US	62/826030			
10027	Mobile Communication System User Equipment Base Station Base Band Circuitry Methods Machine Readable Media and Computer Programs to Communicate in a Mobile Communication System			NP	APP-Pending	US	16/243206		US-2019-0215701-A1	
10028	DETERMINATION OF NEW RADIO (NR) PHYSICAL UPLINK CONTROL CHANNEL (PUCCH) RESOURCE FOR HYBRID AUTOMATIC REPEAT REQUEST ACKNOWLEDGEMENT (HARQ-ACK) FEEDBACK			PCT	APP-Pending	US	16/482758			
10029	Techniques for Improved Beam Management			PCT	APP-Pending	US	16/487155			
10030	MONITORING CONTROL CHANNELS IN CONTROL RESOURCE SETS FOR NEW RADIO			PCT	APP-Pending	US	16/463971			
10031	TRANSMISSION OF SYNCHRONIZATION SIGNALS			PCT	APP-Pending	US	16/490884			
10032	DESIGN OF DOWNLINK CONTROL INFORMATION FOR WIDEBAND COVERAGE ENHANCEMENT			PCT	APP-Pending	US	16/484438			
10033	CHANNEL QUALITY INDICATOR TABLE DESIGN FOR WIDEBAND COVERAGE ENHANCEMENT IN MULTIFIRE SYSTEMS			PCT	APP-Pending	US	16/493739			
10034	Method for Interference Measurement in New Radio (NR) Communication Systems			PCT	APP-Pending	US	16/488039			
10035	Beam Recovery Frame Structure and Recovery Request for Communication Systems			PCT	APP-Pending	US	16/483252			
10036	Techniques for Employing Polar Code in Connection with NR (New Radio)			PCT	APP-Pending	US	16/488309			
10037	PARTIAL UPLINK SUBFRAME TRANSMISSIONS ON UNLICENSED CARRIERS			PCT	APP-Pending	US	16/465121		US-2019-0327117-A1	
10038	Design of Cell Specific Reference Signal (CRS) Muting for Even Further Enhanced Machine Type Communication (eMTC)			PCT	APP-Pending	US	16/487226			
10039	BEAM MANAGEMENT PROCEDURE TRIGGERING AND SIGNALING DELIVERY IN FALL-BACK MODE			PCT	APP-Pending	US	16/488913			
10040	MAXIMUM CHANNEL OCCUPANCY TIME SHARING AND CO-EXISTENCE			PCT	APP-Pending	US	16/490260			
10041	COMMON SEARCH SPACE DESIGN IN ENHANCED PHYSICAL DOWNLINK CONTROL CHANNEL			PCT	APP-Pending	US	16/490263			
10042	BANDWIDTH PART CONFIGURATION AND OPERATION FOR NEW RADIO (NR) WIDEBAND USER EQUIPMENT (UE)			PCT	APP-Pending	US	16/484802			
10043	TIMING ADVANCE FOR GRANTLESS UPLINK TRANSMISSION			PCT	APP-in-Preparation	US				
10044	NR RRC CONNECTION SETUP OPTIMISATION			NP	APP-Pending	US	16/242715		US-2019-0215887-A1	
10045	RESOLVING BIDIRECTIONAL ATTACKS FOR MULTI-CONNECTIVITY			NP	PAT-Active	US	16/245837	#####	US-2019-0145997-A1	
10046	ENHANCING F1 APPLICATION PROTOCOL (F1-AP) INTERFACES IN A MULTI-HOP RELAY NETWORK WITH CENTRALIZED UNIT (CU) AND DISTRIBUTED UNIT (DU)			NP	APP-Pending	US	16/254172		US-2019-0158277-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
10042	Resource Set Configurations Using Automatic Repeat Request Information			NP	APP-Pending	US	16/245552		US-2019-0146275-A1	
10048	NEXT GENERATION NODE-B (GNB) AND METHODS TO INDICATE A TYPE OF ACCESS FOR PAGING OF A USER EQUIPMENT (UE)			NP	APP-Pending	US	16/245089		US-2019-0191909-A1	
10049	NEXT GENERATION NODE-B (GNB) AND METHODS TO INDICATE A TYPE OF ACCESS FOR PAGING OF A USER EQUIPMENT (UE)			ENT	APP-Pending	US	16/408265		US-2019-0305418-A1	
10050	PADDING BITS FOR CSI REPORT CODING			NP	APP-Pending	US	16/245825		US-2019-0146266-A1	
10051	Transmission Downlink Control Information for New Radio (NR) System			NP	APP-Pending	US	16/247187		US-2019-0223160-A1	
10052	SCHEDULING AND HYBRID AUTOMATIC REPEAT REQUEST OPERATION FOR CARRIER AGGREGATION WITH MIXED NUMEROLOGIES			PCT	APP-Pending	US	15/466530			
10053	USER EQUIPMENT (UE) AND METHODS FOR VEHICLE-TO-VEHICLE (V2V) SIDELINK COMMUNICATION IN ACCORDANCE WITH A SHORT TRANSMISSION TIME INTERVAL (TTI)			PCT	APP-Pending	US	16/496321			
10054	CARRIER AGGREGATION AND HIGH ORDER MODULATION IN VEHICLE-TO-VEHICLE (V2V) SIDELINK COMMUNICATION			PCT	APP-Pending	US	16/496346			
10055	PRIORITIZED MESSAGING AND RESOURCE SELECTION IN VEHICLE-TO-VEHICLE (V2V) SIDELINK COMMUNICATION			PCT	APP-Pending	US	16/488552			
10056	NARROWBAND INTERNET-OF-THINGS (NB-IOT) ENHANCEMENTS			PCT	APP-Pending	US	16/473586			
10057	WAKE UP SIGNAL FOR MACHINE TYPE COMMUNICATION AND NARROWBAND-INTERNET-OF-THINGS DEVICES			PCT	APP-Pending	US	16/495778			
10058	DESIGN OF EARLY TERMINATION SIGNAL AND HARQ-ACK FEEDBACK FOR PUSCH			PCT	APP-Pending	US	16/496882			
10059	SUB-PRIOR RESOURCE ALLOCATION FOR PUSCH IN EVEN FURTHER ENHANCED MTC			PCT	APP-Pending	US	16/488200			
10060	ENHANCED CELL SEARCH AND SYSTEM INFORMATION ACQUISITION			PCT	APP-Pending	US	16/496363			
10061	CONTROL SIGNALING FOR DEMODULATION REFERENCE SIGNAL ANTENNA PORT INDICATION			PCT	APP-Pending	US	16/488563			
10062	DM-RS GROUPING AND CSI REPORTING FOR COMP			PCT	APP-Pending	US	16/496753			
10063	REG BUNDLING SIZE AND DM-RS PATTERN FOR PHYSICAL DOWNLINK CONTROL CHANNEL			PCT	APP-Pending	US	16/467185			
10064	CQI AND PMI OFFSET FOR UNLICENSED EMBT TRANSMISSION			NP	APP-Pending	US	16/259715		US-2019-0229794-A1	
10065	UPLINK NON-ORTHOGONAL MULTIPLE ACCESS TRANSMISSION SCHEME			NP	APP-Pending	US	16/264243		US-2019-0173616-A1	
10066	CONTROL SIGNALING OF BEAM FAILURE DETECTION			NP	APP-Pending	US	16/267721		US-2019-0173740-A1	
10067	CONTROL SIGNALING OF BEAM FAILURE DETECTION			ENT	APP-Pending	US	16/408037			
10068	DESIGN OF SCHEDULING REQUEST FOR FURTHER ENHANCED NARROWBAND-INTERNET-OF-THINGS (eNB-IoT)			PCT	APP-Pending	US	16/479188			
10069	NEW RADIO (NR) SHORT AND LONG DURATION PHYSICAL UPLINK CONTROL CHANNEL (PUCCH) DESIGN			PCT	APP-Pending	US	16/496904			
10070	ADVANCED RADIO RESOURCE MANAGEMENT IN NEXT-GEN MULTI-HOP RELAYING CELLULAR NETWORK			PCT	APP-Pending	US	16/487944			
10071	ENHANCED CONDITIONAL HANDOVER			PCT	APP-Pending	US	16/488175			
10072	EVOLVED NODE-B (ENB) USER EQUIPMENT (UE) AND METHODS OF SWITCHING BETWEEN DIRECT AND INDIRECT COMMUNICATION FOR A RELAY ARRANGEMENT			PCT	APP-Pending	US	16/477454		US-2019-0357101-A1	
10073	SYSTEMS AND METHODS FOR GROUP BASED SERVICES PROVISIONING			PCT	APP-Pending	US	16/479557			
10074	GROUP BASED CONTEXT AND SECURITY FOR MASSIVE INTERNET OF THINGS DEVICES			PCT	APP-Pending	US	16/480267			
10075	MINIMIZATION OF PADDING AND RESOURCE WASTAGE IN MESSAGES 3 (MSG3) FOR EARLY DATA TRANSMISSION (EDT)			NP	APP-Pending	US	16/254988		US-2019-0169197-A1	
10076	NR (New Radio) PRACH (Physical Random Access Channel) Configuration and Multi-Beam Operation			PCT	APP-Pending	US	16/473382			

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
10077	METHODS TO SIGNAL ANTENNA PANEL CAPABILITY OF USER EQUIPMENT (UE) FOR CARRIER AGGREGATION (CA) IN MILLIMETER-WAVE (MMWAVE) FREQUENCY BANDS			NP	APP-Pending	US	16/276824		US-2019-0182898-A1	
10078	DYNAMIC ADAPTATION OF MAXIMUM PACKET LOSS RATE (PLR) FOR SINGLE RADIO VOICE CALL CONTINUITY (SRVCC) HANDOVER OPTIMIZATION USING SESSION DESCRIPTION PROTOCOL (SDP)			NP	APP-Pending	US	16/274981		US-2019-0182741-A1	
10079	MANAGING BEARERS IN A RADIO ACCESS NETWORK			NP	APP-Pending	US	16/277668		US-2019-0182211-A1	
10080	MANAGING BEARERS IN A RADIO ACCESS NETWORK			CNT	APP-Pending	US	16/408028			
10081	METHODS TO HANDLE SCHEDULING REQUESTS FOR ULTRA-RELIABLE LOW LATENCY COMMUNICATION (URLLC) IN NEW RADIO (NR) SYSTEMS			NP	APP-Pending	US	16/273802		US-2019-0182896-A1	
10082	TECHNIQUES TO ENABLE PHYSICAL DOWNLINK CONTROL CHANNEL COMMUNICATIONS			PCT	APP-Pending	US	16/488153			
10083	RELIABILITY MECHANISMS FOR PHYSICAL DOWNLINK CONTROL CHANNEL (PDCCH) TRANSMISSIONS IN NEW RADIO (NR) SYSTEMS			NP	APP-Pending	US	16/277680		US-2019-0182807-A1	
10084	DOWNLINK CONTROL INFORMATION FORMAT FOR ULTRA-RELIABLE PHYSICAL DOWNLINK CONTROL CHANNEL			CIP	APP-Pending	US	16/409427		US-2019-0274092-A1	
10085	TRANSPORT BLOCK SELECTION FOR 1024 QUADRATURE AMPLITUDE MODULATION (QAM)			NP	APP-Pending	US	16/277901		US-2019-0260440-A1	
10086	TRANSPORT BLOCK SELECTION FOR 1024 QUADRATURE AMPLITUDE MODULATION (QAM)			CNT	APP-Pending	US	16/408160		US-2019-0341983-A1	
10087	STEERING OF ROAMING IN 5G SYSTEMS			NP	APP-Pending	US	16/276968		US-2019-0182855-A1	
10088	ENVELOPE DETECTOR-BASED FEEDBACK FOR RADIO FREQUENCY (RF) TRANSMITTERS			NP	PAT-Active	US	16/018731	#####		
10089	Conformally Shielded Power Inductor and Other Passive Devices for 4/5G Envelope Tracker Modules and/or Other Power Management Modules			NP	APP-Pending	US	16/299601		US-2019-0297757-A1	
10090	MANAGEMENT OF 5G NR IN NETWORK FUNCTIONS			PCT	APP-Pending	US	16/499044			
10091	VIRTUALIZATION FRAMEWORK			PCT	APP-Pending	US	16/499067			
10092	ACCESS CONTROL MECHANISM			PCT	APP-Pending	US	16/499067			
10093	COMMON AND USER EQUIPMENT (UE)-SPECIFIC PHYSICAL UPLINK CONTROL CHANNEL (PUCCH) CONFIGURATION			NP	APP-Pending	US	16/293348		US-2019-0235286-A1	
10094	MANAGEMENT SERVICES FOR 5G NETWORKS AND NETWORK FUNCTIONS			NP	APP-Pending	US	16/297017			
10095	SIGNAL IMBALANCE DETECTION SYSTEMS AND METHODS			NP	APP-Pending	US	16/144092			
10096	BEAM INDICATION INFORMATION TRANSMISSION			NP	APP-Pending	US	16/352255		US-2019-0235093-A1	
10097	BEAM INDICATION INFORMATION TRANSMISSION			CNT	APP-Pending	US	16/408319			
10098	PHYSICAL DOWNLINK CONTROL CHANNEL (PDCCH) BLIND DECODING IN FIFTH GENERATION (5G) NEW RADIO (NR) SYSTEMS			NP	APP-Pending	US	16/361981		US-2019-0223164-A1	
10099	Inter-cell beam management			NP	APP-Pending	US	16/358138		US-2019-0222286-A1	
10100	SYSTEM AND METHOD OF MANAGING PNF CONNECTIVITY IN A NETWORK SLICE INSTANCE			NP	APP-Pending	US	16/296971		US-2019-0208553-A1	
10101	DEVICES AND METHODS FOR NEXT GENERATION TECHNOLOGY INDICATORS			NP	APP-Pending	US	16/053926			
10102	GAP PATTERN DESIGN FOR NEW RADIO (NR) SYSTEMS			PCT	APP-Pending	US	16/499747			
10103	ANCHOR CHANNEL DESIGN FOR UNLICENSED INTERNET OF THINGS (IoT)			PCT	APP-Pending	US	16/496375			
10104	HYBRID AUTOMATIC REPEAT REQUEST (HARQ) FOR GRANT-LESS UPLINK (GLU) AND SCHEDULED UPLINK (SUL) IN LICENSED ASSISTED ACCESS (LAA) SYSTEMS			PCT	APP-Pending	US	16/484544			
10105	PHYSICAL DOWNLINK CONTROL CHANNELS (PDCCH) AND ENHANCED PDCCHS (EPDCCH) IN WIDEBAND COVERAGE ENHANCEMENT (WCE) ARRANGEMENTS			PCT	APP-Pending	US	16/497750			
10106	TRANSPORT BLOCK DECODING OPERATION FOR HYBRID TRANSMISSION TIME INTERVAL (TTI) LENGTHS IN WIRELESS COMMUNICATION SYSTEMS			PCT	APP-Pending	US	16/497484			

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
10106	UPLINK CONTROL INFORMATION (UCI) TRANSMISSION AND HYBRID AUTOMATIC REPEAT REQUEST (HARQ) PROCESS IDENTIFICATION FOR GRANT-FREE PHYSICAL UPLINK SHARED CHANNEL (PUSCH)			PCT	APP-Pending	US	16/465977			
10107	COLLISION HANDLING OF REFERENCE SIGNALS			PCT	APP-In-Preparation	US				
10108	Codebook subset restriction for CSI			PCT	APP-Pending	US	16/609204			
10109	System and Method for Phase Noise Compensation			PCT	APP-Pending	US	16/500937			
10110	RS (Reference Signal) Sequence Generation and Mapping and Precoder Assignment for NR (New Radio)			PCT	APP-Pending	US	16/500971			
10111	SUPPORT OF FLEXIBLE PDCCH MONITORING IN NEW RADIO (NR)			PCT	APP-Pending	US	16/462544		US-2019-0305737-A1	
10112	INTERFERENCE COORDINATION FOR NETWORKS SERVING AERIAL VEHICLES			PCT	APP-Pending	US	16/609171			
10113	MULTI-RE DESIGN OF RANDOM ACCESS CHANNEL AND RANDOM ACCESS CHANNEL PROCEDURE FOR INTERNET OF THINGS DEVICE OPERATION IN UNLICENSED SPECTRUM			PCT	APP-Pending	US	16/604047			
10114	SIGNALING OF A CHANNEL STATE INFORMATION REFERENCE SIGNAL (CSI-RS) MAPPING CONFIGURATION FOR A NEW RADIO (NR) SYSTEM			PCT	APP-Pending	US	16/463953			
10115	DOWNLINK CONTROL INFORMATION (DCI) FORMAT FOR GRANT-LESS UPLINK TRANSMISSION (GLUL)			PCT	APP-Pending	US	16/605784			
10116	GRANTLESS UPLINK (GLUL) CONFIGURATION			PCT	APP-Pending	US	16/465996			
10117	EMTC-U MEASUREMENT			PCT	APP-Pending	US	16/611638			
10118	RESOURCE ELEMENT (RE) MAPPING IN NEW RADIO (NR)			PCT	APP-Pending	US	16/477376			
10119	SOUNDING REFERENCE SIGNAL SEQUENCE DESIGN			PCT	APP-Pending	US	16/612331			
10120	CHANNEL DESIGN FOR ENHANCED MACHINE TYPE COMMUNICATION IN AN UNLICENSED SPECTRUM (eMTC-U) SYSTEM			PCT	APP-Pending	US	16/603914			
10121	METHOD AND APPARATUS FOR COMMUNICATION IN LTE SYSTEM ON UNLICENSED SPECTRUM			PCT	APP-Pending	US	16/483561			
10122	Fading and Essential System Information Block (SIB) Transmission in the Unlicensed Internet of Things (U-IOT) System			PCT	APP-Pending	US	16/478246			
10123	ENHANCEMENT ON SCHEDULING AND HARQ-ACK FEEDBACK FOR URLLC MULTIPLEXING SCHEME FOR CONTROL/DATA CHANNEL AND DM-RS FOR NR AND ACTIVATION MECHANISM SCHEDULING ASPECTS AND SYNCHRONIZATION SIGNAL (SS) BLOCKS FOR NEW RADIO (NR) SYSTEM WITH MULTIPLE BANDWIDTH PARTS (BWPs)			PCT	APP-Pending	US	16/466446			
10124	FREQUENCY DOMAIN RESOURCE ALLOCATION FOR DOWNLINK (DL) AND UPLINK (UL) IN NEW RADIO (NR)			PCT	APP-Pending	US	16/616487			
10125	CHANNEL STATE INFORMATION CONCATENATION AND ANTENNA PORT MEASUREMENT			PCT	APP-Pending	US	16/479195		US-2019-0349157-A1	
10126	QUASI CO-LOCATION (QCL) FOR ANTENNA PORTS IN NEW RADIO (NR)			PCT	APP-Pending	US	16/479556			
10127	New Radio (NR) Physical Uplink Structures and Schemes			PCT	APP-Pending	US	16/478224			
10128	CONFIGURABILITY AND SIGNALING FOR HALF-TONE SHIFT HANDLING COLLISION FOR MINI-SLOT-BASED AND SLOT-BASED TRANSMISSION			PCT	APP-Pending	US	16/614106			
10129	POWER RAMPING AND CONTROL IN NEW RADIO (NR) DEVICES			PCT	APP-In-Preparation	US	16/500772			
10131	SYSTEM AND METHOD FOR PHASE TRACKING REFERENCE SIGNAL (PT-RS) MULTIPLEXING			PCT	APP-Pending	US	16/465994		US-2019-0296877-A1	
10132	CONCURRENT TRANSMISSION OF ACKNOWLEDGMENT AND SCHEDULING REQUEST INFORMATION ON A CONTROL CHANNEL			PCT	APP-Pending	US	16/500890			
10133	TIME ADVANCE ADJUSTMENT DELAY FOR SHORTENED TRANSMISSION TIME INTERVAL UNDER CARRIER AGGREGATION OR DUAL CONNECTIVITY			PCT	APP-Pending	US	16/462877			
10134	PDCP PACKET-BASED DDDS FRAME TRANSMISSION			NP	APP-Pending	US	16/299389		US-2019-0246310-A1	
10135	Performance Measurements Related to Virtualized Resources			PCT	APP-Pending	US	16/464840			
10136	DEVICES AND METHODS FOR FLOW-CONTROL TRIGGERING AND FEEDBACK			PCT	APP-Pending	US	16/615337			

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
10132	CONTROL CHANNEL DESIGN FOR WIDEBAND COVERAGE ENHANCEMENT (WCE) SYSTEM INFORMATION BLOCK (SIB) TRANSMISSION			PCT	APP-Pending	US	16/462192			
10138	MANAGEMENT OF MIMO COMMUNICATION SYSTEMS			PCT	APP-Pending	US	16/489087			
10139	METHODS TO COMMUNICATE PARAMETERS ACROSS MULTIPLE COMPONENT CARRIERS OF A CARRIER AGGREGATION FOR SIDELINK COMMUNICATION			NP	APP-Pending	US	16/376523		US-2019-0239178-A1	
10140	L2 HANDLING FOR BEARER TYPE CHANGE			PCT	APP-Pending	US	16/617973			
10141	MULTIPLEXING OF MULTIPLE UPLINK CONTROL INFORMATION TYPES ON AN UPLINK PHYSICAL CONTROL CHANNEL IN NEW RADIO			NP	APP-Pending	US	16/376534		US-2019-0235216-A1	
10142	MULTIPLEXING OF MULTIPLE UPLINK CONTROL INFORMATION TYPES ON AN UPLINK PHYSICAL CONTROL CHANNEL IN NEW RADIO			CNT	APP-Pending	US	16/408372			
10143	NEW RADIO CONTROL CHANNEL RESOURCE SET DESIGN			PCT	APP-Pending	US	16/477475		US-2019-0237185-A1	
10144	TECHNIQUES FOR DATA COMPRESSION			NP	APP-Pending	US	16/037241		US-2019-0238163-A1	
10145	COLLISION HANDLING OF SYNCHRONIZATION SIGNAL (SS) BLOCKS			PCT	APP-In-Preparation	US				
10146	TECHNIQUES IN MEASUREMENT GAP CONFIGURATIONS IN NEW RADIO (NR)			NP	APP-Pending	US	16/392956		US-2019-0233909-A1	
10147	TECHNIQUES IN MEASUREMENT GAP CONFIGURATIONS IN NEW RADIO (NR)			CNT	APP-Pending	US	16/408053			
10148	E1 INTERFACE SETUP IN NG-RAN			NP	APP-Pending	US	16/393753		US-2019-0297852-A1	
10149	CONFIGURED GIANT UPLINK (UL) TRANSMISSION IN NEW RADIO UNLICENSED (NR-U)			NP	APP-Pending	US	16/408337		US-2019-0268935-A1	
10150	PRACH RESOURCE SELECTION			NP	APP-Pending	US	16/409530		US-2019-0268947-A1	
10151	DYNAMIC RESOURCE SCALING AND VM MIGRATION IN NG-RAN			NP	APP-Pending	US	16/393709		US-2019-0253090-A1	
10152	METHODS TO DETERMINE A HYBRID AUTOMATIC REPEAT REQUEST ACKNOWLEDGEMENT (HARQ-ACK) CODEBOOK IN NEW RADIO (NR) SYSTEMS			NP	APP-Pending	US	16/408245		US-2019-0268803-A1	
10153	Systems and Methods for Physical Channel Repetition for Low Latency Communication			NP	APP-Pending	US	16/410095		US-2019-0268807-A1	
10154	SUPPORT OF ADVANCED USER EQUIPMENT (UE) MINIMUM PROCESSING TIMES IN NEW RADIO (NR) SYSTEMS			NP	APP-Pending	US	16/407559		US-2019-0249622-A1	
10155	METHODS AND DEVICES FOR BROADCAST CHANNEL DECODING			NP	APP-Pending	US	16/118472			
10156	BANDWIDTH PART (BWP) SWITCHING DELAYS FOR NEW RADIO (NR)			NP	APP-Pending	US	16/410985		US-2019-0268905-A1	
10157	SYSTEMS AND METHODS FOR APPLYING NR-CAPABLE UE TESTS TO AN NR-CAPABLE UE			NP	APP-Pending	US	16/410562		US-2019-0273569-A1	
10158	SYSTEMS AND METHODS FOR L1-RSRP MEASUREMENT ACCURACY FOR BEAM DETECTION			NP	APP-Pending	US	16/410498		US-2019-0268061-A1	
10159	SESSION CONTINUITY IN MOBILE SYSTEMS USING USER PLANE FUNCTIONS WITH UPLINK CLASSIFIER			NP	APP-Pending	US	16/417921		US-2019-0274185-A1	
10160	BANDWIDTH PART (BWP) SWITCHING			NP	APP-Pending	US	16/417992		US-2019-0337085-A1	
10161	Capacitor Compensated Dual of Polyphase Filter			NP	APP-Pending	US	16/146095			
10162	SCRAMBLING SEQUENCE INITIAL SEED CONFIGURATION FOR REFERENCE SIGNALS DATA AND CONTROL CHANNEL FOR NEW RADIO			NP	APP-Pending	US	16/055964		US-2019-0344669-A1	
10163	RESOURCE ALLOCATION FOR SYSTEM INFORMATION BLOCK (SIB) TRANSMISSION IN A MULTIPLEX SYSTEM			PCT	APP-Pending	US	16/463998			
10164	PHYSICAL UPLINK SHARED CHANNEL (PUSCH) TRANSMISSION BASED ON ROBUST CODEBOOK			PCT	APP-Pending	US	16/483568			
10165	DEMODULATION REFERENCE SIGNAL FOR PHYSICAL BROADCAST CHANNEL IN NEW RADIO			PCT	APP-In-Preparation	US				

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
10166	CONFIGURATION OF GRANT-LESS UPLINK TRANSMISSIONS FOR A USER EQUIPMENT			PCT	APP-Pending	US	16/604143			
10167	SUB-SAMPLING PHASE-LOCKED LOOP (SSPLL) WITH WIDE FREQUENCY ACQUISITION			NP	APP-Pending	US	16/126722			
10168	METHODS TO ADAPT A FREQUENCY DENSITY OF CHANNEL STATE INFORMATION REFERENCE SIGNAL (CSI-RS) RESOURCES FOR BEAM FAILURE DETECTION (BFD) IN NEW RADIO (NR) SYSTEMS			NP	APP-Pending	US	16/422065		US-2019-0283660-A1	
10169	MANAGING LINK QUALITY AND USING PARTIAL SUBFRAMES IN WIRELESS TELECOMMUNICATION NETWORKS			PCT	APP-Pending	US	16/465225			
10170	ENHANCED UPLINK BEAM MANAGEMENT			NP	APP-Pending	US	16/419367		US-2019-0281588-A1	
10171	NON-ORTHOGONAL MULTIPLE ACCESS HYBRID AUTOMATIC REPEAT REQUEST			PSP	APP-Closed	US	62/748044			
10172	FULL BANDWIDTH UPLINK TRANSMISSION FOR UNLICENSED NARROWBAND INTERNET OF THINGS			NP	APP-Pending	US	16/396441		US-2019-0254013-A1	
10173	FULL BANDWIDTH UPLINK TRANSMISSION FOR UNLICENSED NARROWBAND INTERNET OF THINGS			CNT	APP-Pending	US	16/408367			
10174	DEMODULATION REFERENCE SIGNAL AND PHASE-TRACKING REFERENCE SIGNAL PORT INDICATION			NP	APP-Pending	US	16/440209		US-2019-0296876-A1	
10175	METHODS TO MULTIPLEX CONTROL INFORMATION IN ACCORDANCE WITH MULTI-SLOT TRANSMISSIONS IN NEW RADIO (NR) SYSTEMS			NP	APP-Pending	US	16/443990		US-2019-0306922-A1	
10176	Wideband Signal Buffer			NP	APP-Pending	US	16/183320			
10177	VEHICLE-TO-EVERYTHING (V2X) CONTROL FUNCTION BASED ON USER EQUIPMENT (UE) CAPABILITY			NP	APP-Pending	US	16/431419		US-2019-0289459-A1	
10178	VEHICLE-TO-EVERYTHING (V2X) COMMUNICATION AUTHORIZATION IN FIFTH GENERATION (5G) SYSTEMS			NP	APP-Pending	US	16/446337		US-2019-0306754-A1	
10179	NRACH CONFIGURATION AND FORMAT FOR UNLICENSED NB-IOT SYSTEM			NP	APP-Pending	US	16/446177			
10180	APPARATUS SYSTEM AND METHOD OF COMMUNICATION OVER COMMON CONTROL CHANNELS			NP	APP-Pending	US	16/446873		US-2019-0306884-A1	
10181	SPLIT PRECODING AND SPLIT PREFILTERING BETWEEN A CENTRAL UNIT AND A DISTRIBUTED UNIT OF A GENERATION NODE-B (GNB)			NP	APP-Pending	US	16/100773		US-2019-0044680-A1	
10182	USER EQUIPMENT MEASUREMENTS FOR NEW RADIO			NP	APP-Pending	US	16/107475		US-2019-0044802-A1	
10183	USER EQUIPMENT MEASUREMENTS FOR NEW RADIO			CNT	APP-Pending	US	16/408357			
10184	TECHNIQUES IN SYSTEM FRAME NUMBER (SFN) AND FRAME TIMING DIFFERENCE MEASUREMENTS IN NEW RADIO (NR)			NP	APP-Pending	US	16/450715		US-2019-0313272-A1	
10185	DISCOVERY REFERENCE SIGNAL PROPERTIES FOR DYNAMIC FREQUENCY SELECTION CHANNELS			PSP	APP-Closed	US	62/701390			
10186	CHANNEL ACCESS MECHANISMS FOR SIDELINK NR V2X COMMUNICATION			PSP	APP-Closed	US	62/701368			
10187	METHOD TO DYNAMICALLY CHANGE CONNECTIVITY OF VIRTUAL NETWORK FUNCTION (VNF) AND PHYSICAL NETWORK FUNCTION (PNF) INSTANCES IN NEW RADIO (NR) NETWORKS			NP	APP-Pending	US	16/508959			
10188	TECHNIQUES FOR NR CELL/BEAM IDENTIFICATION			NP	APP-Pending	US	16/127942		US-2019-0048559-A1	
10189	TECHNIQUES IN NEW RADIO (NR) USER EQUIPMENT (UE) DEMODULATION OVER THE AIR (OTA) TESTS			NP	APP-Pending	US	16/148905		US-2019-0052376-A1	
10190	Systems and Methods for Mitigation of Nonlinearity Related Phase Noise Degradations			NP	APP-Pending	US	16/204109			
10191	FREQUENCY GENERATION AND SYNCHRONIZATION SYSTEMS AND METHODS			PSP	APP-Closed	US	62/766596			
10192	SENSING BASED DISTRIBUTED SCHEDULING FOR EVENT-BASED MISSION CRITICAL TRAFFIC IN DECENTRALIZED VEHICULAR NETWORK			PSP	APP-Closed	US	62/766694			
10193	WI-FI SPECTRUM EFFICIENCY			PSP	APP-Closed	US	62/770065			
10194	MEASUREMENTS AND REPORTING FOR USER EQUIPMENT (UE) POSITIONING IN WIRELESS NETWORKS			NP	APP-In-Preparation	US				

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
10195	MEASUREMENTS AND REPORTING FOR USER EQUIPMENT (UE) POSITIONING IN WIRELESS NETWORKS			PSP	APP-Closed	US	62/713419			
10196	EARLY DATA TRANSMISSION CONTROL PLANE AND USER PLANE OPTIMIZATION FOR NAE EARLY DATA TRANSMISSION			PSP	APP-Closed	US	62/703758			
10197	MULTIPLE SUBSCRIBER MANAGEMENT IN USER DEVICE			PSP	APP-Closed	US	62/738008			
10198	WAKE-UP SIGNAL ASSISTED C-DRX FOR POWER EFFICIENT COMMUNICATION			PSP	APP-Closed	US	62/708315			
10199	CONFIGURATION OF MULTIPLE MEASUREMENT GAP PATTERNS			NP	APP-Pending	US	16/518262		US-2019-0342801-A1	
10200	UE CAPABILITY OF MULTIPLE MEASUREMENT GAP PATTERNS IN PARALLEL			PSP	APP-Closed	US	62/702026			
10201	DOWNLINK CONTROL CHANNEL SIGNALING FOR IMPROVING UE POWER CONSUMPTION			PSP	APP-Closed	US	62/702822			
10202	RELIABILITY ENHANCEMENT OF RESOURCE ALLOCATION FOR PHYSICAL UPLINK CONTROL CHANNEL IN NR-UNLICENSED SYSTEMS			PSP	APP-Closed	US	62/703317			
10203	TRIGGERING MULTIPLE HARQ-ACK TRANSMISSION IN A SLOT FOR NR SYSTEMS			PSP	APP-Closed	US	62/711325			
10204	HYBRID AUTOMATIC REPEAT REQUEST (HARQ) BASED ON CODEBLOCK GROUPS IN NEW RADIO SYSTEMS			NP	APP-Pending	US	16/126187		US-2019-0045483-A1	
10205	Scheduling Request Transmission Opportunity and Resource Configuration in New Radio			NP	APP-Pending	US	16/126556		US-2019-0045529-A1	
10206	Downlink Control Channel Design in New Radio Systems			NP	APP-Pending	US	16/126260		US-2019-0045490-A1	
10207	SYSTEM AND METHOD FOR PUCCH TRANSMISSION SCHEME			NP	APP-Pending	US	16/125506		US-2019-0149379-A1	
10208	SYSTEM AND METHOD FOR PUCCH TRANSMISSION SCHEME			CNT	APP-Pending	US	16/408063		US-2019-0273644-A1	
10209	CHANNEL STATE INFORMATION (CSI) REPORTING FOR BANDWIDTH PARTS			NP	APP-Pending	US	16/147204		US-2019-0091679-A1	
10210	CHANNEL STATE INFORMATION (CSI) REPORTING FOR BANDWIDTH PARTS			CNT	APP-Pending	US	16/408031			
10211	POWER BOOSTING AND TRANSPORT BLOCK SIZE (TBS) DESIGN IN A NEW RADIO (NR) SYSTEM			NP	APP-Pending	US	16/126999		US-2019-0045390-A1	
10212	POWER BOOSTING AND TRANSPORT BLOCK SIZE (TBS) DESIGN IN A NEW RADIO (NR) SYSTEM			CNT	APP-Pending	US	16/408319			
10213	NARROWBAND REFERENCE SIGNAL (NRS) TRANSMISSION FOR RADIO RESOURCE MANAGEMENT (RRM) MEASUREMENT AND SYNCHRONIZATION CORRELATION			NP	APP-In-Preparation	US				
10214	NARROWBAND REFERENCE SIGNAL (NRS) TRANSMISSION FOR RADIO RESOURCE MANAGEMENT (RRM) MEASUREMENT AND SYNCHRONIZATION CORRELATION			PSP	APP-Closed	US	62/713380			
10215	UPLINK TRANSMISSION FOR MULTI-TXP AND MULTI-PANEL OPERATION			PSP	APP-Closed	US	62/713975			
10216	CONFIGURATION SCHEMES FOR SECONDARY CELL BANDWIDTH PART AND PHYSICAL RESOURCE BLOCK INDEXING			NP	APP-Pending	US	16/123722		US-2019-0044811-A1	
10217	ENHANCEMENT OF PERFORMANCE OF ULTRA-RELIABLE LOW-LATENCY COMMUNICATION			NP	APP-Pending	US	16/126472		US-2019-0045533-A1	
10218	SYSTEM AND METHOD FOR UPLINK POWER CONTROL FRAMEWORK			NP	APP-Pending	US	16/127887		US-2019-0044681-A1	
10219	INITIALIZATION OF PSEUDO NOISE SEQUENCES FOR REFERENCE SIGNALS AND DATA SCRAMBLING			NP	APP-Pending	US	16/127825		US-2019-0044763-A1	
10220	METHOD AND APPARATUS FOR CHANNEL CODING IN THE FIFTH GENERATION NEW RADIO SYSTEM			NP	APP-Pending	US	16/126776		US-2019-0097756-A1	
10221	APPARATUS AND METHOD FOR RSRP MEASUREMENT AND ALLOCATION OF DOWNLINK TRANSMISSION RESOURCES			NP	APP-Pending	US	16/128111		US-2019-0044631-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
10222	DESIGN OF SYNCHRONIZATION SIGNAL BLOCK FOR UNLICENSED CARRIER AND LISTEN BEFORE TALK STRATEGIES FOR INITIAL ACCESS			NP	APP-Pending	US	16/148352		US-2019-0953177-A1	
10223	DESIGN OF CSI MEASUREMENT AND FEEDBACK FOR EMTE-U SYSTEM			NP	APP-Pending	US	16/133208		US-2019-0944588-A1	
10224	CHANNEL WHITELIST AND FLEXIBLE FRAME DESIGN FOR ENHANCED MACHINE-TYPE COMMUNICATIONS SYSTEMS IN UNLICENSED SPECTRUM			NP	APP-Pending	US	16/134124		US-2019-0944810-A1	
10225	DESIGN OF EARLY DATA TRANSMISSION IN WIRELESS COMMUNICATION SYSTEM			NP	APP-Pending	US	16/141202		US-2019-0945554-A1	
10226	FRAMEWORK FOR COMMUNICATIONS IN UNLICENSED NARROW BAND INTERNET OF THINGS (NB-IOT) SYSTEM			NP	APP-Pending	US	16/157442		US-2019-0945372-A1	
10227	UPLINK CONTROL SIGNALING FOR GRANT-FREE UPLINK TRANSMISSION			NP	APP-Pending	US	16/163785		US-2019-0953226-A1	
10228	RACH PROCEDURE AND CONFIGURATION FOR UNLICENSED EMTC SYSTEM			NP	APP-Pending	US	16/163191		US-2019-0916618-A1	
10229	DESIGN FOR A UE SPECIFIC SEARCH SPACE AND A COMMON SEARCH SPACE IN A WIDE COVERAGE ENHANCEMENT			NP	APP-Pending	US	16/133360		US-2019-0948503-A1	
10230	DESIGN OF FREQUENCY HOPPING PATTERN FOR UNLICENSED INTERNET-OF-THINGS SYSTEM			NP	APP-Pending	US	16/163160		US-2019-0953308-A1	
10231	QUALITY REPORT IN FOR ENHANCED MACHINE-TYPE COMMUNICATIONS AND NARROWBAND INTERNET OF THINGS			PSP	APP-Closed	US	62/713978			
10232	DL WAVEFORM TYPE AND GUARD INTERVAL ADAPTATION FOR SYSTEM OPERATING ABOVE 526GHZ CARRIER FREQUENCY			NP	APP-in-Preparation	US				
10233	DL WAVEFORM TYPE AND GUARD INTERVAL ADAPTATION FOR SYSTEM OPERATING ABOVE 526GHZ CARRIER FREQUENCY			PSP	APP-Closed	US	62/717566			
10234	ASSOCIATION OF USER PLANE FUNCTION (UPF) AND EDGE COMPUTING APPLICATION SERVER			NP	APP-in-Preparation	US				
10235	ASSOCIATION OF USER PLANE FUNCTION (UPF) AND EDGE COMPUTING APPLICATION SERVER			PSP	APP-Closed	US	62/713980			
10236	UE CAPABILITY INDICATION OF RX BEAMFORMING FOR CELL IDENTIFICATION			PSP	APP-Closed	US	62/716687			
10237	MANAGEMENT DATA ANALYTICAL KPIs			PSP	APP-Closed	US	62/714964			
10238	ENHANCED PHYSICAL DOWNLINK SHARED CHANNEL REPETITION TRANSMISSION			NP	APP-in-Preparation	US				
10239	ENHANCED PHYSICAL DOWNLINK SHARED CHANNEL REPETITION TRANSMISSION			PSP	APP-Closed	US	62/715420			
10240	END-TO-END PERFORMANCE MEASUREMENTS FOR 5G NETWORKS			PSP	APP-Closed	US	62/715583			
10241	CONTENTION WINDOW SIZE UPDATE FOR CODE BLOCK GROUP (CBG) BASED RETRANSMISSION IN NEW RADIO (NR) SYSTEMS OPERATING ON UNLICENSED SPECTRUM			PSP	APP-Closed	US	62/715780			
10242	IN-DEVICE COEXISTENCE BETWEEN LONG TERM EVOLUTION (LTE) SIDELINK (PCS) AND NEW RADIO (NR) SIDELINK (PCS) TECHNOLOGIES IN VEHICULAR COMMUNICATION			NP	APP-in-Preparation	US				
10243	IN-DEVICE COEXISTENCE BETWEEN LONG TERM EVOLUTION (LTE) SIDELINK (PCS) AND NEW RADIO (NR) SIDELINK (PCS) TECHNOLOGIES IN VEHICULAR COMMUNICATION			PSP	APP-Closed	US	62/717562			
10244	METHOD FOR LTE AND NEW RADIO PCS SIDELINK CONTROL THROUGH NEW RADIO UU LINK AND LTE UU LINK AIR-INTERFACES			NP	APP-in-Preparation	US				
10245	METHOD FOR LTE AND NEW RADIO PCS SIDELINK CONTROL THROUGH NEW RADIO UU LINK AND LTE UU LINK AIR-INTERFACES			PSP	APP-Closed	US	62/717316			
10246	PCS SIDELINK SYNCHRONIZATION FOR EV2X USE CASES IN NEW RADIO (NR) SYSTEMS			NP	APP-in-Preparation	US				
10247	PCS SIDELINK SYNCHRONIZATION FOR EV2X USE CASES IN NEW RADIO (NR) SYSTEMS			PSP	APP-Closed	US	62/717672			
10248	SECURITY FRAMEWORK FOR MESSAGE 3 (MSG3) AND MESSAGE 4 (MSG4) IN EARLY DATA TRANSMISSION			PSP	APP-Closed	US	62/716840			
10249	PERFORMANCE MEASUREMENTS FOR 5G NETWORK FUNCTIONS			PSP	APP-Closed	US	62/716442			
10250	RAN CONDITION AND CELL COMPOSITE LOAD KPIs			PSP	APP-Closed	US	62/716443			

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
10251	FLOW CONTROL FOR UPLINK TRAFFIC IN INTEGRATED ACCESS BACKHAUL NETWORK			NP	APP-In-Preparation	US				
10252	FLOW CONTROL FOR UPLINK TRAFFIC IN INTEGRATED ACCESS BACKHAUL NETWORK			PSP	APP-Closed	US	62/716447			
10253	TECHNIQUES FOR MEASURING NEW RADIO (NR) RADIO RESOURCE MANAGEMENT (RRM) PERFORMANCE ACCURACY FOR FREQUENCY RANGE 2 (FR2)			NP	APP-In-Preparation	US				
10254	TECHNIQUES FOR MEASURING NEW RADIO (NR) RADIO RESOURCE MANAGEMENT (RRM) PERFORMANCE ACCURACY FOR FREQUENCY RANGE 2 (FR2)			PSP	APP-Closed	US	62/717677			
10255	OVERHEAD REDUCTION FOR BEAM COMBINING BASED CHANNEL-STATE INFORMATION (CSI) FEEDBACK			PSP	APP-Closed	US	62/717187			
10256	ENHANCED HARQ FEEDBACK FOR RELIABLE COMMUNICATIONS			NP	APP-In-Preparation	US				
10257	ENHANCED HARQ FEEDBACK FOR RELIABLE COMMUNICATIONS			PSP	APP-Closed	US	62/717542			
10258	WAKE-UP SIGNAL SUB-GROUPING FOR REL-16 EMT-C AND NB-IOT			PSP	APP-Closed	US	62/717172			
10259	CONTENTION WINDOW SIZE UPDATE FOR CODE BLOCK GROUP (CBG) BASED RETRANSMISSION IN NEW RADIO (NR) SYSTEMS OPERATING ON UNLICENSED SPECTRUM			PSP	APP-Closed	US	62/716846			
10260	ENHANCED USER-PLANE CONTEXTS MANAGEMENT IN NEW RADIO (NR) SYSTEMS			NP	APP-In-Preparation	US				
10261	ENHANCED USER-PLANE CONTEXTS MANAGEMENT IN NEW RADIO (NR) SYSTEMS			PSP	APP-Closed	US	62/717161			
10262	DOWNLINK (DL) SIGNAL-TO-NOISE RATIO (SNR) CONTROL FOR NEW RADIO (NR) MILLIMETER WAVE (MMWAVE) OVER-THE-AIR USER EQUIPMENT (UE) DEMODULATION AND CHANNEL STATE INFORMATION (CSI) REPORTING TEST METHODOLOGY			PSP	APP-Closed	US	62/717124			
10263	STARTING POINT DEFINITION FOR MEASUREMENT GAP			NP	APP-In-Preparation	US				
10264	STARTING POINT DEFINITION FOR MEASUREMENT GAP			PSP	APP-Closed	US	62/716843			
10265	MECHANISMS ON RANDOM ACCESS TRIGGERED BY PDCCH ORDER			NP	APP-In-Preparation	US				
10266	MECHANISMS ON RANDOM ACCESS TRIGGERED BY PDCCH ORDER			PSP	APP-Closed	US	62/717547			
10267	SYSTEM AND METHODS ON PHYSICAL UPLINK SHARED CHANNEL ENHANCEMENTS FOR NEW RADIO ULTRA-RELIABLE LOW-LATENCY COMMUNICATION			PSP	APP-Closed	US	62/717689			
10268	PHYSICAL BROADCAST CHANNEL CONTENT FOR NEW RADIO UNLICENSED			PSP	APP-Closed	US	62/717663			
10269	ENHANCED PDCCH MONITORING IN NR SYSTEMS			NP	APP-In-Preparation	US				
10270	ENHANCED PDCCH MONITORING IN NR SYSTEMS			PSP	APP-Closed	US	62/717342			
10271	TC/QCL CONFIGURATION ENHANCEMENTS FOR NR			NP	APP-In-Preparation	US				
10272	TC/QCL CONFIGURATION ENHANCEMENTS FOR NR			PSP	APP-Closed	US	62/717347			
10273	MEASUREMENT PERIOD FOR BEAM REPORTING			PSP	APP-Closed	US	62/717708			
10274	FLEXIBLE SCOPE OF PACKET FILTERS FOR REFLECTIVE QUALITY OF SERVICE (QOS)			NP	APP-In-Preparation	US				
10275	FLEXIBLE SCOPE OF PACKET FILTERS FOR REFLECTIVE QUALITY OF SERVICE (QOS)			PSP	APP-Closed	US	62/718258			
10276	PAGING AND MEASUREMENT IN NR IDLE			NP	APP-In-Preparation	US				
10277	PAGING AND MEASUREMENT IN NR IDLE			PSP	APP-Closed	US	62/717550			
10278	SYNCHRONIZATION SIGNAL BLOCK (SSB) INDEX SCHEDULING FOR NEW RADIO IN UNLICENSED SPECTRUM (NR-U)			PSP	APP-Closed	US	62/717704			
10279	DOWNLINK CONTROL CHANNEL SIGNALING FOR UL COEXISTENCE OF MULTIPLE SERVICE TYPES			PSP	APP-Closed	US	62/717568			
10280	MEASUREMENTS AND REPORTING MECHANISMS FOR INTER-LAB NODE CROSS-LINK INTERFERENCE			PSP	APP-Closed	US	62/717669			
10281	STANDALONE MODE FOR REL-16 EMT-C			NP	APP-In-Preparation	US				
10282	STANDALONE MODE FOR REL-16 EMT-C			PSP	APP-Closed	US	62/717670			
10283	DATA AND CONTROL TRANSMISSION ENHANCEMENTS IN NR			PSP	APP-Closed	US	62/717596			
10284	DESIGN OF UPLINK TRANSMISSION IN PRECONFIGURED RESOURCES FOR ENHANCED MACHINE TYPE COMMUNICATION AND NARROWBAND INTERNET OF THINGS			NP	APP-In-Preparation	US				
10285	DESIGN OF UPLINK TRANSMISSION IN PRECONFIGURED RESOURCES FOR ENHANCED MACHINE TYPE COMMUNICATION AND NARROWBAND INTERNET OF THINGS			PSP	APP-Closed	US	62/717566			

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
10286	MECHANISM ON GAP BASED MEASUREMENT			NP	APP-In-Preparation	US				
10287	MECHANISM ON GAP BASED MEASUREMENT			PSP	APP-Closed	US	62/717690			
10288	SOUNDING REFERENCE SIGNAL (SRS) ENHANCEMENT FOR INCREASING COVERAGE AND CAPACITY			NP	APP-In-Preparation	US				
10289	SOUNDING REFERENCE SIGNAL (SRS) ENHANCEMENT FOR INCREASING COVERAGE AND CAPACITY			PSP	APP-Closed	US	62/717716			
10290	PROVISIONING SERVICES FOR UNMANNED AERIAL SYSTEM IN 5GPP NETWORK			PSP	APP-Closed	US	62/717712			
10291	FAST INITIAL ACQUISITION BY TRANSMITTING NON-ORTHOGONAL SYNCHRONIZATION SIGNAL BLOCKS IN 5G NEW RADIO			PSP	APP-Closed	US	62/720620			
10292	USE OF UE IDENTIFIERS FOR REGISTRATION IN THE 5G SYSTEMS			PSP	APP-Closed	US	62/718263			
10293	EPC SOLUTION FOR RLOS ACCESS			PSP	APP-Closed	US	62/718266			
10294	LOCAL AREA NETWORK SERVICE IN 5G SYSTEMS			PSP	APP-Closed	US	62/718270			
10295	NETWORK DISCOVERY SELECTION AND ACCESS CONTROL IN VERTICAL DOMAIN			PSP	APP-Closed	US	62/718839			
10296	ENHANCEMENT FOR SMT-C CONFIGURATION FOR NR SYSTEMS			NP	APP-In-Preparation	US				
10297	ENHANCEMENT FOR SMT-C CONFIGURATION FOR NR SYSTEMS			PSP	APP-Closed	US	62/765196			
10298	Discovery reference signal for narrowband Internet of things (NB-IOT) systems operating on unlicensed spectrum			PSP	APP-Closed	US	62/765197			
10299	PHASE TRACKING REFERENCE SIGNAL (PT-RS) CONFIGURATION			PCT	APP-In-Preparation	US				
10300	PROVISIONING OF VLAN IDS IN 5G SYSTEMS			PSP	APP-Closed	US	62/720924			
10301	CORESET SELECTION FOR CSI-RS BASED RLM			PSP	APP-Closed	US	62/720925			
10302	BANDWIDTH PART (BWP) SWITCHING DELAY REQUIREMENTS FOR UPLINK (UL) TRANSMISSION			NP	APP-In-Preparation	US				
10303	BANDWIDTH PART (BWP) SWITCHING DELAY REQUIREMENTS FOR UPLINK (UL) TRANSMISSION			PSP	APP-Closed	US	62/720931			
10304	MECHANISMS FOR COLLISION HANDLING BETWEEN SINGLE-SLOT/MULTI-SLOT CSI PUCCHS			PSP	APP-Closed	US	62/720936			
10305	TRANSMISSION BANDWIDTH INDICATION FOR WIDEBAND TRANSMISSION IN NEW RADIO (NR) SYSTEMS OPERATING ON UNLICENSED SPECTRUM			PSP	APP-Closed	US	62/720481			
10306	NETWORK ASSISTED BEAMFORMING FOR SIDELINK UNICAST COMMUNICATION			PSP	APP-Closed	US	62/723709			
10307	TRANSMIT DIVERSITY MECHANISMS FOR POWER SAVING SIGNAL			PSP	APP-Closed	US	62/724430			
10308	APPARATUS FOR MULTIFIRE (MF) LTE			PSP	APP-Closed	US	62/723704			
10309	Dual Connectivity Techniques for NR (New Radio)			NP	APP-Pending	US	16/179421		US-2019-0390151-A1	
10310	SIGNALING RADIO ACCESS NETWORK (RAN) ASSISTED CODEC ADAPTATION CAPABILITIES IN INTERNET PROTOCOL MULTIMEDIA SUBSYSTEM (IMS) MULTIMEDIA TELEPHONY SESSIONS			PSP	APP-Closed	US	62/728625			
10311	UPLINK CONTROL INFORMATION (UCI) PIGGYBACKING ON MULTIPLE PHYSICAL UPLINK SHARED CHANNELS (PUSCHS) WITH SHORT DURATION			PSP	APP-Closed	US	62/728629			
10312	FLOW CONTROL IN INTEGRATED ACCESS AND BACKHAUL NETWORK			PSP	APP-Closed	US	62/728649			
10313	UE CAPABILITY FOR MULTIPLE MEASUREMENT GAP			PSP	APP-Closed	US	62/732473			
10314	EN-DC INTER-BAND AND INTRA-BAND DYNAMIC POWER SHARING			PSP	APP-Closed	US	62/728653			
10315	MEASUREMENT GAP (MG) CONFIGURATION DURING BANDWIDTH PART (BWP)			PSP	APP-Closed	US	62/732507			
10316	HYBRID AUTOMATIC REPEAT REQUEST (HARQ) FEEDBACK FOR NEW RADIO (NR) VEHICLE-TO-VEHICLE (V2V) BROADCAST COMMUNICATION			PSP	APP-Closed	US	62/730978			
10317	MECHANISMS FOR COLLISION HANDLING BETWEEN SINGLE-SLOT/MULTI-SLOT CSI PUCCHS			PSP	APP-Closed	US	62/731612			
10318	CONTROL CHANNEL SIGNALING FOR UE POWER SAVING			PSP	APP-Closed	US	62/732466			
10319	CONDITIONAL HANDOVER			PSP	APP-Closed	US	62/733920			
10320	UNLICENSED NARROWBAND INTERNET-OF-THINGS SYSTEM			PSP	APP-Closed	US	62/732504			
10321	SSB PATTERN AND DMRS DESIGN FOR PBCH FOR ABOVE 526GHZ CARRIER FREQUENCY			PSP	APP-Closed	US	62/733953			
10322	FULL PROTECTION OF INITIAL NON-ACCESS STRATUM PROTOCOL MESSAGE IN 5G SYSTEMS			PSP	APP-Closed	US	62/733344			
10323	COORDINATION SIGNALING FOR SSB TRANSMISSION CONFIGURATIONS IN 5G-NR IAB			PSP	APP-Closed	US	62/734722			

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
10324	END TO END MEASUREMENT AND PERFORMANCE DATA STREAMING			PSP	APP-Closed	US	62/733947			
10325	SIGNALING TO CHILD NODES FOR BACKHAUL BEAM FAILURE IN 5G-NR IAB			PSP	APP-Closed	US	62/734726			
10326	ENHANCED VEHICLE-TO-EVERYTHING PCS RADIO ACCESS TECHNOLOGY NEGOTIATION			PSP	APP-Closed	US	62/735705			
10327	MEASUREMENT CONFIGURATION FOR NEW RADIO - NEW RADIO DUAL CONNECTIVITY			PSP	APP-Closed	US	62/735713			
10328	MULTI-CONNECTIVITY USING TIME DIVISION MULTIPLEXING (TDM) APPROACH			PSP	APP-Closed	US	62/737075			
10329	RADIO LINK FAILURE HANDLING WHEN CONNECTING TO BOTH SERVING CELL AND TARGET CELL			PSP	APP-Closed	US	62/736994			
10330	USER EQUIPMENT CAPABILITY FOR MULTI-CONNECTIVITY HANDOVER			PSP	APP-Closed	US	62/737506			
10331	ENHANCED HYBRID AUTOMATIC RETRANSMISSION REQUEST (HARQ) FOR SEMI-PERSISTENT SCHEDULED (SPS) DATA TRANSMISSION			PSP	APP-Closed	US	62/736902			
10332	RESOURCE ALLOCATION FOR 2-STEP RANDOM ACCESS PROCEDURE FOR PAYLOAD OF MSG1 AND FOR PHYSICAL DOWNLINK CONTROL CHANNEL AND PAYLOAD OF MSG2			PSP	APP-Closed	US	62/737644			
10333	RADIO LINK MONITORING AND FAILURE FOR NEW RADIO-UNLICENSED OPERATION			PSP	APP-Closed	US	62/737480			
10334	MANAGING AND MINIMIZING CONTROL PLANE LATENCY FOR INTEGRATED ACCESS AND BACKHAUL			PSP	APP-Closed	US	62/736761			
10335	PACKET DATA CONVERGENCE PROTOCOL AND ROBUST HEADER COMPRESSION HANDLING FOR MULTI-CONNECTIVITY HANDOVER			PSP	APP-Closed	US	62/737683			
10336	MULTIPLEXING OF MULTIPLE HARQ-ACK FEEDBACKS AND OTHER UCI ON PUCCH AND PUSCH			PSP	APP-Closed	US	62/739081			
10337	BEAM FAILURE RECOVERY OPERATION			NP	APP-Pending	US	16/166523		US-2019-0058519-A1	
10338	CONTROL RESOURCE SET INFORMATION IN PHYSICAL BROADCAST CHANNEL			NP	APP-Pending	US	16/171998		US-2019-0069322-A1	
10339	CHANNEL STATE INFORMATION REPORT FOR PHASE TRACKING REFERENCE SIGNAL PORT SELECTION			NP	APP-Pending	US	16/173602		US-2019-0068268-A1	
10340	DETERMINING RESOURCES FOR UPLINK CONTROL INFORMATION ON PHYSICAL UPLINK SHARED CHANNEL AND PHYSICAL UPLINK CONTROL CHANNEL WITH FREQUENCY HOPPING			NP	APP-Pending	US	16/213919		US-2019-0118588-A1	
10341	PERFORMANCE MEASUREMENTS RELATED TO HANDOVER AND PDU SESSION RESOURCE SETUP IN NG-RAN			PSP	APP-Closed	US	62/736748			
10342	METHODS TO ACHIEVE UPLINK (UL) IN-ORDER DELIVERY FOR QUALITY OF SERVICE (QOS) FLOW OFFLOADED IN MULTI-RAT DUAL CONNECTIVITY (MR-DC) WITH 5GC			PSP	APP-Closed	US	62/737523			
10343	METHOD FOR SPATIAL ASSUMPTION CONFIGURATION FOR NR DOWNLINK TRANSMISSION			PSP	APP-Closed	US	62/739080			
10344	PAGING ENHANCEMENT FOR 5G UNLICENSED OPERATION			PSP	APP-Closed	US	62/737655			
10345	ENCODING OF SECONDARY CELL GROUP FAILURE MEASUREMENT REPORT			PSP	APP-Closed	US	62/736926			
10346	OVERHEAD REDUCTION FOR BEAM COMBINING BASED CHANNEL-STATE INFORMATION (CSI) FEEDBACK			PSP	APP-Closed	US	62/736986			
10347	CONNECTION MANAGEMENT SOLUTION TO SUPPORT UNICAST AND GROUPCAST COMMUNICATION OVER SIDELINK FOR ENHANCED VEHICLE TO EVERYTHING (EV2X)			PSP	APP-Closed	US	62/737515			
10348	RADIO ACCESS TECHNOLOGY SELECTION FOR NEW RADIO VEHICLE TO EVERYTHING			PSP	APP-Closed	US	62/737561			
10349	QOS MANAGEMENT ASPECTS FOR NR SIDELINK TO SUPPORT ADVANCED V2X USE CASES			PSP	APP-Closed	US	62/737488			
10350	TECHNIQUES FOR IMPROVING NEW RADIO (NR) POSITIONING PERFORMANCE			PSP	APP-Closed	US	62/739026			
10351	ENHANCEMENTS TO REDUCE RRM MEASUREMENTS AND UE POWER CONSUMPTION			PSP	APP-Closed	US	62/739078			
10352	NOTIFICATION AND ACQUISITION OF EARTHQUAKE AND TSUNAMI WARNING SYSTEM/COMMERCIAL MOBILE ALERT SYSTEM IN CONNECTED MODE FOR USER EQUIPMENT IN COVERAGE ENHANCED MODE			PSP	APP-Closed	US	62/737503			
10353	RESOURCE ALLOCATION AND CONFIGURATION FOR BROADCAST AND UNICAST OPERATION OVER SIDELINK FOR NEW RADIO (NR) VEHICLE TO EVERYTHING (V2X)			PSP	APP-Closed	US	62/737731			

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
10354	METHOD FOR PHYSICAL UPLINK SHARED CHANNEL (PUSCH) DEFAULT BEAM IN NEW RADIO (NR) WITH MULTI-TRANSMISSION RECEPTION POINT (TRP) MULTI-PANEL OPERATION			PSP	APP-Closed	US	62/7390344			
10355	MEASUREMENT PERIOD AND ACCURACY FOR BEAM REPORTING BASED ON L1-REFERENCE SIGNAL RECEIVED POWER			PSP	APP-Closed	US	62/738268			
10356	NEXT GENERATION NODEB (GNB) SUPERVISED USER EQUIPMENT (UE) SOUNDING REFERENCE SIGNAL (SRS) TRANSMIT (TX) BEAM SWEEPING FOR FIFTH GENERATION (5G) NEW RADIO (NR) UPLINK BEAM MANAGEMENT			PSP	APP-Closed	US	62/738155			
10357	PHYSICAL UPLINK SHARED CHANNEL ENHANCEMENTS FOR NEW RADIO ULTRA-RELIABLE LOW-LATENCY COMMUNICATION			PSP	APP-Closed	US	62/737526			
10358	NR VEHICLE TO EVERYTHING (V2X) UNICAST AND BROADCAST CHANNEL-STATE INFORMATION (CSI) FEEDBACK WITHOUT DEDICATED REFERENCE SIGNALS			PSP	APP-Closed	US	62/739047			
10359	PAGING RECEPTION FOR USER EQUIPMENT IN IDLE AND INACTIVE STATE			PSP	APP-Closed	US	62/737671			
10360	SYSTEM AND METHODS ON PUSCH REPETITION TERMINATION IN NR			PSP	APP-Closed	US	62/739042			
10361	SUPPORT OF UNICAST AND GROUPCAST IN NEW RADIO VEHICLE-TO-EVERYTHING			PSP	APP-Closed	US	62/739055			
10362	BEAM FAILURE RECOVERY AND RADIO LINK FAILURE ASSOCIATIONS IN 5G-NR			PSP	APP-Closed	US	62/739076			
10363	SUPPORTING INFORMATION CENTRIC NETWORKING IN NEXT GENERATION CELLULAR NETWORKS (BEYOND 5G)			PSP	APP-Closed	US	62/755146			
10364	WAKE-UP SIGNAL SUB-GROUPING FOR REL-16 EMBEDED NB-IOT			PSP	APP-Closed	US	62/739063			
10365	PRECONFIGURED SHARED RESOURCES FOR UPLINK TRANSMISSION			PSP	APP-Closed	US	62/739057			
10366	REFERENCE SIGNAL DESIGN WITH FLEXIBLE BANDWIDTH FOR REMOTE INTERFERENCE MANAGEMENT IN FIFTH GENERATION (5G) NETWORKS			PSP	APP-Closed	US	62/739098			
10367	QUALITY REPORT FOR ENHANCED MACHINE-TYPE COMMUNICATIONS AND NARROWBAND INTERNET OF THINGS			PSP	APP-Closed	US	62/739070			
10368	DOWNLINK CONTROL CHANNEL SIGNALING FOR UL COEXISTENCE OF MULTIPLE SERVICE TYPES			PSP	APP-Closed	US	62/739073			
10369	DATA AND CONTROL TRANSMISSION ENHANCEMENTS IN NR			PSP	APP-Closed	US	62/739071			
10370	ROUTE ADAPTATION IN MULTI-HOP RELAY NETWORKS			PSP	APP-Closed	US	62/739065			
10371	SYSTEM AND METHODS OF TIME-DOMAIN RESOURCE ALLOCATION FOR REPEATED TRANSMISSIONS			PSP	APP-Closed	US	62/739080			
10372	SYSTEM AND METHOD OF SEQUENCE BASED UPLINK TRANSMISSION CANCELLATION INDICATION			PSP	APP-Closed	US	62/739053			
10373	ENHANCEMENT OF SOUNDING REFERENCE SIGNAL FOR NEW RADIO-UNLICENSED			PSP	APP-Closed	US	62/739031			
10374	SYSTEM AND METHOD FOR PEAK-TO-AVERAGE POWER RATIO (PAPR) REDUCTION IN REFERENCE SIGNALS			PSP	APP-Closed	US	62/739049			
10375	DEMODULATION REFERENCE SIGNAL TRANSMISSION FROM MULTIPLE BASE STATIONS			PSP	APP-Closed	US	62/739052			
10376	ON SCALING FACTOR FOR NEW RADIO GAP BASED MEASUREMENT			PSP	APP-Closed	US	62/739057			
10377	ON SIMULTANEOUS TRANSMISSION OF PHYSICAL UPLINK CHANNELS AND SIGNALS FOR NEW RADIO BEAMFORMED SYSTEM			PSP	APP-Closed	US	62/742083			
10378	NR-PUBLIC NETWORK DISCOVERY SELECTION AND ACCESS CONTROL IN VERTICAL DOMAIN			PSP	APP-Closed	US	62/740594			
10379	INTERFERENCE MITIGATION IN ULTRA-DENSE WIRELESS NETWORKS			NP	APP-Pending	US	16/159236		US-2019-0116560-A1	
10380	DOWNLINK (DL) TRANSMISSION TIMING OF INTEGRATED ACCESS AND BACKHAUL (IAB) NODE			PSP	APP-Closed	US	62/742027			
10381	ENABLING RELAY SERVICE FOR USER EQUIPMENT BEHIND RESIDENTIAL GATEWAY TO ACCESS FIFTH GENERATION CORE NETWORK VIA RESIDENTIAL GATEWAY			PSP	APP-Closed	US	62/740859			
10382	POWER ALLOCATION IN NR AND LTE DUAL CONNECTIVITY SCENARIOS			PSP	APP-Closed	US	62/742039			
10383	MOBILE DEVICE CONTEXT TRANSFER IN A 5G SYSTEM			PSP	APP-Closed	US	62/742762			
10384	ADDITIONAL DMBS FOR NR PUSCH CONSIDERING LTE-NR DL SHARING			PSP	APP-Closed	US	62/742129			
10385	LOW PAPR REFERENCE SIGNAL FOR COVERAGE ENHANCEMENT WAVEFORMS			PSP	APP-Closed	US	62/742780			

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
10386	PEAK-TO-AVERAGE POWER RATIO (PAPR) REDUCTION IN REFERENCE SIGNALS			PSP	APP-Closed	US	62/743312			
10387	TIME DOMAIN RESOURCE ALLOCATION FOR REPEATED TRANSMISSIONS			PSP	APP-Closed	US	62/743305			
10388	UE CAPABILITY TRANSFER AND STORAGE			PSP	APP-Closed	US	62/744405			
10389	RADIO LINK MONITORING (RLM) ENHANCEMENTS			PSP	APP-Closed	US	62/744022			
10390	PHYSICAL UPLINK CONTROL CHANNEL (PUCCH) POWER CONTROL			PSP	APP-Closed	US	62/747088			
10391	WAKE-UP SIGNAL DESIGN			PSP	APP-Closed	US	62/747086			
10392	SECONDARY AUTHENTICATION FOR WIRELESS WIDE AREA NETWORK (WWAN) VIRTUAL PRIVATE NETWORK (VPN) IN LONG TERM EVOLUTION (LTE)			PSP	APP-Pending	US	62/779350			
10393	ACCESS CONTROL FOR NETWORK SLICES IN DIFFERENT BUSINESS ROLE MODELS			PSP	APP-Closed	US	62/747576			
10394	TECHNOLOGIES FOR MANAGING AND MINIMIZING LATENCY FOR INTEGRATED ACCESS AND BACKHAUL			PSP	APP-Closed	US	62/747579			
10395	DYNAMIC RADIO FREQUENCY SWITCHING FOR INTER-FREQUENCY RADIO RESOURCE MANAGEMENT (RRM) MEASUREMENTS IN RADIO RESOURCE CONTROL (RRC) CONNECTED STATE			PSP	APP-Closed	US	62/750464			
10396	PEAK-TO-AVERAGE POWER RATIO (PAPR) REDUCTION IN REFERENCE SIGNALS			PSP	APP-Closed	US	62/747582			
10397	FURTHER MEASUREMENT GAP ENHANCEMENT			PSP	APP-Closed	US	62/749542			
10398	TECHNIQUES FOR USER PLANE EARLY DATA TRANSMISSION (EDT) MSG4 LOSS			PSP	APP-Closed	US	62/750678			
10399	ADDITIONAL TIMING ADVANCE SIGNALING IN 5G-NR IAB			PSP	APP-Closed	US	62/750563			
10400	TECHNOLOGIES FOR PERFORMANCE DATA STREAMING			PSP	APP-Closed	US	62/749495			
10401	ENHANCED EMERGENCY CALLING OVER LONG TERM EVOLUTION (LTE) AND FIFTH GENERATION (5G) NEW RADIO (NR)			PSP	APP-Closed	US	62/768757			
10402	CONNECTIVITY ENHANCEMENT			PSP	APP-Closed	US	62/752245			
10403	QUADRATURE LOCAL OSCILLATOR SIGNAL GENERATION SYSTEMS AND METHODS			NP	APP-Pending	US	15/352043			
10404	SUPPORTING INFORMATION CENTRIC NETWORKING IN NEXT GENERATION CELLULAR NETWORKS POLICY AND CHARGING CONTROL (PCC)			PSP	APP-Closed	US	62/751150			
10405	METHODS OF LIMITED BUFFER RATE-MATCHING (LBRM) PRE-EMPTION AND Sidelink SYNCHRONIZATION IN NEW RADIO (NR) SYSTEMS			NP	APP-Pending	US	15/181808		US-2019-0141647-A1	
10406	FIAP SIGNALING FOR IAB CENTRAL COORDINATION REGARDING NOT AVAILABLE RESOURCE			PSP	APP-Closed	US	62/752806			
10407	DESIGN AND APPARATUS FOR NF-LITE			PSP	APP-Closed	US	62/752248			
10408	OFF-RASTER SSB DESIGN IN IAB			PSP	APP-Closed	US	62/753640			
10409	ADAPTIVE IN-SYNC AND OUT-OF-SYNC CLASSIFICATION BASED ON CHANNEL PARAMETER ESTIMATION TRACKING REFERENCE SIGNALS IN 5G RADIO LINK MONITORING AND BEAM FAILURE DETECTION			PSP	APP-Closed	US	62/757440			
10410	MEDIUM ACCESS CONTROL (MAC) FORMAT FOR MSG4 AND MSG5 IN 2-PART RANDOM ACCESS PROCEDURE			PSP	APP-Closed	US	62/753487			
10411	METHODS FOR ENHANCED PUCCH TRANSMISSION FOR HIGH RELIABILITY			PSP	APP-Closed	US	62/753357			
10412	ETHERNET HEADER COMPRESSION			PSP	APP-Closed	US	62/753779			
10413	MOBILITY MANAGEMENT IN INFORMATION CENTRIC NETWORKING FOR NEXT GENERATION CELLULAR NETWORKS (BEYOND 5G)			PSP	APP-Closed	US	62/756262			
10414	PERFORMANCE MEASUREMENTS RELATED TO PDU SESSION AND N4 SESSION MANAGEMENT			PSP	APP-Closed	US	62/753550			
10415	ENABLING UAS COMMUNICATION FOR COMMANDS AND CONTROL IN THE 5G SYSTEM			PSP	APP-Closed	US	62/755261			
10416	SCHEDULING REQUEST ENHANCEMENT FOR NR UNLICENSED			PSP	APP-Closed	US	62/753830			
10417	SECONDARY PHYSICAL RANDOM ACCESS CHANNEL (PRACH) CONFIGURATION FOR CONTENTION BASED RANDOM ACCESS IN NEW RADIO SYSTEMS			PSP	APP-Closed	US	62/754503			
10418	SEMI-STATIC RESOURCE ALLOCATION FOR NEW RADIO INTEGRATED ACCESS AND BACKHAUL (IAB) NETWORK			PSP	APP-Closed	US	62/754336			
10419	ENABLING LIVE AUDIO/VIDEO MEDIA PRODUCTION SERVICES IN THE 5G SYSTEM			PSP	APP-Closed	US	62/755386			
10420	METHODS TO ENHANCE USER PLANE FLOW CONTROL FOR RETRANSMITTED PACKETS			PSP	APP-Closed	US	62/754483			
10421	SIGNALING FOR MAC4 VERIFICATION IN RRM4 WITHOUT ANCHOR RELOCATION			PSP	APP-Closed	US	62/754454			
10422	ROBUST HEADER COMPRESSION INDICATION AFTER PATH SWITCH DURING HANDOVER			PSP	APP-Closed	US	62/753731			

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
10423	SECURITY FRAMEWORK FOR MESSAGE 3 (MSG3) AND MESSAGE 4 (MSG4) IN EARLY DATA TRANSMISSION			PSP	APP-Closed	US	62/753843			
10424	PAGING ENHANCEMENT FOR NR UNLICENSED			PSP	APP-Closed	US	62/753840			
10425	METHOD TO CONTROL TRAFFIC ACCESSING PLMN SERVICE AT NON-PUBLIC NETWORK IN 5G SYSTEM			PSP	APP-Closed	US	62/755044			
10426	METHOD OF FREQUENCY DOMAIN CSI COMPRESSION			PSP	APP-Closed	US	62/754497			
10427	METHODS FOR TRANSMISSION RETRANSMISSION AND HARQ PROCESE FOR PUR IN IDLE MODE			PSP	APP-Closed	US	62/754479			
10428	METHODS OF QOS-AWARE CONGESTION CONTROL RESOURCE ALLOCATION AND IN-DEVICE COEXISTENCE SOLUTIONS FOR NR V2X SIDELINK COMMUNICATION			PSP	APP-Closed	US	62/754476			
10429	METHOD OF DATA-AIDED SIDELINK SYNCHRONIZATION FOR NR V2X COMMUNICATION			PSP	APP-Closed	US	62/754525			
10430	SIDELINK PHYSICAL LAYER COLLISION AVOIDANCE HYBRID AUTOMATIC REPEAT REQUEST (HARQ) FEEDBACK AND CHANNEL-STATE INFORMATION (CSI) ACQUISITION			PSP	APP-Closed	US	62/754840			
10431	DETECTING AND MITIGATING DRONE INTERFERENCE			NP	APP-Pending	US	16/234273		US-2019-0306675-A1	
10432	SIGNALING CODEC MODE NOTIFICATION FOR SPEECH IN IMS MULTIMEDIA TELEPHONY SESSIONS			PSP	APP-Closed	US	62/755149			
10433	PHYSICAL UPLINK CONTROL CHANNEL (PUCCH) RESOURCE ALLOCATION AND HYBRID AUTOMATIC REPEAT REQUEST (HARQ) ACKNOWLEDGEMENT (ACK) CODEBOOK DETERMINATION ENHANCEMENTS IN CASE OF MULTIPLE DOWNLINK CONTROL INFORMATION (DCI) IN A SLOT			PSP	APP-Closed	US	62/754970			
10434	RANDOM DMRS SEQUENCE GENERATION IN NR UPLINK			PSP	APP-Closed	US	62/754982			
10435	MECHANISMS TO INDICATE CHANNEL OCCUPANCY TIME TO OTHER NODES FOR NR BASED UNLICENSED OPERATION			PSP	APP-Closed	US	62/755343			
10436	TIME SYNCHRONIZATION ACCURACY ENHANCEMENTS			PSP	APP-Closed	US	62/755349			
10437	SIDELINK RESOURCE ALLOCATION AND USER EQUIPMENT PROCESSING BEHAVIORS FOR NEW RADIO VEHICLE TO ANYTHING SIDELINK COMMUNICATION			PSP	APP-Closed	US	62/755344			
10438	RADIO LINK MONITORING (RLM) ENHANCEMENTS FOR POWER SAVINGS			PSP	APP-Closed	US	62/755188			
10439	CSI MEASUREMENT AND REPORT QUALITY DEFINITION FOR 5G NR MULTI-TRP			PSP	APP-Closed	US	62/755362			
10440	RADIO LINK MONITORING (RLM) ENHANCEMENT FOR NEW RADIO			PSP	APP-Closed	US	62/755346			
10441	SYSTEM AND METHOD FOR UPLINK LOW-PAPR DMRS SEQUENCE DESIGN			PSP	APP-Closed	US	62/755391			
10442	FULL PROTECTION OF INITIAL NON-ACCESS STRATUM PROTOCOL MESSAGE IN 5G SYSTEMS			PSP	APP-Closed	US	62/755384			
10443	TIME PATTERN OF REFERENCE SIGNAL FOR REMOTE INTERFERENCE MANAGEMENT IN 5G NR NETWORKS			PSP	APP-Closed	US	62/755389			
10444	ON THE REQUIREMENT FOR BWP SWITCHING			PSP	APP-Closed	US	62/755999			
10445	DESIGN AND APPARATUS FOR MF-LTE			PSP	APP-Closed	US	62/756039			
10446	SIGNALING FOR RESOURCE ALLOCATION AND SCHEDULING IN 5G-NR INTEGRATED ACCESS AND BACKHAUL			NP	APP-Pending	US	16/189157		US-2019-0222281-A1	
10447	SIGNALING FOR RESOURCE ALLOCATION AND SCHEDULING IN 5G-NR INTEGRATED ACCESS AND BACKHAUL			ENT	APP-Pending	US	15/408070			
10448	DESIGN OF SYNCHRONIZATION SIGNALS FOR MULTIFREQUENCY NARROWBAND INTERNET-OF-THINGS (MF-NB-IOT) OPERATION IN UNLICENSED SPECTRUM			NP	APP-Pending	US	16/242850		US-2019-0208574-A1	
10449	METHOD TO CONTROL TRAFFIC ACCESSING PLMN SERVICE AT NON-PUBLIC NETWORK IN 5G SYSTEM			PSP	APP-Closed	US	62/757035			
10450	VEHICLE-TO-EVERYTHING (V2X) POLICY AND PARAMETERS FOR NG-UU COMMUNICATION PROVISIONED TO USER EQUIPMENT (UE) BY POLICY CONTROL FUNCTION (PCF)			PSP	APP-Closed	US	62/757715			
10451	METHOD TO DETERMINE SPATIAL QCL ASSUMPTION FOR CSI-RS IN NR			PSP	APP-Closed	US	62/757965			
10452	Redundant QCL Tuning with Overlapping Fractional Regions			NP	APP-Pending	US	16/366122			
10453	PEAK-TO-AVERAGE POWER RATIO (PAPR) REDUCTION IN REFERENCE SIGNALS			PSP	APP-Closed	US	62/757687			
10454	BEAM MANAGEMENT FOR PARTIAL BEAM CORRESPONDENCE USER EQUIPMENT			PSP	APP-Closed	US	62/758136			
10455	ON BEAM SWITCH IN INTRA-BAND NON-CONTIGUOUS CARRIER AGGREGATION			PSP	APP-Closed	US	62/760326			

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
10456	SYNCHRONIZATION SIGNAL BLUETOOTH BASED BEAM FAILURE DETECTION			PSP	APP-Closed	US	62/760276			
10457	Closed loop efficiency tracking in digital envelope tracking system			PSP	APP-Pending	US	62/828771			
10458	HANDOFF COMMAND HANDLING FOR SIMULTANEOUS CONNECTIVITY HANDOFF			PSP	APP-Closed	US	62/767399			
10459	SYSTEM AND METHOD OF DOWNLINK CONTROL CHANNEL SIGNALING FOR DL COEXISTENCE OF MULTIPLE SERVICE TYPES			PSP	APP-Closed	US	62/760339			
10460	DYNAMIC PROCESSING RESOURCE ALLOCATION ACROSS MULTIPLE CARRIERS			NP	APP-Pending	US	16/423043			
10461	SIGNALING FROM ACCESS AND BACKHAUL (AB) MOBILE TERMINAL (MT) REGARDING RELEASED RESOURCES			PSP	APP-Closed	US	62/767327			
10462	ENHANCEMENT FOR TIME DOMAIN RESOURCE ALLOCATION IN IAB NETWORKS			PSP	APP-Pending	US	62/773053			
10463	NETWORK SELECTION AND SERVICE CONTINUITY IN NON-PUBLIC NETWORKS			PSP	APP-Closed	US	62/767384			
10464	SELF-LEARNING UE CAPABILITY VERIFICATION FROM PARTIAL CAPABILITIES			PSP	APP-Closed	US	62/768363			
10465	ENABLING CACHED CONTENT RETRIEVING USING INFORMATION CENTRIC NETWORKING (ICN) FOR FDU SESSIONS TO REDUCE LATENCY IN NEXT GENERATION CELLULAR NETWORKS			PSP	APP-Closed	US	62/768763			
10466	METHOD FOR PHYSICAL LAYER SECURITY PROTECTION USING PUBLIC KEYS			NP	PAT-Active	US	16/245009	#####	US-2019-0145986-A1	
10467	APPARATUS AND METHOD OF LWA AND LWIP CONFIGURATION PERFORMANCE AND FAULT MANAGEMENT			NP	APP-Pending	US	16/240322		US-2019-0141785-A1	
10468	PHASE TRACKING REFERENCE SIGNAL (PT-RS) POWER BOOSTING			NP	APP-Pending	US	16/238232		US-2019-0140729-A1	
10469	PAGING CAUSE DETERMINATION FOR INACTIVE DEVICE IN THE 5G SYSTEM			PSP	APP-Closed	US	62/769332			
10470	DATABASE STRUCTURE AND USAGE OF WIRELESS SIGNAL ENVIRONMENT FOR DRONES			PSP	APP-Pending	US	62/772182			
10471	SYSTEM AND METHOD FOR BEAM INDICATION FOR UPLINK AND DOWNLINK TRANSMISSIONS			PSP	APP-Closed	US	62/770404			
10472	TECHNIQUES IN MEASUREMENT PROCEDURE FOR EMTS SYSTEMS OPERATING ON UNLICENSED SPECTRUM			PSP	APP-Closed	US	62/771951			
10473	INTEGRITY PROTECTION FOR FREQUENT SMALL DATA TRANSMISSION			PSP	APP-Pending	US	62/785542			
10474	DYNAMIC TRANSMIT POWER ADJUSTMENT			PSP	APP-Pending	US	62/778798			
10475	DESIGN AND APPARATUS FOR MF-LITE			PSP	APP-Pending	US	62/773828			
10476	MULTIRADIO INTERFACE (MURI) FOR MULTIPLE RADIO COMPUTERS			PSP	APP-Pending	US	62/779170			
10477	BEAM MANAGEMENT FOR CARRIER AGGREGATION (CA)			NP	APP-Pending	US	16/242821		US-2019-0335245-A1	
10478	BEAM MANAGEMENT FOR CARRIER AGGREGATION (CA)			CNT	APP-Pending	US	16/408021		US-2019-0357249-A1	
10479	BEAM INDICATION CONSIDERING BEAM FAILURE RECOVERY IN NEW RADIO			NP	APP-Pending	US	15/245970		US-2019-0239212-A1	
10480	SIZE DETERMINATION FOR CHANNEL STATE INFORMATION (CSI) PART ONE AND PART TWO TRANSMISSION OF CSI REPORT			NP	APP-Pending	US	16/243887		US-2019-0145291-A1	
10481	TIME DENSITY AND FREQUENCY DENSITY DETERMINATION OF PHASE TRACKING REFERENCE SIGNALS (PT-RS) IN NEW RADIO (NR) SYSTEMS			NP	APP-Pending	US	16/245410		US-2019-0156615-A1	
10482	CSI-RS SEQUENCE GENERATION AND MAPPING AND DMRS SCRAMBLING ID CONFIGURATION			NP	APP-Pending	US	16/247171		US-2019-0145294-A1	
10483	CSI-RS SEQUENCE GENERATION AND MAPPING AND DMRS SCRAMBLING ID CONFIGURATION			CNT	APP-Pending	US	16/407743		US-2019-0327050-A1	
10484	TIME DOMAIN RESOURCE ALLOCATION FOR MOBILE COMMUNICATION			NP	APP-Pending	US	16/245407		US-2019-0149365-A1	
10485	CONTENTION WINDOW ADJUSTMENT MECHANISMS FOR FELAA SYSTEMS			NP	APP-Pending	US	16/250360		US-2019-0155256-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
10486	CONTENTION WINDOW ADJUSTMENT MECHANISMS FOR FELAA SYSTEMS			CNT	APP-Pending	US	16/407767		US-2019-0335501-A1	
10487	CONTROL SIGNALING FOR UPLINK MULTIPLE INPUT MULTIPLE OUTPUT CHANNEL STATE INFORMATION REFERENCE SIGNAL CONFIGURATION AND SOUNDING REFERENCE SIGNAL CONFIGURATION			NP	APP-Pending	US	16/252204		US-2019-0174466-A1	
10488	HANDLING OVERLAPPING OF PUCCH AND PUSCH FOR NEW RADIO SYSTEMS			NP	APP-Pending	US	16/251762		US-2019-0261391-A1	
10489	HANDLING OVERLAPPING OF PUCCH AND PUSCH FOR NEW RADIO SYSTEMS			CNT	APP-Pending	US	16/407775		US-2019-0335485-A1	
10490	CHANNEL CONFIGURATION AND DLUL CONFIGURATION FOR NB-IOT-U SYSTEM			NP	APP-Pending	US	15/267810		US-2019-0174476-A1	
10491	INDICATION TECHNIQUES FOR NARROWBAND SYSTEM INFORMATION BLOCK TYPE 1 (SIB1-NB) TRANSMISSION ON A CARRIER			NP	APP-Pending	US	15/273566		US-2019-0180686-A1	
10492	INDICATION TECHNIQUES FOR NARROWBAND SYSTEM INFORMATION BLOCK TYPE 1 (SIB1-NB) TRANSMISSION ON A CARRIER			CNT	APP-Pending	US	16/408030		US-2019-0273599-A1	
10493	TWO-TONE PHYSICAL UPLINK SHARED CHANNEL FOR MACHINE TYPE COMMUNICATIONS			NP	APP-Pending	US	16/277870		US-2019-0215849-A1	
10494	TWO-TONE PHYSICAL UPLINK SHARED CHANNEL FOR MACHINE TYPE COMMUNICATIONS			CNT	APP-Pending	US	16/408298			
10495	RESERVED RESOURCE ELEMENTS FOR HYBRID AUTOMATIC REPEAT REQUEST BITS			NP	APP-Pending	US	16/246102		US-2019-0166597-A1	
10496	METHODS FOR ENHANCED UPLINK BEAM OPERATIONS			PSP	APP-Pending	US	62/777404			
10497	SYSTEM AND METHOD FOR DL TRANSMISSION WITH LOW PEAK-TO-AVERAGE-POWER (PAPR)			PSP	APP-Pending	US	62/788585			
10498	FREQUENCY HOPPING PATTERN FOR NARROWBAND INTERNET-OF-THINGS IN UNLICENSED SPECTRUM			NP	APP-Pending	US	16/261130		US-2019-0158139-A1	
10499	SIMULTANEOUS HARQ-ACK FEEDBACK AND UPLINK TRANSMISSION WITHOUT DYNAMIC GRANT			NP	APP-Pending	US	16/274853		US-2019-0327755-A1	
10500	SIMULTANEOUS HARQ-ACK FEEDBACK AND UPLINK TRANSMISSION WITHOUT DYNAMIC GRANT			CNT	APP-Pending	US	16/407786		US-2019-0335486-A1	
10501	METHODS FOR SIMULTANEOUS SUPPORT OF RESOURCE SELECTION MODES AND CONFIGURATION MECHANISMS FOR NR V2X SIDELINK			PSP	APP-Pending	US	62/780876			
10502	CONFIGURATION MANAGEMENT PERFORMANCE MANAGEMENT AND FAULT MANAGEMENT TO SUPPORT EDGE COMPUTING			PSP	APP-Pending	US	62/782074			
10503	RANDOM ACCESS PROCEDURE FOR NR BASED SATELLITE COMMUNICATION			PSP	APP-Pending	US	62/788958			
10504	COEXISTENCE SOLUTIONS FOR LTE E-V2X AND ITS-G5 / DSRC			PSP	APP-Pending	US	62/788552			
10505	METHOD AND SYSTEM FOR THRESHOLD MONITORING			PSP	APP-Pending	US	62/785355			
10506	ANTENNA SYSTEM HAVING HINGE ANTENNA			PSP	APP-Pending	US	62/851952			
10507	METHODS FOR PHYSICAL DOWNLINK CONTROL CHANNEL WITH MULTI-TRP TRANSMISSION			PSP	APP-Pending	US	62/788485			
10508	PHASE TRACKING REFERENCE SIGNAL DESIGN FOR SINGLE CARRIER WAVEFORM			PSP	APP-Pending	US	62/788282			
10509	PERFORMANCE MEASUREMENTS RELATED TO QUALITY OF SERVICE FLOW AND SERVICE REQUEST			PSP	APP-Pending	US	62/789363			
10510	PRACH AND PUCCH DESIGN FOR MF-LITE			PSP	APP-Pending	US	62/788077			
10511	SIGNALING METHODS FOR SEMI-STATIC CONFIGURATION REGARDING NOT AVAILABLE HARD AND SOFT AND RESOURCES IN IAB			PSP	APP-Pending	US	62/790386			
10512	LOW-LATENCY UPLINK (UL) SCHEDULING REQUESTS			PSP	APP-Pending	US	62/790800			
10513	REFERENCE SIGNAL DESIGN FOR A SYSTEM OPERATING ABOVE 526 GIGAHERTZ (GHZ) CARRIER FREQUENCY			PSP	APP-Pending	US	62/790978			
10514	METHOD AND APPARATUS FOR RACH OPTIMIZATION AND AUTOMATIC NEIGHBOR RELATION CREATION FOR 5G NETWORKS			PSP	APP-Pending	US	62/789961			
10515	ON THE CONTENTION WINDOW SIZE UPDATE FOR CAT4 LBT FOR CBG BASED RETRANSMISSION IN NR SYSTEMS OPERATING ON UNLICENSED SPECTRUM			PSP	APP-Pending	US	62/790376			
10516	SECURITY FRAMEWORK FOR MSG3 AND MSG4 IN EARLY DATA TRANSMISSION			NP	APP-Pending	US	16/294553		US-2019-0208413-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
10517	SECURITY FRAMEWORK FOR MSG3 AND MSG4 IN EARLY DATA TRANSMISSION			ENT	APP-Pending	US	16/407166			
10518	DYNAMIC INDICATION OF SOFT RESOURCE AVAILABILITY VIA SR PROCEDURE IN IAB			PSP	APP-Pending	US	62/790403			
10519	FAILBACK PROCEDURE FOR 2-STEP RACH			PSP	APP-Pending	US	62/790951			
10520	CONTROLLING THE NUMBER OF UL-TO-UL AND UL-TO-DL SWITCHING POINTS WITHIN A SHARED COT IN NR SYSTEMS OPERATING ON UNLICENSED SPECTRUM			PSP	APP-Pending	US	62/790766			
10521	RESOURCE ALLOCATION FOR PHYSICAL UPLINK CONTROL CHANNEL DURING INITIAL ACCESS IN NR-UNLICENSED RACH RESOURCE COORDINATION MECHANISMS FOR ADJACENT HOPS IN IAB			PSP	APP-Pending	US	62/790889			
10522	ADJACENT HOPS IN IAB			PSP	APP-Pending	US	62/791417			
10523	SIGNALING PROCEDURES FOR NR POSITIONING SUPPORT			PSP	APP-Pending	US	62/791486			
10524	SIDELINK PHYSICAL LAYER PROCEDURES FOR COLLISION AVOIDANCE HARQ FEEDBACK AND CSI ACQUISITION			PSP	APP-Pending	US	62/791527			
10525	METHOD FOR MEASUREMENT OF UE-TO-UE REFERENCE SIGNAL IN NEW RADIO (NR) NETWORKS WITH CROSS-LINK INTERFERENCE			PSP	APP-Pending	US	62/791388			
10526	METHOD OF RESOURCE ALLOCATION REFERENCE SIGNAL DESIGN AND BEAM MANAGEMENT FOR NR POSITIONING			PSP	APP-Pending	US	62/791569			
10527	SIDELINK PROCEDURES AND STRUCTURES FOR TRANSMISSION AND RECEPTION OF NON-STANDALONE AND STANDALONE PSCCH			PSP	APP-Pending	US	62/791572			
10528	PORT MANAGEMENT FOR RELIABLE DATA SERVICE (RDS) PROTOCOL			PSP	APP-Pending	US	62/792080			
10529	CORESET0 CONFIGURATION ENHANCEMENT FOR OFF-RASTER SSB IN IAB			PSP	APP-Pending	US	62/791446			
10530	UE-TO-UE CROSSLINK INTERFERENCE MEASUREMENT AND REPORTING			PSP	APP-Pending	US	62/791653			
10531	SYSTEM AND METHODS FOR SIGNALING MECHANISM FOR UE ASSISTANCE FEEDBACK			PSP	APP-Pending	US	62/791689			
10532	INTRA-UE MULTIPLEXING IN NEW RADIO SYSTEMS			PSP	APP-Pending	US	62/791633			
10533	PDCCH CANDIDATE SELECTION FOR MULTI-DCI NC JT FOR 5G NR			PSP	APP-Pending	US	62/791647			
10534	METHOD FOR CONVEYING REMOTE INTERFERENCE MANAGEMENT INFORMATION VIA REFERENCE SIGNAL			PSP	APP-Pending	US	62/791703			
10535	GRANT BASED PUSCH TRANSMISSION AND CONFIGURED GRANT BASED PUSCH TRANSMISSION IN NR SYSTEMS OPERATING ON UNLICENSED SPECTRUM			PSP	APP-Pending	US	62/791701			
10536	INFORMATION EXCHANGE FOR NETWORK COORDINATION OF UE-TO-UE CROSS-LINK INTERFERENCE MEASUREMENT			PSP	APP-Pending	US	62/791667			
10537	USER EQUIPMENT PROCESSING TIME RELAXATION FOR MULTI-DCI NC JT PDSCH RECEPTION			PSP	APP-Pending	US	62/791645			
10538	COT SHARING PROCEDURE FOR CONFIGURED GRANTS IN NR SYSTEMS OPERATING ON UNLICENSED SPECTRUM			PSP	APP-Pending	US	62/791690			
10539	PRS DESIGN FOR QCL AND FRAME TIMING INFORMATION IN NR-U			PSP	APP-Pending	US	62/791697			
10540	CROSS-CARRIER SCHEDULING WITH DIFFERENT NUMEROLOGIES			PSP	APP-Pending	US	62/791643			
10541	NETWORK COORDINATION FOR CLI MITIGATION			PSP	APP-Pending	US	62/791658			
10542	OLUTION TO HANDLE V2X UE WITH DIFFERENT PCS RAT CAPABILITY IN 5G5			PSP	APP-Pending	US	62/792268			
10543	PHYSICAL DOWNLINK CONTROL CHANNEL DESIGN FOR DFT-S-OFDM WAVEFORM			PSP	APP-Pending	US	62/795451			
10544	FREQUENCY DOMAIN CHANNEL STATE INFORMATION (CSI) COMPRESSION			PSP	APP-Pending	US	62/794220			
10545	AVOID USER EQUIPMENT TO TRIGGER MEASUREMENT REPORT AFTER EXIT CONDITIONAL HANDOVER			PSP	APP-Pending	US	62/793704			
10546	METHODS FOR MULTI-TRP TRANSMISSION			PSP	APP-Pending	US	62/793804			
10547	SIDELINK CONNECTION ESTABLISHMENT DESIGN TO SUPPORT UNICAST AND GROUPCAST COMMUNICATION FOR NR V2X			PSP	APP-Pending	US	62/793126			
10548	METHODS FOR DATA REPETITION TRANSMISSION FOR HIGH RELIABLE COMMUNICATION			PSP	APP-Pending	US	62/794285			
10549	EVOLVED PACKET CORE (EPC) SOLUTION FOR RESTRICTED LOCAL OPERATOR SERVICES (RLOS) ACCESS USING DEVICE AUTHENTICATION			PSP	APP-Pending	US	62/794365			
10550	SELECTION OF CORE NETWORK BASED ON SUPPORTED CELLULAR INTERNET OF THINGS (CIOT) FEATURES			PSP	APP-Pending	US	62/794099			
10551	OPERATION OF EMTS AND NB-IOT UES WHEN CONNECTED TO 5G5N			PSP	APP-Pending	US	62/796487			
10552	PRACH AND PUCCH DESIGN FOR ME-LITE			PSP	APP-Pending	US	62/795214			

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
10553	DATA TRANSFER OVER NAS CONTROL PLANE FOR CIOT IN 5GS			PSP	APP-Pending	US	62/797012			
10554	ENABLING UAS SERVICE FOR IDENTIFICATION AND OPERATION IN 3GPP SYSTEM			PSP	APP-Pending	US	62/802802			
10555	DATA CHANNEL MAPPING TYPE AND DM-RS CONFIGURATION TO ENABLE L1 CL1 MEASUREMENT AND REPORTING			PSP	APP-Pending	US	62/795771			
10556	UE CAPABILITIES PROVISIONING AND RETRIEVAL IN CELLULAR NETWORKS			NP	APP-Pending	US	16/376528		US-2019-0239064-A1	
10557	RANDOM ACCESS RECEPTION AND MESSAGE 3 TRANSMISSION FOR NEW RADIO (NR) BASED SATELLITE COMMUNICATION			PSP	APP-Pending	US	62/796976			
10558	TRANSPORT BLOCK SIZE (TBS) DETERMINATION IN FULL-DIMENSION MULTIPLE-INPUT MULTIPLE-OUTPUT (FD-MIMO) NETWORKS			NP	APP-Pending	US	16/371970		US-2019-0230699-A1	
10559	CONFIGURATION AND DESIGN OF CSI AND MCS TABLES FOR 5G COMMUNICATIONS			NP	APP-Pending	US	16/372877		US-2019-0253121-A1	
10560	SYSTEM INFORMATION IN UNLICENSED NARROWBAND INTERNET OF THINGS (NB-IOT) SYSTEMS			NP	APP-Pending	US	16/384672		US-2019-0246464-A1	
10561	CHANNEL CONFIGURATION AND DOWNLINK/UPLINK CONFIGURATION FOR NARROW BAND INTERNET OF THINGS (NB-IOT) SYSTEMS			NP	APP-Pending	US	16/388128		US-2019-0258013-A1	
10562	CHANNEL STATE INFORMATION REFERENCE SIGNAL (CSI-RS) AND SOUNDING REFERENCE SIGNAL (SRS) TRIGGERING			NP	APP-Pending	US	16/397916		US-2019-0273637-A1	
10563	CHANNEL STATE INFORMATION REFERENCE SIGNAL (CSI-RS) AND SOUNDING REFERENCE SIGNAL (SRS) TRIGGERING			CNT	APP-Pending	US	16/408375		US-2019-0327115-A1	
10564	DOWNLINK RECEPTION SIGNAL COLLISION AVOIDANCE			PSP	APP-Pending	US	62/798881			
10565	SCHEDULING OF PDSCH TRANSMISSION WITH DFT-S-OFDM WAVEFORM			PSP	APP-Pending	US	62/798942			
10566	PUCCH AND PUSCH DEFAULT BEAM CONSIDERING BEAM FAILURE RECOVERY			NP	APP-Pending	US	16/298416		US-2019-0236730-A1	
10567	PUCCH AND PUSCH DEFAULT BEAM CONSIDERING BEAM FAILURE RECOVERY			CNT	APP-Pending	US	16/407881		US-2019-0335524-A1	
10568	MECHANISMS TO CONVERGE THE WI-FI ACCESS NETWORK WITH THE 5G NR ACCESS NETWORK WITHIN THE RADIO ACCESS NETWORK			PSP	APP-Pending	US	62/798380			
10569	FAST RETURN TO 5GS AFTER HANDOVER TO EPS DUE TO EPS FALLBACK FROM 5GS			PSP	APP-Pending	US	62/798303			
10570	V2X UE WITH DIFFERENT PCS RAT CAPABILITY IN 5GS			PSP	APP-Pending	US	62/798361			
10571	SINGLE RADIO VOICE CALL CONTINUITY HANDOVER			NP	APP-Pending	US	16/273975		US-2019-0182718-A1	
10572	PRACH AND PUSCH DESIGN FOR NF-LTE			PSP	APP-Pending	US	62/798898			
10573	METHODS FOR TIMING OFFSET SIGNALING FOR CROSS-LINK INTERFERENCE (CLI) MEASUREMENT			PSP	APP-Pending	US	62/800763			
10574	SOLUTION FOR 5GC TO NOTIFY V2X UE WHETHER V2X SERVICE IS SUPPORTED OR AUTHORIZED			PSP	APP-Pending	US	62/800808			
10575	ON THE FRAME STRUCTURE DESIGN FOR SINGLE CARRIER WAVEFORM			PSP	APP-Pending	US	62/800360			
10576	CROSS-LINK INTERFERENCE (CLI) MEASUREMENT REPORTING			PSP	APP-Pending	US	62/801022			
10577	TRS SETUP IN RRM TESTING			PSP	APP-Pending	US	62/800957			
10578	ENABLING INTERACTIVE SERVICE FOR CLOUD RENDERING GAMING IN 5GS			PSP	APP-Pending	US	62/802153			
10579	A NOVEL SCHEDULING RESTRICTION METHOD FOR INTRA-FREQUENCY MEASUREMENT			PSP	APP-Pending	US	62/800398			
10580	NR RRM ENHANCEMENTS IN MEASUREMENT EVENT AND REPORTING AND CELL RESELECTION CRITERIA FOR UNLICENSED BAND OPERATION			PSP	APP-Pending	US	62/805156			
10581	MAC FORMAT FOR MSGA AND MSGB IN 2-STEP RA PROCEDURE			PSP	APP-Pending	US	62/805158			
10582	REPETITION CONFIGURATION FOR REMOTE INTERFERENCE MANAGEMENT-REFERENCE SIGNAL (RM-RS) TRANSMISSIONS			PSP	APP-Pending	US	62/802626			
10583	FRAME-BASED EQUIPMENT MODE OF OPERATION FOR NEW RADIO-UNLICENSED SYSTEMS AND NETWORKS			PSP	APP-Pending	US	62/804532			
10584	QUALITY REPORT IN MSG3 FOR REL-16 E-UTRA AND NB-IOT			PSP	APP-Pending	US	62/804969			

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
10585	Systems and Methods for Physical Random Access Channel Transmissions			NP	APP-Pending	US	16/376333		US-2019-0236283-A1	
10586	METHODS FOR PROVISIONING AUDIO-VIDEO MEDIA PRODUCTION SERVICES IN THE 5G SYSTEM			PSP	APP-Pending	US	62/803332			
10587	REGISTRATION MANAGEMENT IN INFORMATION CENTRIC NETWORKING FOR NEXT GENERATION CELLULAR NETWORKS			PSP	APP-Pending	US	62/805869			
10588	SERVICE REQUEST PROCEDURES IN INFORMATION CENTRIC NETWORKING FOR NEXT GENERATION CELLULAR NETWORKS			PSP	APP-Pending	US	62/805834			
10589	PER-LINK SEMI-STATIC RESOURCE CONFIGURATION SCHEMES FOR AN INTEGRATED ACCESS AND BACKHAUL (IAB) DISTRIBUTED UNIT (DU)			PSP	APP-Pending	US	62/804632			
10590	SLOT FORMATS FOR SEMI-STATIC DOWNLINK-UPLINK (DL-UL) CONFIGURATION AND DYNAMIC SLOT FORMAT INDICATION (SFI) IN INTEGRATED ACCESS AND BACKHAUL (IAB) NETWORKS			PSP	APP-Pending	US	62/804674			
10591	SUPPORT OF LOCATION MANAGEMENT FUNCTIONALITY IN RAN			PSP	APP-Pending	US	62/804485			
10592	MEASUREMENT GAP DESIGN FOR NR-DC MODE			PSP	APP-Pending	US	62/804110			
10593	SYSTEM AND METHOD FOR EMISSION AND POWER AWARE BEAM SELECTION			PSP	APP-Pending	US	62/805873			
10594	ENHANCED BEAM RECOVERY			PSP	APP-Pending	US	62/804080			
10595	CORE NETWORK SUPPORT FOR DELAY BUDGET INFORMATION (DBI) SIGNALING IN IMS MULTIMEDIA SESSIONS			PSP	APP-Pending	US	62/804592			
10596	SIP REGISTRATION PROCEDURE FOR ANBR CAPABILITY SIGNALING			PSP	APP-Pending	US	62/805204			
10597	ON THE CONTENTION WINDOW SIZE UPDATE FOR CAT4 LBT FOR CBG BASED RETRANSMISSION IN NR SYSTEMS			PSP	APP-Pending	US	62/804107			
10598	OPERATING ON UNLICENSED SPECTRUM			PSP	APP-Pending	US	62/805192			
10599	BROADCASTING SCHEMES OF Delta INFORMATION IN FIFTH GENERATION (5G) NEW RADIO (NR) INTEGRATED ACCESS AND BACKHAUL (IAB) NETWORK			PSP	APP-Pending	US	62/805192			
10600	METHOD AND SYSTEM FOR PERFORMANCE THRESHOLD MONITORING SERVICE AND MANAGEMENT DATA STREAMING CONNECTION OPERATIONS			PSP	APP-Pending	US	62/804698			
10601	SYSTEM AND METHOD TO DEPLOY OF UPF AND EDGE COMPUTING VNFs IN NFV ENVIRONMENT NETWORKS			PSP	APP-Pending	US	62/804695			
10602	SYSTEM INFORMATION DESIGN FOR NEW RADIO (NR) VEHICLE-TO-EVERYTHING (V2X) SIDELINK OPERATION			PSP	APP-Pending	US	62/805234			
10603	METHODS FOR TRANSMISSION RETRANSMISSION AND HARD PROCESS FOR PUR IN IDLE MODE			PSP	APP-Pending	US	62/805162			
10604	METHOD OF TYPE II CSI REPORTING FOR MULTIPLE SPATIAL LAYERS			PSP	APP-Pending	US	62/805892			
10605	REDIRECTION FROM GSM EDGE RADIO ACCESS NETWORK (GERAN) BANDS TO EVOLVED UTM TERRESTRIAL RADIO ACCESS NETWORK (EUTRAN) BANDS			PSP	APP-Pending	US	62/824858			
10606	METHOD FOR SCCELL BEAM FAILURE RECOVERY OPERATION IN NR			PSP	APP-Pending	US	62/805864			
10607	MT ASSUMED SSB PERIODICITY FOR CELL RESELECTION IN 5G-NR IAB			PSP	APP-Pending	US	62/805203			
10608	PERFORMANCE MEASUREMENTS RELATED TO REGISTRATION VIA UNTRUSTED NON-3GPP ACCESS AND INTER-RAT HANDOVERS			PSP	APP-Pending	US	62/805242			
10609	SYSTEM AND METHOD FOR 5G SON FOR MOBILITY ROBUSTNESS OPTIMIZATION AND AUTOMATIC NETWORK SLICE CREATION			PSP	APP-Pending	US	62/805248			
10610	SYSTEM AND METHOD FOR UE TRIGGERED CSRS			PSP	APP-Pending	US	62/805517			
10611	TECHNOLOGIES FOR DYNAMICALLY CONFIGURING UE SR5 RESOURCES			PSP	APP-Pending	US	62/806518			
10612	MEASURING NR RSRP BY OTA			PSP	APP-Pending	US	62/806542			
10613	CLI-RSSI MEASUREMENT RESOURCE CONFIGURATION			PSP	APP-Pending	US	62/806575			
10614	ON COLLISION HANDLING OF MSGA PUSCH IN 2-STEP RACH AND OTHER UPLINK CHANNELS			PSP	APP-Pending	US	62/806912			
10615	CHANNEL OCCUPANCY TIME (COT) STRUCTURE IN NEW RADIO (NR) SYSTEMS OPERATING ON UNLICENSED SPECTRUM			PSP	APP-Pending	US	62/805267			
10616	GRANT BASED PUSCH TRANSMISSION AND CONFIGURED GRANT BASED PUSCH TRANSMISSION IN NR SYSTEMS OPERATING ON UNLICENSED SPECTRUM			PSP	APP-Pending	US	62/805270			

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
10616	DOWNLINK (DL) POSITIONING REFERENCE SIGNAL (PRS) BANDWIDTH PART (BWP) CONFIGURATION REFERENCE SIGNAL DESIGN AND USER EQUIPMENT (UE) BASED POSITIONING ENHANCEMENTS FOR NEW RADIO (NR) POSITIONING			PSP	APP-Pending	US	62/805834			
10617	METHODS THAT MAKE THE NR CARRIER AGGREGATION MORE EFFECTIVE			PSP	APP-Pending	US	62/806230			
10618	METHODS OF ENSURING FAIRNESS IN A MULTI-HOP RELAY NETWORK			PSP	APP-Pending	US	62/805723			
10619	SYSTEMS AND METHODS FOR AUTONOMOUS VEHICLE COMMUNICATION			NP	APP-Pending	US	16/368560			
10620	CONTIGUOUS CONFIGURED AND GRANT-BASED UL TRANSMISSIONS ON NR-LT SYSTEMS			PSP	APP-Pending	US	62/805555			
10621	DESIGN OF NR SIDELINK SYNCHRONIZATION SIGNAL FOR V2X USE CASES WITH OPTIMIZED RX PROCESSING			PSP	APP-Pending	US	62/805818			
10622	METHODS FOR SNR ES AND NOC SETUP FOR NR PERFORMANCE REQUIREMENTS			PSP	APP-Pending	US	62/805861			
10623	RECEIVE ANTENNA RELATIVE PHASE MEASUREMENTS FOR NR			PSP	APP-Pending	US	62/805919			
10624	APERIODIC QUALITY REPORT IN CONNECTED MODE USING QUALITY DEFINITION AS IN MSG3 FOR REL-16 5MTC			PSP	APP-Pending	US	62/805917			
10625	METHODS FOR SIMULTANEOUS SUPPORT OF AND SWITCHING BETWEEN SCHEDULED AND UE AUTONOMOUS RESOURCE SELECTION MODES FOR NR V2X SIDELINK			PSP	APP-Pending	US	62/805728			
10626	SYSTEM AND METHOD OF ADAPTATION OF REFERENCE SIGNAL (RS) MONITORING FOR UE POWER SAVING			PSP	APP-Pending	US	62/806537			
10627	2-STEP RACH INITIATED BY PDCCH ORDER			PSP	APP-Pending	US	62/806203			
10628	INTER-GNB EXCHANGE FOR INTENDED UL/DL DIRECTIONS			PSP	APP-Pending	US	62/806207			
10629	NR - COT SHARING PROCEDURE FOR CONFIGURED GRANTS IN NR SYSTEMS OPERATING ON UNLICENSED SPECTRUM			PSP	APP-Pending	US	62/806199			
10630	WIDEBAND INTERLACE DESIGN FOR PHYSICAL UPLINK CHANNEL IN NR UNLICENSED			PSP	APP-Pending	US	62/806701			
10631	SECONDARY CELL BEAM RECOVERY			PSP	APP-Pending	US	62/807186			
10632	TECHNOLOGIES FOR PROTECTING AGAINST VICTIM MASQUERADE ATTACK IN REMOTE INTERFERENCE MANAGEMENT			PSP	APP-Pending	US	62/806246			
10633	MEASUREMENT TIMING ADJUSTMENT FOR SRS-PSP MEASUREMENT			PSP	APP-Pending	US	62/806515			
10634	METHOD FOR INITIALIZATION SEED GENERATION FOR PN SEQUENCES IN REMOTE INTERFERENCE MANAGEMENT			PSP	APP-Pending	US	62/806566			
10635	RESOURCE ALLOCATION FOR MULTI-TRP URLLC			PSP	APP-Pending	US	62/806540			
10636	DEMODULATION REFERENCE SIGNAL (DMRS) INDICATION FOR SINGLE DOWNLINK CONTROL INFORMATION (DCI) MULTI-TRANSMISSION RECEPTION POINT (TRP) TRANSMISSION			PSP	APP-Pending	US	62/806644			
10637	SYSTEMS AND METHODS FOR INTRA-UE MULTIPLEXING IN NEW RADIO (NR)			PSP	APP-Pending	US	62/806701			
10638	SYSTEM AND METHOD FOR UPLINK POWER SELECTION WITH POWER SAVING			PSP	APP-Pending	US	62/807186			
10639	LOCATION SERVICES (LCS) CLIENT IN A NEXT GENERATION (NG) RADIO ACCESS NETWORK (RAN)			PSP	APP-Pending	US	62/806576			
10640	OPERATIONS AND NOTIFICATIONS FOR PERFORMANCE MANAGEMENT OF 5G NETWORKS AND NETWORK SLICING			NP	APP-Pending	US	16/396312		US-2019-0253912-A1	
10641	OPERATIONS AND NOTIFICATIONS FOR PERFORMANCE MANAGEMENT OF 5G NETWORKS AND NETWORK SLICING			CNT	APP-Pending	US	15/408446		US-2019-0395350-A1	
10642	MANAGING VIRTUAL LINKS IN A NETWORK SERVICE INSTANCE			NP	APP-Pending	US	15/357959		US-2019-0280938-A1	
10643	MANAGING VIRTUAL LINKS IN A NETWORK SERVICE INSTANCE			CNT	APP-Pending	US	16/408446		US-2019-0334763-A1	
10644	Enhancements on Random Access for NR-Unlicensed			NP	APP-Pending	US	15/369187		US-2019-0223255-A1	
10645	ON RADIO LINK MONITORING FOR HIGH SPEED SCENARIO			PSP	APP-Pending	US	62/808725			
10646	CELL ACTIVATION AND DEACTIVATION DELAY FOR CA IN HIGH SPEED SCENARIO			PSP	APP-Pending	US	62/808726			

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
10647	SYSTEM AND METHODS ON PUSCH REPETITION TERMINATION IN NR			PSP	APP-Pending	US	62/808728			
10648	RADIO RESOURCE MANAGEMENT (RRM) TESTING USING ARRIVAL OF ANGLES (AOA)			PSP	APP-Pending	US	62/809396			
10649	UL RETRANSMISSION AND RLF RECOVERY IN A MULTI-HOP RELAY NETWORK			PSP	APP-Pending	US	62/810123			
10650	ENHANCED CA RRM MEASUREMENT IN HIGH SPEED SCENARIO			PSP	APP-Pending	US	62/809439			
10651	PCDP DESIGN FOR REDUCTION OF HANDOVER INTERRUPTION			PSP	APP-Pending	US	62/809441			
10652	COMPRESSION AND DECOMPRESSION OF INFORMATION CENTRIC NETWORKING NAMES AT THE PCDP			PSP	APP-Pending	US	62/811829			
10653	DESIGN AND IMPLEMENTATION OF UCI ON PUSCH FOR MF-LITE			PSP	APP-Pending	US	62/812166			
10654	METHOD FOR DETERMINING THE CONTENT OF A RETRANSMISSION			PSP	APP-Pending	US	62/820580			
10655	DEFINING USER EQUIPMENT (UE) DOWNLINK (DL) MEASUREMENT AND DEMODULATION PERFORMANCE REQUIREMENTS AND MITIGATING AGAINST INTER-CARRIER INTERFERENCE (ICI) ISSUES DUE TO FREQUENCY DOMAIN MULTIPLEXED (FDM) DL CHANNELS WITH MIXED NUMEROLOGIES			PSP	APP-Pending	US	62/815234			
10656	BALANCING TIME RESOURCE ALLOCATION TO C-V2X AND ITS-55 OR DSRC DEPENDING ON USER CONFIGURATIONS			PSP	APP-Pending	US	62/820145			
10657	METHODS FOR ENHANCED RANDOM ACCESS FOR RELAY NODE			PSP	APP-Pending	US	62/815907			
10658	ENHANCED AUTONOMOUS UPLINK TIMING ADJUSTMENT			PSP	APP-Pending	US	62/815213			
10659	SSB PATTERN AND DMRS DESIGN FOR PBCH FOR ABOVE 526GHZ CARRIER FREQUENCY			PSP	APP-Pending	US	62/818369			
10660	MEASUREMENT OBJECTS IN A NEW RADIO (NR) SYSTEM			NP	APP-Pending	US	16/373065		US-2019-0230550-A1	
10661	MEASUREMENT OBJECTS IN A NEW RADIO (NR) SYSTEM			CNT	APP-Pending	US	16/408250			
10662	INTER-RELAY NODE DISCOVERY AND MEASUREMENTS			PSP	APP-Pending	US	62/816697			
10663	NEXT GENERATION NODE-B (GNB) FOR INTEGRATED ACCESS AND BACKHAUL (IAB) RELAY IN NEW RADIO (NR) NETWORKS			NP	APP-Pending	US	16/366739		US-2019-0223978-A1	
10664	METHODS OF BEAM MANAGEMENT AND BEAM SELECTION BASED ON MEASUREMENT REPORTING IN NEW RADIO (NR) SYSTEMS			NP	APP-Pending	US	16/379047		US-2019-0238208-A1	
10665	TECHNOLOGIES TO DETERMINE SUPPORT OF IMS VOICE OVER PS SESSIONS IN A 5G MOBILE NETWORK			PSP	APP-Pending	US	62/819284			
10666	HANDLING OF CONCURRENT 3GPP AND NON-3GPP ACCESS IN THE 5G SYSTEM			PSP	APP-Pending	US	62/821959			
10667	HIGHER LAYER CONFIGURATION FOR MF-LITE SYSTEMS IN GLOBAL MODE OF OPERATION			PSP	APP-Pending	US	62/816772			
10668	AUTOMATED REMOTE ID MONITORING NETWORK			PSP	APP-Pending	US	62/818526			
10669	HIGHER LAYER CONFIGURATION FOR MF-LITE SYSTEMS IN GLOBAL MODE OF OPERATION			PSP	APP-Pending	US	62/817351			
10670	CWS ADJUSTMENT FOR DL TRANSMISSIONS FOR STANDALONE MODE IN NR SYSTEMS OPERATING ON UNLICENSED SPECTRUM			PSP	APP-Pending	US	62/818376			
10671	SYSTEM AND METHOD OF PHASE TRACKING REFERENCE SIGNAL TRANSMISSION FOR OFDM			PSP	APP-Pending	US	62/818611			
10672	RELAY NODE RESOURCE HANDLING			PSP	APP-Pending	US	62/818343			
10673	PHYSICAL RESOURCE BLOCK BUNDLING IN MULTI-TRIP OPERATION			PSP	APP-Pending	US	62/821338			
10674	PHYSICAL RANDOM ACCESS CHANNEL (PRACH) AND PHYSICAL UPLINK CONTROL CHANNEL (PUCCH) DESIGN FOR MF-LITE			PSP	APP-Pending	US	62/821922			
10675	CONFIGURATIONS FOR MF-LITE SYSTEMS IN GLOBAL OPERATION MODE			PSP	APP-Pending	US	62/821830			
10676	ON COLLISION HANDLING OF MSGA PHYSICAL UPLINK SHARED CHANNEL (PUSCH) IN 2 STEP RANDOM ACCESS CHANNEL (RACH) AND OTHER UPLINK CHANNELS			PSP	APP-Pending	US	62/821585			
10677	SIGNALING FOR INACTIVE SMALL DATA TRANSMISSION WITHOUT PATH SWITCHING			PSP	APP-Pending	US	62/820766			
10678	DATA FORWARDING IN MR-DC WITH 5GC OPERATIONS INVOLVING SN CHANGE			PSP	APP-Pending	US	62/820143			
10679	ON THE CONTENTION WINDOW SIZE UPDATE FOR CAT4 LBT FOR CBG BASED RETRANSMISSION IN NR SYSTEMS OPERATING ON UNLICENSED SPECTRUM			PSP	APP-Pending	US	62/821847			

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
10680	UE BEHAVIOR AND RESTRICTIONS FOR GLOBAL MODE IN MF-LITE SYSTEM			PSP	APP-Pending	US	62/821588			
10681	SIGNALING FOR PARENT DU REGARDING ITS CHILD DU RESOURCE ALLOCATION IN 5G-NR IAB			PSP	APP-Pending	US	62/822373			
10682	User Equipment (UE) Downlink Transmission Configuration Indication (TCI)-State Selection			NP	APP-Pending	US	16/406504		US-2019-0281587-A1	
10683	SYMBOL PUNCTURE FOR UNLICENSED NARROWBAND INTERNET OF THINGS (NB-IOT)			NP	APP-Pending	US	16/406282		US-2019-0268970-A1	
10684	MULTIPLEXING PHYSICAL UPLINK CONTROL CHANNELS IN A SLOT FOR A NEW RADIO (NR) SYSTEM			NP	APP-Pending	US	16/804608		US-2019-0261363-A1	
10685	UE USING UPLINK GRANT-BASED TRANSMISSIONS AND EXTENDED POWER GRANT-FREE NOMA TRANSMISSIONS			NP	APP-Pending	US	16/408924		US-2019-0289628-A1	
10686	METHODS FOR DATA TRANSMISSION IN RELAY NODE			PSP	APP-Pending	US	62/822584			
10687	RESERVATION SIGNAL TO AVOID THE GAP FOR PUSCH TRANSMISSION IN THE MF-LITE SYSTEM			PSP	APP-Pending	US	62/822366			
10688	URL BT FAILURES HANDLING IN NR UNLICENSED			PSP	APP-Pending	US	62/823460			
10689	TIME-DOMAIN RESOURCE ALLOCATION FOR CONFIGURED GRANT TRANSMISSIONS IN NEW RADIO (NR) SYSTEMS			PSP	APP-Pending	US	62/821911			
10690	SIGNALING DESIGN FOR REGIONAL OPERATION FOR MF-LITE			PSP	APP-Pending	US	62/821595			
10691	CROSS-LINK INTERFERENCE (CLI) RADIO RESOURCE MANAGEMENT (RRM) MEASUREMENT			PSP	APP-Pending	US	62/822507			
10692	COEFFICIENT REPORTING FOR TYPE II CHANNEL STATE INFORMATION (CSI)			PSP	APP-Pending	US	62/822334			
10693	INTEGRITY PROTECTION OF UPLINK (UL) DATA			PSP	APP-Pending	US	62/824126			
10694	ON THE APPLICATION OF TWO-STEP RACH FOR NR WITH UNLICENSED OPERATION			PSP	APP-Pending	US	62/824893			
10695	LINK ESTABLISHMENT IN RELAY NODES			PSP	APP-Pending	US	62/824171			
10696	NOTIFICATION AND ACQUISITION OF ETWS/CMAAS IN CONNECTED MODE FOR UES IN CE			PSP	APP-Pending	US	62/824143			
10697	SCHEDULING RESTRICTION DUE TO UE SIMULTANEOUS RX/TX CAPABILITY IN INTER-BAND CA OR DC			PSP	APP-Pending	US	62/824143			
10698	SYSTEM AND METHOD FOR BEAM FAILURE RECOVERY			PSP	APP-Pending	US	62/822510			
10699	METHODS FOR ETHERNET HEADER COMPRESSION			PSP	APP-Pending	US	62/824905			
10700	GRANT-BASED PHYSICAL UPLINK SHARED CHANNEL (PUSCH) TRANSMISSION AND CONFIGURED GRANT-BASED PUSCH TRANSMISSION IN NEW RADIO (NR) SYSTEMS OPERATING ON UNLICENSED SPECTRUM			PSP	APP-Pending	US	62/824986			
10701	ASSISTANCE INFORMATION INDICATION FOR RAT AND INTERFACE SELECTION FOR NEW RADIO VEHICLE-TO-EVERYTHING (V2X)			PSP	APP-Pending	US	62/824924			
10702	SIDELINK ADMISSION CONTROL: MECHANISMS FOR NEW RADIO SYSTEMS			PSP	APP-Pending	US	62/824726			
10703	INDICATION OF THE NUMBER OF REPETITIONS FOR DCI FORMAT 3/3A FOR EMTCC			PSP	APP-Pending	US	62/825623			
10704	DESIGN OF USER EQUIPMENT GROUP PHYSICAL DOWNLINK CONTROL CHANNEL BASED WAKE UP SIGNAL OR CHANNEL			PSP	APP-Pending	US	62/826818			
10705	ENABLING MULTIPLE STARTING SYMBOL OCCASIONS FOR CONFIGURED GRANTS IN NEW RADIO (NR) SYSTEMS OPERATING ON UNLICENSED SPECTRUM			PSP	APP-Pending	US	62/825649			
10706	METHODS FOR DISCONTINUOUS RECEPTION AND ENERGY SAVINGS IN NR-BASED UNLICENSED CARRIER COMMUNICATION			PSP	APP-Pending	US	62/824961			
10707	RSS-BASED RSSI CALCULATION AND ACCURACY			PSP	APP-Pending	US	62/826706			
10708	SSB MEASUREMENT ACCURACY TESTING			PSP	APP-Pending	US	62/826702			
10709	METHODS TO ENHANCE PDCP DUPLICATION			PSP	APP-Pending	US	62/824965			
10710	UE-BASED PDCP DUPLICATION ACTIVATION/DEACTIVATION ON HANDLING OVERLAPPING BETWEEN PUSCH AND PUSCH			PSP	APP-Pending	US	62/841758			
10711	FOR MULTI-TRP OPERATION			PSP	APP-Pending	US	62/825688			
10712	DYNAMIC INDICATION OF SOFT RESOURCE AVAILABILITY BASED ON MULTI-SLOT SCHEDULING MECHANISM			PSP	APP-Pending	US	62/825444			
10713	PERFORMANCE MEASUREMENTS RELATED TO PDU SESSION RESOURCE MANAGEMENT AND SERVICE REQUEST VIA UNTRUSTED NON-3GPP ACCESS			PSP	APP-Pending	US	62/825657			
10714	DATA DUPLICATION OVER RADIO LINK CONTROL CHANNELS			PSP	APP-Pending	US	62/825577			

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
10715	SYNCHRONIZATION SIGNAL BLOCKS FOR INTER-INTEGRATED BACKHAUL ACCESS (IAB) DISCOVERY AND MEASUREMENTS			PSP	APP-Pending	US	62/825404			
10716	PHYSICAL LAYER CELL IDENTIFIER (PCI) CONFIGURATION AND AUTOMATIC NEIGHBOR RELATIONS (ANR) FOR 5G NETWORKS			PSP	APP-Pending	US	62/825516			
10717	HYBRID AUTOMATIC REPEAT REQUEST (HARQ) TRANSMISSIONS FOR NEW RADIO (NR)			PSP	APP-Pending	US	62/826627			
10718	ENHANCED RACH-LESS HANDOVER AND SCG CHANGE			PSP	APP-Pending	US	62/825595			
10719	DESIGN AND APPARATUS FOR THE FBE FRAMEWORK FOR NR SYSTEMS OPERATING ON UNLICENSED SPECTRUM			PSP	APP-Pending	US	62/825678			
10720	RESOURCE ALLOCATION AND USER MULTIPLEXING CAPACITY ENHANCEMENTS FOR INTERLACE BASED PHYSICAL UPLINK CONTROL CHANNEL FORMATS IN NEW RADIO (NR)-UNLICENSED			PSP	APP-Pending	US	62/826947			
10721	MECHANISMS TO OPERATE WIDEBAND CARRIER IN UNLICENSED BAND			PSP	APP-Pending	US	62/826948			
10722	NR CELL ACTIVATION WITH FINE BEAM CSI			PSP	APP-Pending	US	62/826713			
10723	NR-U RADIO LINK MONITORING			PSP	APP-Pending	US	62/826555			
10724	TRANSMISSION CONFIGURATION INDICATION (TCI) STATE AND BEAM SWITCHING			PSP	APP-Pending	US	62/826851			
10725	RX BEAM RELATED SCALE FACTOR IN FR2			PSP	APP-Pending	US	62/826849			
10726	SCHEDULING NR SHARED CHANNEL TRANSMISSION OVER MULTIPLE SLOTS BY FALLBACK DCI			PSP	APP-Pending	US	62/826799			
10727	CHANNEL STATE INFORMATION REFERENCE SIGNAL (CSI-RS) AS PART OF DISCOVERY REFERENCE SIGNAL (DRS) CONFIGURATION AND INDICATION FOR NEW RADIO-UNLICENSED (NR-U)			PSP	APP-Pending	US	62/826946			
10728	USER EQUIPMENT (UE) MEASUREMENT CAPABILITY IN HIGH SPEED SCENARIOS			PSP	APP-Pending	US	62/826950			
10729	POCC MONITORING AND RATE-MATCHING FOR RMSI IN NR-U			PSP	APP-Pending	US	62/826796			
10730	PREEMPTION INDICATION FOR MULTI-TXP TRANSMISSION PER-QU AND PER-LINK CONFIGURATIONS FOR DYNAMIC INDICATION OF SOFT RESOURCE AVAILABILITY VIA TWO SFIS IN IAB			PSP	APP-Pending	US	62/826954			
10731	ON CAPABILITY 2 AND MULTIPLE PDSCH/PUSCH PER SLOT IN NR			PSP	APP-Pending	US	62/826890			
10732	ON MEASUREMENT AND PROCEDURES FOR NR POSITIONING			PSP	APP-Pending	US	62/827753			
10733	NR UL FR2 DESIGN RESOURCE ALLOCATION AND MAPPING IN NR POSITIONING			PSP	APP-Pending	US	62/827755			
10734	PDSCH CONTROL CHANNEL DESIGN FOR NR V2X SIDELINK COMMUNICATION AND PDSCH DMRS PHYSICAL STRUCTURE			PSP	APP-Pending	US	62/827748			
10735	ON THE DELAY AND INTERRUPTION REQUIREMENT FOR BWP SWITCHING			PSP	APP-Pending	US	62/827766			
10736	RESOURCE ALLOCATION FOR REPEATED UL TRANSMISSIONS			PSP	APP-Pending	US	62/828304			
10737	CROSS SLOT SCHEDULING POWER SAVING TECHNIQUES			PSP	APP-Pending	US	62/828327			
10738	SYSTEM AND METHOD OF DOWNLINK CONTROL CHANNEL SIGNALING FOR UL COEXISTENCE OF MULTIPLE SERVICE TYPES			PSP	APP-Pending	US	62/828383			
10739	METHODS FOR ENHANCED NR-V2X SYNCHRONIZATION PROCEDURE			PSP	APP-Pending	US	62/828317			
10740	Digital Envelope Tracker for Multiple-TX Channels with Shared Resource Voltage Regulator and Sim Single Channel Digital Envelope Tracker for mmWave Symbol Power Tracking			PSP	APP-Pending	US	62/828633			
10741	METHODS FOR ENHANCED PDSCH MONITORING			PSP	APP-Pending	US	62/828358			
10742	SYSTEM AND METHOD OF PROVIDING TIMING OF SL TRANSMISSION WHEN SCHEDULED BY NR GNB			PSP	APP-Pending	US	62/828380			
10743	CONNECTION RESUME PROCEDURE FOR UE IN EDRX AND RRC INACTIVE STATE FOR MT DATA			PSP	APP-Pending	US	62/828344			
10744	UE MODEM FOR DRONES WITH FLIGHT PATH AND 3D WIRELESS ENVIRONMENT SIGNAL QUALITY INFORMATION			NP	APP-Pending	US	16/457729			
10745	UE CAPABILITY FOR DC-BASED HANDOVER			PSP	APP-Pending	US	62/829453			
10746	WAKE-UP SIGNAL SUB-GROUPING FOR REL-16 EMTF AND NR-JDT			PSP	APP-Pending	US	62/829588			
10747	METHODS OF ADAPTIVE TRANSMISSION IN LOW LATENCY SCENARIOS IN NEW RADIO (NR) SYSTEMS			NP	APP-Pending	US	16/418768		US-2019-0273578-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
10749	Interlace-Based Uplink Physical Channel Design for New Radio Unlicensed (NR-U)			NP	APP-Pending	US	16/402480		US-2019-0342874-A1	
10750	CONFIGURABLE RESYNCHRONIZATION SIGNAL (RSS) FOR MACHINE TYPE COMMUNICATION (MTC) IN NEW RADIO (NR) SYSTEMS			NP	APP-Pending	US	16/409183		US-2019-0268904-A1	
10751	LIGHTWEIGHT SUPPORT OF INFORMATION CENTRIC NETWORK (ICN) SERVICES IN NEXT GENERATION CELLULAR NETWORK			PSP	APP-Pending	US	62/836479			
10752	NETWORK CODING AT THE PACKET DATA CONVERGENCE PROTOCOL (PDCP) LAYER TO INCREASE COMMUNICATION RELIABILITY			PSP	APP-Pending	US	62/833445			
10753	NR V2X SIDELINK STRUCTURES FOR PSSCH COVERAGE ENHANCEMENT			PSP	APP-Pending	US	62/831086			
10754	HANDLING INTRA USER EQUIPMENT (UE) UPLINK (UL) OVERLAPPING GRANTS			PSP	APP-Pending	US	62/833479			
10755	UE INDICATION TO PCF WHETHER OR NOT TO SEND UE POLICY			NP	APP-Pending	US	16/411701		US-2019-0268935-A1	
10756	MECHANISM ON MEASUREMENT GAP BASED INTER-FREQUENCY MEASUREMENT			NP	APP-Pending	US	16/411717		US-2019-0274196-A1	
10757	APPARATUS SYSTEM AND METHOD OF CONFIGURING NEW RADIO (NR) MEASUREMENTS			NP	APP-Pending	US	16/436951		US-2019-0113271-A1	
10758	ENHANCED SIGNALING TO SUPPORT MULTIPLE CONFIGURED GRANTS			PSP	APP-Pending	US	62/836017			
10759	QoS-DM CONFIGURATION OF PACKET LOSS RATE (PLR) BASED ADAPTATION IN IMS SPEECH SESSIONS			PSP	APP-Pending	US	62/865046			
10760	MOBILITY MANAGEMENT FOR INTER-GNB (NEXT GENERATION NODE B) HANDOVER IN NEW RADIO (NR) SYSTEMS			NP	APP-Pending	US	16/419245		US-2019-0342800-A1	
10761	LOW PAPR DMRS DESIGN FOR PUSCH			PSP	APP-Pending	US	62/836014			
10762	SYSTEM AND METHOD OF OFT-S-OFDM TRANSMISSION WITH GUARD SUBCARRIERS AND PULSE SHAPING FILTERING			PSP	APP-Pending	US	62/837571			
10763	HOME CONTROLLED REAUTHENTICATION PROCEDURE FOR KAUSF GENERATION AND SOR INFORMATION DELIVERY			PSP	APP-Pending	US	62/838184			
10764	GRANT BASED PHYSICAL UPLINK SHARED CHANNEL (PUSCH) TRANSMISSION AND CONFIGURED GRANT BASED PUSCH TRANSMISSION IN NEW RADIO (NR) SYSTEMS OPERATING ON UNLICENSED SPECTRUM			PSP	APP-Pending	US	62/839952			
10765	METHOD FOR ENABLING SERVICE CONTINUITY IN AN EDGE COMPUTING ENVIRONMENT			PSP	APP-Pending	US	62/840296			
10766	HANDOVER ENHANCEMENT WITH SIMULTANEOUS UE TX BEAMS			PSP	APP-Pending	US	62/840533			
10767	UPLINK (UL) TRANSMISSION IN WIDEBAND CARRIER AND CARRIER AGGREGATION IN NR SYSTEMS OPERATING ON UNLICENSED SPECTRUM			PSP	APP-Pending	US	62/840647			
10768	SYSTEM AND METHOD FOR BEAM FAILURE RECOVERY REQUEST			PSP	APP-Pending	US	62/842361			
10769	SPLIT PROTOCOL DATA UNIT (PDU) SESSION INDICATION FOR MULTI-RAT DUAL CONNECTIVITY WITH EGC			PSP	APP-Pending	US	62/839295			
10770	MULTIPLEXING CONFIGURED GRANT (CG) TRANSMISSIONS IN NEW RADIO (NR) SYSTEMS OPERATING ON UNLICENSED SPECTRUM			PSP	APP-Pending	US	62/842389			
10771	METHODS OF IMPROVING THE ROBUSTNESS FOR DCI TRIGGERED BEAM UPDATE IN 5G NR			PSP	APP-Pending	US	62/842306			
10772	UPLINK LBT FAILURES HANDLING FOR NR SYSTEMS OPERATING ON UNLICENSED SPECTRUM			PSP	APP-Pending	US	62/841693			
10773	CONFIGURED GRANT IMPROVEMENT FOR NR UNLICENSED			PSP	APP-Pending	US	62/841699			
10774	SIGNALING DESIGN FOR REGIONAL OPERATION FOR MF-LITE			PSP	APP-Pending	US	62/841992			
10775	HIGHER LAYER CONFIGURATION FOR MF-LITE SYSTEMS IN GLOBAL OPERATION MODE			PSP	APP-Pending	US	62/842235			
10776	MOBILE-TERMINATED (MT) EARLY DATA TRANSMISSION (EDT) IN CONTROL PLANE AND USER PLANE SOLUTIONS			PSP	APP-Pending	US	62/841696			
10777	CONTROL CHANNEL SIGNALING FOR USER EQUIPMENT (UE)			PSP	APP-Pending	US	62/841766			
10778	POWER SAVING			PSP	APP-Pending	US	62/841764			
10779	RADIO UNLICENSED (NR-U) IDLE MODE OPERATIONS			PSP	APP-Pending	US	62/842754			
10779	RADIO LINK MONITORING BEAM MANAGEMENT IN NR FOR URLLC			PSP	APP-Pending	US	62/841688			

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
10780	LAYER-2 ID TO SUPPORT UNICAST COMMUNICATION OVER SIDELINK FOR eV2X			PSP	APP-Pending	US	62/841745			
10781	METHODS FOR ENHANCED HANDOVER USING CONDITIONAL AND SIMULTANEOUS CONNECTIVITY HO			PSP	APP-Pending	US	62/841757			
10782	POWER CONTROL FOR TWO-STEP RANDOM ACCESS PROCEDURE			PSP	APP-Pending	US	62/842314			
10783	CHANNEL SENSING INDICATION WHEN COT SHARING IN NR SYSTEMS OPERATING IN UNLICENSED SPECTRUM			PSP	APP-Pending	US	62/842370			
10784	ENHANCING INTER-MODE HANDOVER SIGNALING FOR CONDITIONAL HO			PSP	APP-Pending	US	62/842153			
10785	METHOD AND SYSTEM FOR DL PRS TRANSMISSION FOR ACCURATE RAT-DEPENDENT NR POSITIONING			PSP	APP-Pending	US	62/842181			
10786	ENHANCEMENTS OF FREQUENCY DOMAIN RESOURCE ALLOCATION SCHEMES FOR PHYSICAL UPINK SHARED CHANNEL IN NR-UNLICENSED			PSP	APP-Pending	US	62/842432			
10787	DOWNLINK CONTROL CHANNEL SIGNALING FOR UL COEXISTENCE OF MULTIPLE SERVICE TYPES			PSP	APP-Pending	US	62/842882			
10788	SIGNALING MECHANISMS OF RACH CONFIGURATIONS FOR IAB NODES			PSP	APP-Pending	US	62/842417			
10789	MEASUREMENT GAP PATTERN USE AND MANAGEMENT SYSTEM AND METHODS FOR CLOSED-LOOP POWER CONTROL FOR PUSCH			PSP	APP-Pending	US	62/842416			
10790	NR TIME-DOMAIN RESOURCE ALLOCATION FOR CONFIGURED GRANT TRANSMISSIONS IN NR SYSTEMS OPERATING ON UNLICENSED SPECTRUM			PSP	APP-Pending	US	62/843196			
10791	MECHANISMS TO OPERATE DOWNLINK WIDEBAND CARRIER IN UNLICENSED BAND			PSP	APP-Pending	US	62/842977			
10792	SYSTEM AND METHODS ON THE MAPPING BETWEEN PRACH PREAMBLE AND PUSCH RESOURCE UNIT FOR 2-STEP RACH			PSP	APP-Pending	US	62/843064			
10793	ENHANCEMENTS TO RANDOM ACCESS CHANNEL OCCASION CONFIGURATION IN TIME DOMAIN FOR NR-UNLICENSED			PSP	APP-Pending	US	62/843276			
10794	MECHANISM AND SIGNALING ON CORESET AND PUSCH RESOURCE GROUPING FOR MULTI-TRP OPERATION			PSP	APP-Pending	US	62/843077			
10795	ENHANCED PDCCH MONITORING			PSP	APP-Pending	US	62/843269			
10796	BEAM SWITCHING BASED ON DCI INDICATION FOR MULTI-TRP URLLC			PSP	APP-Pending	US	62/843287			
10797	SYSTEM AND METHOD FOR UE PROCESSING TIME RELAXATION FOR MULTI-TRP TRANSMISSION			PSP	APP-Pending	US	62/843280			
10798	SYSTEM AND METHOD FOR DMPS ANTENNA PORT INDICATION FOR URLLC			PSP	APP-Pending	US	62/843271			
10799	SYNCHRONIZATION SIGNAL BLOCK (SSB) BASED BEAM MEASUREMENT AND REPORTING IN 5G NR			PSP	APP-Pending	US	62/843273			
10800	HANDOVER FURTHER ENHANCEMENT WITH SIMULTANEOUS UE TRANSMISSION BEAMS			PSP	APP-Pending	US	62/846254			
10801	METHODS FOR ADAPTATION LAYER ENHANCEMENT IN RELAY NETWORK			PSP	APP-Pending	US	62/846249			
10802	CLOSED-LOOP POWER CONTROL FOR PUSCH			PSP	APP-Pending	US	62/844974			
10803	BEAM INFORMATION DELIVERY FOR SCCELL BEAM FAILURE RECOVERY OPERATION IN NR			PSP	APP-Pending	US	62/844658			
10804	PUSCH DEFAULT BEAM IN NR WITH MULTI-TRP MULTI-PANEL OPERATION			PSP	APP-Pending	US	62/846354			
10805	METHOD OF SLOT OFFSET DETERMINATION FOR NON-TERRRESTRIAL NETWORKS			PSP	APP-Pending	US	62/847060			
10806	SYSTEM AND METHODS ON THE MAPPING BETWEEN PRACH PREAMBLE AND PUSCH RESOURCE UNIT FOR 2-STEP RACH			PSP	APP-Pending	US	62/846332			
10807	RADIO RESOURCE CONTROL (RRC) BASED TRANSMISSION CONFIGURATION INDICATOR (TCI) STATE SWITCHING			PSP	APP-Pending	US	62/846496			
10808	USER EQUIPMENT (UE) CAPABILITY FOR RADIO RESOURCE CONTROL (RRC) BASED BANDWIDTH PART (BWP) SWITCHING DELAY			PSP	APP-Pending	US	62/846514			
10809	CHANNEL RASTER AND SYNCHRONIZATION SIGNAL RASTER FOR NR UNLICENSED SPECTRUM			PSP	APP-Pending	US	62/847120			
10810	UE ASSISTANCE INFORMATION FOR VOICE OVER CELLULAR			PSP	APP-Pending	US	62/847770			
10811	METHODS FOR RESOURCE CONFIGURATIONS IN RELAY NETWORK			PSP	APP-Pending	US	62/866222			
10812	UNLICENSED BAND IOT SYSTEMS			NP	APP-Pending	US	62/849681			
10813							15/451292		US-2019-0313481-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
10814	EMISSION AND PANEL AWARE BEAM SELECTION			NP	APP-Pending	US	16/447584		US-2019-0306850-A1	
10815	BEAM INDICATION FOR SEMI-PERSISTENT AND GRANT-FREE TRANSMISSIONS			NP	APP-Pending	US	16/449294		US-2019-0306924-A1	
10816	AVOIDING PAGING COLLISIONS IN A DEVICE WITH MULTIPLE SUBSCRIPTIONS			PSP	APP-Pending	US	62/853633			
10817	SYSTEM AND METHOD FOR MULTIPLEXING OF PUCCH FOR BEAM FAILURE RECOVERY AND OTHER SIGNALS			PSP	APP-Pending	US	62/854189			
10818	5G LOAD BALANCING AND MOBILITY ROBUSTNESS OPTIMIZATION			PSP	APP-Pending	US	62/852829			
10819	SOFT RESOURCE SIGNALING IN RELAY NETWORK			PSP	APP-Pending	US	62/853475			
10820	DYNAMIC SOFT RESOURCE SIGNALING IN RELAY NETWORKS			PSP	APP-Pending	US	62/855494			
10821	WEBSOCKET AND RESTFUL SOLUTIONS FOR PERFORMANCE DATA STREAMING PERFORMANCE DATA FILE REPORTING AND PERFORMANCE THRESHOLD MONITORING SERVICES			PSP	APP-Pending	US	62/855220			
10822	TWO STEP RANDOM ACCESS CHANNEL (RACH) PROCEDURE MSGB RESPONSES			PSP	APP-Pending	US	62/858140			
10823	CENTRALIZED AND DISTRIBUTED SELF-ORGANIZING NETWORKS (SON) FOR PHYSICAL-LAYER CELL IDENTIFIER (PCI) CONFIGURATION AND AUTOMATIC NEIGHBOR RELATION (ANR)			PSP	APP-Pending	US	62/857173			
10824	TECHNIQUES IN CONFIGURED GRANT UPLINK TRANSMISSION IN NEW RADIO (NR) SYSTEMS OPERATING IN UNLICENSED SPECTRUM			NP	APP-Pending	US	16/509847		US-2019-0342911-A1	
10825	UPLINK TRANSMISSION FOR MULTI-PANEL OPERATION			NP	APP-Pending	US	16/502344			
10826	USER EQUIPMENT TRANSMISSION POWER CONTROL			NP	APP-Pending	US	16/502477		US-2019-0327691-A1	
10827	METHODS TO DETERMINE PARAMETERS RELATED TO PHASE TRACKING REFERENCE SIGNALS (PT-RS) BASED ON A TYPE OF RADIO NETWORK TEMPORARY IDENTIFIER (RNTI)			NP	APP-Pending	US	16/510977			
10828	DOWNLINK CONTROL CHANNEL SIGNALING FOR IMPROVING UE POWER CONSUMPTION			NP	APP-Pending	US	16/520522			
10829	PBCH CONTENT FOR NR UNLICENSED			NP	APP-Pending	US	16/515764		US-2019-0142826-A1	
10830	REFERENCE SIGNAL AND CONTROL INFORMATION PROCESSING IN 5G-NR WIRELESS SYSTEMS			NP	APP-Pending	US	16/446320		US-2019-0306923-A1	
10831	HIGHER LAYER CONFIGURATION FOR M-LTE SYSTEMS IN GLOBAL OPERATION MODE			PSP	APP-Pending	US	62/858842			
10832	END-TO-END RADIO ACCESS NETWORK (RAN) DEPLOYMENT IN OPEN RAN (O-RAN)			PSP	APP-Pending	US	62/859559			
10833	MECHANISMS TO SUPPORT MUTUAL ANCHORING AND TRAFFIC DISTRIBUTION FOR CONTROL PLANE AND USER PLANE OVER 5G NR AND WI-FI ACCESS IN A CONVERGED RAN INTEGRATING NR AND WI-FI ACCESS			PSP	APP-Pending	US	62/861587			
10834	RRM MEASUREMENT RESTRICTION ON CU MEASUREMENT PERFORMANCE MEASUREMENTS RELATED TO APPLICATION			PSP	APP-Pending	US	62/861064			
10835	TRIGGERING AND SMS OVER NAS			PSP	APP-Pending	US	62/860647			
10836	CHANNEL SENSING FOR PHYSICAL RANDOM ACCESS CHANNEL (PRACH) SIGNALS IN NEW RADIO (NR) SYSTEMS OPERATING IN THE UNLICENSED SPECTRUM			PSP	APP-Pending	US	62/863891			
10837	METHODS FOR RRC CONNECTION RE-ESTABLISHMENT WHEN SECURITY IS NOT ACTIVATED AND UE IS CONNECTED TO S-GW			PSP	APP-Pending	US	62/861250			
10838	METHOD OF SLOT OFFSET DETERMINATION FOR NON-TERRRESTRIAL NETWORKS			PSP	APP-Pending	US	62/864760			
10839	METHODS FOR FAST SECONDARY CELL ACTIVATION AND DEACTIVATION			PSP	APP-Pending	US	62/862508			
10840	METHODS FOR MDT IN CONTROL PLANE AND USER PLANE SOLUTIONS			PSP	APP-Pending	US	62/862325			
10841	METHODS OF DETECTING FAKE BASE STATION BY UE DURING HANDOVER			PSP	APP-Pending	US	62/862521			
10842	HARQ-ACK TRANSMISSION AND RETRANSMISSION IN WIRELESS COMMUNICATION SYSTEM			PSP	APP-Pending	US	62/864291			
10843	ADAPTIVE UPLINK (UL) TIMING ADJUSTMENT FOR BEAM SWITCHING IN FIFTH-GENERATION NEW RADIO (5G NR)			PSP	APP-Pending	US	62/867746			

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
10844	SESSION DESCRIPTION PROTOCOL (SDP)-BASED METHODS FOR IMMERSIVE TELECONFERENCING AND TELEPRESENCE			PSP	APP-Pending	US	62/866488			
10845	METHODS FOR FAST SCELL ACTIVATION WITH SHORT CSI REPORTING			PSP	APP-Pending	US	62/866484			
10846	DESIGN OF MULTIPLEXING RULES FOR CONFIGURED GRANT TRANSMISSIONS IN NR SYSTEMS OPERATING ON UNLICENSED SPECTRUM			PSP	APP-Pending	US	62/869258			
10847	NR TIME-DOMAIN RESOURCE ALLOCATION FOR CONFIGURED GRANT TRANSMISSIONS IN NR SYSTEMS OPERATING ON UNLICENSED SPECTRUM			PSP	APP-Pending	US	62/870263			
10848	FBE FRAMEWORK FOR NR SYSTEMS OPERATING ON UNLICENSED SPECTRUM			PSP	APP-Pending	US	62/871533			
10849	RADIO LINK MONITORING FOR UNICAST SIDELINK COMMUNICATIONS			PSP	APP-Pending	US	62/872634			
10850	RAN3 RAN2 Design of quality report in Msg3 for Rel-16 eMTC and NB-IoT Update of ID# A85725			NP	APP-In-Preparation	US				
10851	RAN3 NR - On The Contention Window Size Update for CBG Based Retransmission in NR Systems Operating on Unlicensed Spectrum (replacing ID# A89340)			NP	APP-In-Preparation	US				
10852	RAN3 5G LTE Method of overhead reduction for beam combining based CSI feedback			NP	APP-In-Preparation	US				
10853	Design of wake-up signal sub-grouping for Rel-16 eMTC and NB-IoT Update of ID# A85709			NP	APP-In-Preparation	US				
10854	5G RAN1 - System and methods on PUSCH enhancements for NR URLLC			NP	APP-In-Preparation	US				
10855	System and method of downlink control channel signaling for UL coexistence of multiple service types (update of A84305)			NP	APP-In-Preparation	US				
10856	5G RAN1 - System and methods for data and control transmission enhancements in NR (update of ID# A84315)			NP	APP-In-Preparation	US				
10857	METHODS OF TWO-STEP CELL RE-SELECTION FOR NR-U			PSP	APP-Pending	US	62/874796			
10858	LOCATION BASED SIDELINK (SL) HYBRID AUTOMATIC REPEAT REQUEST (HARQ) FEEDBACK TRANSMISSION			PSP	APP-Pending	US	62/874423			
10859	Enabling UAS Service for Identification and operation in 3GPP System			NP	APP-In-Preparation	US				
10860	A method of DL SNR control for the NR mmWave over-the-air UE Demodulation and CSI reporting test methodology			NP	APP-In-Preparation	US				
10861	UDP AND RTP-BASED METHODS FOR STREAMING OF VOLUMETRIC POINT CLOUD CONTENT			PSP	APP-Pending	US	62/874873			
10862	REDUCED CSI (CHANNEL STATE INFORMATION)-RS (REFERENCE SIGNAL) DENSITY SUPPORT FOR FD (FULL DIMENSIONAL)-MIMO (MULTIPLE INPUT MULTIPLE OUTPUT) SYSTEMS			PCT	APP-Pending	US	16/467566		US-2019-0357221-A1	
10863	USER EQUIPMENT HYSTERESIS FOR SIGNAL BLOCKAGE DETECTION			PCT	APP-Pending	US	16/478116			
10864	REFERENCE SIGNAL TIME DIFFERENCE (RSTD) MEASUREMENTS FOR OBSERVED TIME DIFFERENCE OF ARRIVAL (OTDOA) POSITIONING			PCT	APP-Pending	US	16/347800		US-2019-0257916-A1	
10865	SIGNALING TO SUPPORT REDUCED PROCESSING TIME			PCT	APP-Pending	US	16/327775		US-2019-0215906-A1	
10866	UE AND DEVICES FOR CODEC RATE ADAPTATION			PCT	APP-Pending	US	16/339360			
10867	DYNAMIC PROTOCOL STACK RESET DURING RADIO HANDOVER			PCT	APP-Pending	US	16/348380		US-2019-0313296-A1	
10868	COVERAGE ENHANCEMENT FOR UNLICENSED INTERNET OF THINGS (U-IoT)			PCT	APP-Pending	US	16/349963		US-2019-0288811-A1	
10869	FAKE GNB/ENB DETECTION USING IDENTITY-BASED AUTHENTICATION AND ENCRYPTION			PCT	APP-Pending	US	16/479885		US-2019-0249765-A1	
10870	USER EQUIPMENT (UE) GENERATION NODE-B (GNB) AND METHODS FOR SIGNALING OF CONTROL INFORMATION FOR PRE-CODING			PCT	APP-Pending	US	16/349556			
10871	BEAMFORMING MEASUREMENTS BASED ON PSS/SSS APPARATUSES TO SWITCH BETWEEN LTE RAT AND NR RAT DURING TRANSITION FROM INACTIVE STATE TO ACTIVE STATE			PCT	APP-Pending	US	16/471506		US-2019-0327890-A1	
10872				PCT	APP-Pending	US	16/462342		US-2019-0320483-A1	
10873	MEASUREMENT OF BEAM REFINEMENT SIGNAL			PCT	APP-Pending	US	16/349957		US-2019-0334611-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
10874	SYSTEMS METHODS AND DEVICES FOR CONGESTION CONTROL FOR TRANSPORT OF USER DATA VIA A CONTROL PLANE			PCT	APP-Pending	US	16/348219			
10875	TRANSMISSION SCHEME FOR COMMON CONTROL MESSAGE WITH MULTI-BEAM OPERATION			PCT	APP-Pending	US	16/475765		US-2019-0357303-A1	
10876	LOW OVERHEAD SUBBAND PHYSICAL DOWNLINK CONTROL FOR COMMUNICATION SYSTEMS			PCT	APP-Pending	US	16/475782		US-2019-0349153-A1	
10877	INTER-NODE INTERFERENCE AVOIDANCE			PCT	APP-Pending	US	16/475867			
10878	INSTANTIATION AND MANAGEMENT OF PHYSICAL AND VIRTUALIZED NETWORK FUNCTIONS OF A RADIO ACCESS NETWORK NODE			PCT	APP-Pending	US	16/475821		US-2019-0327623-A1	
10879	GENERATION NODE-B (GNB) USER EQUIPMENT (UE) AND METHODS FOR HANDOVER IN NEW RADIO (NR) SYSTEMS			PCT	APP-Pending	US	16/473235		US-2019-0327651-A1	
10880	ACCESS CONTROL FOR WIRELESS CELLULAR COMMUNICATION SYSTEMS			PCT	APP-Pending	US	16/475670		US-2019-0345843-A1	
10881	MEASUREMENT ROB SUSPENSION AND RESUMPTION IN NETWORK FUNCTION VIRTUALIZATION			PCT	APP-Pending	US	16/465453			
10882	UE TESTING SYSTEM FOR RF CHARACTERISTICS FOR THE NEW RADIO STANDARD			PCT	APP-Pending	US	16/467102			
10883	CODEBOOK DESIGN FOR NEW RADIO (NR) SYSTEMS			PCT	APP-Pending	US	16/476537		US-2019-0328959-A1	
10884	BANDWIDTH ADAPTATION FOR WIRELESS COMMUNICATION SYSTEMS			PCT	APP-Pending	US	16/349251		US-2019-0285658-A1	
10885	SYNCHRONIZATION SIGNAL TRANSMISSION TECHNIQUES			PCT	APP-Pending	US	16/349960		US-2019-0319599-A1	
10886	LOCATION POSITIONING PROTOCOL BASED POSITIONING FOR UES IN IDLE MODE			PCT	APP-Pending	US	16/477572			
10887	ADVERTISEMENT OF NR CAPABILITY TO USER EQUIPMENT			PCT	APP-Pending	US	16/473577			
10888	MECHANISMS TO HANDLE DL (DOWNLINK) CONTROL AND DATA CHANNELS WITH DIFFERENT NUMEROLOGIES IN NR (NEW RADIO)			PCT	APP-Pending	US	16/476127		US-2019-0357198-A1	
10889	USER EQUIPMENT (UE) EVOLVED NODE-B (ENB) AND METHODS TO INDICATE PARAMETERS FOR A RELAY ARRANGEMENT			PCT	APP-Pending	US	16/479161		US-2019-0350047-A1	
10890	UPLINK TRANSMISSIONS USING PRECODED SOUNDING REFERENCE SIGNALS FOR COMMUNICATION SYSTEMS			PCT	APP-Pending	US	16/473579			
10891	DEVICES FOR PER-CC MEASUREMENT GAP CONFIGURATION			PCT	APP-Pending	US	16/479856			
10892	NETWORK ASSISTED LTE CRS INTERFERENCE MITIGATION			PCT	APP-Pending	US	16/482995			
10893	POSITIONING ENHANCEMENTS FOR NARROWBAND INTERNET OF THINGS			PCT	APP-Pending	US	16/474149		US-2019-0349881-A1	
10894	POWER HEADROOM REPORTING FOR SHORTENED TRANSMISSION TIME INTERVALS			PCT	APP-Pending	US	16/476375			
10895	NETWORK RESOURCE MODEL TO SUPPORT NEXT GENERATION NODE-B			PCT	APP-Pending	US	16/476028		US-2019-0357084-A1	
10896	SYSTEMS METHODS AND APPARATUSES FOR DIAMETER BASED INTERFACES TO ENABLE RESTRICTIONS OF COVERAGE ENHANCEMENT IN WIRELESS NETWORKS			PCT	APP-Pending	US	16/475824			
10897	NETWORK CONTROLLED SMALL GAP CONFIGURATION			PCT	APP-Pending	US	16/476381			
10898	DOWNLINK CONTROL SIGNALING SEGMENTATION			PCT	APP-Pending	US	16/476657			
10899	QUALITY OF SERVICE FLOW TO DATA RADIO BEARER MAPPING OVERRIDE BIT			PCT	APP-Pending	US	16/475873		US-2019-0357086-A1	
10900	Determining Timing Differences Between Primary and Secondary Component Carriers Having Variable Transmission Time Intervals			PCT	APP-Pending	US	16/476397			
10901	Partial Sensing and Congestion Control for Long Term Evolution (LTE) Vehicular Communication			PCT	APP-Pending	US	16/476128			
10902	SYSTEMS METHODS AND DEVICES FOR VIRTUAL RESOURCE METRIC MANAGEMENT			PCT	APP-Pending	US	16/476017		US-2019-0349272-A1	
10903	MANAGEMENT OF VOICE SERVICES FOR USER EQUIPMENTS IN COVERAGE ENHANCEMENT (CE) MODE B			PCT	APP-Pending	US	16/349587		US-2019-0273762-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
10904	SYSTEM INFORMATION DECODING IN WIRELESS NETWORKS			PCT	APP-Pending	US	15/477487			
10905	PHASE TRACKING REFERENCE SIGNAL INDICATION IN MULTI-USER SUPERPOSITION TRANSMISSION			PCT	APP-Pending	US	16/479813			
10906	REPORTING A NUMBER OF EFFECTIVE FREQUENCIES FOR RADIO RESOURCE MANAGEMENT PURPOSES			PCT	APP-Pending	US	16/473663		US-2019-0357068-A1	
10907	SYSTEMS METHODS AND APPARATUSES FOR MANAGING MULTIPLE ANCHORS FOR MULTI-HOMING			PCT	APP-Pending	US	15/487766			
10908	DEVICES AND METHODS FOR DYNAMIC RACH			PCT	APP-Pending	US	15/487390			
10909	SYSTEMS METHODS AND APPARATUSES FOR CONFIGURING MEASUREMENT GAP PER FREQUENCY GROUP AND PER CELL			PCT	APP-Pending	US	16/487685			
10910	High Speed train in New Radio (NR)			PCT	APP-Pending	US	16/483181			
10911	METHOD AND APPARATUS FOR CROSS RETRANSMISSION BETWEEN GUL AND SUL			PCT	APP-Pending	US	15/483388			
10912	EXPIRATION HANDLING OF TWO-STAGE GRANT VALIDITY DURATION			PCT	APP-Pending	US	15/487788			
10913	TECHNOLOGY COORDINATION FOR DEVICE-TO-DEVICE DISCOVERY			PCT	APP-Pending	US	16/474036			
10914	SYSTEMS METHODS AND DEVICES FOR MEASUREMENT CONFIGURATION BY A SECONDARY NODE IN EN-DC			PCT	APP-Pending	US	16/479487			
10915	RE-TRANSMISSION OF PDCP PDUS BY CENTRALIZED NODES OF A RAN ARCHITECTURE			PCT	APP-Pending	US	15/487173			
10916	METHODS AND SYSTEMS FOR INSTANTIATING AND CONNECTING RADIO ACCESS NETWORK VIRTUALIZED NETWORK FUNCTION AND CORE NETWORK VIRTUALIZED NETWORK FUNCTION			PCT	APP-Pending	US	16/484790			
10917	INSTANTIATION OF A VIRTUAL NETWORK FUNCTION (VNF) AS PART OF A GNCDB (GNB)			PCT	APP-Pending	US	16/484422			
10918	SUPPORTING SON FUNCTIONS ON NETWORK SLICE INSTANCES			PCT	APP-Pending	US	15/485088			
10919	MULTIPIRE ARCHITECTURE FOR CELLULAR INTERNET-OF-THINGS (CIOT)			PCT	APP-Pending	US	15/499016			
10920	TIMING DETERMINATION TECHNIQUES FOR 5G RADIO ACCESS NETWORK CELLS			PCT	APP-Pending	US	16/488133			
10921	HANDLING OF USER EQUIPMENT COVERAGE ENHANCEMENT MODE B RADIO CAPABILITY MISMATCH DUE TO CHANGE IN USER EQUIPMENT USAGE SETTING			PCT	APP-Pending	US	15/462339			
10922	Robust Ultrasound Communication Signal Format			PCT	APP-In-Preparation	US				
10923	DEVICE AND METHOD TO ALLOW CROSS-TRANSMISSION TIME INTERVAL (TTI) SWITCHING AND HYBRID AUTOMATIC REPEAT REQUEST (HARQ) OPERATION IN A NEW RADIO NETWORK			PCT	APP-Pending	US	16/476576		US-2019-0356426-A1	
10924	FLEXIBLE BLOCK SIZE SUPPORT FOR POLAR CODE			PCT	APP-Pending	US	16/488561			
10925	TRACKING REFERENCE SIGNALS FOR NEW RADIO			PCT	APP-Pending	US	15/473563			
10926	SUPPORT OF 64 QAM FOR EREMTX POSCH TRANSMISSION			PCT	APP-Pending	US	15/465998			
10927	DOWNLINK CONTROL INFORMATION TO SUPPORT UPLINK PARTIAL SUBFRAME TRANSMISSION ON LICENSED ASSISTED ACCESS SECONDARY CELL			PCT	APP-Pending	US	16/488187			
10928	RADIO LINK MONITORING BEAM RECOVERY AND RADIO LINK FAILURE HANDLING			PCT	APP-Pending	US	16/487665			
10929	METHODS AND ARRANGEMENTS FOR WIDE BANDWIDTH COMMUNICATIONS			PCT	APP-Pending	US	15/464927			
10930	SYSTEMS METHODS AND DEVICES FOR SELECTING CELLULAR TIMING CONFIGURATIONS			PCT	APP-Pending	US	16/480372			
10931	SYSTEM AND METHOD FOR BEAM MANAGEMENT			PCT	APP-Pending	US	16/498805			
10932	COMMON PHYSICAL DOWNLINK CONTROL CHANNEL (CPDCC) DESIGN FOR MULTIPLEX WIDEBAND COVERAGE ENHANCEMENT (WCE) SYSTEMS			PCT	APP-Pending	US	16/463338			
10933	AUTONOMOUS HANDOVER FOR WIRELESS NETWORKS			PCT	APP-Pending	US	15/479893			
10934	MECHANISMS FOR HANDLING UPLINK GRANTS INDICATING DIFFERENT PHYSICAL UPLINK SHARED CHANNEL STARTING POSITIONS IN A SAME SUBFRAME			PCT	APP-Pending	US	16/480196			
10935	UE CAPABILITY INDICATION TO POSITIONING SERVER			PCT	APP-Pending	US	16/487406			
10936	METHOD AND APPARATUS FOR NUMEROLOGY CONFIGURATION IN NON-COHERENT JOINT TRANSMISSION			PCT	APP-Pending	US	15/483393			
10937	IMPROVED HANDLING OF TIMER EXPIRY FOR RAT CSFB			PCT	APP-Pending	US	15/489222			
10938	METHOD AND APPARATUS FOR INTERFERENCE MEASUREMENT USING BEAM MANAGEMENT REFERENCE SIGNAL			PCT	APP-Pending	US	16/484340			

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
10939	NETWORK FUNCTION VIRTUALIZATION INFRASTRUCTURE PERFORMANCE			PCT	APP-Pending	US	16/499847			
10940	CENTRALIZED UNIT AND DISTRIBUTED UNIT CONNECTION IN A VIRTUALIZED RADIO ACCESS NETWORK			PCT	APP-Pending	US	16/499861			
10941	ENHANCED NETWORK SLICE MANAGEMENT FOR WIRELESS COMMUNICATIONS			PCT	APP-Pending	US	16/499857			
10942	METHODS AND ARRANGEMENTS TO SIGNAL FOR AERIAL VEHICLES			PCT	APP-Pending	US	16/500819			
10943	UNIFYING SPLIT BEARERS IN LTE INTERWORKING			PCT	APP-Pending	US	16/466398			
10944	ABSOLUTE POWER CONTROL TOLERANCE FOR NB-IOT/MTC			PCT	APP-Pending	US	16/479540			
10945	MEASUREMENT CONFIGURATION TECHNIQUES FOR WIDEBAND COVERAGE ENHANCEMENT (WICE)-CAPABLE DEVICES			PCT	APP-Pending	US	16/604836			
10946	METHOD AND APPARATUS FOR RADIO LINK MONITORING			PCT	APP-Pending	US	16/483982			
10947	MEASUREMENT DESIGN FOR NEXT RADIO (NR) AND LONG TERM EVOLUTION (LTE)			PCT	APP-Pending	US	16/604982			
10948	PER UE NETWORK CONTROLLED SMALL GAP (NCSG) SIGNALLING			PCT	APP-Pending	US	16/613641			
10949	SYSTEMS METHODS AND DEVICES FOR SELECTING A PUBLIC LAND MOBILE NETWORK USING COVERAGE ENHANCEMENT INDICATORS			PCT	APP-Pending	US	16/489178			
10950	BEAMFORMED MEASUREMENT FOR NEW RADIO (NR)			PCT	APP-Pending	US	16/500351			
10951	MULTIRADIO INTERFACE FOR SOFTWARE RECONFIGURATION			PCT	APP-In-Preparation	US				
10952	SYSTEMS METHODS AND DEVICES FOR LEGACY SYSTEM FALLBACK IN A CELLULAR COMMUNICATIONS SYSTEM			PCT	APP-Pending	US	16/489279			
10953	Handling Multiple SR Configurations and Corresponding UL Grants			PCT	APP-Pending	US	16/478905			
10954	PHYSICAL RESOURCE BLOCK INDEXING FOR COEXISTENCE OF NARROW BAND CARRIER AGGREGATION AND WIDE BAND USER EQUIPMENT IN NEW RADIO			PCT	APP-Pending	US	16/349584		US-2019-0280843-A1	
10955	SEPARATION OF CONTROL PLANE AND USER PLANE IN NEW RADIO (NR) SYSTEMS			PCT	APP-In-Preparation	US				
10956	APPARATUS OF GNB TO ENABLE AN INACTIVE MODE IN DUAL CONNECTIVITY			PCT	APP-Pending	US	16/475056			
10957	Access Control for User Equipment with Coverage Enhancement Level Support			PCT	APP-Pending	US	16/609312			
10958	MULTIPIRE ARCHITECTURE SUPPORTING ACCESS CLASSES AND BARRING			PCT	APP-In-Preparation	US				
10959	DEVICES AND METHODS FOR UE-SPECIFIC RAN-CN ASSOCIATIONS			PCT	APP-Pending	US	16/615054			
10960	ANTENNA BEAMWIDTH CONTROL			NP	APP-Pending	US	15/942026		US-2019-0305422-A1	
10961	HANDOVER FOR UNMANNED AERIAL VEHICLES			NP	APP-Pending	US	16/057979		US-2019-0045406-A1	
10962	SCRAMBLING OF PHYSICAL BROADCAST CHANNEL (PBCH)			PCT	APP-In-Preparation	US				
10963	METHOD FOR ESTIMATING CRYSTAL COEFFICIENT VALUES FOR A SIGNAL GENERATOR			NP	PAT-Active	US	09/867571	6636121	US-2002-0180635-A1	
10964	WIRELESS LINK CONTROL AND RECOVERY USING POSITIONAL DATA			NP	PAT-Active	US	15/279490	#####	US-2018-0091202-A1	
10965	WIRELESS LINK CONTROL AND RECOVERY USING POSITIONAL DATA			NP	APP-Pending	US	16/542310			
10966	SCHEDULING REQUEST TRANSMISSIONS IN THE UNLICENSED SPECTRUM			PCT	APP-Pending	US	16/092673		US-2019-0192660-A1	
10967	INTERFERENCE AWARE BEAM SELECTION FOR NR (NEW RADIO)			PCT	APP-Pending	US	16/306986		US-2019-0305838-A1	
10968	CHANNEL STATE AND BEAM RELATED INFORMATION REPORTING			PCT	APP-Pending	US	16/309856		US-2019-0173622-A1	
10969	END-TO-END TECHNIQUES TO CREATE PM (PERFORMANCE MEASUREMENT) THRESHOLDS AT NFV (NETWORK FUNCTION VIRTUALIZATION) INFRASTRUCTURE			PCT	APP-Pending	US	16/303298		US-2019-0215235-A1	
10970	UPLINK SOUNDING REFERENCE SIGNAL (SRS) TRANSMISSION IN CARRIER AGGREGATION SYSTEM			PCT	APP-Pending	US	16/303759			

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
10971	APPARATUSES TO AUTHORIZE AND ENABLE/DISABLE ENHANCED COVERAGE FUNCTIONALITY			PCT	APP-Pending	US	16/093912		US-2019-0110241-A1	
10972	APPARATUSES TO AUTHORIZE AND ENABLE/DISABLE ENHANCED COVERAGE FUNCTIONALITY			CNT	APP-Pending	US	16/907004		US-2019-0274088-A1	
10973	CONFIGURING DOWNLINK LISTEN-BEFORE-TALK PRIORITY CLASS FOR UPLINK GRANT TRANSMISSION IN LICENSED ASSISTED ACCESS			PCT	APP-Pending	US	15/766556		US-2018-0288805-A1	
10974	AMPLITUDE-MODULATION SIGNAL AND PHASE-MODULATION SIGNAL DELAY ADJUSTMENT FOR POLAR TRANSMITTER			NP	PAT-Active	US	15/268955	9867155		
10975	PAPR reduction for IQ-RF DAC			NP	PAT-Active	US	15/274721	9985811	US-2018-0091338-A1	
10976	OCL (CLOSED CO-LOCATION) INDICATION FOR BEAMFORMING MANAGEMENT			PCT	APP-Pending	US	16/312645		US-2019-0345998-A1	
10977	CAMPING APPROACH IN MULTI-SIM USER EQUIPMENT WHEN PRESENT IN COVERAGE HOLES OF RESPECTIVE NETWORK OPERATORS			NP	PAT-Active	US	15/281117	#####	US-2018-0098262-A1	
10978	CAMPING APPROACH IN MULTI-SIM USER EQUIPMENT WHEN PRESENT IN COVERAGE HOLES OF RESPECTIVE NETWORK OPERATORS			CNT	APP-In-Preparation	US				
10979	APPARATUSES AND METHODS FOR MEASURING NEIGHBORING INTER-FREQUENCY OR INTER-RAT CELLS			PCT	APP-Pending	US	16/328741		US-2019-0306270-A1	
10980	MOBILE TERMINAL DEVICES AND METHODS IN MOBILE COMMUNICATION DEVICES			PCT	APP-Pending	US	16/323261		US-2019-0215783-A1	
10981	MOBILE DEVICE MANAGEMENT BASED ON PREDICTED BASE STATION BEHAVIOR			PCT	APP-Pending	US	16/327878		US-2019-0223098-A1	
10982	PROCESSING REQUESTS FOR MEASUREMENT OF SIGNAL QUALITY AT THE LOCATION OF A USER EQUIPMENT WITH MULTIPLE SIMS OR SUBSCRIPTIONS			NP	PAT-Active	US	15/688910	#####	US-2018-0098238-A1	
10983	PROCESSING REQUESTS FOR MEASUREMENT OF SIGNAL QUALITY AT THE LOCATION OF A USER EQUIPMENT WITH MULTIPLE SIMS			CNT	APP-Pending	US	16/546334			
10984	METHODS AND DEVICES FOR SELF-INTERFERENCE CANCELLATION			PCT	APP-Pending	US	16/327986		US-2019-0225884-A1	
10985	DISCOVERY AND NETWORK ACCESS PROCEDURES FOR 5G THINGS COMMUNICATION SYSTEM			PCT	APP-Pending	US	16/079756		US-2019-0857123-A1	
10986	TESTING OF USER EQUIPMENTS FOR IDLE PERIODS DISTRIBUTION			PCT	APP-Pending	US	16/307346		US-2019-0141553-A1	
10987	METHOD OF UPLINK CONTROL SIGNALING FOR NON-SCHEDULED UPLINK OPERATION OVER UNLICENSED SPECTRUM			PCT	APP-Pending	US	16/071893		US-2019-0037598-A1	
10988	TRANSMISSION OF PHASE TRACKING REFERENCE SIGNALS (PTRS)			PCT	APP-Pending	US	16/323465			
10989	TRANSMISSION OF PHASE TRACKING REFERENCE SIGNALS (PTRS) FOR BANDWIDTH PARTS			CNT	APP-Pending	US	15/408003		US-2019-0356463-A1	
10990	STATION (STA) AND METHOD FOR USAGE OF PHASE NOISE COMPENSATION BASED ON OPERATIONAL PARAMETERS			NP	APP-Pending	US	15/281722		US-2018-0097533-A1	
10991	A TRANSMITTER AND A METHOD FOR GENERATING AN ANALOG RADIO FREQUENCY TRANSMIT SIGNAL			PCT	APP-Pending	US	16/321082		US-2019-0181895-A1	
10992	HYBRID DISPLAY INTEGRATABLE ANTENNAS USING TOUCH SENSOR TRACE AND EDGE DISCONTINUITY STRUCTURES			NP	PAT-Active	US	15/465261	#####	US-2018-0275788-A1	
10993	HYBRID DISPLAY INTEGRATABLE ANTENNAS USING TOUCH SENSOR TRACE AND EDGE DISCONTINUITY STRUCTURES			CNT	APP-Pending	US	16/274851		US-2019-0346946-A1	
10994	LOW COMPLEXITY CHANNEL DECODERS			NP	PAT-Active	US	05/880767	7243295	US-2002-0198567-A1	
10995	LOW COMPLEXITY CHANNEL DECODERS			DIV	PAT-Active	US	10/829075	7240274	US-2004-0185856-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
10996	AUDIO SIGNAL PROCESSING FOR SPEECH COMMUNICATION			NP	PAT-Active	US	08/851389	6820054	US-2003-0923433-A1	
10997	REDUCED COMPLEXITY MMSE MULTISER DETECTION FOR A MULTIRATE CDMA LINK			NP	PAT-Active	US	10/291188	7333466	US-2004-0990906-A1	
10998	CONTROL CHANNEL TRANSMISSION IN NEW RADIO ACCESS TECHNOLOGIES USING COMMON SEARCH SPACE			PCT	APP-Pending	US	16/467549		US-2019-0313888-A1	
10999	SYSTEMS AND METHODS FOR DELIVERING RADIO APPLICATIONS TO RECONFIGURABLE RADIO EQUIPMENT			PCT	APP-Pending	US	16/481180			
11000	INDOOR POSITIONING ENHANCEMENTS			PCT	APP-Pending	US	16/316494		US-2019-0297595-A1	
11001	PRC COORDINATION BETWEEN A PLURALITY OF NODES			PCT	APP-Pending	US	16/316489		US-2019-0297662-A1	
11002	SYSTEMS AND METHOD FOR SELECTING CARRIER RESOURCES FOR NARROWBAND PHYSICAL RANDOM ACCESS CHANNEL PROCEDURES			PCT	APP-Pending	US	16/316842			
11003	BEAM MEASUREMENT AND REPORTING IN CELLULAR NETWORKS			PCT	APP-Pending	US	16/324667		US-2019-0182896-A1	
11004	OPTIMIZED RESOURCE SELECTION PROCEDURES IN VEHICLE-TO-VEHICLE COMMUNICATIONS			PCT	APP-Pending	US	16/316744			
11005	SUPPORT OF SC-PTM BASED MULTICASTING FOR BL/CE AND NB-IOT UES			PCT	APP-Pending	US	16/316771		US-2019-0245254-A1	
11006	NETWORK PROFILE SYSTEM AND METHOD			NP	APP-Pending	US	15/393553		US-2018-0193572-A1	
11007	USING A MANAGED OBJECT OPERATION TO CONTROL A LIFECYCLE MANAGEMENT OPERATION			PCT	APP-Pending	US	16/319886		US-2019-0266012-A1	
11008	METHODS AND DEVICES FOR COMPENSATING MISADJUSTMENT OF A GNSS DEVICE			NP	PAT-Active	US	15/282501	8828888	US-2018-0295178-A1	
11009	BANDWIDTH UTILIZATION DURING SILENCE FRAMES			PCT	APP-Pending	US	16/505581			
11010	SCHEDULING UPLINK TRANSMISSIONS FOR A USER EQUIPMENT (UE)			PCT	APP-Pending	US	16/761387		US-2018-0270860-A1	
11011	DEVICES AND METHODS FOR E-RAA MULTI-CARRIER LBT			PCT	APP-Pending	US	16/321812		US-2019-0174546-A1	
11012	TRANSMITTER AND RECEIVER FOR MASTER INFORMATION BLOCK OVER PHYSICAL BROADCAST CHANNEL			PCT	APP-Pending	US	16/060401		US-2019-0007896-A1	
11013	5G MMWAVE WIRELESS REMOTE RADIO HEAD SYSTEM			PCT	APP-Pending	US	16/461727		US-2019-0320498-A1	
11014	DEVICE AND METHOD FOR ULTRASONIC COMMUNICATION			NP	APP-Pending	US	15/378298		US-2018-0167147-A1	
11015	DEVICES AND METHODS FOR PROCESSING TRANSMISSIONS FROM MULTIPLE NETWORK ACCESS NODES BASED ON DISTINGUISHING FEATURES			NP	PAT-Active	US	15/393363	8888888	US-2018-0192449-A1	
11016	SYSTEM AND METHOD OF CONTROLLING A TRANSMISSION			ONY	APP-Pending	US	16/454066			
11017	DOWNLINK CONTROL CHANNEL DESIGN FOR BEAMFORMING SYSTEMS			PCT	APP-Pending	US	16/326168		US-2019-0182095-A1	
11018	SYSTEMS METHODS AND DEVICES FOR USER PLANE TRAFFIC FORWARDING			PCT	APP-Pending	US	16/479432			
11019	CELLULAR WAKEUP RECEIVER FOR REDUCING POWER CONSUMPTION OF USER EQUIPMENT EMPLOYING LTE-WLAN AGGREGATION			PCT	APP-Pending	US	16/475913		US-2019-0327679-A1	
11020	IoT goes Unlicensed			PCT	APP-Pending	US	16/489475			
11021	CSI (CHANNEL STATE INFORMATION)-RS (REFERENCE SIGNAL) OVERHEAD REDUCTION FOR CLASS B FD (FULL DIMENSIONAL) MIMO (MULTIPLE INPUT MULTIPLE OUTPUT) SYSTEMS			PCT	APP-Pending	US	16/067929		US-2019-0223187-A1	
11022	FREQUENCY HOPPING FOR UNLICENSED INTERNET OF THINGS			PCT	APP-Pending	US	16/328456			

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
11023	SYSTEM AND METHOD FOR BEAMED REFERENCE SIGNAL WITH HYBRID BEAM			PCT	APP-Pending	US	15/767113		US-2019-0974890-A1	
11024	LINK MONITORING REPETITION LEVEL FEEDBACK FOR COMMUNICATION SYSTEMS			PCT	APP-Pending	US	16/328543		US-2019-0215909-A1	
11025	INTRA- AND INTER-RAT CO-EXISTENCE AND CONGESTION CONTROL FOR LTE PCS-BASED VEHICLE-TO-VEHICLE (V2V) COMMUNICATION			PCT	APP-Pending	US	16/322412		US-2019-0174547-A1	
11026	SYSTEMS METHODS AND DEVICES FOR UPLINK BEARER AND ACCESS CATEGORY MAPPING			PCT	APP-Pending	US	16/326662			
11027	DMRS FOR 5G THINGS COMMUNICATION SYSTEM USER EQUIPMENT (UE) AND METHOD OF SIDELINK DATA COMMUNICATION IN FIFTH GENERATION (5G) NEW RADIO (NR) THINGS NETWORKS			PCT	APP-Pending	US	16/079470		US-2019-0052442-A1	
11028	COMMUNICATION IN FIFTH GENERATION (5G) NEW RADIO (NR) THINGS NETWORKS			PCT	APP-Pending	US	16/078989		US-2019-0090220-A1	
11029	RANDOM ACCESS AND SCHEDULING REQUEST IN NEW RADIO THINGS SIDELINK			PCT	APP-Pending	US	16/079617		US-2019-0054551-A1	
11030	MULTIPLE RADIO RESOURCE RESERVATION FOR VEHICLE-TO-EVERYTHING COMMUNICATIONS			PCT	APP-Pending	US	16/323957		US-2019-0182890-A1	
11031	USER EQUIPMENT (UE) EVOLVED NODE-B (ENB) AND METHODS FOR DYNAMIC HYBRID AUTOMATIC REPEAT REQUEST (HARQ)			PCT	APP-Pending	US	16/322068		US-2019-0191487-A1	
11032	USER EQUIPMENT (UE) EVOLVED NODE-B (ENB) AND METHODS FOR DYNAMIC HYBRID AUTOMATIC REPEAT REQUEST (HARQ)			CNT	APP-Pending	US	16/408016		US-2019-0335536-A1	
11033	METHOD AND APPARATUS FOR A HIGH ISOLATION DUAL PORT ANTENNA SYSTEM			NP	PAT-Active	US	10/005738	6608602	US-2003-0085647-A1	
11034	SPARSE CHANNEL ESTIMATION FOR ORTHOGONAL FREQUENCY DIVISION MULTIPLEXED SIGNALS			CNT	PAT-Active	US	11/750033	7605616	US-2007-0223610-A1	
11035	CELL SELECTION TECHNIQUES FOR DIRECTIONAL COMMUNICATIONS			PCT	APP-Pending	US	16/497496			
11036	USER EQUIPMENT (UE) EVOLVED NODE-B (ENB) AND METHODS FOR MULTIPLEXING NEW RADIO (NR) PHYSICAL UPLINK SHARED CHANNEL (NR PUSCH) AND NR PHYSICAL UPLINK CONTROL CHANNEL (NR PUCCH)			PCT	APP-Pending	US	16/322040		US-2019-0191453-A1	
11037	USER EQUIPMENT (UE) EVOLVED NODE-B (ENB) AND METHODS FOR MULTIPLEXING NEW RADIO (NR) PHYSICAL UPLINK SHARED CHANNEL (NR PUSCH) AND NR PHYSICAL UPLINK CONTROL CHANNEL (NR PUCCH)			CNT	APP-Pending	US	16/407961		US-2019-0335483-A1	
11038	ANGULAR ELECTRODE			NP	PAT-Active	US	15/473941	#####	US-2018-0247715-A1	
11039	FREQUENCY DEPENDENT ENVELOPE TRACKING			NP	APP-Pending	US	15/443260		US-2018-0246570-A1	
11040	ANTENNA INCORPORATED INTO DEVICE HINGE AND METHOD			NP	PAT-Active	US	15/477054	#####	US-2018-0287241-A1	
11041	RF Transmitter Architecture Methods			NP	PAT-Active	US	15/476014	#####	US-2018-0287821-A1	
11042	RF TRANSMIT ARCHITECTURE METHODS			CNT	APP-Pending	US	16/193431		US-2019-0327118-A1	
11043	BINARY STOCHASTIC TIME-TO-DIGITAL CONVERTER AND METHOD			NP	PAT-Active	US	15/477057	9917775		
11044	DOWNLINK CONTROL INFORMATION DESIGN WITH SHORTER TTI			PCT	APP-Pending	US	16/346335		US-2019-0268931-A1	
11045	LIFECYCLE MANAGEMENT PARAMETER MODELING FOR VIRTUAL NETWORK FUNCTIONS			PCT	APP-Pending	US	16/338987			
11046	RADAR METHODS AND APPARATUS USING IN PHASED ARRAY COMMUNICATION SYSTEMS			NP	APP-Pending	US	15/389426		US-2018-0180713-A1	
11047	SYSTEMS AND METHODS TO REPORT BAND COMBINATION CAPABILITIES IN A TELECOMMUNICATION NETWORK			PCT	APP-Pending	US	16/330143		US-2019-0306925-A1	
11048	SIGNALING OF SUPPORT FOR NETWORK CONTROLLED SMALL GAP WCG FOR INTERRUPTION CONTROL			PCT	APP-Pending	US	16/339500			

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
11049	Frequency domain based digital cancellation of modulated spur interference in LTE-LA transceivers			NP	APP-Pending	US	15/474243		US-2018-0287719-A1	
11050	DEVICE FOR AND METHOD OF RADIO ACCESS TECHNOLOGY SELECTION AMONG MULTIPLE RADIO ACCESS TECHNOLOGIES			PCT	APP-Pending	US	16/310407		US-2019-015082-A1	
11051	SPUR CANCELLATION USING INVERSE SPUR INJECTION			NP	PAT-Active	US	15/448078	#####	US-2018-0254852-A1	
11052	Feed-Forward Envelope Tracking			NP	PAT-Active	US	15/474186	#####	US-2018-0287563-A1	
11053	Feed-Forward Envelope Tracking			CNT	APP-Pending	US	16/140291		US-2019-0096486-A1	
11054	POLAR TRANSMITTER WITH JOINED MODULATOR			NP	PAT-Active	US	15/639444	#####		
11055	DEVICE AND METHOD FOR RADIO CELL SELECTION			NP	PAT-Active	US	15/720447	#####	US-2019-0104451-A1	
11056	DEVICE AND METHOD FOR RADIO CELL SELECTION			CNT	APP-Pending	US	16/530752			
11057	USER EQUIPMENT WITH ADAPTIVE TRANSMISSION POWER SCALING BASED ON DECODING CONFIDENCE			PCT	APP-Pending	US	16/484325			
11058	EFFICIENT BEAM SEARCH METHODS FOR THREE-DIMENSIONAL BEAMFORMING WITH NON-PRECODED REFERENCE SIGNALS			PCT	APP-Pending	US	16/488618			
11059	TRANSMISSION POWER CONTROL METHODS AND DEVICES			NP	PAT-Active	US	15/476361	#####	US-2018-0288709-A1	
11060	METHODS AND DEVICES FOR PROCESSING A DATA SIGNAL FOR TRANSMISSION TO MULTI-STREAM TERMINALS			PCT	APP-Pending	US	16/494474			
11061	APPARATUS AND METHOD FOR INTERPOLATING BETWEEN A FIRST AND A SECOND SIGNAL			PCT	APP-Pending	US	16/474560		US-2019-0356305-A1	
11062	OFFSET SYSTEM AND METHOD FOR MULTI-BIT DIGITAL-TO-ANALOG CONVERTERS			PCT	APP-Pending	US	16/349390		US-2019-0341923-A1	
11063	METHOD FOR TRANSMISSION OF UNICAST CONTROL IN BROADCAST/MULTICAST TRANSMISSION TIME INTERVALS			NP	PAT-Active	US	11/554989	8175021	US-2007-0169151-A1	
11064	Method for Transmission of Unicast Control in Broadcast/Multicast Transmission Time Intervals			CNT	PAT-Active	US	13/446492	9147133	US-2012-0195246-A1	
11065	METHOD FOR TRANSMISSION OF UNICAST CONTROL IN BROADCAST/MULTICAST TRANSMISSION TIME INTERVALS			DIV	PAT-Active	US	14/840933	9807789	US-2015-0373738-A1	
11066	METHOD FOR TRANSMISSION OF UNICAST CONTROL IN BROADCAST/MULTICAST TRANSMISSION TIME INTERVALS			CNT	PAT-Active	US	15/795628	#####	US-2018-0220445-A1	
11067	WIDEBAND REFERENCE SIGNAL TRANSMISSION IN SC-FDMA COMMUNICATION SYSTEMS			NP	PAT-Active	US	11/927146	7957759	US-2008-0139237-A1	
11068	WIDEBAND REFERENCE SIGNAL TRANSMISSION IN SC-FDMA COMMUNICATION SYSTEMS			DIV	PAT-Active	US	13/104862	9838980	US-2011-0212745-A1	
11069	Signaling of Random Access Preamble Sequences in Wireless Networks			NP	PAT-Active	US	12/184239	8773968	US-2009-0046629-A1	
11070	SIGNALING OF RANDOM ACCESS PREAMBLE SEQUENCES IN WIRELESS NETWORKS			CNT	PAT-Active	US	14/326354	9774424	US-2014-0341010-A1	
11071	SIGNALING OF RANDOM ACCESS PREAMBLE SEQUENCES IN WIRELESS NETWORKS			CNT	PAT-Active	US	15/713893	#####	US-2018-0131481-A1	
11072	SECONDARY SYNCHRONIZATION SIGNAL MAPPING			NP	PAT-Active	US	12/234362	8025586	US-2009-0080407-A1	
11073	SECONDARY SYNCHRONIZATION SIGNAL MAPPING			DIV	PAT-Active	US	14/458515	9806859	US-2014-0345145-A1	
11074	SECONDARY SYNCHRONIZATION SIGNAL MAPPING			CNT	PAT-Active	US	15/729064	#####	US-2018-0123750-A1	
11075	CODE DIVISION MULTIPLE ACCESS WIRELESS SYSTEM WITH CLOSED LOOP MODE USING NINETY DEGREE PHASE ROTATION AND BEAMFORMER VERIFICATION			NP	PAT-Active	US	09/635715	6831943		

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
11076	CODE DIVISION MULTIPLE ACCESS WIRELESS SYSTEM WITH CLOSED LOOP MODE USING NINETY DEGREE PHASE ROTATION AND BEAMFORMER VERIFICATION			DIV	PAT-Active	US	10/781472	7384867	US-2004-0186627-A1	
11077	CODE DIVISION MULTIPLE ACCESS WIRELESS SYSTEM WITH CLOSED LOOP MODE USING NINETY DEGREE PHASE ROTATION AND BEAMFORMER VERIFICATION			DIV	PAT-Active	US	10/919470	7346121	US-2005-0202666-A1	
11078	CODE DIVISION MULTIPLE ACCESS WIRELESS SYSTEM WITH CLOSED LOOP MODE USING NINETY DEGREE PHASE ROTATION AND BEAMFORMER VERIFICATION			ENT	PAT-Active	US	11/681088	7463706	US-2007-0165689-A1	
11079	CODE DIVISION MULTIPLE ACCESS WIRELESS SYSTEM WITH CLOSED LOOP MODE USING NINETY DEGREE PHASE ROTATION AND BEAMFORMER VERIFICATION			DIV	PAT-Active	US	12/331279	7711034	US-2009-0103590-A1	
11080	Broadcast multicast mode			NP	PAT-Active	US	11/117820	9825977	US-2005-0276238-A1	
11081	UPLINK SYNCHRONIZATION MAINTENANCE PRINCIPLES IN WIRELESS NETWORKS			NP	PAT-Active	US	12/111810	8218526	US-2008-0267185-A1	
11082	UPLINK SYNCHRONIZATION MAINTENANCE PRINCIPLES IN WIRELESS NETWORKS			ENT	PAT-Active	US	13/531006	9185717	US-2013-0242973-A1	
11083	TRANSMISSION OF BUNDLED FEEDBACK IN WIRELESS NETWORKS			NP	PAT-Active	US	12/389486	8345605	US-2009-0213769-A1	
11084	DOWNLINK SYNCHRONIZATION CHANNEL AND METHODS FOR CELLULAR SYSTEMS			NP	PAT-Active	US	11/737554	8031745	US-2007-0348068-A1	
11085	WIRELESS COMMUNICATIONS SYSTEM WITH SECONDARY SYNCHRONIZATION CODE BASED ON VALUES IN PRIMARY SYNCHRONIZATION CODE			DIV	PAT-Active	US	11/438149	7656934	US-2006-0286230-A1	
11086	WIRELESS COMMUNICATIONS SYSTEM WITH SECONDARY SYNCHRONIZATION CODE BASED ON VALUES IN PRIMARY SYNCHRONIZATION CODE			DIV	PAT-Active	US	12/638468	7860152	US-2010-0091821-A1	
11087	PRIMARY AND SECONDARY SYNCHRONIZATION CODES FROM FIRST SECONDTHIRD SEQUENCES			DIV	PAT-Active	US	12/949413	8144747	US-2011-0064073-A1	
11088	WIRELESS COMMUNICATIONS SYSTEM WITH SECONDARY SYNCHRONIZATION CODE BASED ON VALUES IN PRIMARY SYNCHRONIZATION CODE			DIV	PAT-Active	US	13/403201	8913362	US-2012-0147877-A1	
11089	WIRELESS COMMUNICATIONS SYSTEM WITH SECONDARY SYNCHRONIZATION CODE BASED ON VALUES IN PRIMARY SYNCHRONIZATION CODE			DIV	PAT-Active	US	13/403223	8917756	US-2012-0154184-A1	
11090	WIRELESS COMMUNICATIONS SYSTEM WITH SECONDARY SYNCHRONIZATION CODE BASED ON VALUES IN PRIMARY SYNCHRONIZATION CODE			DIV	PAT-Active	US	13/403236	8681834	US-2012-0147730-A1	
11091	WIRELESS COMMUNICATIONS SYSTEM WITH CYCLING OF UNIQUE CELL BIT SEQUENCES IN STATION COMMUNICATIONS			NP	PAT-Active	US	09/605610	7372825		
11092	WIRELESS COMMUNICATIONS SYSTEM WITH CYCLING OF UNIQUE CELL BIT SEQUENCES IN STATION COMMUNICATIONS			ENT	PAT-Active	US	12/034534	8107420	US-2008-0170638-A1	
11093	RECEIVER ALGORITHM FOR THE LENGTH 4 CPC			NP	PAT-Active	US	09/649390	6891862		
11094	METHOD AND APPARATUS FOR PRIORITIZING INFORMATION PROTECTION IN HIGH ORDER MODULATION SYMBOL MAPPING			NP	PAT-Active	US	09/948893	6476734	US-2002-0126763-A1	
11095	MULTIPLYING SYMBOL STREAMS BY RECTANGULAR MATRIX OF $[P/M] \times 1$ VECTORS			DIV	PAT-Active	US	11/468394	7713798	US-2006-0281581-A1	
11096	HIGH DATA RATE CLOSED LOOP MIMO SCHEME COMBINING TRANSMIT DIVERSITY AND DATA MULTIPLEXING			DIV	PAT-Active	US	12/970167	8138678	US-2011-0080976-A1	
11097	WIRELESS SYSTEM WITH HYBRID AUTOMATIC RETRANSMISSION REQUEST IN INTERFERENCE-LIMITED COMMUNICATIONS			NP	PAT-Active	US	10/260763	7295624	US-2004-0203456-A1	
11098	TIME-FREQUENCY INTERLEAVED ORTHOGONAL FREQUENCY DIVISION MULTIPLEXING ULTRA WIDE BAND PHYSICAL LAYER			NP	PAT-Active	US	10/688169	7756002	US-2004-0151109-A1	
11099	Wireless Precoding Methods			ENT	PAT-Active	US	13/237543	8693575	US-2012-0080718-A1	
11100	WIRELESS PRECODING METHODS			ENT	PAT-Active	US	14/095470	9197306	US-2014-0293006-A1	
11101	SLOW UPLINK POWER CONTROL			NP	PAT-Active	US	11/425202	7668564	US-2006-0285985-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
11102	LOW COMPLEXITY DESIGN OF PRIMARY SYNCHRONIZATION SEQUENCE FOR OFDMA			NP	PAT-Active	US	11/835744	7948866	US-2008-0931185-A1	
11103	CODEBOOK AND PRE-CODER SELECTION FOR CLOSED-LOOP MIMO			NP	PAT-Active	US	11/893045	7948064	US-2008-0937675-A1	
11104	ADAPTIVE SELECTION OF TRANSMISSION PARAMETERS FOR REFERENCE SIGNALS			NP	PAT-Active	US	11/839421	8084638	US-2008-0931125-A1	
11105	ADAPTIVE SELECTION OF TRANSMISSION PARAMETERS FOR REFERENCE SIGNALS			CNT	PAT-Active	US	13/314405	8717933	US-2012-0113921-A1	
11106	NETWORK-BASED INTER-CELL POWER CONTROL FOR MULTI-CHANNEL WIRELESS NETWORKS			NP	PAT-Active	US	12/067343	8072918	US-2008-0247375-A1	
11107	BLOCK SCRAMBLING FOR ORTHOGONAL FREQUENCY DIVISION MULTIPLE ACCESS			NP	PAT-Active	US	12/061878	8111731	US-2008-0247477-A1	
11108	PRE-SYNCHRONIZATION METHOD FOR HARD HANDOVERS IN WIRELESS NETWORKS			NP	PAT-Active	US	12/112472	8218500	US-2008-0267131-A1	
11109	RANDOM ACCESS PREAMBLE DETECTION FOR LONG TERM EVOLUTION WIRELESS NETWORKS			NP	PAT-Active	US	12/139814	8084546	US-2009-0040918-A1	
11110	TIME-SHARING OF SOUNDING RESOURCES			NP	PAT-Active	US	12/142135	8102809	US-2009-0934468-A1	
11111	DOWNLINK SIGNALING OF SOUNDING RESOURCES IN A WIRELESS COMMUNICATIONS SYSTEM			CNT	PAT-Active	US	13/331038	8718011	US-2012-0320870-A1	
11112	TRANSMISSION OF ACK/NACK BITS AND THEIR EMBEDDING IN THE CQI REFERENCE SIGNAL			NP	PAT-Active	US	12/183242	8149938	US-2009-0042558-A1	
11113	TRANSMISSION OF ACK/NACK BITS AND THEIR EMBEDDING IN THE CQI REFERENCE SIGNAL			CNT	PAT-Active	US	13/438584	8254483	US-2012-0236773-A1	
11114	Transmission Using Nested QFDMA			DE/	PAT-Active	US	12/055944	8714542	US-2010-0309775-A1	
11115	ACK/NAK REPETITION SCHEMES IN WIRELESS NETWORKS			NP	PAT-Active	US	12/368583	8184579	US-2009-0207793-A1	
11116	INTERLEAVER DESIGN WITH UNEQUAL ERROR PROTECTION FOR CONTROL INFORMATION			NP	PAT-Active	US	12/357500	8140944	US-2009-0198055-A1	
11117	SOUNDING REFERENCE SIGNAL CELL SPECIFIC SUB-FRAME CONFIGURATION			NP	PAT-Active	US	12/411886	7965657	US-2009-0290514-A1	
11118	CELL SPECIFIC SOUNDING REFERENCE SIGNAL SUB-FRAME CONFIGURATION			NP	PAT-Active	US	12/432031	7993916	US-2009-0275459-A1	
11119	DEVICE RADAR SENSING			PCT	APP-Pending	US	16/490218			
11120	DESIGN OF IN-BAND BACKHAUL FOR WIRELESS RELAYS IN WIRELESS NETWORKS			NP	PAT-Active	US	12/683291	8259637	US-2010-0272006-A1	
11121	PROTOCOL STACK AND SCHEDULER FOR LS RELAY			NP	PAT-Active	US	12/683300	8305965	US-2010-0272037-A1	
11122	Layer Mapping for Up Link Single User Multiple Input Multiple Output Wireless Telephony			NP	PAT-Active	US	12/693028	8971448	US-2010-0215109-A1	
11123	Coordinated Multi-Point Transmission in a Cellular Network			NP	PAT-Active	US	12/773491	8712396	US-2010-0285792-A1	
11124	SECURITY FOR PAGING MESSAGES			PCT	APP-Pending	US	15/408556			
11125	CSI (CHANNEL STATE INFORMATION) ENHANCEMENTS FOR FD (FULL DIMENSION) MIMO (MULTIPLE INPUT MULTIPLE OUTPUT)			PCT	APP-Pending	US	16/081172		US-2019-0068266-A1	
11126	FREQUENCY TRACKING FOR BEAMFORMED SYSTEMS			PCT	APP-Pending	US	16/085124			
11127	DEBUGGING TRANSLATION BLOCK AND DEBUGGING ARCHITECTURE			NP	PAT-Active	US	15/591161	8898888	US-2018-0228866-A1	
11128	GESTURE RECOGNITION RADAR SYSTEMS AND METHODS			PCT	APP-Pending	US	16/500230			

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
11129	APPARATUS AND METHOD FOR DETERMINING A DISTANCE TO AN OBJECT			NP	APP-Pending	US	15/951202		US-2018-0341000-A1	
11130	PEAK-TO-AVERAGE POWER RATIO REDUCTION FOR IQ TRANSMITTERS			PCT	APP-Pending	US	15/607893			
11131	SMART BEAMWIDTH ADAPTATION IN WIRELESS HEAD-MOUNTED DISPLAYS			NP	PAT-Active	US	15/719057	#####		
11132	REAL-TIME CO-CHANNEL INTERFERENCE SUPPRESSION			NP	PAT-Active	US	15/640479	#####	US-2019-0007845-A1	
11133	SERVER- AND NETWORK-ASSISTED DYNAMIC ADAPTIVE STREAMING OVER HYPertext TRANSPORT PROTOCOL SIGNALING			PCT	APP-Pending	US	15/680148			
11134	RF SIGNAL REPEATER MOBILE UNIT POSITION DETERMINATION SYSTEM USING THE RF SIGNAL REPEATER AND METHOD OF COMMUNICATION THEREFOR			NP	PAT-Active	US	09/598653	6501955		
11135	RF SIGNAL REPEATER IN MOBILE COMMUNICATIONS SYSTEMS			CNT	PAT-Active	US	10/173912	6439539	US-2002-0155838-A1	
11136	HIGH-SPEED MOBILITY COMMUNICATION SYSTEMS AND METHODS			PCT	APP-Pending	US	18/500362			
11137	DYNAMIC OFFLOADING OF V2X SERVICES TO DSRC APPARATUS FOR PARTIALLY OFFLOADING PROTOCOL PROCESSING			PCT	APP-Pending	US	15/306561		US-2019-0178344-A1	
11138	5G RAN1 SYSTEM AND METHOD FOR PHASE NOISE COMPENSATION FOR DIVERSITY BASED TRANSMISSION			PSP	APP-in-Preparation	US				
11140	TELEPHONE CALL PROCEDURES FOR POWER EFFICIENT MOBILE TERMINATING PACKET SWITCHED SERVICES			NP	PAT-Active	US	15/692477	#####	US-2019-0099161-A1	
11141	DEVICES AND METHODS FOR NORMAL AND ENHANCED COVERAGE COMPATABILITY			NP	APP-Pending	US	15/718648		US-2019-0098564-A1	
11142	NETWORK CONTROLLER AND METHOD FOR CONTROLLING A COMMUNICATION			NP	APP-Pending	US	15/700205		US-2019-0081690-A1	
11143	MULTIUSER UPLINK POWER CONTROL WITH USER GROUPING			NP	PAT-Active	US	15/708165	#####	US-2019-0090200-A1	
11144	TXOP WITH CONTINUED LBT AFTER A PAUSE			PCT	APP-Pending	US	16/488722			
11145	SYSTEMS AND METHODS FOR UPLINK TRANSMISSION POWER CONTROL			PCT	APP-Pending	US	16/323475		US-2019-0174423-A1	
11146	SYSTEMS AND METHODS FOR UPLINK TRANSMISSION POWER CONTROL			LNT	APP-Pending	US	16/407952		US-2019-0197151-A1	
11147	PAID POWER MODE FOR AN OSCILLATOR			PCT	APP-Pending	US	15/080464			
11148	DEVICES AND METHODS FOR POWER ALLOCATION			NP	APP-Pending	US	15/719585		US-2019-0104480-A1	
11149	ANTENNA ARRANGEMENT FOR WIRELESS VIRTUAL REALITY HEADSET			PCT	APP-Pending	US	16/325661		US-2019-0214709-A1	
11150	DEVICES AND METHODS FOR RESOURCE SELECTION IN WIRELESS COMMUNICATIONS			NP	PAT-Active	US	15/718598	#####	US-2019-0104512-A1	
11151	WIDEBAND CARRIER CONFIGURATION			PCT	APP-Pending	US	16/399693			
11152	ADAPTIVE FILTERING WITH TAP LEAKAGE USING ERROR FILTERING			NP	PAT-Active	US	13/037656	6865588	US-2003-0126170-A1	
11153	INTERFERENCE REDUCTION USING LOW COMPLEXITY ANTENNA ARRAY			NP	PAT-Active	US	09/976200	7039135	US-2003-0072396-A1	
11154	METHOD FOR DISCOVERY AND ROUTING USING A PRIORI KNOWLEDGE IN THE FORM OF APPLICATION PROGRAMME WITHIN MOBILE AD-HOC NETWORKS			NP	PAT-Active	US	10/035463	7668958	US-2003-0075033-A1	
11155	METHOD FOR DISCOVERY AND ROUTING USING A PRIORI KNOWLEDGE IN THE FORM OF APPLICATION PROGRAMME WITHIN MOBILE AD-HOC NETWORKS			CNT	PAT-Active	US	12/709987	8321587	US-2010-0153562-A1	
11156	METHOD AND APPARATUS FOR FAST CONVERGING AFFINE PROJECTION BASED ECHO CANCELLER			NP	PAT-Active	US	08/947804	6700978	US-2002-0071547-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
11152	NETWORK ECHO CANCELLER FOR INTEGRATED TELECOMMUNICATIONS PROCESSING			NP	PAT-Active	US	08/948501	6738358	US-2002-0064139-A1	
11158	PULSE AMPLITUDE MODULATED SYSTEM WITH REDUCED INTERSYMBOL INTERFERENCE			NP	PAT-Active	US	10/261574	7391834	US-2004-0062319-A1	
11159	PULSE AMPLITUDE MODULATED SYSTEM WITH REDUCED INTERSYMBOL INTERFERENCE			ENT	PAT-Active	US	12/077987	7653165	US-2008-0181331-A1	
11160	SYSTEM AND METHOD FOR CONTROLLING SIGNAL PROCESSING IN A VOICE OVER PACKET (VOIP) ENVIRONMENT			NP	PAT-Active	US	09/960886	6928076	US-2002-0054588-A1	
11161	FAST CONVERGING AFFINE PROJECTION BASED ECHO CANCELLER FOR SPARSE MULTI-PATH CHANNELS			NP	PAT-Active	US	05/947887	6908782	US-2002-0093919-A1	
11162	HIGH ISOLATION LOW LOSS PRINTED BALUN FEED FOR A CROSS DIPOLE STRUCTURE			NP	PAT-Active	US	09/993187	6567056	US-2003-0090430-A1	
11163	APPARATUS AND METHOD TO REDUCE QUANTIZATION ERROR			NP	PAT-Active	US	10/195783	7324588	US-2004-0008791-A1	
11164	TRANSFERRING MULTIPLE DATA UNITS OVER A WIRELESS COMMUNICATION LINK			NP	PAT-Active	US	10/113039	7376435	US-2003-0186715-A1	
11165	ADAPTIVELY EXTENDING TUNABLE RANGE OF FREQUENCY IN A CLOSED LOOP			NP	PAT-Active	US	10/324886	6885873	US-2004-0115547-A1	
11166	INPUT JITTER ATTENUATION IN A PHASE-LOCKED LOOP			NP	PAT-Active	US	10/206778	6703878	US-2004-0017261-A1	
11167	APPARATUS TO SPECULATIVELY IDENTIFY PACKETS FOR TRANSMISSION AND METHOD THEREFOR			NP	PAT-Active	US	10/304391	7385926	US-2004-0100981-A1	
11168	METHOD AND APPARATUS OF GENERATING A QUALITY INDICATOR			NP	PAT-Active	US	10/218117	7010731	US-2004-0034821-A1	
11169	METHOD AND SYSTEM FOR ALLOCATION OF RESOURCES WITHIN WIRELESS SYSTEMS			DIV	PAT-Active	US	11/418673	7447532	US-2006-0295425-A1	
11170	FREQUENCY SELECTIVE SURFACE AND METHOD OF MANUFACTURE			NP	PAT-Active	US	10/328479	6985738	US-2004-0115658-A1	
11171	ON CHIP LOGIC ANALYZER DEBUG BUS			NP	PAT-Active	US	10/334311	6822474	US-2004-0124903-A1	
11172	APPARATUS AND METHOD FOR DATA COMPRESSIBILITY TEST			NP	PAT-Active	US	10/328167	7263233	US-2004-0126026-A1	
11173	REFERENCE IMPEDANCE APPARATUS SYSTEMS AND METHODS			NP	PAT-Active	US	10/336233	6998931	US-2004-0130408-A1	
11174	PROGRAMMABLE GAIN AMPLIFIER WITH SELF-ADJUSTING OFFSET CORRECTION			NP	PAT-Active	US	10/329187	7302246	US-2004-0121735-A1	
11175	TRANSMIT/RECEIVER COMBINER USING SHUNT ADMITTANCE ELEMENTS FOR ISOLATION			NP	PAT-Active	US	10/330386	6798314	US-2004-0124944-A1	
11176	WIRELESS COMMUNICATION DEVICE HAVING VARIABLE GAIN DEVICE AND METHOD THEREFOR			NP	PAT-Active	US	10/328956	7684776	US-2004-0121750-A1	
11177	SPATIAL MULTIPLEXING IN A CELLULAR NETWORK			NP	PAT-Closed	US	09/364146	6067290		
11178	SUBSCRIBER UNIT INCORPORATING SPATIAL MULTIPLEXING			EXP	PAT-Closed	US	09/545434	6678253		
11179	SUBSCRIBER UNIT IN A HYBRID LINK INCORPORATING SPATIAL MULTIPLEXING			DIV	PAT-Closed	US	09/564770	6757265		
11180	SUBSCRIBER UNIT IN A HYBRID LINK INCORPORATING SPATIAL MULTIPLEXING			DIV	PAT-Active	US	10/322244	7606204	US-2003-0169720-A1	
11181	SUBSCRIBER UNIT IN A HYBRID LINK INCORPORATING SPATIAL MULTIPLEXING			ENT	PAT-Active	US	10/929015	7773564	US-2005-0025099-A1	
11182	SPATIAL MULTIPLEXING IN A CELLULAR NETWORK			ENT	PAT-Active	US	12/823057	8339934	US-2010-0360134-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
11183	SPATIAL MULTIPLEXING IN A CELLULAR NETWORK			CNT	PAT-Active	US	13/684010	9137799	US-2013-0163526-A1	
11184	SPATIAL MULTIPLEXING IN A CELLULAR NETWORK			CNT	PAT-Active	US	13/780995	9144074	US-2013-0176966-A1	
11185	SPATIAL MULTIPLEXING IN A CELLULAR NETWORK			CNT	PAT-Active	US	13/781048	9210709	US-2013-0176968-A1	
11186	SPATIAL MULTIPLEXING IN A CELLULAR NETWORK			CNT	PAT-Closed	US	14/952804	9447821	US-2016-0081057-A1	
11187	DIVERSITY TRANSMITTER BASED ON LINEAR TRANSFORM PROCESSING OF TRANSMITTED INFORMATION			NP	PAT-Active	US	09/574498	6442214		
11188	WIRELESS COMMUNICATIONS SYSTEM THAT SUPPORTS MULTIPLE MODES OF OPERATION			NP	PAT-Active	US	08/653060	6937592		
11189	WIRELESS COMMUNICATIONS SYSTEM THAT SUPPORTS MULTIPLE MODES OF OPERATION			CNT	PAT-Active	US	11/101813	7586873	US-2005-0174981-A1	
11190	WIRELESS COMMUNICATIONS SYSTEM THAT SUPPORTS MULTIPLE MODES OF OPERATION			CNT	PAT-Active	US	12/496922	8345637	US-2010-0045429-A1	
11191	WIRELESS COMMUNICATIONS SYSTEM THAT SUPPORTS MULTIPLE MODES OF OPERATION			CNT	PAT-Active	US	12/604350	8428037	US-2010-0142636-A1	
11192	WIRELESS COMMUNICATIONS SYSTEM THAT SUPPORTS MULTIPLE MODES OF OPERATION			CNT	PAT-Active	US	13/858784	9288800	US-2013-0285962-A1	
11193	WIRELESS COMMUNICATIONS SYSTEM THAT SUPPORTS MULTIPLE MODES OF OPERATION			CNT	PAT-Active	US	15/066129	9736832	US-2016-0262134-A1	
11194	MODE SELECTION FOR DATA TRANSMISSION IN WIRELESS COMMUNICATION CHANNELS BASED ON STATISTICAL PARAMETERS			NP	PAT-Active	US	09/665149	6760882		
11195	MODE SELECTION FOR DATA TRANSMISSION IN WIRELESS COMMUNICATION CHANNELS BASED ON STATISTICAL PARAMETERS			CNT	PAT-Active	US	13/076999	8418033	US-2011-0179336-A1	
11196	SYSTEM AND METHOD OF DYNAMICALLY OPTIMIZING A TRANSMISSION MODE OF WIRELESSLY TRANSMITTED INFORMATION			EXP	PAT-Active	US	10/072359	6802035	US-2002-0147953-A1	
11197	SYSTEM AND METHOD OF DYNAMICALLY OPTIMIZING A TRANSMISSION MODE OF WIRELESSLY TRANSMITTED INFORMATION			CNT	PAT-Active	US	10/990676	7583609	US-2005-0099975-A1	
11198	SYSTEM AND METHOD FOR DATA TRANSMISSION FROM MULTIPLE WIRELESS BASE TRANSCEIVER STATIONS TO A SUBSCRIBER UNIT			NP	PAT-Active	US	03/708170	6567387		
11199	SYSTEM AND METHOD FOR DATA TRANSMISSION FROM MULTIPLE WIRELESS BASE TRANSCEIVER STATIONS TO A SUBSCRIBER UNIT			CNT	PAT-Active	US	10/388176	6934266	US-2003-0161283-A1	
11200	SYSTEM AND METHOD FOR SYNCHRONIZING DATA TRANSMISSION FROM MULTIPLE WIRELESS BASE TRANSCEIVER STATIONS TO A SUBSCRIBER UNIT			CIP	PAT-Active	US	09/729886	6862272	US-2002-0055356-A1	
11201	SYSTEM AND METHOD FOR SYNCHRONIZING DATA TRANSMISSION FROM MULTIPLE WIRELESS BASE TRANSCEIVER STATIONS TO A SUBSCRIBER UNIT			CNT	PAT-Active	US	15/989909	7397804	US-2005-0137679-A1	
11202	SYSTEM AND METHOD FOR TRANSMIT DIVERSITY BASE UPON TRANSMISSION CHANNEL DELAY SPREAD			NP	PAT-Active	US	09/999438	7336719	US-2003-0096304-A1	
11203	SYSTEM AND METHOD FOR ADJUSTING A POWER LEVEL OF A TRANSMISSION SIGNAL			NP	PAT-Active	US	10/189755	6891902	US-2004-0005014-A1	
11204	INTEGRATED ANTENNA AND PC CARD CARRYING CASE			NP	PAT-Active	US	10/403432	7277738	US-2005-0263927-A1	
11205	APPARATUS AND METHOD TO PROVIDE POWER AMPLIFICATION			NP	PAT-Active	US	10/463725	6952344	US-2004-0251954-A1	
11206	STRAINED-SILICON VOLTAGE CONTROLLED OSCILLATOR (VCO)			NP	PAT-Active	US	10/676387	7049898	US-2005-0068117-A1	
11207	PULSE SHAPING SIGNALS FOR ULTRA WIDEBAND COMMUNICATION			NP	PAT-Active	US	10/815171	7415245	US-2005-021760-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
11208	ADAPTIVE MULTICARRIER WIRELESS COMMUNICATION SYSTEM APPARATUS AND ASSOCIATED METHODS			NP	PAT-Active	US	10/738689	7286609	US-2005-0931047-A1	
11209	APPARATUS AND METHOD TO EXTEND COMMUNICATION RANGE			NP	PAT-Active	US	10/646448	7443486	US-2005-0265482-A1	
11210	METHOD AND APPARATUS FOR PATH SEARCHING			NP	PAT-Active	US	10/608129	7324607	US-2004-0266357-A1	
11211	LOW POWER DISPLAY REFRESH			NP	PAT-Active	US	10/407758	7734943	US-2004-0139798-A1	
11212	MODULATION SCHEME FOR ORTHOGONAL FREQUENCY DIVISION MULTIPLEXING SYSTEMS OR THE LIKE			NP	PAT-Active	US	10/664218	7688766	US-2005-0058057-A1	
11213	MODULATION SCHEME FOR ORTHOGONAL FREQUENCY DIVISION MULTIPLEXING SYSTEMS OR THE LIKE			CNT	PAT-Active	US	12/645914	8218464	US-2010-0135426-A1	
11214	MODULATION SCHEME FOR ORTHOGONAL FREQUENCY DIVISION MULTIPLEXING SYSTEMS OR THE LIKE			CNT	PAT-Active	US	13/494233	8913533	US-2012-0156778-A1	
11215	ADAPTIVE CHANNELIZATION SCHEME FOR HIGH THROUGHPUT MULTICARRIER SYSTEMS			NP	PAT-Active	US	10/812284	7345889	US-2005-0152328-A1	
11216	TRAINED DATA TRANSMISSION FOR COMMUNICATION SYSTEMS			NP	PAT-Active	US	10/719208	7373112	US-2005-0932478-A1	
11217	TRAINED DATA TRANSMISSION FOR COMMUNICATION SYSTEMS			DIV	PAT-Active	US	12/109002	7826798	US-2008-0198760-A1	
11218	TRAINED DATA TRANSMISSION FOR COMMUNICATION SYSTEMS			CNT	PAT-Active	US	12/894495	8478201	US-2011-0013524-A1	
11219	TRAINED DATA TRANSMISSION FOR COMMUNICATION SYSTEMS			CNT	PAT-Active	US	13/912402	9992764	US-2013-0336247-A1	
11220	TRAINED DATA TRANSMISSION FOR COMMUNICATION SYSTEMS			CNT	APP-Pending	US	15/996081		US-2018-0279263-A1	
11221	SLAVE-LESS EDGE-TRIGGERED FLIP-FLOP			NP	PAT-Active	US	10/616810	6986421		
11222	TECHNIQUE TO SELECT TRANSMISSION PARAMETERS			NP	PAT-Active	US	10/636765	7903538	US-2005-0936887-A1	
11223	PARALLEL WIRELESS COMMUNICATION APPARATUS METHOD AND SYSTEM			NP	PAT-Active	US	10/745123	8139723	US-2005-0138199-A1	
11224	PARALLEL WIRELESS COMMUNICATION APPARATUS METHOD AND SYSTEM			CNT	PAT-Active	US	13/338855	8948139	US-2012-0099576-A1	
11225	PARALLEL WIRELESS COMMUNICATION APPARATUS METHOD AND SYSTEM			CNT	PAT-Active	US	14/600154	9432355	US-2015-0139179-A1	
11226	PARALLEL WIRELESS COMMUNICATION APPARATUS METHOD AND SYSTEM			CNT	PAT-Active	US	15/198328	#####	US-2016-0309515-A1	
11227	HIGH EFFICIENCY RF POWER AMPLIFIER			NP	PAT-Active	US	10/688705	6888409	US-2005-0083123-A1	
11228	SERVICE DISCOVERY ARCHITECTURE AND METHOD FOR WIRELESS NETWORKS			NP	PAT-Active	US	10/685111	7403512	US-2005-0078644-A1	
11229	COMMUNICATION SYSTEM AND METHOD FOR CHANNEL ESTIMATION AND BEAMFORMING USING A MULTI-ELEMENT ARRAY ANTENNA			NP	PAT-Active	US	10/654037	7463846	US-2005-0047322-A1	
11230	MULTI-ELEMENT ANTENNA BEAMFORMING IN A WIRELESS ACCESS NETWORK			CNT	PAT-Active	US	12/245950	8165239	US-2009-0034640-A1	
11231	FREQUENCY PRESCALER APPARATUS METHOD AND SYSTEM			NP	PAT-Active	US	10/608051	6822491		
11232	SOFT BITS NORMALIZATION APPARATUS METHOD AND SYSTEM			NP	PAT-Active	US	10/670982	7349495	US-2005-0069057-A1	
11233	DYNAMIC EMI (ELECTROMAGNETIC INTERFERENCE) MANAGEMENT			NP	PAT-Active	US	10/692965	7522928	US-2005-0101359-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
11234	DYNAMIC EMI (ELECTROMAGNETIC INTERFERENCE) MANAGEMENT			CNT	PAT-Active	US	12/386535	7884888	US-2009-0270040-A1	
11235	APPARATUS AND ASSOCIATED METHODS TO PERFORM INTELLIGENT TRANSMIT POWER CONTROL WITH SUBCARRIER PUNCTURING			NP	PAT-Active	US	10/750561	7245879	US-2005-0032514-A1	
11236	METHOD AND APPARATUS FOR TRANSMITTING WIRELESS SIGNALS ON MULTIPLE FREQUENCY CHANNELS IN A FREQUENCY AGILE NETWORK			NP	PAT-Active	US	10/744318	7039432	US-2005-0136933-A1	
11237	APPARATUS AND METHODS FOR COMMUNICATING USING SYMBOL-MODULATED SUBCARRIERS			NP	PAT-Active	US	10/675292	7321614	US-2005-0062916-A1	
11238	APPARATUS AND METHODS FOR COMMUNICATING USING SYMBOL-MODULATED SUBCARRIERS			CNT	PAT-Active	US	11/847156	7672365	US-2007-0291639-A1	
11239	METHOD AND MOBILE COMMUNICATION STATION FOR COMMUNICATING OFDM SYMBOLS USING TWO OR MORE ANTENNAS			CNT	PAT-Active	US	12/643389	8315321	US-2010-0098181-A1	
11240	BASE STATION AND METHOD FOR CHANNEL CODING AND LINK ADAPTATION			CNT	PAT-Active	US	13/680387	8824582	US-2013-0077661-A1	
11241	METHOD AND ADAPTIVE BIT INTERLEAVER FOR WIDEBAND SYSTEMS USING ADAPTIVE BIT LOADING			NP	PAT-Active	US	10/740170	7570895	US-2005-0135493-A1	
11242	OFDM TRANSMITTER WITH ADAPTIVE BIT INTERLEAVER FOR ADAPTIVE BIT LOADING AND METHOD FOR OFDM COMMUNICATIONS			CNT	PAT-Active	US	12/492466	8218674	US-2009-0257454-A1	
11243	OFDM TRANSMITTER WITH VARIABLE CODE BLOCK INTERLEAVER AND METHOD FOR OFDM COMMUNICATIONS WITH VARIABLE CODE BLOCK SIZES			CNT	PAT-Active	US	13/944120	9166741	US-2012-0275339-A1	
11244	SYSTEMS AND METHODS FOR ADAPTIVE BIT LOADING IN A MULTIPLE ANTENNA ORTHOGONAL FREQUENCY DIVISION MULTIPLEXED COMMUNICATION SYSTEM			NP	PAT-Active	US	10/750587	7384858	US-2005-0147076-A1	
11245	SYSTEMS AND METHODS FOR ADAPTIVE BIT LOADING IN A MULTIPLE ANTENNA ORTHOGONAL FREQUENCY DIVISION MULTIPLEXED COMMUNICATION SYSTEM			CNT	PAT-Active	US	12/118338	7738579	US-2008-0253471-A1	
11246	MIMO TRANSMITTER AND METHOD FOR TRANSMITTING AN OFDM SYMBOL IN ACCORDANCE WITH AN IEEE 80211 COMMUNICATION STANDARD OVER A PLURALITY OF SPATIAL CHANNELS			CNT	PAT-Active	US	12/482671	7822135	US-2009-0252257-A1	
11247	MIMO TRANSMITTER AND METHOD FOR TRANSMITTING A GROUP OF SEQUENTIAL OFDM SYMBOLS IN ACCORDANCE WITH AN IEEE 80216 COMMUNICATION STANDARD			CNT	PAT-Active	US	12/482689	7885346	US-2009-0245405-A1	
11248	MIMO TRANSMITTER FOR TRANSMITTING A GROUP OF SEQUENTIAL OFDM SYMBOLS USING A PLURALITY OF ANTENNAS			CNT	PAT-Active	US	12/757117	8396147	US-2010-0195545-A1	
11249	OFDM TRANSMITTER AND METHOD FOR MULTI-USER MIMO TRANSMISSIONS			CNT	PAT-Active	US	12/982161	8019010	US-2011-0086956-A1	
11250	MIMO TRANSMITTER AND METHOD FOR TRANSMITTING OFDM SYMBOLS			CNT	PAT-Active	US	13/489595	8705645	US-2012-0236911-A1	
11251	TRANSMITTER AND METHOD THEREON			NP	PAT-Active	US	10/745673	6946961		
11252	APPARATUS AND METHOD OF MULTI-USER DETECTION			NP	PAT-Active	US	10/748180	7340034	US-2005-0143653-A1	
11253	SDMA COMMUNICATIONS WITH NON-IMMEDIATE BLOCK ACKNOWLEDGEMENT			CNT	PAT-Active	US	11/923631	7567617	US-2008-0181162-A1	
11254	ADAPTIVE SIGNALING IN MULTIPLE ANTENNA SYSTEMS			NP	PAT-Active	US	10/689151	7480494	US-2005-0041611-A1	
11255	ADAPTIVE SIGNALING IN MULTIPLE ANTENNA SYSTEMS			CNT	PAT-Active	US	12/324580	8565253	US-2009-0147879-A1	
11256	TRANSMISSION OF DATA WITH FEEDBACK TO THE TRANSMITTER IN A WIRELESS LOCAL AREA NETWORK OR THE LIKE			NP	PAT-Active	US	10/738522	7515541	US-2005-0030897-A1	
11257	METHOD AND APPARATUS FOR VARYING LENGTHS OF LOW DENSITY PARTIAL CHECK CODEWORDS			NP	PAT-Active	US	10/815317	7263651	US-2005-0154952-A1	
11258	VOLTAGE CONTROLLED OSCILLATOR APPARATUS METHOD AND SYSTEM			NP	PAT-Active	US	10/729629	7034623	US-2005-0122180-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
11259	METHOD APPARATUS AND SYSTEM TO MANAGE DISTRIBUTED CHANNEL ACCESS WITH TIME RESERVATION			NP	PAT-Active	US	10/745898	8625497	US-2005-0147055-A1	
11260	METHOD APPARATUS AND SYSTEM TO MANAGE DISTRIBUTED CHANNEL ACCESS WITH TIME RESERVATION			ENT	PAT-Active	US	14/097307	9332564	US-2014-0092843-A1	
11261	METHOD APPARATUS AND SYSTEM TO MANAGE DISTRIBUTED CHANNEL ACCESS WITH TIME RESERVATION			ENT	PAT-Active	US	15/144532	9775173	US-2016-0138100-A1	
11262	MULTICARRIER RECEIVERS AND METHODS FOR SEPARATING TRANSMITTED SIGNALS IN A MULTIPLE ANTENNA SYSTEM			NP	PAT-Active	US	10/814095	7289585	US-2005-0152482-A1	
11263	MULTIPLE ANTENNA SYSTEMS AND METHODS USING HIGH-THROUGHPUT SPACE-FREQUENCY BLOCK CODES			NP	PAT-Active	US	10/814113	7315577	US-2005-0058212-A1	
11264	SYSTEM AND METHOD FOR SELECTING DATA RATES TO PROVIDE UNIFORM BIT LOADING OF SUBCARRIERS OF A MULTICARRIER COMMUNICATION CHANNEL			NP	PAT-Active	US	10/815035	7333556	US-2005-0152485-A1	
11265	MULTICARRIER TRANSMITTER MULTICARRIER RECEIVER AND METHODS FOR COMMUNICATING MULTIPLE SPATIAL SIGNAL STREAMS			NP	PAT-Active	US	10/880158	7440510	US-2005-0058217-A1	
11266	CIRCUIT TO ADD AND SUBTRACT TWO DIFFERENTIAL SIGNALS			NP	PAT-Active	US	10/734122	7299032	US-2005-0130800-A1	
11267	LOOP FILTER WITH ACTIVE CAPACITOR AND METHOD FOR GENERATING A REFERENCE			NP	PAT-Active	US	10/726166	7005929	US-2005-0116782-A1	
11268	RESPONSE SCHEDULING FOR MULTIPLE RECEIVERS			CIP	PAT-Active	US	10/969589	8699508	US-2005-0135410-A1	
11269	VARIABLE SDMA ACK TIMEOUT			NP	PAT-Active	US	10/759473	7408908	US-2005-0157734-A1	
11270	AMPLIFIER DISTORTION MANAGEMENT APPARATUS SYSTEMS AND METHODS			NP	PAT-Active	US	10/786677	7251815	US-2005-0148402-A1	
11271	SYSTEMS AND METHODS TO CONVEY ADDITIONAL SIGNALING INFORMATION IN A WIRELESS LOCAL AREA NETWORK			NP	PAT-Active	US	10/806893	7423968	US-2005-0152357-A1	
11272	CHANNEL SPECIFICATION APPARATUS SYSTEMS AND METHODS			NP	PAT-Active	US	10/806988	7440423	US-2005-0152299-A1	
11273	BANDPASS AMPLIFIER METHOD AND SYSTEM			NP	PAT-Active	US	10/813992	7519344	US-2005-0218974-A1	
11274	ACCESS POINT HAVING AT LEAST ONE OR MORE CONFIGURABLE RADIOS			NP	PAT-Active	US	10/812648	7817579	US-2005-0213516-A1	
11275	METHOD AND APPARATUS TO SELECT CODING MODE			NP	PAT-Active	US	10/822829	7684507	US-2005-0226343-A1	
11276	METHOD AND APPARATUS TO SELECT CODING MODE			ENT	PAT-Active	US	12/542941	8503562	US-2009-0304105-A1	
11277	METHOD AND APPARATUS TO SELECT CODING MODE			ENT	PAT-Active	US	12/542949	7929634	US-2009-0304106-A1	
11278	METHOD AND APPARATUS TO SELECT CODING MODE			ENT	PAT-Active	US	13/089043	8755452	US-2011-0194640-A1	
11279	METHOD AND APPARATUS FOR DECODING FORWARD ERROR CORRECTION CODES			NP	PAT-Active	US	10/798643	7395495	US-2005-0154957-A1	
11280	ADAPTIVE TRANSMIT POWER CONTROL IN WIRELESS DEVICES			NP	PAT-Active	US	10/796756	7583975	US-2005-0197147-A1	
11281	CALIBRATION AND TESTING ARCHITECTURE FOR RECEIVERS			NP	PAT-Active	US	10/812834	7409189	US-2005-0221763-A1	
11282	REMOTE OPERATIONS USING WIRELESS PERSONAL AREA NETWORK			NP	PAT-Active	US	10/814047	7580101	US-2005-0226178-A1	
11283	POWER AMPLIFIER LINEARIZATION METHODS AND APPARATUS USING PREDISTORTION IN THE FREQUENCY DOMAIN			NP	PAT-Active	US	10/881731	7336716	US-2006-0006028-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
11284	MULTI-THRESHOLD RELIABILITY DECODING OF LOW-DENSITY PARITY CHECK CODES			CNT	PAT-Active	US	11/466792	7718561	US-2007-0911586-A1	
11285	SIGNAL GENERATION APPARATUS SYSTEMS AND METHODS			NP	PAT-Active	US	10/815030	7570702	US-2005-0220214-A1	
11286	RECONFIGURABLE VITERBI/TURBO DECODER			NP	PAT-Active	US	10/936372	7536630	US-2005-0034051-A1	
11287	MINIATURIZED PLANAR MICROSHIP BALUN			NP	PAT-Active	US	10/860968	6998930	US-2006-0001502-A1	
11288	METHOD AND APPARATUS FOR PERFORMING SEQUENTIAL CLOSED LOOP MULTIPLE INPUT MULTIPLE OUTPUT (MIMO)			NP	PAT-Active	US	10/954582	7609780	US-2006-0071897-A1	
11289	METHOD AND APPARATUS FOR PERFORMING SEQUENTIAL CLOSED LOOP MULTIPLE INPUT MULTIPLE OUTPUT (MIMO)			CNT	PAT-Active	US	12/584637	8204145	US-2010-0046665-A1	
11290	MULTICARRIER COMMUNICATION SYSTEM AND METHODS FOR LINK ADAPTATION USING UNIFORM BIT LOADING AND SUBCARRIER PUNCTURING			NP	PAT-Active	US	10/862535	7570953	US-2005-0152466-A1	
11291	METHOD FOR SIGNALING INFORMATION BY MODIFYING MODULATION CONSTELLATIONS			NP	PAT-Active	US	11/018414	7474808	US-2005-0178927-A1	
11292	METHOD FOR SIGNALING INFORMATION BY MODIFYING MODULATION CONSTELLATIONS			CNT	PAT-Active	US	12/319191	8001686	US-2009-0122694-A1	
11293	METHOD FOR SIGNALING INFORMATION BY MODIFYING MODULATION CONSTELLATIONS			CNT	PAT-Active	US	13/929142	9270429	US-2013-0290897-A1	
11294	METHOD FOR SIGNALING INFORMATION BY MODIFYING MODULATION CONSTELLATIONS			CNT	PAT-Active	US	14/075004	9379863	US-2014-0064223-A1	
11295	METHOD FOR SIGNALING INFORMATION BY MODIFYING MODULATION CONSTELLATIONS			CNT	PAT-Active	US	15/190594	8954716	US-2017-0116061-A1	
11296	METHOD FOR SIGNALING INFORMATION BY MODIFYING MODULATION CONSTELLATIONS			CNT	PAT-Active	US	15/623201	#####	US-2017-0288934-A1	
11297	LINK ADAPTION BASED MMSE EQUALIZATION ELIMINATES NOISE POWER ESTIMATION			NP	PAT-Active	US	10/977004	7583606	US-2006-0088006-A1	
11298	METHOD AND APPARATUS TO ENABLE MULTIPLE RECEIVERS			NP	PAT-Active	US	10/833276	7408909	US-2005-0243760-A1	
11299	METHOD AND APPARATUS TO ENABLE MULTIPLE RECEIVERS			CNT	PAT-Active	US	12/185158	8254354	US-2008-0116887-A1	
11300	METHOD AND APPARATUS TO ENABLE MULTIPLE RECEIVERS			CNT	PAT-Active	US	12/653529	8457067	US-2010-0097999-A1	
11301	WIRELESS APPARATUS HAVING MULTIPLE COORDINATED TRANCEIVERS FOR MULTIPLE WIRELESS COMMUNICATION PROTOCOLS			REL	PAT-Closed	US	11/283478	RE41735		
11302	MULTIPLE WIRELESS COMMUNICATION PROTOCOL METHODS AND APPARATUSES			EXP	PAT-Closed	US	09/439946	6690726		
11303	MULTIPLE WIRELESS COMMUNICATION PROTOCOL METHODS AND APPARATUSES INCLUDING QUALITY OF SERVICE CONSIDERATIONS			CNT	PAT-Active	US	11/004210	7420936	US-2005-0078616-A1	
11304	MULTIPLE WIRELESS COMMUNICATION PROTOCOL METHODS AND APPARATUSES INCLUDING PROACTIVE REDUCTION OF INTERFERENCE			EXP	PAT-Closed	US	09/560672	6891857		
11305	MULTIPLE WIRELESS COMMUNICATION PROTOCOL METHODS AND APPARATUSES			CNT	PAT-Active	US	10/464688	7239615	US-2003-0214961-A1	
11306	WIRELESS APPARATUS INTERFERENCE AVOIDANCE/RESOLUTION METHOD AND APPARATUSES			NP	PAT-Active	US	09/498215	6928266		
11307	GFSK RECEIVER			EXP	PAT-Active	US	10/621056	7239675	US-2004-0013209-A1	
11308	INTERLEAVER			NP	PAT-Active	US	11/093743	7529807	US-2006-0242475-A1	
11309	POWER EFFICIENT SIGNAL ACQUISITION WITH MULTIPLE RECEIVE ANTENNAS			NP	PAT-Active	US	10/955933	7345720	US-2006-0068854-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
11310	DIFFERENTIAL CLOCK CORRECTION			NP	PAT-Active	US	11/020984	7265597	US-2006-0132207-A1	
11311	Using the dynamic beacon to enhance power saving capabilities for low power UWB devices			NP	PAT-Active	US	11/025700	7706804	US-2006-0146215-A1	
11312	TRANSMITTING AND PROTECTING LONG FRAMES IN A WIRELESS LOCAL AREA NETWORK			NP	PAT-Active	US	11/029325	7447185	US-2006-0146172-A1	
11313	APPARATUS AND METHOD FOR VOLTAGE CONVERSION			NP	PAT-Active	US	10/957319	7198555	US-2006-0066361-A1	
11314	METHOD AND APPARATUS TO VARY POWER LEVEL OF TRAINING SIGNAL			CNT	PAT-Active	US	12/627353	8331872	US-2010-0075710-A1	
11315	MULTIPLE ANTENNA MULTICARRIER TRANSMITTER AND METHOD FOR ADAPTIVE BEAMFORMING WITH TRANSMIT-POWER NORMALIZATION			NP	PAT-Active	US	11/004720	7822128	US-2006-0120468-A1	
11316	RECURSIVE REDUCTION OF CHANNEL STATE FEEDBACK			NP	PAT-Active	US	10/937097	7362827	US-2006-0092054-A1	
11317	Method and apparatus to provide low cost transmit beamforming for network devices			NP	PAT-Active	US	11/076195	8515359	US-2006-0238683-A1	
11318	TRAINING SYMBOL FORMAT FOR ADAPTIVELY POWER LOADED MIMO			NP	PAT-Active	US	11/024587	7542515	US-2006-0146290-A1	
11319	TRAINING SYMBOL FORMAT FOR ADAPTIVELY POWER LOADED MIMO			CNT	PAT-Active	US	12/820470	7953171	US-2010-0254476-A1	
11320	CALIBRATION IN MIMO SYSTEMS			NP	PAT-Active	US	10/939162	7366245	US-2006-0056532-A1	
11321	INTERPOLATION IN CHANNEL STATE FEEDBACK			NP	PAT-Active	US	10/938421	7535253	US-2006-0056531-A1	
11322	INTERPOLATION IN CHANNEL STATE FEEDBACK			DIV	PAT-Active	US	12/424259	7961802	US-2010-0232527-A1	
11323	MULTIPLE INTERMEDIATE FREQUENCIES RECEIVER AND A METHOD THEREOF			NP	PAT-Active	US	11/081535	7388067	US-2006-0211398-A1	
11324	DISTRIBUTED VOICE NETWORK			NP	PAT-Active	US	11/027915	7593890	US-2006-0146787-A1	
11325	METHOD AND NETWORK ELEMENT FOR ESTABLISHING A IP COMMUNICATIONS SESSION BETWEEN MOBILE COMMUNICATION DEVICES			CNT	PAT-Active	US	13/493084	8605714	US-2012-0230624-A1	
11326	METHOD AND NETWORK ELEMENT FOR VOICE-OVER-IP (VoIP) COMMUNICATIONS IN A MOBILE IP NETWORK			DIV	PAT-Active	US	12/563555	8204044	US-2010-0068345-A1	
11327	METHOD AND SYSTEM TO SUPPORT FAST HAND-OVER OF MOBILE SUBSCRIBER STATIONS IN BROADBAND WIRELESS NETWORKS			NP	PAT-Active	US	10/997356	7369856	US-2006-0113111-A1	
11328	PACKET TRAFFIC MANAGEMENT APPARATUS SYSTEMS AND METHODS			NP	PAT-Active	US	11/082368	7551607	US-2006-0205790-A1	
11329	ANTENNA SYSTEM USING COMPLEMENTARY METAL OXIDE SEMICONDUCTOR TECHNIQUES			NP	PAT-Active	US	11/095326	7256740	US-2006-0220963-A1	
11330	ANTENNA SYSTEM USING COMPLEMENTARY METAL OXIDE SEMICONDUCTOR TECHNIQUES			CNT	PAT-Active	US	11/782445	7492317	US-2007-0262904-A1	
11331	ON-DIE COUPLED INDUCTOR STRUCTURES FOR IMPROVING QUALITY FACTOR			NP	PAT-Active	US	11/130596	7456726	US-2006-0262573-A1	
11332	METHOD AND SYSTEM FOR MULTICARRIER COMMUNICATION BETWEEN A BASE STATION AND SUBSCRIBERS OF DIFFERENT BANDWIDTHS			PCT	PAT-Active	US	10/572125	7613242	US-2008-0304581-A1	
11333	METHOD AND SYSTEM OF NETWORK MANAGEMENT SOFTWARE ARCHITECTURES FOR MOBILE BROADBAND WIRELESS NETWORKS			NP	PAT-Active	US	11/051000	7305246	US-2006-0172742-A1	
11334	LOW NOISE HIGH-LINEARITY RF FRONT END RECEIVER			NP	PAT-Active	US	11/072212	7529529	US-2006-0189562-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
11335	TECHNIQUES TO MANAGE CHANNEL PREDICTION			NP	PAT-Active	US	11/040935	7522555	US-2006-0165008-A1	
11336	TECHNIQUES TO MANAGE CHANNEL PREDICTION			CNT	PAT-Active	US	12/426716	8396029	US-2009-0257393-A1	
11337	TECHNIQUES FOR BEAMFORMING USING PREDICTED CHANNEL STATE INFORMATION			CNT	PAT-Active	US	12/908637	8442468	US-2011-0032893-A1	
11338	TECHNIQUES TO MANAGE CHANNEL PREDICTION			CNT	PAT-Active	US	13/893136	9037039	US-2013-0251009-A1	
11339	TECHNIQUES TO MANAGE CHANNEL PREDICTION			CNT	PAT-Active	US	14/6891275	9634742	US-2015-0333896-A1	
11340	TECHNIQUES TO MANAGE CHANNEL PREDICTION			CNT	PAT-Active	US	15/463461	#####	US-2018-0041294-A1	
11341	BEAMFORMING CODEBOOK GENERATION SYSTEM AND ASSOCIATED METHODS			NP	PAT-Active	US	11/036806	7778826	US-2006-0155533-A1	
11342	BEAMFORMING CODEBOOK GENERATION SYSTEM AND ASSOCIATED METHODS			CNT	PAT-Active	US	12/584009	8428937	US-2009-0326333-A1	
11343	TECHNIQUES TO GENERATE A PRECODING MATRIX FOR A WIRELESS SYSTEM			CNT	PAT-Active	US	12/583994	8682656	US-2010-0157921-A1	
11344	BEAMFORMING CODEBOOK GENERATION SYSTEM AND ASSOCIATED METHODS			CNT	PAT-Active	US	12/583960	8417517	US-2010-0067594-A1	
11345	BEAMFORMING CODEBOOK GENERATION SYSTEM AND ASSOCIATED METHODS			CNT	PAT-Active	US	12/583954	8340361	US-2009-0323844-A1	
11346	CODEBOOK GENERATION SYSTEM AND ASSOCIATED METHODS			CNT	PAT-Active	US	13/648803	#####	US-2013-0056204-A1	
11347	CODEBOOK GENERATION SYSTEM AND ASSOCIATED METHODS			CNT	PAT-Active	US	13/648585	#####	US-2013-0093977-A1	
11348	BEAMFORMING CODEBOOK GENERATION SYSTEM AND ASSOCIATED METHODS			CIP	PAT-Active	US	11/058963	7885044	US-2006-0155534-A1	
11349	TECHNIQUES TO ENHANCE DIVERSITY FOR A WIRELESS SYSTEM			NP	PAT-Active	US	11/085207	7538463	US-2006-0223460-A1	
11350	TECHNIQUES TO ENHANCE DIVERSITY FOR A WIRELESS SYSTEM			CNT	PAT-Active	US	12/454726	8060131	US-2010-0041351-A1	
11351	TECHNIQUES TO ENHANCE DIVERSITY FOR A WIRELESS SYSTEM			CNT	PAT-Active	US	13/294812	8412129	US-2012-0087398-A1	
11352	TECHNIQUES TO ENHANCE DIVERSITY FOR A WIRELESS SYSTEM			CNT	PAT-Active	US	13/611610	8682266	US-2013-0010866-A1	
11353	5G7 GATEWAY FOR WIRELESS COMMUNICATION NETWORKS			CIP	PAT-Active	US	15/302589	7298751		
11354	WIRELESS COMMUNICATION DEVICE AND METHOD FOR COORDINATED CHANNEL ACCESS WITH REDUCED LATENCY IN A WIRELESS NETWORK			NP	PAT-Active	US	11/172448	7466964	US-2007-0004347-A1	
11355	WIRELESS COMMUNICATION DEVICE AND METHOD FOR REDUCING CARRIER FREQUENCY OFFSETS OVER A SIMULTANEOUS MULTI-USER UPLINK IN A MULTICARRIER COMMUNICATION NETWORK			NP	PAT-Active	US	11/172451	7426195	US-2007-0002800-A1	
11356	APPARATUS AND METHOD REDUCING NON-LINEARITY IN AN OUTPUT SIGNAL OF AN AMPLIFIER DEVICE			NP	PAT-Active	US	11/186296	7288936	US-2007-0018730-A1	
11357	MEDIA DISTRIBUTION SYSTEM			NP	PAT-Active	US	11/167979	7573847	US-2006-0294573-A1	
11358	CONSTRUCTION AND USE OF SHORTENED EG-RDPC CODES			PCT	PAT-Active	US	15/572116	7628334	US-2008-0250304-A1	
11359	TRANSMITTER CONTROL			NP	PAT-Active	US	11/206447	7853147	US-2007-0041470-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
11360	METHODS AND APPARATUS WITH LOGIC TO DETERMINE A RELATIVE CHANGE RELATIONSHIP BETWEEN MODEM AND FRAME CLOCKS			NP	PAT-Active	US	11/131660	7577222	US-2006-0262882-A1	
11361	METHODS AND APPARATUS FOR RESOLVING ADDRESS MAPPING ASSOCIATED WITH A WIRELESS MESH NETWORK			NP	PAT-Active	US	11/139265	7623501	US-2006-0268766-A1	
11362	SCALABLE SYSTEM TO ADAPTIVELY TRANSMIT AND RECEIVE INCLUDING ADAPTIVE ANTENNA SIGNAL AND BACK-END PROCESSORS			NP	PAT-Active	US	11/234581	7738585	US-2007-0071118-A1	
11363	SCALABLE SYSTEM TO ADAPTIVELY TRANSMIT AND RECEIVE INCLUDING ADAPTIVE ANTENNA SIGNAL AND BACK-END PROCESSORS			CNT	PAT-Active	US	13/197752	8306144	US-2011-0286441-A1	
11364	MULTI-TAP MICROELECTROMECHANICAL INDUCTOR			NP	PAT-Active	US	11/137748	7362203	US-2006-0267717-A1	
11365	BROADBAND MULTICARRIER TRANSMITTER WITH SUBCHANNEL FREQUENCY DIVERSITY FOR TRANSMITTING A PLURALITY OF SPATIAL STREAMS			NP	PAT-Active	US	11/075030	7616704	US-2006-0203935-A1	
11366	MULTICARRIER RECEIVER AND METHOD FOR CARRIER FREQUENCY OFFSET CORRECTION AND CHANNEL ESTIMATION FOR RECEIPT OF SIMULTANEOUS TRANSMISSIONS OVER A MULTI-USER UPLINK			NP	PAT-Active	US	11/171643	7480487	US-2007-0004337-A1	
11367	SYSTEMS AND METHODS FOR NEGOTIATING SECURITY PARAMETERS FOR PROTECTING MANAGEMENT FRAMES IN WIRELESS NETWORKS			NP	PAT-Active	US	11/131951	7381475	US-2006-0262932-A1	
11368	ORDERED AND DUPLICATE-FREE DELIVERY OF WIRELESS DATA FRAMES			NP	PAT-Active	US	11/129957	7746866	US-2006-0256722-A1	
11369	ORDERED AND DUPLICATE-FREE DELIVERY OF WIRELESS DATA FRAMES			CNT	PAT-Active	US	12/774457	8638797	US-2010-0220858-A1	
11370	DEVICE SYSTEM AND METHOD OF MULTIPLE ACCESS TRANSMISSION			NP	PAT-Active	US	11/136476	7574214	US-2006-0270416-A1	
11371	METHODS AND APPARATUS FOR PROVIDING INTEGRITY PROTECTION FOR MANAGEMENT AND CONTROL TRAFFIC OF WIRELESS COMMUNICATION NETWORKS			NP	PAT-Active	US	11/155148	7647508	US-2006-0286204-A1	
11372	COMPACT MULTI-BAND MULTI-PORT ANTENNA			NP	PAT-Active	US	11/209218	7289064	US-2007-0052587-A1	
11373	SYSTEM AND METHOD FOR AUTOMATICALLY CONFIGURING AND INTEGRATING A RADIO BASE STATION INTO AN EXISTING WIRELESS CELLULAR COMMUNICATION NETWORK WITH FULL BI-DIRECTIONAL ROAMING AND HANDOVER CAPABILITY			NP	PAT-Active	US	10/913877	7477920	US-2005-0148368-A1	
11374	METHOD AND SCHEME FOR SPACE-TIME CODED CO-CHANNEL INTERFERENCE CANCELLATION			PCT	PAT-Active	US	12/088496	8064532	US-2009-0175366-A1	
11375	WIRELESS COMMUNICATION DEVICE AND METHODS FOR PROTECTING BROADCASTED MANAGEMENT CONTROL MESSAGES IN WIRELESS NETWORKS			NP	PAT-Active	US	11/208426	7392037	US-2007-0060043-A1	
11376	SINGULAR VALUE DECOMPOSITION BEAMFORMING FOR A MULTIPLE-INPUT-MULTIPLE-OUTPUT COMMUNICATION SYSTEM			NP	PAT-Active	US	11/334329	8483761	US-2007-0167192-A1	
11377	APPARATUS AND METHOD OF CONTROLLING TRANSMISSION IN REVERSE DIRECTION			NP	PAT-Active	US	11/394215	7706397	US-2007-0237169-A1	
11378	APPARATUS AND METHOD OF CONTROLLING TRANSMISSION IN REVERSE DIRECTION			CNT	PAT-Active	US	12/703847	8644293	US-2010-0182930-A1	
11379	SLEEP-MODE WIRELESS CELL RESELECTION APPARATUS SYSTEMS AND METHODS			NP	PAT-Active	US	11/551421	7693955	US-2007-0160179-A1	
11380	SLEEP-MODE WIRELESS CELL RESELECTION APPARATUS SYSTEMS AND METHODS			CNT	PAT-Active	US	12/650157	8255634	US-2011-0103279-A1	
11381	COMMUNICATION WITHIN A WIRELESS NETWORK USING MULTIPLE FREQUENCY BANDS			NP	PAT-Active	US	11/394570	7720036	US-2007-0098668-A1	
11382	GENERALIZED MULTI-THRESHOLD DECODER FOR LOW-DENSITY PARITY CHECK CODES			PCT	PAT-Active	US	12/087179	8209579	US-2009-0222711-A1	
11383	UPLINK THROUGHPUT FOR WIRELESS NETWORK INTERFACES			NP	PAT-Active	US	11/267717	7499426	US-2007-0104130-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
11384	DYNAMIC PACKET ERROR MANAGEMENT FOR WIRELESS COMMUNICATIONS			INV	PAT-Active	US	11/267763	7826404	US-2007-0104131-A1	
11385	TECHNIQUES FOR LOCATION MANAGEMENT AND PAGING IN A COMMUNICATION SYSTEM			NP	PAT-Active	US	11/270765	8145243	US-2007-0105567-A1	
11386	MULTIPLE INPUT MULTIPLE OUTPUT WIRELESS COMMUNICATION SYSTEM ASSOCIATED METHODS AND DATA STRUCTURES			CIP	PAT-Active	US	11/313532	7672387	US-2007-0149181-A1	
11387	MULTIPLE INPUT MULTIPLE OUTPUT WIRELESS COMMUNICATION SYSTEM ASSOCIATED METHODS AND DATA STRUCTURES			CNT	PAT-Active	US	12/715317	8068554	US-2010-0202549-A1	
11388	MULTIPLE INPUT MULTIPLE OUTPUT WIRELESS COMMUNICATION SYSTEM ASSOCIATED METHODS AND DATA STRUCTURES			CIP	PAT-Active	US	13/292528	8665981	US-2012-0057643-A1	
11389	MULTIPLE INPUT MULTIPLE OUTPUT WIRELESS COMMUNICATION SYSTEM ASSOCIATED METHODS AND DATA STRUCTURES			CNT	PAT-Active	US	14/160870	8934567	US-2014-0146808-A1	
11390	MULTIPLE INPUT MULTIPLE OUTPUT WIRELESS COMMUNICATION SYSTEM ASSOCIATED METHODS AND DATA STRUCTURES			CNT	PAT-Active	US	14/594325	9083403	US-2015-0124898-A1	
11391	WIRELESS COMMUNICATION SYSTEM ASSOCIATED METHODS AND DATA STRUCTURES			NP	PAT-Active	US	11/292909	8200164	US-2007-0129018-A1	
11392	WIRELESS COMMUNICATION SYSTEM ASSOCIATED METHODS AND DATA STRUCTURES			CNT	PAT-Active	US	13/535768	8711779	US-2012-0363116-A1	
11393	PURGING OF AUTHENTICATION KEY CONTEXTS BY BASE STATIONS ON HANDOFF			CNT	PAT-Active	US	12/710325	8126144	US-2010-0150345-A1	
11394	SIGNAL-TO-NOISE RATIO (SNR) DETERMINATION IN THE TIME DOMAIN			NP	PAT-Active	US	11/480163	7454136	US-2008-0022162-A1	
11395	RADIO RECEIVER AND A METHOD THEREOF			NP	PAT-Active	US	11/452330	7653368	US-2007-0291880-A1	
11396	DIFFERENTIAL AMPLIFIER WITH TWO LONG-TAILED PAIRS OF TRANSISTORS			NP	PAT-Active	US	09/526832	6642787		
11397	LOW RETURN LOSS RESISTIVE FEEDBACK AMPLIFIER			NP	PAT-Active	US	11/435397	7423488	US-2007-0268072-A1	
11398	IMPROVEMENTS IN OR RELATING TO DEMODULATOR ALIGNMENT CORRECTION IN TUNERS			NP	PAT-Active	US	09/454842	6567488		
11399	RADIO FREQUENCY TUNER			NP	PAT-Active	US	10/604786	7356321	US-2003-0086854-A1	
11400	CONTROLLABLE ATTENUATOR			NP	PAT-Active	US	10/229906	6683511	US-2003-0071697-A1	
11401	RADIO FREQUENCY TUNER FRONT END AND TUNER			NP	PAT-Active	US	10/247952	7437333	US-2003-0076018-A1	
11402	AMPLIFIER AND TUNER			NP	PAT-Active	US	10/389712	6742512	US-2003-0179038-A1	
11403	DIGITAL TELEVISION TUNER WITH DIGITAL TO ANALOG CONVERTER EMBEDDED IN A CONNECTOR			NP	PAT-Active	US	10/691753	7611382	US-2004-0130662-A1	
11404	MIXER CIRCUIT OFFSET COMPENSATION			NP	PAT-Active	US	10/825601	7012457	US-2005-0001669-A1	
11405	DIGITAL TELEVISION DISPLAY CONTROL APPARATUS AND METHOD			NP	PAT-Active	US	10/825588	7295246	US-2004-0263690-A1	
11406	VARIABLE CAPACITANCE CIRCUIT ARRANGEMENT			INV	PAT-Active	US	11/545940	7358824	US-2007-0030086-A1	
11407	VARIABLE CAPACITANCE CIRCUIT ARRANGEMENT			NP	PAT-Active	US	10/989857	7209016	US-2005-0134395-A1	
11408	CIRCUIT ARRANGEMENT			INV	PAT-Active	US	11/545987	7411469	US-2007-0057744-A1	
11409	COOPERATIVE INTER-CARRIER CHANNEL CODING APPARATUS SYSTEMS AND METHODS			NP	PAT-Active	US	11/400757	7615687	US-2007-0237251-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
11410	GERAN TRANSCEIVER AND METHOD FOR COOPERATIVE CHANNEL ENCODING ACROSS MULTIPLE GERAN TONAL CARRIERS			CNT	PAT-Active	US	12/563267	8194769	US-2010-0908408-A1	
11411	MULTI-BAND DIELECTRIC RESONATOR ANTENNA			NP	PAT-Active	US	11/964774	7718325	US-2008-0042903-A1	
11412	DOWNLINK CHANNEL PARAMETERS DETERMINATION FOR A MULTIPLE-INPUT-MULTIPLE-OUTPUT (MIMO) SYSTEM			NP	PAT-Active	US	11/617313	7918013	US-2007-0254601-A1	
11413	DOWNLINK CHANNEL PARAMETERS DETERMINATION FOR A MULTIPLE-INPUT-MULTIPLE-OUTPUT (MIMO) SYSTEM			CNT	PAT-Active	US	12/862957	8225452	US-2011-0002372-A1	
11414	DOWNLINK CHANNEL PARAMETERS DETERMINATION FOR A MULTIPLE-INPUT-MULTIPLE-OUTPUT (MIMO) SYSTEM			CNT	PAT-Active	US	13/543371	8611918	US-2012-0275487-A1	
11415	DOWNLINK CHANNEL PARAMETERS DETERMINATION FOR A MULTIPLE-INPUT-MULTIPLE-OUTPUT (MIMO) SYSTEM			CNT	PAT-Active	US	14/108207	9379875	US-2014-0185542-A1	
11416	DOWNLINK CHANNEL PARAMETERS DETERMINATION FOR A MULTIPLE-INPUT-MULTIPLE-OUTPUT (MIMO) SYSTEM			CNT	PAT-Active	US	15/169247	#####	US-2016-0277080-A1	
11417	PROVIDING CQI FEEDBACK WITH COMMON CODE RATE TO A TRANSMITTER STATION			NP	PAT-Active	US	11/617586	7830977	US-2007-0254803-A1	
11418	PROVIDING CQI FEEDBACK WITH COMMON CODE RATE TO A TRANSMITTER STATION			CNT	PAT-Active	US	12/871361	8488709	US-2011-0005076-A1	
11419	PROVIDING CQI FEEDBACK WITH COMMON CODE RATE TO A TRANSMITTER STATION			CNT	PAT-Active	US	13/205589	8422583	US-2011-0294438-A1	
11420	SYSTEMS AND METHODS FOR FRAME TUNNELING IN WIRELESS COMMUNICATIONS			NP	PAT-Active	US	11/432129	8088689	US-2007-0254841-A1	
11421	SYSTEMS AND METHODS FACILITATING HIGH THROUGHPUT CONTROL IN WIRELESS COMMUNICATIONS			CNT	PAT-Active	US	13/211301	8189469	US-2011-0299517-A1	
11422	SYSTEMS AND METHODS FACILITATING HIGH THROUGHPUT CONTROL IN WIRELESS COMMUNICATIONS			CNT	PAT-Active	US	13/463240	8798098	US-2013-0044703-A1	
11423	SYSTEMS AND METHODS FACILITATING HIGH THROUGHPUT CONTROL IN WIRELESS COMMUNICATIONS			CNT	PAT-Active	US	14/304881	9706416	US-2014-0262791-A1	
11424	SYSTEMS AND METHODS FACILITATING HIGH THROUGHPUT CONTROL IN WIRELESS COMMUNICATIONS			CNT	APP-Pending	US	15/645746		US-2017-0815481-A1	
11425	QUALITY OF SERVICE RESOURCE NEGOTIATION			NP	PAT-Active	US	11/462657	7911997	US-2008-0031204-A1	
11426	QUALITY OF SERVICE RESOURCE NEGOTIATION			CNT	PAT-Active	US	13/011821	8094612	US-2011-0110222-A1	
11427	QUALITY OF SERVICE RESOURCE NEGOTIATION			CNT	PAT-Active	US	13/330612	8331293	US-2012-0087344-A1	
11428	WIRELESS ACCESS NETWORK AND METHOD FOR HANDOVER OF MOBILE TERMINALS IN IDLE MODE			NP	PAT-Active	US	11/419455	7633904	US-2007-0268863-A1	
11429	SYSTEM AND METHOD FOR RELOCATING A FOREIGN AGENT FOR AN IDLE MODE MOBILE STATION IN A PROXY MOBILE INTERNET PROTOCOL ENABLED ACCESS SERVICE NETWORK			CNT	PAT-Active	US	12/615378	8126466	US-2010-0056154-A1	
11430	Wireless access network and method for allocating data subcarriers within a downlink subframe based on grouping of user stations			NP	PAT-Active	US	11/687393	8131306	US-2007-0223440-A1	
11431	BASE STATION AND METHOD FOR RESOURCE ALLOCATION USING LOCALIZED AND DISTRIBUTED RESOURCE BLOCKS			CNT	PAT-Active	US	13/400762	8301355	US-2012-0147846-A1	
11432	BASE STATION AND METHOD FOR RESOURCE ALLOCATION USING LOCALIZED AND DISTRIBUTED RESOURCE BLOCKS			CNT	PAT-Active	US	13/662844	9167571	US-2013-0286999-A1	
11433	MIMO RECEIVER AND METHOD FOR BEAMFORMING USING CORDIC OPERATIONS			NP	PAT-Active	US	11/618122	7649985	US-2007-0226287-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
11434	WIRELESS ACCESS NETWORK BASE STATION AND METHOD FOR DETERMINING LOCATION INFORMATION FOR A MOBILE STATION USING UPLINK TIME-DIFFERENCE OF ARRIVAL			NP	PAT-Active	US	11/457011	7570962	US-2008-0314960-A1	
11435	WIMAX BASE STATION AND METHOD FOR DETERMINING LOCATION INFORMATION FOR A MOBILE STATION IN A WIMAX NETWORK			ENT	PAT-Active	US	12/507634	8340893	US-2009-0280826-A1	
11436	TRANSMISSION POWER NORMALIZATION			NP	PAT-Active	US	11/540225	7620416	US-2008-0081654-A1	
11437	CHANNEL QUALITY INFORMATION FEEDBACK TECHNIQUES FOR A WIRELESS SYSTEM			NP	PAT-Active	US	11/613983	8462758	US-2008-0153506-A1	
11438	CHANNEL QUALITY INFORMATION FEEDBACK TECHNIQUES FOR A WIRELESS SYSTEM			ENT	PAT-Active	US	13/757025	9066360	US-2013-0136026-A1	
11439	HIGH SPEED COMPARATOR OFFSET CORRECTION			NP	PAT-Active	US	11/518105	7362246	US-2008-0062032-A1	
11440	TECHNIQUES TO DETERMINISTICALLY REDUCE SIGNAL INTERFERENCE			NP	PAT-Active	US	11/614284	7693501	US-2008-0153447-A1	
11441	REDUNDANT MULTICAST SERVICE IN WIRELESS NETWORK			NP	PAT-Active	US	11/714371	8179869	US-2008-0219189-A1	
11442	LOCAL OSCILLATOR CONTROL IN RADIO RECEIVERS			NP	PAT-Active	US	11/714307	7630697	US-2008-0219329-A1	
11443	CMOS IC AND HIGH-GAIN ANTENNA INTEGRATION FOR POINT-TO-POINT WIRELESS COMMUNICATION			NP	PAT-Active	US	11/807987	7737894	US-2008-0297429-A1	
11444	CMOS IC AND HIGH-GAIN ANTENNA INTEGRATION FOR POINT-TO-POINT WIRELESS COMMUNICATION			DIV	PAT-Active	US	12/775137	7852278	US-2010-0214186-A1	
11445	MAPPING OF PREAMBLE SEQUENCE SETS WITH FRAME CONTROL HEADER (FCH) LOCATION FOR MULTI-HOP WIRELESS BROADBAND ACCESS COMMUNICATIONS			NP	PAT-Active	US	11/923586	8168925	US-2008-0117846-A1	
11446	METHODS AND ARRANGEMENTS TO DETERMINE A RECEPTION OF A SIGNAL			NP	PAT-Active	US	11/796856	7843872	US-2008-0267058-A1	
11447	POWER AMPLIFIER EFFICIENCY USING ERROR ESTIMATE AND DATA RATE			NP	PAT-Active	US	11/699096	7792505	US-2008-0182530-A1	
11448	POWER SAVING OPERATION OF ALWAYS-CONNECTED WIRELESS ROAMING			NP	PAT-Active	US	11/864682	8149747	US-2009-0086660-A1	
11449	POWER SAVING OPERATION OF ALWAYS-CONNECTED WIRELESS ROAMING			ENT	PAT-Active	US	13/334648	8717958	US-2012-0272079-A1	
11450	SLEEP OPTIMIZATION FOR MOBILE DEVICES IN A WIRELESS NETWORK			ENT	PAT-Active	US	12/955060	8306581	US-2011-0070849-A1	
11451	MOBILE CHANNEL ESTIMATION FOR DVB-T COFDM DEMODULATOR			NP	PAT-Active	US	11/986897	7970068	US-2009-0135823-A1	
11452	CASCADING PHASE PULSE POSITION AND PULSE WIDTH MODULATION BASED DIGITAL TRANSMITTER			NP	PAT-Active	US	11/837043	7773669	US-2009-0041108-A1	
11453	SUBRANGING FOR A PULSE POSITION AND PULSE WIDTH MODULATION BASED TRANSMITTER			NP	PAT-Active	US	12/176546	8098726	US-2009-0034603-A1	
11454	POLAR AMPLIFIER			NP	PAT-Active	US	11/807987	7541867	US-2008-0297246-A1	
11455	METHOD AND APPARATUS FOR ANTENNA ALLOCATION ON A MULTI-RADIO PLATFORM			NP	PAT-Active	US	11/890713	8213344	US-2009-0042555-A1	
11456	MILLIMETER-WAVE PHASE-LOCKED LOOP WITH INJECTION-LOCKED FREQUENCY DIVIDER USING QUARTER-WAVELENGTH TRANSMISSION LINE AND METHOD OF CALIBRATION			NP	PAT-Active	US	11/835330	7856212	US-2009-0042528-A1	
11457	METHOD AND APPARATUS FOR MULTICARRIER COMMUNICATION IN WIRELESS SYSTEMS			NP	PAT-Active	US	11/748310	8036702	US-2008-0387068-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
11458	MULTICARRIER TECHNIQUES FOR WIRELESS SYSTEMS			CNT	PAT-Active	US	13/268013	8560099	US-2012-0927116-A1	
11459	MULTICARRIER TECHNIQUES FOR WIRELESS SYSTEMS			CNT	PAT-Active	US	13/706275	9497762	US-2013-0107766-A1	
11460	MULTICARRIER TECHNIQUES FOR WIRELESS SYSTEMS			CNT	APP-Pending	US	15/351341		US-2017-0127418-A1	
11461	RECURSIVE REDUCTION OF CHANNEL STATE FEEDBACK			NP	PAT-Active	US	12/004923	8254359	US-2009-0161646-A1	
11462	RECURSIVE REDUCTION OF CHANNEL STATE FEEDBACK			Div	PAT-Active	US	13/532966	8743857	US-2012-0269260-A1	
11463	MILLIMETER-WAVE COMMUNICATION STATIONS WITH DIRECTIONAL ANTENNAS AND METHODS FOR FAST LINK RECOVERY			NP	PAT-Active	US	11/682658	7652624	US-2008-0218413-A1	
11464	UNIFIED MULTI-MODE RECEIVER DETECTOR			NP	PAT-Active	US	11/888228	8068566	US-2009-034662-A1	
11465	HIERARCHICAL CELL DEPLOYMENT			NP	PAT-Active	US	12/043343	8355378	US-2008-0219216-A1	
11466	ARCHITECTURE AND METHODS FOR COEXISTENCE OF WIRELESS RADIOS HAVING DIFFERING PROTOCOLS			NP	PAT-Active	US	11/697369	8189710	US-2008-0247445-A1	
11467	TECHNIQUES FOR TIMING OPTIMIZATION IN WIRELESS NETWORKS THAT UTILIZE A UNIVERSAL SERVICES INTERFACE			CNT	PAT-Active	US	13/082505	8224973	US-2011-0191411-A1	
11468	ESTIMATING STATISTICAL PROPERTIES OF NOISE IN MODULATED DATA CARRIER SIGNALS			NP	PAT-Active	US	11/959347	7979032	US-2009-0270944-A1	
11469	DIVERSITY RECEIVER AND METHOD FOR CONTROLLING POWER THEREOF			NP	PAT-Active	US	11/870928	8116404	US-2009-0097600-A1	
11470	DIRECT CONVERSION RECEIVER AND METHOD FOR CORRECTING PHASE IMBALANCE THEREIN			NP	PAT-Active	US	11/933579	8036335	US-2009-0116586-A1	
11471	RECEIVER SYSTEM FOR MULTIPLE BANDWIDTH TELEVISION CHANNELS			NP	PAT-Active	US	11/863748	8237870	US-2009-0086107-A1	
11472	SYSTEM AND METHOD FOR CONTROLLING RESONANCE FREQUENCY OF FILM BULK ACOUSTIC RESONATOR DEVICES			NP	PAT-Active	US	11/836538	7718369	US-2009-0389961-A1	
11473	COMPRESSED MEDIUM ACCESS CONTROL (MAC) HEADER STRUCTURE FOR MAC OVERHEAD REDUCTION IN MOBILE WORLDWIDE INTEROPERABILITY FOR MICROWAVE ACCESS (WiMAX) SYSTEMS			NP	PAT-Active	US	11/831299	7974312	US-2009-0034526-A1	
11474	FIELD PROGRAMING OF A MOBILE STATION WITH SUBSCRIBER IDENTIFICATION AND RELATED INFORMATION			NP	PAT-Active	US	11/763978	8331989	US-2008-0311956-A1	
11475	EMERGENCY CALL SERVICES FOR WIRELESS NETWORK ROAMING			NP	PAT-Active	US	12/130358	8094661	US-2008-0311881-A1	
11476	DEVICE SYSTEM AND METHOD OF CHANNEL QUALITY INDICATION			NP	PAT-Active	US	11/823781	7974242	US-2009-0111475-A1	
11477	ADAPTIVE PAGING AREA			NP	PAT-Active	US	12/165280	8094633	US-2009-0003295-A1	
11478	ADAPTIVE SLEEP AREA			NP	PAT-Active	US	12/165438	8359037	US-2009-0003255-A1	
11479	CHANNEL AWARE MULTIPLE USER MIMO SCHEME UNIFIED WITH SINGLE USER CLOSED LOOP MIMO			NP	PAT-Active	US	12/183317	8179844	US-2009-0074039-A1	
11480	SIGMA-DELTA CONVERTER NOISE CANCELLATION			NP	PAT-Active	US	12/239254	7812750	US-2010-0079324-A1	
11481	BEAM SELECTION IN OPEN LOOP MU-MIMO			NP	PAT-Active	US	12/057727	8290639	US-2009-0042617-A1	
11482	METHOD AND APPARATUS FOR SCHEDULING TRANSMISSIONS IN A WIRELESS COMMUNICATION SYSTEM			NP	PAT-Active	US	11/966859	8103218	US-2009-0040936-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
11483	EFFICIENT CQICH TRANSPORT FORMAT			NP	PAT-Active	US	12/057678	8315643	US-2009-0941138-A1	
11484	ASSIGNING NONCES FOR SECURITY KEYS			NP	PAT-Active	US	12/006265	8504439	US-2009-0172394-A1	
11485	ADAPTIVE ANTENNA BEAMFORMING			ENT	PAT-Active	US	12/898087	8508410	US-2011-0018767-A1	
11486	TRANSISTOR AND ROUTING LAYOUT FOR A RADIO FREQUENCY INTEGRATED CMOS POWER AMPLIFIER DEVICE			NP	PAT-Active	US	12/164219	7705664	US-2009-0322427-A1	
11487	AVOIDING COLLISIONS BETWEEN USERS IF MAP CONTAINING PERSISTENT SCHEDULING INFORMATION IS LOST			NP	PAT-Active	US	11/945274	8072875	US-2009-0138598-A1	
11488	SYSTEM AIDED PAPR REDUCTION SCHEME BASED ON TR ALGORITHM			NP	PAT-Active	US	12/113175	8160959	US-2009-0274103-A1	
11489	LOOP DELAY COMPENSATION FOR CONTINUOUS TIME SIGMA DELTA ANALOG TO DIGITAL CONVERTER			NP	PAT-Active	US	12/215874	8195221	US-2009-0325632-A1	
11490	NOVEL DOUBLE-FEEDBACK FLEXIBLE NON-INTEGFER FREQUENCY DIVISION CIRCUIT			NP	PAT-Active	US	12/254080	7804932	US-2010-0097106-A1	
11491	RESOURCE MANAGEMENT AND INTERFERENCE MITIGATION TECHNIQUES FOR RELAY-BASED WIRELESS NETWORKS			NP	PAT-Active	US	12/049207	7962091	US-2009-0335444-A1	
11492	RESOURCE MANAGEMENT AND INTERFERENCE MITIGATION TECHNIQUES FOR RELAY-BASED WIRELESS NETWORKS			ENT	PAT-Active	US	13/094523	8265547	US-2011-0199957-A1	
11493	RESOURCE MANAGEMENT AND INTERFERENCE MITIGATION TECHNIQUES FOR RELAY-BASED WIRELESS NETWORKS			ENT	PAT-Active	US	13/105222	8422940	US-2011-0211618-A1	
11494	INTERFERENCE AVOIDANCE WITH SYNCHRONOUS HARD AND PERSISTENT SCHEDULING			NP	PAT-Active	US	12/347462	8354512	US-2010-0003355-A1	
11495	METHOD AND APPARATUS FOR EFFICIENT SCHEDULING IN BROADBAND WIRELESS ACCESS NETWORKS			NP	PAT-Active	US	12/419250	8570958	US-2009-0257389-A1	
11496	USER EQUIPMENT AND METHOD FOR PERSISTENT SUBFRAME SCHEDULING			ENT	PAT-Active	US	14/052936	9749995	US-2014-0036843-A1	
11497	RADIO FREQUENCY INTERFERENCE SENSING SYSTEM AND METHOD			NP	PAT-Active	US	12/166168	8483621	US-2010-0003924-A1	
11498	MULTI-TRANSCIVER WIRELESS COMMUNICATION DEVICE AND METHODS FOR OPERATING DURING DEVICE DISCOVERY AND CONNECTION ESTABLISHMENT			NP	PAT-Active	US	12/062707	8149804	US-2009-0292128-A1	
11499	PILOT METHOD FOR 802.16M			NP	PAT-Active	US	12/415938	7974178	US-2010-0346696-A1	
11500	SYSTEM AND METHOD FOR PROVIDING LOCATION BASED SERVICES (LBS) TO ROAMING SUBSCRIBERS IN A WIRELESS ACCESS NETWORK			NP	PAT-Active	US	12/201048	8064928	US-2010-0056162-A1	
11501	DYNAMIC INTERFERENCE AVOIDANCE WITH ASYNCHRONOUS HARD			NP	PAT-Active	US	12/317112	8261151	US-2010-0162069-A1	
11502	BANDWIDTH ALLOCATION BASE STATION AND METHOD FOR ALLOCATING UPLINK BANDWIDTH USING SDMA			NP	PAT-Active	US	12/169731	8343680	US-2010-0008331-A1	
11503	VIRTUAL MULTICARRIER DESIGN FOR ORTHOGONAL FREQUENCY DIVISION MULTIPLE ACCESS COMMUNICATIONS			NP	PAT-Active	US	12/242755	8295373	US-2010-0080908-A1	
11504	VIRTUAL MULTICARRIER DESIGN FOR ORTHOGONAL FREQUENCY DIVISION MULTIPLE ACCESS COMMUNICATIONS			ENT	PAT-Active	US	13/658735	8934554	US-2013-0114527-A1	
11505	VIRTUAL MULTICARRIER DESIGN FOR ORTHOGONAL FREQUENCY DIVISION MULTIPLE ACCESS COMMUNICATIONS			ENT	PAT-Active	US	14/963956	9548879	US-2015-0172085-A1	
11506	VIRTUAL MULTICARRIER DESIGN FOR ORTHOGONAL FREQUENCY DIVISION MULTIPLE ACCESS COMMUNICATIONS			ENT	APP-Pending	US	15/021877		US-2018-0210314-A1	
11507	VIRTUAL MULTICARRIER DESIGN FOR ORTHOGONAL FREQUENCY DIVISION MULTIPLE ACCESS COMMUNICATIONS			ENT	PAT-Active	US	15/366903	###88888	US-2017-0086198-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
11508	RESOURCE ALLOCATION IN A WIRELESS NETWORK			CNT	PAT-Active	US	11/704027	7424002	US-2007-0133496-A1	
11509	CALCULATING SPATIAL WEIGHTS IN A RADIO COMMUNICATIONS SYSTEM			NP	PAT-Active	US	09/727261	6658881		
11510	CHANNEL ALLOCATION BASED ON RANDOM PLUS PLANNED PROCESSES			NP	PAT-Active	US	09/753266	7978673		
11511	RADIO COMMUNICATIONS SYSTEM WITH A MINIMAL BROADCAST CHANNEL			NP	PAT-Active	US	09/675748	7158493		
11512	RADIO COMMUNICATIONS SYSTEM WITH A MINIMAL BROADCAST CHANNEL			CNT	PAT-Active	US	11/588754	8085925		
11513	RADIO COMMUNICATIONS SYSTEM WITH A MINIMAL BROADCAST CHANNEL			CNT	PAT-Active	US	13/342175	8532048	US-2012-0099459-A1	
11514	HOPPING ON RANDOM ACCESS CHANNELS			CSP	PAT-Active	US	10/175707	7630346	US-2003-0067801-A1	
11515	SELECTING RANDOM ACCESS CHANNELS			CSP	PAT-Active	US	10/218770	7349371	US-2003-0133426-A1	
11516	METHOD AND APPARATUS FOR INCREASING THE EFFECTIVE RANGE OF A COMMUNICATION LINK IN A WIRELESS COMMUNICATION SYSTEM			NP	PAT-Active	US	09/817731	7386781	US-2002-0165097-A1	
11517	ADAPTIVE ANTENNA ARRAY WITH PROGRAMMABLE SENSITIVITY			NP	PAT-Active	US	09/967896	7039363		
11518	METHOD AND APPARATUS FOR PROVIDING SPATIAL PROCESSING IN A REMOTE UNIT			NP	PAT-Active	US	09/967863	6965788		
11519	REMOTE UNIT FOR PROVIDING MULTIPLE-MODE SPATIAL PROCESSING			CNT	PAT-Active	US	13/205553	8326374	US-2011-0294554-A1	
11520	CALIBRATION OF WIDEBAND RADIOS AND ANTENNAS USING A NARROWBAND CHANNEL			NP	PAT-Active	US	09/967127	7039036		
11521	SYSTEM AND RELATED METHODS FOR BEAMFORMING IN A MULTI-POINT COMMUNICATIONS ENVIRONMENT			CNT	PAT-Active	US	11/717933	7661276	US-2007-0163552-A1	
11522	SYSTEM AND RELATED METHODS FOR CLUSTERING MULTI-POINT COMMUNICATION TARGETS			NP	PAT-Active	US	09/967058	6973314	US-2003-0064754-A1	
11523	SYSTEM AND RELATED METHODS FOR CLUSTERING MULTI-POINT COMMUNICATION TARGETS			CNT	PAT-Active	US	11/254599	7298073	US-2006-0040672-A1	
11524	METHOD AND APPARATUS FOR EFFICIENT STORAGE OF TRAINING SEQUENCES FOR PEAK TO AVERAGE POWER CONSTRAINED MODULATION FORMATS			NP	PAT-Active	US	09/967208	7433418		
11525	METHOD AND APPARATUS FOR EFFICIENT STORAGE OF TRAINING SEQUENCES FOR PEAK TO AVERAGE POWER CONSTRAINED MODULATION FORMATS			CNT	PAT-Active	US	12/245623	8325847	US-2010-0086078-A1	
11526	ESTIMATION OF DOWNLINK TRANSMISSION PARAMETERS IN A RADIO COMMUNICATIONS SYSTEM WITH AN ADAPTIVE ANTENNA ARRAY			NP	PAT-Active	US	10/153515	6738020		
11527	BROADCAST BURST USING SPATIAL DIVERSITY FOR A RADIO COMMUNICATIONS SYSTEM			CNT	PAT-Active	US	11/581192	7430246		
11528	SELECTIVE POWER CONTROL MESSAGING			NP	PAT-Active	US	10/189709	7269382	US-2004-0005803-A1	
11529	SELECTIVE POWER CONTROL MESSAGING			CSP	PAT-Active	US	10/262336	7257301	US-2004-0004944-A1	
11530	EFFICIENT BROADCAST CHANNEL STRUCTURE AND USE FOR SPATIAL DIVERSITY COMMUNICATIONS			NP	PAT-Active	US	10/187023	6928287	US-2004-0132454-A1	
11531	SYMBOL ESTIMATION-BASED DECORRELATOR FOR DIRECTING BEAMS AND S TO REMOTE USERS IN A WIRELESS COMMUNICATIONS SYSTEM			DIV	PAT-Active	US	11/249903	7310538	US-2006-0040708-A1	
11532	PHASE ERROR DETECTION WITH CONDITIONAL PROBABILITIES			NP	PAT-Active	US	12/317970	8204156	US-2010-0166115-A1	
11533	DETECTION AND RECOVERY OF HARQ NAK-TO-ACK FEEDBACK ERROR IN WIRELESS COMMUNICATIONS SYSTEMS			DIV	PAT-Active	US	14/606864	9344228	US-2015-0149849-A1	
11534	METHOD AND APPARATUS FOR ACTIVATING A WIRELESS COMMUNICATION DEVICE			NP	PAT-Active	US	12/536788	8509096	US-2011-0032869-A1	
11535	ANTENNA STRUCTURE			NP	PAT-Active	US	12/237724	8085418	US-2010-0141533-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
11536	METHOD AND APPARATUS OF SUBCHANNELIZATION OF WIRELESS COMMUNICATION SYSTEM			NP	PAT-Active	US	12/327838	8095176	US-2010-0144340-A1	
11537	PARTIALLY RANDOM PERMUTATION SEQUENCE GENERATOR			NP	PAT-Active	US	12/345528	8518358	US-2010-0169400-A1	
11538	TECHNIQUES TO SUPPORT MULTIPLE RADIO-ACCESS TECHNOLOGIES			NP	PAT-Active	US	12/384562	8391252	US-2010-0113047-A1	
11539	TECHNIQUES FOR FEMTO CELL SYNCHRONIZATION IN WIRELESS NETWORKS			NP	PAT-Active	US	12/653816	8398050	US-2010-0157906-A1	
11540	GPS ASSISTED NETWORK ADMINISTRATION			NP	PAT-Active	US	12/4859145	8538434	US-2010-0300991-A1	
11541	MACRO-TO-FEMTO CELL RESELECTION			NP	PAT-Active	US	12/456987	8311545	US-2010-0330500-A1	
11542	METHOD AND SYSTEM TO IMPROVE LINK BUDGET OF A WIRELESS SYSTEM			NP	PAT-Active	US	12/502857	8782482	US-2011-0016369-A1	
11543	METHOD AND SYSTEM TO IMPROVE LINK BUDGET OF A WIRELESS SYSTEM			DIV	PAT-Active	US	14/296313	9356741	US-2014-0289580-A1	
11544	METHOD AND SYSTEM TO IMPROVE LINK BUDGET OF A WIRELESS SYSTEM			CNT	PAT-Active	US	15/144510	8900327	US-2016-0323069-A1	
11545	METHOD AND SYSTEM TO IMPROVE LINK BUDGET OF A WIRELESS SYSTEM			CNT	APP-Pending	US	15/264805		US-2018-0133475-A1	
11546	MULTI RADIO COMMUNICATION DEVICE AND METHOD FOR ENABLING COEXISTENCE BETWEEN A BLUETOOTH TRANSCIVER AND A WIMAX TRANSCIVER OPERATING IN FDD MODE			NP	PAT-Active	US	12/425795	8563592	US-2010-0265856-A1	
11547	ALIGNMENT OF CHANNEL FILTERS FOR MULTIPLE-TUNER APPARATUSES			NP	PAT-Active	US	12/460811	8335279	US-2011-0015765-A1	
11548	DELAY LINE CALIBRATION			NP	PAT-Active	US	12/769886	8736384	US-2011-0287120-A1	
11549	POLAR CAP RESET METHOD FOR DIFFERENTIAL CODEBOOK FOR WIRELESS COMMUNICATIONS			NP	PAT-Active	US	12/567364	8654740	US-2011-0075650-A1	
11550	METHODS AND SYSTEMS TO DIGITALLY SWITCH BETWEEN FREQUENCIES AND CORRESPONDING BANDWIDTHS IN A TRANSCIVER			NP	PAT-Active	US	12/565306	8300731	US-2011-0069740-A1	
11551	EFFICIENT PAGING OPERATION FOR FEMTOCELL DEPLOYMENT			NP	PAT-Active	US	12/614586	8301177	US-2010-0226311-A1	
11552	HARQ FEEDBACK CHANNEL INDEXING SCHEME IN WIRELESS COMMUNICATION SYSTEMS			NP	PAT-Active	US	12/624048	8316269	US-2010-0275081-A1	
11553	TRANSMISSION OF ADVANCED-MAP INFORMATION ELEMENTS IN MOBILE NETWORKS			NP	PAT-Active	US	12/615625	8560696	US-2010-0274892-A1	
11554	TRANSMISSION OF ADVANCED-MAP INFORMATION ELEMENTS IN MOBILE NETWORKS			DIV	PAT-Active	US	14/031295	9253761	US-2014-0016606-A1	
11555	TAIL-BITTING CONVOLUTIONAL CODES FOR UPLINK FAST FEEDBACK CONTROL CHANNEL			NP	PAT-Active	US	12/799634	8677223	US-2010-0287452-A1	
11556	FRAME STRUCTURE FOR SUPPORT OF LARGE DELAY SPREAD DEPLOYMENT SCENARIOS			NP	PAT-Active	US	12/611487	8462676	US-2011-0183494-A1	
11557	BASE STATION AND METHOD FOR CONFIGURING SUB-FRAMES FOR RELAY-NODE OPERATIONS			CNT	PAT-Active	US	13/530986	8634834	US-2012-0263135-A1	
11558	BASE STATION AND METHOD FOR CONFIGURING SUB-FRAMES FOR RELAY-NODE OPERATIONS			CNT	PAT-Active	US	14/044070	8917638	US-2014-0195075-A1	
11559	BASE STATION AND METHOD FOR CONFIGURING SUB-FRAMES FOR RELAY-NODE OPERATIONS			CNT	PAT-Active	US	14/577934	9219681	US-2015-0183733-A1	
11560	COEXISTENCE INTERFACE FOR MULTIPLE RADIO MODULES USING A REDUCED NUMBER OF CONNECTIONS			NP	PAT-Active	US	12/533888	8412368	US-2010-0142500-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
11561	GROUP RESOURCE ALLOCATION TECHNIQUES FOR IEEE 802.16M			NP	PAT-Active	US	12/651338	8351533	US-2010-0266057-A1	
11562	MOBILE STATION AND METHOD FOR DYNAMICALLY SWITCHING SLEEP CYCLES WITHOUT DEACTIVATING A CURRENT POWER SAVING CLASS (PSC)			NP	PAT-Active	US	12/497196	8233418	US-2010-0002615-A1	
11563	MULTIPROTOCOL ANTENNA STRUCTURE AND METHOD FOR SYNTHESIZING A MULTIPROTOCOL ANTENNA PATTERN			NP	PAT-Active	US	12/536132	8368601	US-2011-0032157-A1	
11564	METHOD AND APPARATUS TO SUPPORT MULTI-CHANNEL RECEPTION			NP	PAT-Active	US	12/567670	8179355	US-2011-0075034-A1	
11565	CALIBRATION OF QUADRATURE IMBALANCE VIA LOOPBACK PHASE SHIFTS			NP	PAT-Active	US	12/586726	8953663	US-2011-0075715-A1	
11566	CALIBRATION OF QUADRATURE IMBALANCE VIA LOOPBACK PHASE SHIFTS			CNT	PAT-Active	US	14/457811	9509355	US-2015-0036727-A1	
11567	UPLINK FEEDBACK CHANNEL REPORTING MECHANISM IN WIRELESS SYSTEMS			NP	PAT-Active	US	12/646862	8417180	US-2010-0273435-A1	
11568	WIRELESS BROADBAND RESOURCE ALLOCATION INDEXING			NP	PAT-Active	US	12/638417	8300586	US-2011-0143380-A1	
11569	TECHNIQUES TO NEGOTIATE CAPABILITIES BETWEEN NETWORKED DEVICES			NP	PAT-Active	US	12/589938	8284725	US-2011-0103314-A1	
11570	BEAMFORMING USING BASE AND DIFFERENTIAL CODEBOOKS			NP	PAT-Active	US	12/639540	8315204	US-2011-0002263-A1	
11571	BEAMFORMING USING BASE AND DIFFERENTIAL CODEBOOKS			CNT	PAT-Active	US	13/652061	9042522	US-2013-0180898-A1	
11572	BEAMFORMING USING BASE AND DIFFERENTIAL CODEBOOKS			CNT	PAT-Active	US	14/593957	9419694	US-2015-0162962-A1	
11573	BEAMFORMING USING BASE AND DIFFERENTIAL CODEBOOKS			CNT	PAT-Active	US	15/303606	9680543	US-2016-0315678-A1	
11574	BEAMFORMING USING BASE AND DIFFERENTIAL CODEBOOKS			CNT	PAT-Active	US	15/496969	#####	US-2017-0230097-A1	
11575	Systems and methods for channel coding of wireless communication			NP	PAT-Active	US	12/655274	8397126	US-2011-0004804-A1	
11576	METHOD AND APPARATUS OF DERIVING SECURITY KEY(S)			NP	PAT-Active	US	12/643675	8566593	US-2011-0004760-A1	
11577	UPLINK OPEN LOOP POWER CONTROL SYSTEM			NP	PAT-Active	US	12/638707	8599769	US-2011-0002279-A1	
11578	DEVICE SYSTEM AND METHOD OF SIMULTANEOUSLY COMMUNICATING WITH A GROUP OF WIRELESS COMMUNICATION UNITS			NP	PAT-Active	US	12/639061	8542686	US-2011-0143892-A1	
11579	ARTICLE OF SIMULTANEOUSLY COMMUNICATING WITH A GROUP OF WIRELESS COMMUNICATION UNITS			CNT	PAT-Active	US	13/892395	9060366	US-2013-0250887-A1	
11580	APPARATUS AND ARTICLE OF SIMULTANEOUSLY TRANSMITTING TO A GROUP OF WIRELESS COMMUNICATION STATIONS			CNT	PAT-Active	US	14/710714	9877223	US-2015-0257033-A1	
11581	FEMTOCELL DISCOVERY AND ASSOCIATION IN CELLULAR NETWORKS			NP	PAT-Active	US	12/646560	8400985	US-2011-0149878-A1	
11582	FEMTOCELL DISCOVERY AND ASSOCIATION IN CELLULAR NETWORKS			CNT	PAT-Active	US	13/768703	9237435	US-2013-0157657-A1	
11583	BASE STATION DISCOVERY AND ASSOCIATION IN CELLULAR NETWORKS			CNT	PAT-Active	US	14/992523	#####	US-2016-0174143-A1	
11584	ALLOCATING GROUP RESOURCES FOR WIRELESS COMMUNICATIONS			NP	PAT-Active	US	12/644090	8351384	US-2011-0044266-A1	
11585	SHORT USER MESSAGES IN SYSTEM CONTROL SIGNALING			NP	PAT-Active	US	12/646706	8283417	US-2010-0279717-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
11586	DEVICE SYSTEM AND METHOD OF POWER-SAVING FOR WIRELESS COMMUNICATION			NP	PAT-Active	US	12/645502	8351848	US-2011-0945763-A1	
11587	INITIALIZING FEMTOCELLS			NP	PAT-Active	US	12/644080	8255677	US-2011-0904747-A1	
11588	INITIALIZING FEMTOCELLS			ENT	PAT-Active	US	13/555228	#####	US-2012-0289222-A1	
11589	FEMTOCELL ARCHITECTURE AND NETWORK			NP	PAT-Active	US	12/645045	8638731	US-2011-0145876-A1	
11590	HANDOVER FOR CELLULAR RADIO COMMUNICATIONS			NP	PAT-Active	US	12/646718	8275378	US-2011-0902799-A1	
11591	DISTRIBUTING GROUP SIZE INDICATIONS TO MOBILE STATIONS			NP	PAT-Active	US	12/636892	8599766	US-2011-0944285-A1	
11592	ZONE SWITCHING IN MIXED-ZONE AIR INTERFACE			NP	PAT-Active	US	12/646284	8301348	US-2010-0277618-A1	
11593	TRANSMISSION OF PREAMBLE CODE FOR MOBILE WIMAX SYSTEMS			NP	PAT-Active	US	12/660295	8351322	US-2010-0226322-A1	
11594	MAC/PHY IDENTIFICATION OF BASE STATION TYPES AND THEIR PREFERRED AND RESTRICTED ACCESS			NP	PAT-Active	US	12/820966	8588139	US-2011-0944244-A1	
11595	LOCATION DETERMINATION IN WIRELESS COMMUNICATION SYSTEMS			NP	PAT-Active	US	12/844435	8477690	US-2011-0115338-A1	
11596	TECHNIQUES USING DIFFERENTIAL PRECODING FOR HIGHLY CORRELATED CHANNELS IN WIRELESS NETWORKS			NP	PAT-Active	US	12/757169	8737199	US-2011-0249655-A1	
11597	TECHNIQUES USING DIFFERENTIAL PRECODING FOR HIGHLY CORRELATED CHANNELS IN WIRELESS NETWORKS			ENT	PAT-Active	US	13/591613	8873417	US-2013-0223495-A1	
11598	GROUP RESOURCE ALLOCATION SYSTEMS AND TECHNIQUES			NP	PAT-Active	US	12/655159	9438404	US-2011-0149760-A1	
11599	APPARATUS AND METHODS FOR MINIMIZING PERFORMANCE LOSS IN MULTIPLE TUNER SOLUTIONS			NP	PAT-Active	US	12/752569	8280446	US-2011-0244812-A1	
11600	CALIBRATION OF QUADRATURE IMBALANCES USING WIDEBAND SIGNALS			NP	PAT-Active	US	12/800995	8713905	US-2011-0292978-A1	
11601	METHOD AND APPARATUS FOR ADAPTIVE MITIGATION OF NOISE INTERFERENCE			NP	PAT-Active	US	13/192255	8830972	US-2013-0328244-A1	
11602	METHOD AND APPARATUS FOR ENHANCED MULTICAST BROADCAST SERVICES			NP	PAT-Active	US	12/846533	8472360	US-2011-0944229-A1	
11603	SYSTEM METHOD AND APPARATUS FOR AN EFFICIENT INFORMATION BROADCAST IN A MULTI-CARRIER WIRELESS NETWORK			NP	PAT-Active	US	12/789058	8472425	US-2011-0944213-A1	
11604	COVERAGE LOSS RECOVERY IN A WIRELESS COMMUNICATION NETWORK			NP	PAT-Active	US	12/826639	8638751	US-2011-0986737-A1	
11605	NEIGHBOR LIST BROADCASTING TECHNIQUES			ENT	PAT-Active	US	14/282826	9501939	US-2015-0904977-A1	
11606	APPARATUS AND METHODS FOR UPGRADING AN AIRLINK IN A WIRELESS SYSTEM			NP	PAT-Active	US	12/890179	8483132	US-2011-0134896-A1	
11607	TECHNIQUES TO CONTROL UPLINK POWER			NP	PAT-Active	US	12/782800	8295335	US-2011-0158304-A1	
11608	UPLINK POWER CONTROL IN WIRELESS NETWORKS			NP	PAT-Active	US	12/843940	8224373	US-2011-0159913-A1	
11609	DIFFERENTIAL FEEDBACK SCHEME FOR CLOSED-LOOP MIMO BEAMFORMING			NP	PAT-Active	US	12/770620	8340207	US-2011-0964152-A1	
11610	MANAGING INTERFERENCE DUE TO LOW POWER BSS			NP	PAT-Active	US	12/889525	8526984	US-2011-0159898-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
11611	POWER LOADING IN MU-MIMO			NP	PAT-Active	US	12/845482	8554261	US-2012-0928671-A1	
11612	POWER LOADING IN MU-MIMO			CNT	PAT-Active	US	14/579321	9549378	US-2015-0271762-A1	
11613	PLATFORM NOISE ESTIMATION AND MITIGATION FOR WIRELESS RECEIVERS			NP	PAT-Active	US	12/886316	8509364	US-2012-0069940-A1	
11614	METHOD AND APPARATUS FOR TRANSFORMER POWER COMBINER AND DYNAMIC POWER CONTROL FOR QUADRAPHASE POWER AMPLIFIERS			NP	PAT-Active	US	12/879252	8472896	US-2012-0062318-A1	
11615	BASE STATION AND METHOD FOR REDUCING ASYNCHRONOUS INTERFERENCE IN A MULTI-TIER OFDMA OVERLAY NETWORK			NP	PAT-Active	US	12/822925	8630229	US-2011-0002770-A1	
11616	OFDM TRANSMITTER AND METHODS FOR REDUCING THE EFFECTS OF SEVERE INTERFERENCE WITH SYMBOL LOADING			NP	PAT-Active	US	12/889651	8462864	US-2011-0158337-A1	
11617	MOBILE DEVICE TRANSMITTER AND METHODS FOR TRANSMITTING SIGNALS IN DIFFERENT SIGNAL DIMENSIONS FOR 3GPP LTE			CNT	PAT-Active	US	13/895555	9300504	US-2013-0243118-A1	
11618	MOBILE DEVICE TRANSMITTER AND METHODS FOR TRANSMITTING SIGNALS IN DIFFERENT SIGNAL DIMENSIONS FOR 3GPP LTE			CNT	PAT-Active	US	15/003549	9712683	US-2016-0142120-A1	
11619	FREQUENCY AND TIMING OFFSET ESTIMATION ALGORITHM FOR DTV (DVB-T2) RECEIVERS			NP	PAT-Active	US	12/956565	8472540	US-2012-0134398-A1	
11620	DYNAMIC INTERFERENCE MITIGATION FOR CELLULAR NETWORKS			NP	PAT-Active	US	12/956562	8700085	US-2012-0135763-A1	
11621	MULTI-RADIO COMMUNICATION BETWEEN WIRELESS DEVICES			CNT	PAT-Active	US	14/321688	9215186	US-2014-0313979-A1	
11622	MULTI-RADIO COMMUNICATION BETWEEN WIRELESS DEVICES			CNT	PAT-Active	US	14/968838	9912602	US-2016-0337256-A1	
11623	ESTIMATING QUALITY OF A SIGNAL IN MOBILE WIRELESS COMMUNICATION SYSTEMS			NP	PAT-Active	US	12/958235	8730827	US-2012-0140713-A1	
11624	UPLINK POWER HEADROOM CALCULATION AND REPORTING FOR OFDMA CARRIER AGGREGATION COMMUNICATION SYSTEM			NP	PAT-Active	US	12/889318	8584718	US-2011-0312366-A1	
11625	ALLOCATING A CONTROL CHANNEL FOR CARRIER AGGREGATION			NP	PAT-Active	US	12/967652	8625218	US-2011-0288487-A1	
11626	ALLOCATING A CONTROL CHANNEL FOR CARRIER AGGREGATION			CNT	PAT-Active	US	13/275608	8843168	US-2012-0034945-A1	
11627	MONITORING A CONTROL CHANNEL FOR CARRIER AGGREGATION			CNT	PAT-Active	US	13/969966	8983516	US-2013-0336263-A1	
11628	ALLOCATING A CONTROL CHANNEL FOR CARRIER AGGREGATION			CNT	PAT-Active	US	14/482107	9591642	US-2015-0029964-A1	
11629	ALLOCATING A CONTROL CHANNEL FOR CARRIER AGGREGATION			CNT	PAT-Active	US	15/405050	#####	US-2017-0127391-A1	
11630	CONFIGURING COMPONENT CARRIERS IN CARRIER AGGREGATION			NP	PAT-Active	US	12/975725	8537718	US-2011-0287978-A1	
11631	CONFIGURING COMPONENT CARRIERS IN CARRIER AGGREGATION			CNT	PAT-Active	US	13/299765	8743734	US-2012-0063357-A1	
11632	CONFIGURING COMPONENT CARRIERS IN CARRIER AGGREGATION			CNT	PAT-Active	US	13/299800	9338772	US-2012-0063358-A1	
11633	CONFIGURING COMPONENT CARRIERS IN CARRIER AGGREGATION			CNT	PAT-Active	US	15/150286	#####	US-2016-0255630-A1	
11634	BASE STATION SELECTION METHOD FOR HETEROGENEOUS OVERLAY NETWORKS			NP	PAT-Active	US	12/977797	8519654	US-2012-0035226-A1	
11635	CONFIGURABLE COMMON REFERENCE SIGNAL PORT FOR ANTENNA SYSTEMS			NP	PAT-Active	US	12/928758	8708077	US-2012-0035521-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
11636	CABLE ANTENNA APPARATUS AND SYSTEM			NP	PAT-Active	US	12/957208	9799943	US-2012-0135565-A1	
11637	DYNAMIC BANDWIDTH CONTROL IN INTERFERENCE SITUATIONS			NP	PAT-Active	US	12/969771	8619640	US-2012-0155294-A1	
11638	DYNAMIC BANDWIDTH CONTROL IN INTERFERENCE SITUATIONS			ENT	PAT-Active	US	14/045484	9608795	US-2014-0098760-A1	
11639	TECHNIQUES FOR MANAGING MOBILITY MANAGEMENT SIGNALING IN A WIRELESS NETWORK			NP	PAT-Active	US	12/975827	8787337	US-2012-0039313-A1	
11640	TECHNIQUES FOR UPDATE PROCEDURE SIGNALING IN A WIRELESS NETWORK			CNT	PAT-Active	US	14/219240	9781543	US-2014-0204931-A1	
11641	TECHNIQUES FOR UPDATE PROCEDURE SIGNALING IN A WIRELESS NETWORK			CNT	PAT-Active	US	15/992576	#####	US-2018-0279102-A1	
11642	TECHNIQUES FOR UPDATE PROCEDURE SIGNALING IN A WIRELESS NETWORK			CNT	PAT-Active	US	15/687313	#####	US-2017-0358673-A1	
11643	TECHNIQUES FOR INITIATING COMMUNICATION IN A WIRELESS NETWORK			NP	PAT-Active	US	12/976217	8532030	US-2011-0288052-A1	
11644	TECHNIQUES FOR DYNAMIC SPECTRUM MANAGEMENT ALLOCATION AND SHARING			NP	PAT-Active	US	13/029439	8973480	US-2012-0082100-A1	
11645	APPARATUS AND METHODS OF TIME DOMAIN MULTIPLEXING SOLUTIONS FOR IN-DEVICE COEXISTENCE			NP	PAT-Active	US	13/077745	9872307	US-2012-0082077-A1	
11646	APPARATUS AND METHODS OF TIME DOMAIN MULTIPLEXING SOLUTIONS FOR IN-DEVICE COEXISTENCE			ENT	APP-Pending	US	14/582110		US-2015-0109976-A1	
11647	COORDINATED MULTIPORT COMMUNICATION NETWORK WITH MULTIPLE COOPERATING eNBs AND METHOD FOR BEAMFORMING COORDINATION WITH INTERFERENCE SUPPRESSION			PCT	PAT-Active	US	13/883390	9197371	US-2013-0250865-A1	
11648	PMI FEEDBACK WITH CODEBOOK INTERPOLATION			NP	PAT-Active	US	13/077905	8713807	US-2012-0082190-A1	
11649	ENHANCED NODE B AND METHOD FOR PRECODING WITH REDUCED QUANTIZATION ERROR			NP	PAT-Active	US	13/075320	8644289	US-2012-0113830-A1	
11650	ENHANCED NODE B AND METHOD FOR PRECODING WITH REDUCED QUANTIZATION ERROR			CNT	PAT-Active	US	14/160931	9197372	US-2014-0133445-A1	
11651	ENHANCED NODE B AND METHOD FOR PRECODING WITH REDUCED QUANTIZATION ERROR			CNT	PAT-Active	US	14/887499	9525471	US-2016-0094283-A1	
11652	ENHANCED NODE B AND METHOD FOR PRECODING WITH REDUCED QUANTIZATION ERROR			CNT	PAT-Active	US	15/373366	9843367	US-2017-0155435-A1	
11653	APPARATUS SYSTEMS AND METHODS UTILIZING ADJACENT-CHANNEL POWER DEPENDENT AUTOMATIC GAIN CONTROL FOR DIGITAL TELEVISION DEMODULATION			NP	PAT-Active	US	13/032079	8582035	US-2012-0212675-A1	
11654	APPARATUS SYSTEMS AND METHODS UTILIZING ADJACENT-CHANNEL POWER DEPENDENT AUTOMATIC GAIN CONTROL FOR DIGITAL TELEVISION DEMODULATION			CNT	PAT-Active	US	14/047098	8817395	US-2014-0036157-A1	
11655	COORDINATED MULTI-PORT TRANSMISSION USING INTERFERENCE FEEDBACK			NP	PAT-Active	US	13/075023	8687727	US-2012-0114028-A1	
11656	CONTENTION-BASED TRANSMISSION WITH CONTENTION-FREE FEEDBACK FOR REDUCING LATENCY IN LTE ADVANCED NETWORKS AND ENHANCED PUSCH			NP	PAT-Active	US	13/044125	8638736	US-2011-0216722-A1	
11657	USER EQUIPMENT AND METHOD FOR CONTENTION-BASED COMMUNICATIONS OVER ALLOCATED PUSCH RESOURCES			CNT	PAT-Active	US	14/165038	9578659	US-2014-0140304-A1	
11658	DELIVERY OF MULTICAST AND BROADCAST SERVICES CONCURRENTLY WITH UNICAST DATA			NP	PAT-Active	US	13/154809	8780876	US-2012-0035279-A1	
11659	DELIVERY OF MULTICAST AND BROADCAST SERVICES CONCURRENTLY WITH UNICAST DATA			CNT	PAT-Active	US	14/244355	9883432	US-2014-0293862-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
11660	DELIVERY OF MULTICAST AND BROADCAST SERVICES CONCURRENTLY WITH UNICAST DATA			ENT	PAT-Active	US	14/335179	9107124	US-2014-0328243-A1	
11661	DELIVERY OF MULTICAST AND BROADCAST SERVICES CONCURRENTLY WITH UNICAST DATA			ENT	PAT-Active	US	15/814126	#####	US-2018-0146305-A1	
11662	DELIVERY OF MULTICAST AND BROADCAST SERVICES CONCURRENTLY WITH UNICAST DATA			ENT	PAT-Active	US	14/788709	9693274	US-2015-0304917-A1	
11663	FRAMEWORK FOR COORDINATED MULTIPPOINT TRANSMISSION BASED ON A MULTICELL MAC/RRC DESIGN			NP	PAT-Active	US	13/165946	8604593	US-2012-0082082-A1	
11664	MULTI USER MIMO DETECTION UTILIZING AVERAGED SPATIAL WHITENING			NP	PAT-Active	US	13/175055	8711965	US-2013-0003896-A1	
11665	METHOD AND APPARATUS FOR INTERFERENCE MITIGATION IN WIRELESS SYSTEMS			NP	PAT-Active	US	13/174382	8768393	US-2013-0005376-A1	
11666	RECEIVER WITH IMPROVED NOISE VARIANCE ESTIMATION			PCT	PAT-Active	US	13/993486	9614560	US-2016-0193088-A1	
11667	HIGHER ORDER MU-MIMO FOR LTE-A			PCT	PAT-Active	US	13/995155	9807637	US-2013-0285380-A1	
11668	HIGHER ORDER MU-MIMO FOR LTE-A			ENT	PAT-Active	US	15/717687	#####	US-2018-0035302-A1	
11669	CO-PHASING OF TRANSMISSIONS FROM MULTIPLE INFRASTRUCTURE NODES			PCT	PAT-Active	US	13/995158	9559864	US-2013-0288728-A1	
11670	MOBILE DEVICE AND METHOD FOR AUTOMATIC CONNECTIVITY DATA OFFLOADING AND ROAMING BETWEEN NETWORKS			NP	PAT-Active	US	13/173338	8590623	US-2013-0007953-A1	
11671	MOBILE DEVICE AND METHOD FOR AUTOMATIC CONNECTIVITY DATA OFFLOADING AND ROAMING BETWEEN NETWORKS			ENT	PAT-Active	US	14/083028	9084081	US-2014-0081450-A1	
11672	MOBILE DEVICE AND METHOD FOR AUTOMATIC CONNECTIVITY DATA OFFLOADING AND ROAMING BETWEEN NETWORKS			ENT	PAT-Active	US	14/731668	9906840	US-2015-0350871-A1	
11673	MOBILE DEVICE AND METHOD FOR AUTOMATIC CONNECTIVITY DATA OFFLOADING AND ROAMING BETWEEN NETWORKS			ENT	PAT-Active	US	15/873537	#####	US-2018-0242137-A1	
11674	TECHNIQUES TO TRAIN A PERSONAL AREA NETWORK COMPONENT			PCT	PAT-Active	US	13/997272	9078271	US-2013-0815217-A1	
11675	TECHNIQUES TO TRAIN A PERSONAL AREA NETWORK COMPONENT			ENT	PAT-Active	US	14/792387	9661646	US-2016-0195618-A1	
11676	DIGITALLY SCALABLE TRANSFORMER COMBINING POWER AMPLIFIER			NP	PAT-Active	US	13/250983	8502598	US-2013-0082772-A1	
11677	VOLTAGE-CONTROLLED OSCILLATOR WITH REDUCED SINGLE-ENDED CAPACITANCE			PCT	PAT-Active	US	13/997592	9093950	US-2013-0309963-A1	
11678	VOLTAGE-CONTROLLED OSCILLATOR WITH REDUCED SINGLE-ENDED CAPACITANCE			ENT	PAT-Active	US	14/754108	9473066	US-2015-0372643-A1	
11679	DUAL MODE VOLTAGE REGULATOR WITH RECONFIGURATION CAPABILITY			PCT	PAT-Active	US	13/997306	9577523	US-2015-0042295-A1	
11680	CONTROL AND DATA PLANE SOLUTIONS FOR CARRIER-AGGREGATION BASED WLAN OFFLOAD			ENT	PAT-Active	US	14/675098	9426685	US-2015-0268274-A1	
11681	SYSTEM AND METHOD OF RANK ADAPTATION IN MIMO COMMUNICATION SYSTEM			PCT	PAT-Active	US	13/976298	9445239	US-2013-0287139-A1	
11682	SYSTEM AND METHOD OF RANK ADAPTATION IN MIMO COMMUNICATION SYSTEM			ENT	PAT-Active	US	15/205964	#####	US-2016-0323027-A1	
11683	SYSTEM AND METHOD OF RANK ADAPTATION IN MIMO COMMUNICATION SYSTEM			ENT	PAT-Active	US	15/037893	#####	US-2018-0224629-A1	
11684	SYSTEM AND METHOD OF CHANNEL CONTROL IN A WIRELESS COMMUNICATION SYSTEM			PCT	PAT-Active	US	13/998900	9998944	US-2014-0161034-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
11685	METHODS AND SYSTEM FOR COMMUNICATING CONTROL INFORMATION USING CARRIER AGGREGATION			PCT	PAT-Active	US	13/976005	8817755	US-2013-0294423-A1	
11686	METHODS AND SYSTEM FOR COMMUNICATING CONTROL INFORMATION USING CARRIER AGGREGATION			ENT	PAT-Active	US	14/955099	9473972	US-2014-0348115-A1	
11687	METHODS AND SYSTEM FOR COMMUNICATING CONTROL INFORMATION USING CARRIER AGGREGATION			ENT	APP-Pending	US	15/295934		US-2019-0037432-A1	
11688	SYSTEM AND METHOD OF MANAGING WIRELESS COMMUNICATIONS WITH MULTIPLE TRANSMISSION POINTS			PCT	PAT-Active	US	13/976464	8888888	US-2014-0355529-A1	
11689	TECHNIQUES FOR MACHINE-TO-MACHINE DEVICE MANAGEMENT			PCT	APP-Pending	US	13/976466		US-2013-0265932-A1	
11690	MACHINE-TO-MACHINE (M2M) COMMUNICATIONS USING SHORT MESSAGE SERVICES (SMS)			PCT	PAT-Active	US	13/994115	9344835	US-2014-0073367-A1	
11691	MULTI-HOP SINGLE SIGN-ON (SSO) FOR IDENTITY PROVIDER (IdP) ROAMING/PROXY			PCT	PAT-Active	US	13/995118	9258344	US-2013-0275085-A1	
11692	METHOD FOR CONTROLLING OPERATION ACTIVITY MODES OF A WIRELESS TELECOMMUNICATIONS TERMINAL			NP	PAT-Active	US	13/158690	9107163	US-2011-0305213-A1	
11693	EXTENDED ACCESS BARRING			PCT	PAT-Active	US	13/994117	8264979	US-2014-0128029-A1	
11694	EXTENDED ACCESS BARRING			ENT	PAT-Active	US	14/924364	9615314	US-2016-0050615-A1	
11695	EXTENDED ACCESS BARRING			ENT	PAT-Active	US	15/439390	9974004	US-2017-0164269-A1	
11696	EXTENDED ACCESS BARRING			PCT	PAT-Active	US	14/992734	9653029	US-2016-0127980-A1	
11697	EXTENDED ACCESS BARRING			ENT	PAT-Active	US	15/486916	8888888	US-2017-0223809-A1	
11698	PROCESSOR EXTENSIONS FOR ACCELERATING SPECTRAL BAND REPLICATION			ENT	PAT-Active	US	13/491229	8589634	US-2012-0265329-A1	
11699	TIMESLOT SCHEDULING IN DIGITAL AUDIO AND HYBRID AUDIO RADIO SYSTEMS			NP	PAT-Active	US	12/154882	8198769	US-2008-0293857-A1	
11700	TIMESLOT SCHEDULING IN DIGITAL AUDIO AND HYBRID AUDIO RADIO SYSTEMS			ENT	PAT-Active	US	13/463725	8824447	US-2012-0213217-A1	
11701	DIGITAL RADIO BROADCAST TRANSMISSION USING A TABLE OF CONTENTS			NP	PAT-Active	US	12/773835	8323823	US-2010-0330900-A1	
11702	WIRELESS WIDE AREA NETWORK (WWAN) ASSISTED PROXIMITY WIRELESS LOCAL AREA NETWORK (WLAN) PEER-TO-PEER (P2P) CONNECTION AND OFFLOADING			PCT	PAT-Active	US	13/997253	9813841	US-2014-0115058-A1	
11703	STRUCTURED CODEBOOK FOR UNIFORM CIRCULAR ARRAY (UCA)			PCT	PAT-Active	US	13/993629	9313747	US-2013-0336152-A1	
11704	METHOD TO SUPPORT AN ASYMMETRIC TIME-DIVISION DUPLEX (TDD) CONFIGURATION IN A HETEROGENEOUS NETWORK (HETNET)			PCT	PAT-Active	US	13/994108	9504084	US-2013-0343243-A1	
11705	WIRELESS MODULE AND METHOD FOR LOCAL IP ACCESS PACKET DATA NETWORK RELEASE			PCT	PAT-Active	US	13/991362	9398503	US-2014-0177590-A1	
11706	TECHNIQUES FOR MANAGING IDLE STATE ACTIVITY IN MOBILE DEVICES			PCT	PAT-Active	US	13/976955	9338748	US-2014-0051485-A1	
11707	TECHNIQUES FOR MANAGING IDLE STATE ACTIVITY IN MOBILE DEVICES			ENT	PAT-Active	US	14/951285	9942850	US-2016-0081029-A1	
11708	TECHNIQUES FOR MANAGING IDLE STATE ACTIVITY IN MOBILE DEVICES			ENT	APP-Pending	US	15/948907		US-2018-0227852-A1	
11709	DISTRIBUTED ANTENNA SYSTEM AND METHOD FOR ENHANCED POSITIONING			PCT	PAT-Active	US	13/992917	9402233	US-2013-0336224-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
11710	SYSTEM AND METHOD FOR ADAPTING VIDEO COMMUNICATIONS			PCT	PAT-Active	US	13/976445	9860296	US-2013-0275615-A1	
11711	REFERENCE SIGNAL GENERATION AND DETERMINING REFERENCE SIGNAL RESOURCE ALLOCATION			PCT	PAT-Active	US	13/519312	###88888	US-2015-0138079-A1	
11712	SYSTEM AND METHOD FOR MANAGING MULTIRADIO COMMUNICATIONS IN A SINGLE DEVICE			PCT	PAT-Active	US	13/976395	9388604	US-2013-0273857-A1	
11713	USER EQUIPMENT INITIATED DISCONTINUOUS OPERATION IN A WIRELESS COMMUNICATIONS NETWORK			PCT	PAT-Active	US	14/127805	8713164	US-2014-0226542-A1	
11714	USER EQUIPMENT INITIATED DISCONTINUOUS OPERATION IN A WIRELESS COMMUNICATIONS NETWORK			CNT	PAT-Active	US	15/062572	9538547	US-2016-0192435-A1	
11715	DUAL MODE VOLTAGE REGULATOR WITH DYNAMIC RECONFIGURATION CAPABILITY			PCT	PAT-Active	US	13/994810	9343963	US-2015-0035507-A1	
11716	METHOD AND DEVICE FOR TRANSMITTING A CHANNEL QUALITY INFORMATION			NP	PAT-Active	US	13/213283	9077480	US-2013-0044616-A1	
11717	TRANSMITTER CIRCUIT AND METHOD			NP	PAT-Active	US	13/173488	8917636	US-2013-0093570-A1	
11718	RADIO RECEIVER APPARATUS OF A CELLULAR RADIO NETWORK			NP	PAT-Active	US	13/306081	8938243	US-2013-0137440-A1	
11719	DYNAMIC ACTIVATION OF RECEIVE DIVERSITY			NP	PAT-Active	US	13/248117	8682256	US-2013-0084808-A1	
11720	COMMUNICATION DEVICES AND FLOW RESTRICTION DEVICES			NP	PAT-Active	US	13/633228	9756527	US-2013-0094360-A1	
11721	VOLTAGE REGULATOR WITH ADAPTIVE CONTROL			PCT	PAT-Active	US	13/997712	9504214	US-2014-0321102-A1	
11722	DTC System with High Resolution Phase Alignment			PCT	PAT-Active	US	13/976677	9077375	US-2014-0092288-A1	
11723	METHOD AND FACILITY TO MEASURE AND COMPENSATE DCD FREQUENCY DISTORTIONS USING A DPLL			NP	PAT-Active	US	13/326712	8638878	US-2013-0156129-A1	
11724	Method and Facility to Measure and Compensate DCD Frequency Distortions using a DPLL			CNT	PAT-Active	US	14/105846	8923461	US-2014-0112423-A1	
11725	DC/DC CONVERTER METHOD FOR PROVIDING AN OUTPUT VOLTAGE ON THE BASIS OF AN INPUT VOLTAGE AND COMPUTER PROGRAM			NP	PAT-Active	US	13/231482	9219411	US-2013-0093100-A1	
11726	COMMON MODE REJECTION CIRCUIT			NP	PAT-Active	US	13/304438	8773211	US-2013-0135057-A1	
11727	METHOD FOR RECEIVING INFORMATION AND COMMUNICATION TERMINAL			NP	PAT-Active	US	13/316708	9743343	US-2013-0150105-A1	
11728	CHANGING THE MACHINE-TO-MACHINE (M2M) GROUP OF AN M2M DEVICE			PCT	PAT-Active	US	13/995173	9210532	US-2014-0256324-A1	
11729	RESOURCE SCHEDULING FOR MACHINE-TO-MACHINE DEVICES			PCT	PAT-Active	US	13/995174	9451386	US-2014-0010187-A1	
11730	METHODS FOR SWITCHING BETWEEN A MBMS DOWNLOAD AND AN HTTP-BASED DELIVERY OF DASH FORMATTED CONTENT OVER AN IMS NETWORK			PCT	PAT-Active	US	13/994118	9387852	US-2015-0288530-A1	
11731	METHODS FOR SWITCHING BETWEEN A MBMS DOWNLOAD AND AN HTTP-BASED DELIVERY OF DASH FORMATTED CONTENT OVER AN IMS NETWORK			CNT	PAT-Active	US	14/581747	8960926	US-2015-0131657-A1	
11732	METHODS FOR SWITCHING BETWEEN A MBMS DOWNLOAD AND AN HTTP-BASED DELIVERY OF DASH FORMATTED CONTENT OVER AN IMS NETWORK			CNT	APP-Pending	US	15/881620		US-2018-0152309-A1	
11733	ASSOCIATION BIASING FOR A HETEROGENEOUS NETWORK (HetNet)			PCT	PAT-Active	US	13/994119	9271249	US-2014-0185523-A1	
11734	MAPPING AN ENHANCED PHYSICAL DOWNLINK CONTROL CHANNEL			PCT	PAT-Active	US	13/994113	9642180	US-2014-0126487-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
11735	MAPPING AN ENHANCED PHYSICAL DOWNLINK CONTROL CHANNEL			CNT	PAT-Active	US	15/582354	9936495	US-2017-0236288-A1	
11736	MAPPING AN ENHANCED PHYSICAL DOWNLINK CONTROL CHANNEL			CNT	PAT-Active	US	15/908708	#####	US-2018-0192407-A1	
11737	TECHNOLOGY FOR CSI FEEDBACK IN A MIMO COMMUNICATION SYSTEM			PCT	PAT-Active	US	13/994745	9319118	US-2014-0112406-A1	
11738	FORMING CARRIER AGGREGATION TIMING ADVANCE GROUPS IN A HETEROGENEOUS NETWORK			PCT	PAT-Active	US	13/994111	9578616	US-2014-0219185-A1	
11739	FORMING CARRIER AGGREGATION TIMING ADVANCE GROUPS IN A HETEROGENEOUS NETWORK			CNT	PAT-Active	US	15/099628	9999018	US-2016-0227594-A1	
11740	FORMING CARRIER AGGREGATION TIMING ADVANCE GROUPS IN A HETEROGENEOUS NETWORK			CNT	PAT-Active	US	15/613818	#####	US-2017-0275045-A1	
11741	METHOD AND SYSTEM FOR COEXISTENCE OF MULTIPLE COLLOCATED RADIOS			PCT	PAT-Active	US	13/976896	9510306	US-2014-0185484-A1	
11742	NEAR FIELD COMMUNICATIONS (NFC) AND PROXIMITY SENSOR FOR PORTABLE DEVICES			PCT	PAT-Active	US	13/977576	9048882	US-2014-0220887-A1	
11743	NEAR FIELD COMMUNICATIONS (NFC) COIL AND PROXIMITY SENSOR FOR PORTABLE DEVICES			CNT	PAT-Active	US	14/717093	9444522	US-2015-0333802-A1	
11744	NEAR FIELD COMMUNICATIONS (NFC) AND PROXIMITY SENSOR FOR PORTABLE DEVICES			CNT	PAT-Active	US	15/092334	9553637	US-2016-0218773-A1	
11745	DETERMINING AN ORDER OF MODULATION FOR EACH TRANSPORT BLOCK BASED ON INITIAL CHANNEL STATE INFORMATION			PCT	PAT-Active	US	13/992726	9807723	US-2013-0265972-A1	
11746	TECHNIQUES TO SIMULTANEOUSLY TRANSMIT AND RECEIVE OVER THE SAME RADIOFREQUENCY CARRIER			PCT	PAT-Active	US	13/976423	9537543	US-2014-0376416-A1	
11747	DISCONTINUOUS RECEPTION (DRX) CONTROLLER AND METHOD FOR DRX OPERATION			CNT	PAT-Active	US	14/321015	9560590	US-2014-0362754-A1	
11748	ACCURATE UPLINK POWER CONTROL FOR COMP AND C-RAN			PCT	PAT-Active	US	13/993833	9487713	US-2015-0304860-A1	
11749	METHOD AND APPARATUS FOR M2M DEVICE SUBSCRIPTION			PCT	PAT-Active	US	13/977124	9491673	US-2013-0272257-A1	
11750	METHOD AND APPARATUS FOR M2M DEVICE SUBSCRIPTION			CNT	PAT-Active	US	15/345429	9883321	US-2017-0118579-A1	
11751	METHOD AND SYSTEM FOR NETWORK ACCESS CONTROL			PCT	PAT-Active	US	13/976455	9749377	US-2013-0291075-A1	
11752	WIRELESS COMMUNICATION DEVICE USING TIME-VARIANT ANTENNA MODULE			PCT	PAT-Active	US	13/996516	9350394	US-2014-0018020-A1	
11753	WIRELESS COMMUNICATION DEVICE USING TIME-VARIANT ANTENNA MODULE			PCT	PAT-Active	US	15/150104	9705536	US-2016-0254829-A1	
11754	WIRELESS COMMUNICATION DEVICE USING TIME-VARIANT ANTENNA MODULE			CNT	PAT-Active	US	15/341242	#####	US-2017-0085280-A1	
11755	SMALL DATA COMMUNICATIONS IN A WIRELESS COMMUNICATION NETWORK			PCT	PAT-Active	US	13/880962	8867476	US-2013-0308564-A1	
11756	SMALL DATA COMMUNICATIONS IN A WIRELESS COMMUNICATION NETWORK			CNT	PAT-Active	US	14/285725	8923210	US-2014-0254490-A1	
11757	REPORTING POWER DISRUPTIONS OF MACHINE-TO-MACHINE DEVICES			PCT	PAT-Active	US	13/995119	9369822	US-2013-0266000-A1	
11758	ONE METHOD OF DELEGATE-BASED GROUP CHANNEL ACCESS			PCT	PAT-Active	US	13/997240	9544716	US-2015-0189452-A1	
11759	SYSTEM AND METHOD OF UPLINK POWER CONTROL IN A WIRELESS COMMUNICATION SYSTEM			PCT	PAT-Active	US	13/976452	9363780	US-2013-0294390-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
11760	SYSTEM AND METHOD FOR IMPROVING NETWORK ACCESS IN MACHINE TO MACHINE COMMUNICATION			PCT	PAT-Active	US	13/977004	9525960	US-2014-0274082-A1	
11761	DECOUPLING ARRANGEMENT			NP	PAT-Active	US	13/331500	8913364	US-2013-0157382-A1	
11762	DECOUPLING ARRANGEMENT			ENT	PAT-Active	US	14/534979	9225164	US-2015-0131190-A1	
11763	DECOUPLING ARRANGEMENT			CNT	PAT-Active	US	14/945762	#####	US-2016-0305580-A1	
11764	DECOUPLING ARRANGEMENT			CNT	APP-Pending	US	15/675883		US-2018-0270948-A1	
11765	DATABASE COORDINATOR PROCESSOR AND METHOD FOR PROVIDING CERTIFICATION INFORMATION			NP	PAT-Active	US	13/294214	9674706	US-2013-0122888-A1	
11766	OPTIMIZATION OF DATA HANDOVER TO WIRELESS WIDE AREA NETWORKS			NP	PAT-Active	US	13/336024	8923246	US-2013-0163450-A1	
11767	DISTORTION ESTIMATION APPARATUS AND METHOD			NP	PAT-Active	US	13/408553	9026391	US-2013-0226483-A1	
11768	DISTORTION ESTIMATION APPARATUS AND METHOD			CNT	PAT-Active	US	14/677454	8568521	US-2015-0276834-A1	
11769	SECOND-ORDER FILTER WITH NOTCH FOR USE IN RECEIVERS TO EFFECTIVELY SUPPRESS THE TRANSMITTER BLOCKERS			NP	PAT-Active	US	13/405673	9112476	US-2013-0225101-A1	
11770	SECOND-ORDER FILTER WITH NOTCH FOR USE IN RECEIVERS TO EFFECTIVELY SUPPRESS THE TRANSMITTER BLOCKERS			ENT	PAT-Active	US	14/793129	9413526	US-2015-0318836-A1	
11771	TECHNIQUES TO MANAGE GROUP CONTROLLING SIGNALING FOR MACHINE-TO-MACHINE DEVICES			NP	PAT-Active	US	13/434495	9131480	US-2013-0254953-A1	
11772	WIRELESS COMMUNICATION SYSTEM WITH COMMON CELL ID			PCT	PAT-Active	US	13/995175	9300509	US-2013-0266997-A1	
11773	RANDOM BACKOFF FOR EXTENDED ACCESS BARRING			NP	PAT-Active	US	13/538865	9078257	US-2013-0170479-A1	
11774	PATCH-BASED PROXIMITY SENSORS ANTENNAS AND CONTROL SYSTEMS TO CONTROL ANTENNAS BASED ON CORRESPONDING PROXIMITY MEASURES			NP	PAT-Active	US	13/538892	9705182	US-2014-0002305-A1	
11775	TRANSMITTERS AND METHODS			NP	PAT-Active	US	13/835693	8891681	US-2013-0231168-A1	
11776	GEOGRAPHICALLY ISOLATED ANTENNAS			CNT	PAT-Active	US	14/806974	9854524	US-2016-0304843-A1	
11777	IMPROVING CARRIER AGGREGATION PERFORMANCE			PCT	PAT-Active	US	13/997219	#####	US-2015-0223265-A1	
11778	UPLINK POWER CONTROL SIGNALING WITH CARRIER AGGREGATION			PCT	PAT-Active	US	13/997221	9635610	US-2015-0331039-A1	
11779	TECHNIQUES FOR UPLINK POWER CONTROL			PCT	PAT-Active	US	13/977008	9370018	US-2013-0272173-A1	
11780	METHODS TO TRANSPORT INTERNET TRAFFIC OVER MULTIPLE WIRELESS NETWORKS SIMULTANEOUSLY			PCT	PAT-Active	US	13/995154	9402264	US-2013-0268628-A1	
11781	MAPPING AN ENHANCED PHYSICAL DOWNLINK CONTROL CHANNEL			PCT	PAT-Active	US	13/977523	9351311	US-2014-0056279-A1	
11782	MAPPING AN ENHANCED PHYSICAL DOWNLINK CONTROL CHANNEL			CNT	PAT-Active	US	15/130875	#####	US-2016-0234815-A1	
11783	INTER-NODE INTERFERENCE CANCELLATION			PCT	PAT-Active	US	13/997230	9689731	US-2014-0018090-A1	
11784	RESCHEDULING OF A RESOURCE COMPONENT OF LOW POWER NODES (LPNs) IN A COORDINATION SET			PCT	PAT-Active	US	13/997256	9893304	US-2014-0226575-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
11785	DISCONTINUOUS RECEPTION IN A WIRELESS DEVICE FOR IN-DEVICE COEXISTENCE			PCT	PAT-Active	US	13/997223	9992742	US-2015-0971179-A1	
11786	CHANNEL STATE INFORMATION FEEDBACK IN COORDINATED MULTI-POINT SYSTEM			NP	PAT-Active	US	13/655184	8737514	US-2013-0114658-A1	
11787	TRANSMISSION POINT INDICATION IN COORDINATED MULTI-POINT SYSTEM			PCT	PAT-Active	US	13/997588	9320035	US-2014-0003324-A1	
11788	TRANSMISSION POINT INDICATION IN COORDINATED MULTI-POINT SYSTEM			CNT	PAT-Active	US	15/061833	8735938	US-2016-0192415-A1	
11789	TRANSMISSION POINT INDICATION IN COORDINATED MULTI-POINT SYSTEM			CNT	PAT-Active	US	15/645888	#####	US-2017-0310524-A1	
11790	DOWNLINK RESOURCE SCHEDULING			PCT	PAT-Active	US	13/995468	9497742	US-2013-0279462-A1	
11791	DOWNLINK RESOURCE SCHEDULING			CNT	PAT-Active	US	15/277856	#####	US-2017-0086173-A1	
11792	SELECTION OF ACKNOWLEDGMENT TIMING IN WIRELESS COMMUNICATIONS			PCT	PAT-Active	US	13/997973	9220085	US-2014-0010128-A1	
11793	SELECTION OF ACKNOWLEDGMENT TIMING IN WIRELESS COMMUNICATIONS			CNT	PAT-Active	US	14/247189	8247527	US-2014-0215143-A1	
11794	SELECTION OF ACKNOWLEDGMENT TIMING IN WIRELESS COMMUNICATIONS			CNT	PAT-Active	US	14/970035	9614709	US-2016-0183210-A1	
11795	SELECTION OF ACKNOWLEDGMENT TIMING IN WIRELESS COMMUNICATIONS			CNT	PAT-Active	US	15/385361	9762575	US-2017-0104575-A1	
11796	SELECTION OF ACKNOWLEDGMENT TIMING IN WIRELESS COMMUNICATIONS			CNT	PAT-Active	US	15/646985	9893872	US-2017-0310454-A1	
11797	SELECTION OF ACKNOWLEDGMENT TIMING IN WIRELESS COMMUNICATIONS			CNT	PAT-Active	US	15/851345	#####	US-2018-0167190-A1	
11798	LINK ADAPTATION IN COORDINATED MULTIPPOINT SYSTEM			PCT	PAT-Active	US	13/976370	9388559	US-2013-0336269-A1	
11799	DYNAMIC POINT SELECTION VIA A COORDINATING SET OF BASE STATIONS			NP	PAT-Active	US	13/538070	9008018	US-2013-0114524-A1	
11800	DYNAMIC POINT SELECTION VIA A COORDINATING SET OF BASE STATIONS			CNT	PAT-Active	US	14/642215	9432093	US-2015-0100555-A1	
11801	COORDINATION OF SELF-OPTIMIZATION OPERATIONS IN A SELF ORGANIZING NETWORK			PCT	PAT-Active	US	13/976374	#####	US-2013-0279368-A1	
11802	INDIVIDUAL AND GROUP PAGING IN A WIRELESS NETWORK			PCT	PAT-Active	US	13/997253	9825797	US-2015-0098179-A1	
11803	SMALL DATA TECHNIQUES AND CONFIGURATIONS IN A WIRELESS COMMUNICATION NETWORK			PCT	PAT-Active	US	13/996320	9755882	US-2013-0279372-A1	
11804	SMALL DATA TECHNIQUES AND CONFIGURATIONS IN A WIRELESS COMMUNICATION NETWORK			CNT	APP-Pending	US	15/659462		US-2017-0338935-A1	
11805	TECHNIQUES FOR TRAFFIC DELIVERY TO A GROUP OF DEVICES			PCT	PAT-Active	US	13/976386	9232498	US-2013-0272186-A1	
11806	HYBRID CODEBOOK DESIGN FOR WIRELESS SYSTEMS			NP	PAT-Active	US	13/529280	9088872	US-2013-0156075-A1	
11807	OPERATOR-ASSISTED DEVICE-TO-DEVICE (D2D) DISCOVERY			PCT	PAT-Active	US	13/997736	9594262	US-2014-0219251-A1	
11808	OPERATOR-ASSISTED DEVICE-TO-DEVICE (D2D) DISCOVERY			CNT	PAT-Active	US	15/413320	9955325	US-2017-0134626-A1	
11809	OPERATOR-ASSISTED DEVICE-TO-DEVICE (D2D) DISCOVERY			CNT	PAT-Active	US	15/944968	#####	US-2018-0227741-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
11810	OPERATOR-ASSISTED DEVICE-TO-DEVICE (D2D) DISCOVERY			ENT	APP-Pending	US	15/409677			
11811	TECHNIQUES FOR COORDINATED UPLINK POWER CONTROL			NP	PAT-Active	US	13/532841	9301219	US-2013-0188501-A1	
11812	TECHNIQUES FOR COORDINATED UPLINK POWER CONTROL			ENT	PAT-Active	US	15/083016	9998999	US-2017-0055228-A1	
11813	METHOD FOR CONTROLLING RECEIVING DIVERSITY OF A RECEIVER AND A MOBILE STATION			PCT	PAT-Active	US	13/976784	9077418	US-2014-0016685-A1	
11814	SAMPLING RECEIVER WITH INHERENT MIXER FUNCTIONALITY			NP	PAT-Active	US	13/443394	8848847	US-2013-0265191-A1	
11815	DIGITAL EVENT GENERATOR, COMPARATOR SWITCHED MODE ENERGY CONVERTER AND METHOD			NP	PAT-Active	US	13/473213	9190906	US-2013-0307509-A1	
11816	COMMUNICATION DEVICES AND METHODS FOR SELECTING A RADIO ACCESS MODE			NP	PAT-Active	US	13/463854	8855709	US-2013-0295986-A1	
11817	COMMUNICATION DEVICES AND METHODS FOR OPERATING A COMMUNICATION DEVICE			NP	PAT-Active	US	13/455205	8929934	US-2013-0288727-A1	
11818	DYNAMIC UPLINK AND DOWNLINK CONFIGURATION USING FLEXIBLE SUBFRAMES			NP	PAT-Active	US	13/608369	9544823	US-2013-0188516-A1	
11819	DYNAMIC UPLINK AND DOWNLINK CONFIGURATION USING FLEXIBLE SUBFRAMES			ENT	PAT-Active	US	15/400106	9877317	US-2017-0223671-A1	
11820	INTER-RAT (RADIO ACCESS TECHNOLOGY) ENERGY SAVING MANAGEMENT			PCT	PAT-Active	US	13/991544	9263989	US-2014-0187234-A1	
11821	METHOD FOR OPERATING A TRANSCEIVER CIRCUIT AND TRANSCEIVER CIRCUIT			NP	PAT-Active	US	13/597480	9071339	US-2014-0064067-A1	
11822	METHODS AND APPARATUS FOR RATE ADAPTATION OF QUALITY OF SERVICE BASED APPLICATION			NP	PAT-Active	US	13/568165	8914537	US-2014-0343975-A1	
11823	MOBILE COMMUNICATION APPARATUS METHOD FOR PERFORMING SIGNAL RECEPTION QUALITY MEASUREMENTS AND METHOD FOR ASCERTAINING A MOVEMENT BY A MOBILE COMMUNICATION APPARATUS			NP	PAT-Active	US	13/910159	9473951	US-2013-0337848-A1	
11824	CIRCUIT AND METHOD			PCT	PAT-Active	US	13/976649	9041576	US-2014-0302287-A1	
11825	CIRCUIT AND METHOD			ENT	PAT-Active	US	14/720155	9692443	US-2016-0380645-A1	
11826	AGILE AND ADAPTIVE TRANSMITTER-RECEIVER ISOLATION			NP	PAT-Active	US	13/423513	8874047	US-2013-0244583-A1	
11827	AGILE AND ADAPTIVE WIDEBAND MIMO ANTENNA ISOLATION			EXP	PAT-Active	US	13/598683	8805300	US-2013-0244594-A1	
11828	CARE-OF-ADDRESS HANDOVER			NP	PAT-Active	US	13/758240	9271393	US-2013-0273404-A1	
11829	ENHANCED POWER MANAGEMENT IN COMMUNICATION DEVICE			NP	PAT-Active	US	13/758213	9294996	US-2013-0225215-A1	
11830	COOPERATIVE RADIO ACCESS NETWORK WITH CENTRALIZED BASE STATION BASEBAND UNIT (BBU) PROCESSING POOL			PCT	PAT-Active	US	13/998255	9301198	US-2014-0269322-A1	
11831	METHOD FOR PROVIDING A COMMUNICATION SESSION AND DEVICE			ENT	APP-Pending	US	15/970941		US-2018-0255141-A1	
11832	REMOTE MANAGEMENT AND CONTROL OF VEHICULAR FUNCTIONS VIA MULTIPLE NETWORKS			NP	PAT-Active	US	13/539352	9031712	US-2014-0005859-A1	
11833	DEVICE SYSTEM AND METHOD OF CONTROLLING ACCESS TO LOCATION SOURCES			NP	PAT-Active	US	13/533006	9073884	US-2013-0238857-A1	
11834	DISTRIBUTION OF AN ELECTRONIC REFERENCE CLOCK SIGNAL THAT INCLUDES DELAY AND VALIDITY INFORMATION			NP	PAT-Active	US	13/632230	9365225	US-2014-0294218-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
11835	CIRCUIT FOR SIGNAL PROCESSING AND METHOD PERFORMED BY SUCH CIRCUIT			NP	PAT-Active	US	13/597404	8848775	US-2014-0964335-A1	
11836	Receiver Receiver Circuits and Methods for Providing an Interference-Reduced Signal			NP	PAT-Active	US	13/707338	8693971		
11837	INTERFERENCE AND NOISE ESTIMATION OF A COMMUNICATIONS CHANNEL			NP	PAT-Active	US	13/596305	9298345	US-2014-0064106-A1	
11838	MULTICAST/BROADCAST SERVICE CONTINUITY IN MULTI-CARRIER NETWORKS			NP	PAT-Active	US	13/531848	9144085	US-2013-0083715-A1	
11839	MULTICAST/BROADCAST SERVICE CONTINUITY IN MULTI-CARRIER NETWORKS			CNT	PAT-Active	US	14/489327	9894608	US-2015-0035581-A1	
11840	MULTICAST/BROADCAST SERVICE CONTINUITY IN MULTI-CARRIER NETWORKS			CNT	APP-Pending	US	15/861538		US-2018-0132179-A1	
11841	PHYSICAL-LAYER CELL IDENTITY (PCI) PARTITION FOR HETEROGENEOUS NETWORKS			NP	PAT-Active	US	13/538775	9456415	US-2013-0083744-A1	
11842	TIMING SYNCHRONIZATION FOR DOWNLINK (DL) TRANSMISSIONS IN COORDINATED MULTIPOINT (CoMP) SYSTEMS			PCT	PAT-Active	US	13/997232	9351277	US-2014-0085221-A1	
11843	TIMING SYNCHRONIZATION FOR DOWNLINK (DL) TRANSMISSIONS IN COORDINATED MULTIPOINT (CoMP) SYSTEMS			CNT	PAT-Active	US	15/140389	#####	US-2016-0254938-A1	
11844	TIMING SYNCHRONIZATION FOR DOWNLINK (DL) TRANSMISSIONS IN COORDINATED MULTIPOINT (CoMP) SYSTEMS			CNT	APP-Pending	US	16/035468		US-2018-0343157-A1	
11845	PATH-LOSS ESTIMATION FOR UPLINK POWER CONTROL IN A CARRIER AGGREGATION ENVIRONMENT			NP	PAT-Active	US	13/537967	9642134	US-2013-0142113-A1	
11846	NARROW BANDWIDTH DEVICE IN A BROADBAND NETWORK			NP	PAT-Active	US	13/538762	9596069	US-2013-0114587-A1	
11847	USER EQUIPMENT (UE)-SPECIFIC ASSIGNMENT OF DEMODULATION REFERENCE SIGNAL (DMRS) SEQUENCES TO SUPPORT UPLINK (UL) COORDINATED MULTIPOINT (CoMP)			NP	PAT-Active	US	13/537879	8811344	US-2013-0118523-A1	
11848	TRUSTED WLAN CONNECTIVITY TO 3GPP EVOLVED PACKET CORE			PCT	PAT-Active	US	13/992029	9526027	US-2014-0101726-A1	
11849	TRUSTED WLAN CONNECTIVITY TO 3GPP EVOLVED PACKET CORE			CNT	PAT-Active	US	15/350388	9948105	US-2017-0289587-A1	
11850	TRUSTED WLAN CONNECTIVITY TO 3GPP EVOLVED PACKET CORE			CNT	APP-Pending	US	15/916044		US-2018-0292943-A1	
11851	AUTOMATIC UPLINK-DOWNLINK RATIO RECONFIGURATION SETTING IN WIRELESS COMMUNICATION SYSTEM			NP	PAT-Active	US	13/526767	8942122	US-2013-0186500-A1	
11852	TECHNIQUES FOR MITIGATING INTERFERENCE ASSOCIATED WITH DOWNLINK TRANSMISSIONS FROM A BASE STATION			NP	PAT-Active	US	13/531717	8862176	US-2013-0115999-A1	
11853	TIME-VARIANT ANTENNA ENABLED BY SWITCHED CAPACITOR ARRAY ON SILICON			NP	PAT-Active	US	13/534377	8824982	US-2014-0004804-A1	
11854	SOUNDING REFERENCE SIGNAL ENHANCEMENT TO SUPPORT UPLINK COORDINATED MULTIPOINT			NP	PAT-Active	US	13/595540	9635664	US-2013-0195028-A1	
11855	IP MULTIMEDIA SUBSYSTEM AND METHOD FOR MBMS FILE REPAIR USING HTTP SERVERS			NP	PAT-Active	US	13/613902	9213605	US-2013-0246846-A1	
11856	IP MULTIMEDIA SUBSYSTEM AND METHOD FOR MBMS FILE REPAIR USING HTTP SERVERS			CNT	PAT-Active	US	14/859451	9888045	US-2016-0036866-A1	
11857	IP MULTIMEDIA SUBSYSTEM AND METHOD FOR MBMS FILE REPAIR USING HTTP SERVERS			CNT	APP-Pending	US	15/888593		US-2018-0227334-A1	
11858	TECHNIQUES FOR IMPROVED MULTICAST CONTENT DELIVERY			CNT	PAT-Active	US	14/605742	9565672	US-2015-0134787-A1	
11859	PACKET STREAMING SERVICE CAPABILITY EXCHANGE FOR ENHANCED PERIPHERAL DEVICE SUPPORT			NP	PAT-Active	US	13/598301	8963453	US-2013-0190048-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
11860	IDENTIFIERS FOR MTC GROUP IN 3GPP SYSTEMS			NP	PAT-Active	US	13/528090	8942627	US-2013-0196704-A1	
11861	COORDINATED MULTIPPOINT CONFIGURATION BASED ON CHANNEL STATE INFORMATION REFERENCE SIGNALS			NP	PAT-Active	US	13/534313	8843100	US-2013-0196689-A1	
11862	INTERFERENCE MANAGEMENT FOR DYNAMIC UPLINK AND DOWNLINK CONFIGURATION			NP	PAT-Active	US	13/612318	9197683	US-2013-0194982-A1	
11863	INTERFERENCE MANAGEMENT FOR DYNAMIC UPLINK AND DOWNLINK CONFIGURATION			CNT	PAT-Active	US	14/926418	9775149	US-2016-0157216-A1	
11864	SIGNALING FOR CONFIGURATION OF DOWNLINK COORDINATED MULTIPPOINT COMMUNICATIONS			PCT	PAT-Active	US	13/996150	9385791	US-2013-0343317-A1	
11865	UPLINK COORDINATED MULTI-POINT			NP	PAT-Active	US	13/536722	8917618	US-2013-0195025-A1	
11866	UPLINK COORDINATED MULTI-POINT			CNT	PAT-Active	US	14/543758	9154279	US-2015-0271235-A1	
11867	UPLINK COORDINATED MULTI-POINT			CNT	PAT-Active	US	14/812927	9591638	US-2015-0341149-A1	
11868	UPLINK COORDINATED MULTI-POINT			CNT	PAT-Active	US	15/408223	#####	US-2017-0126375-A1	
11869	HANDLING WAIT TIME IN A CONGESTED WIRELESS COMMUNICATION NETWORK			NP	PAT-Active	US	13/526302	9055477	US-2013-0201823-A1	
11870	HANDLING WAIT TIME IN A CONGESTED WIRELESS COMMUNICATION NETWORK			CNT	PAT-Active	US	13/917324	9125103	US-2013-0272124-A1	
11871	HANDLING USER PLANE CONGESTION IN A WIRELESS COMMUNICATION NETWORK			NP	PAT-Active	US	13/563508	9071999	US-2013-0201824-A1	
11872	HANDLING USER PLANE CONGESTION IN A WIRELESS COMMUNICATION NETWORK			CNT	PAT-Active	US	14/754173	9736074	US-2015-0321497-A1	
11873	LTE ENHANCEMENTS FOR SMALL PACKET TRANSMISSIONS			NP	PAT-Active	US	13/528985	9241327	US-2013-0188566-A1	
11874	TIME AND FREQUENCY SYNCHRONIZATION FOR LTE-ADVANCED NEW CARRIER TYPE			NP	PAT-Active	US	13/537271	9355979	US-2013-0195070-A1	
11875	METHOD AND APPARATUS FOR HOST-CONTROLLED PACKET DATA SUPPRESSION			NP	PAT-Active	US	13/465076	#####	US-2013-0294238-A1	
11876	CIRCUIT ARRANGEMENT AND METHOD FOR LOW POWER MODE MANAGEMENT WITH DELAYABLE REQUEST			NP	PAT-Active	US	13/602394	9021267	US-2014-0068303-A1	
11877	RADIO COMMUNICATION DEVICES AND METHODS FOR CONTROLLING A RADIO COMMUNICATION DEVICE			CIP	PAT-Active	US	13/564915	9319177	US-2013-0209720-A1	
11878	METHODS AND DEVICES FOR CONTROLLING RECEIVE CONFIGURATIONS IN WIRELESS COMMUNICATIONS			CNT	PAT-Active	US	15/067260	#####	US-2017-0305692-A1	
11879	DEVICE FOR PROVIDING A DIFFERENTIAL OUTPUT SIGNAL AND METHOD FOR PROVIDING A DIFFERENTIAL OUTPUT SIGNAL			NP	PAT-Active	US	13/837986	9246727	US-2013-0251052-A1	
11880	COMMUNICATION NETWORK DEVICES BASE STATION AND WIRELESS COMMUNICATION DEVICE			NP	PAT-Active	US	13/472564	9078124	US-2013-0310996-A1	
11881	COMMUNICATION NETWORK DEVICE COMMUNICATION RESOURCE ALLOCATION AND METHOD FOR COMMUNICATION RESOURCE ALLOCATION			NP	PAT-Active	US	13/484350	9071976	US-2013-0324174-A1	
11882	RADIO COMMUNICATION DEVICES AND METHODS FOR CONTROLLING A RADIO COMMUNICATION DEVICE			NP	PAT-Active	US	13/707688	9084123	US-2014-0162567-A1	
11883	METHOD AND APPARATUS FOR ITERATIVELY CALCULATING A VALUE			NP	PAT-Active	US	13/709450	9354844	US-2014-0164461-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
11884	DIFFERENTIAL DELAY LINE RING OSCILLATOR AND MOBILE COMMUNICATION DEVICE			NP	PAT-Active	US	13/631176	8797079	US-2014-0981847-A1	
11885	ANTENNA SYSTEM METHOD AND MOBILE COMMUNICATION DEVICE			NP	PAT-Active	US	13/570327	8884835	US-2014-0943201-A1	
11886	Push-Pull Amplifier and Differential Push-Pull Amplifier			NP	PAT-Active	US	13/617386	8947685	US-2014-0077873-A1	
11887	RADIO COMMUNICATION DEVICES AND METHODS FOR CONTROLLING A RADIO COMMUNICATION DEVICE			NP	PAT-Active	US	13/776804	9158771	US-2014-0342987-A1	
11888	DETERMINATION OF A NOISE AND INTERFERENCE COVARIANCE MEASURE			NP	PAT-Active	US	13/707738	9276729	US-2014-0160949-A1	
11889	METHOD AND DEVICE FOR CONTROLLING A TRANSMIT POWER IN A USER EQUIPMENT			NP	PAT-Active	US	13/658004	9338751	US-2014-0113675-A1	
11890	DEVICE SYSTEM AND METHOD OF COMMUNICATING VIA A DUAL DIRECTIONAL ANTENNA			NP	PAT-Active	US	13/528897	9058502	US-2013-0344907-A1	
11891	DEVICE SYSTEM AND METHOD OF COMMUNICATING VIA A DUAL DIRECTIONAL ANTENNA			CNT	PAT-Active	US	14/718367	9225034	US-2015-0255852-A1	
11892	METHODS AND SYSTEMS TO MITIGATE IMPULSE INTERFERENCE			NP	PAT-Active	US	13/661817	8925871	US-2014-0115820-A1	
11893	AUTOMATIC FREQUENCY CONTROL			PCT	PAT-Active	US	14/233352	9680485	US-2016-0142064-A1	
11894	SYSTEMS AND METHODS FOR PROCESSING ENCODED DATA STREAMS			NP	PAT-Active	US	13/488887	9432489	US-2013-0326080-A1	
11895	PLUG-AND-PLAY TIME-VARIANT ANTENNA MODULE FOR WIRELESS COMMUNICATION DEVICES			CNT	PAT-Active	US	14/629244	9444511	US-2015-0172915-A1	
11896	TIME-VARIANT ANTENNA MODULE FOR WIRELESS COMMUNICATION DEVICES			CNT	PAT-Active	US	15/236050	9947994	US-2017-0040874-A1	
11897	TIME-VARIANT ANTENNA MODULE FOR WIRELESS COMMUNICATION DEVICES			CNT	APP-Pending	US	15/912937		US-2018-0261808-A1	
11898	PASSIVE RADIO LINK CONTROL ENTITY WITH UNIFIED INTERFACE			PCT	PAT-Active	US	13/985708	9247452	US-2014-0386267-A1	
11899	METHOD AND APPARATUS FOR MODIFYING A COMPLEX-VALUED SIGNAL AND MOBILE COMMUNICATION DEVICE			NP	PAT-Active	US	13/763760	8923434	US-2014-0226756-A1	
11900	SIGNAL DELAY ESTIMATOR WITH ABSOLUTE DELAY AMOUNT AND DIRECTION ESTIMATION			NP	PAT-Active	US	13/727908	8781049	US-2014-0185723-A1	
11901	SIGNAL DELAY ESTIMATOR WITH ABSOLUTE DELAY AMOUNT AND DIRECTION ESTIMATION			CNT	PAT-Active	US	14/312074	9106402	US-2014-0303514-A1	
11902	COMMUNICATION STATE TRANSITIONING CONTROL			NP	PAT-Active	US	13/528492	9007972	US-2013-0003577-A1	
11903	COMMUNICATION STATE TRANSITIONING CONTROL			CNT	APP-Pending	US	14/231487		US-2014-0211679-A1	
11904	NETWORK VETTING OF WIRELESS MOBILE DEVICE INITIATED DISCONNECT			NP	PAT-Active	US	13/592621	9210950	US-2013-0293120-A1	
11905	USER EQUIPMENT AND METHOD FOR APPLICATION AGNOSTIC DISCONTINUOUS RECEPTION (DRX) TRIGGERING			PCT	PAT-Active	US	13/993023	9549243	US-2014-0105087-A1	
11906	SUPPORT FOR ASYNCHRONOUS TIME DIVISION DUPLEXING IN ADJACENT CELLS OF A WIRELESS COMMUNICATION SYSTEM			PCT	PAT-Active	US	13/994744	9820250	US-2014-0003270-A1	
11907	SCHEDULING REQUESTS FOR WIRELESS COMMUNICATION DEVICES RUNNING BACKGROUND APPLICATIONS			NP	PAT-Active	US	13/568508	9439208	US-2013-0115890-A1	
11908	TECHNIQUES AND CONFIGURATIONS FOR TRIGGERING A PLURALITY OF WIRELESS DEVICES			NP	PAT-Active	US	13/610772	9241351	US-2013-0115993-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
11909	MOBILE PROXY FOR CLOUD RADIO ACCESS NETWORK			NP	PAT-Active	US	13/587759	8817733	US-2014-0956103-A1	
11910	EXTENDED ACCESS BARRING (EAB) SIGNALING FOR A CORE NETWORK (CN) AND NODE			NP	PAT-Active	US	13/591552	9948166	US-2013-0215742-A1	
11911	OPPORTUNISTIC DEVICE-TO-DEVICE COMMUNICATION			NP	PAT-Active	US	13/563583	8992855	US-2013-0034082-A1	
11912	OPPORTUNISTIC DEVICE-TO-DEVICE COMMUNICATION			CNT	PAT-Active	US	14/335338	9351209	US-2014-0328287-A1	
11913	USER EQUIPMENT AND METHOD FOR ADAPTIVE SELECTION OF HANDOVER PARAMETERS IN WIRELESS-ACCESS NETWORKS			NP	PAT-Active	US	13/569443	8818376	US-2013-0196664-A1	
11914	TECHNIQUES FOR IMPROVED ENERGY-SAVINGS MANAGEMENT			NP	PAT-Active	US	13/627288	###8888	US-2013-0258923-A1	
11915	USER EQUIPMENT AND METHOD FOR DISCONTINUOUS RECEPTION (DRX) MODE IN WIRELESS COMMUNICATION NETWORKS			NP	PAT-Active	US	13/626408	9225759	US-2013-0194981-A1	
11916	HARQ/ACK CODEBOOK SIZE DETERMINATION			NP	PAT-Active	US	13/593044	8885526	US-2013-0242816-A1	
11917	HARQ/ACK CODEBOOK SIZE DETERMINATION			CNT	PAT-Active	US	14/314296	8258805	US-2014-0307596-A1	
11918	ENHANCED PHYSICAL DOWNLINK CONTROL CHANNEL (ePDCCH) INTER-CELL INTERFERENCE COORDINATION (ICIC)			NP	PAT-Active	US	13/591573	9398572	US-2013-0242885-A1	
11919	ENHANCED PHYSICAL DOWNLINK CONTROL CHANNEL (ePDCCH) WITH PHYSICAL RESOURCE BLOCK (PRB) BUNDLING			NP	PAT-Active	US	13/591865	9655086	US-2013-0242886-A1	
11920	Enhanced physical downlink control channel (ePDCCH)			NP	PAT-Active	US	13/598320	9226278	US-2013-0242770-A1	
11921	DOWNLINK CONTROL INFORMATION (DCI) VALIDATION FOR ENHANCED PHYSICAL DOWNLINK CONTROL CHANNEL (ePDCCH)			CIP	PAT-Active	US	13/646223	9544876	US-2013-0242947-A1	
11922	SUPPORT FOR ASYNCHRONOUS ADAPTATION TO UPLINK AND DOWNLINK TRAFFIC DEMANDS FOR WIRELESS COMMUNICATION			NP	PAT-Active	US	13/592588	9288797	US-2013-0242812-A1	
11923	SUPPORT FOR ASYNCHRONOUS ADAPTATION TO UPLINK AND DOWNLINK TRAFFIC DEMANDS FOR WIRELESS COMMUNICATION			CNT	PAT-Active	US	15/014770	9615378	US-2016-0164856-A1	
11924	TECHNIQUES FOR FRACTIONAL WIRELESS BROADBAND USAGE			NP	PAT-Active	US	13/627343	9397899	US-2014-0086103-A1	
11925	INTRA-QCI SCHEDULER AND METHOD FOR INTRA-QCI SCHEDULING IN A WIRELESS ACCESS NETWORK			CNT	APP-Pending	US	15/164985		US-2016-0270104-A1	
11926	RANDOM ACCESS CHANNEL ENHANCEMENTS FOR LTE DEVICES			NP	PAT-Active	US	13/629828	9215701	US-2013-0242735-A1	
11927	METHOD AND APPARATUS FOR COORDINATION OF SELF-OPTIMIZATION FUNCTIONS IN A WIRELESS NETWORK			NP	PAT-Active	US	13/570941	9526091	US-2013-0242720-A1	
11928	METHOD AND APPARATUS FOR COORDINATION OF SELF-OPTIMIZATION FUNCTIONS IN A WIRELESS NETWORK			CNT	PAT-Active	US	14/165311	9516628	US-2014-0160278-A1	
11929	UPLINK CONTROL CHANNEL RESOURCE MAPPING FOR AN ENHANCED PDCCH IN LTE SYSTEMS			NP	PAT-Active	US	13/629546	8989118	US-2013-0242817-A1	
11930	USER EQUIPMENT AND METHOD FOR REDUCING DELAY IN A RADIO ACCESS NETWORK			CNT	PAT-Active	US	14/536111	9326276	US-2015-0063104-A1	
11931	MULTICAST BROADCAST MULTIMEDIA SERVICE-ASSISTED CONTENT DISTRIBUTION			NP	PAT-Active	US	13/626661	8793743	US-2013-0247118-A1	
11932	MULTICAST BROADCAST MULTIMEDIA SERVICE-ASSISTED CONTENT DISTRIBUTION			CNT	PAT-Active	US	14/318435	9432978	US-2014-0376440-A1	
11933	MULTICAST BROADCAST MULTIMEDIA SERVICE-ASSISTED CONTENT DISTRIBUTION			CNT	PAT-Active	US	15/216993	###8888	US-2017-0019263-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
11934	PHYSICAL UPLINK SHARED CHANNEL (PUSCH) TRANSMISSION TIME INTERVAL (TTI) BUNDLING			NP	PAT-Active	US	13/620093	8817734	US-2013-0242889-A1	
11935	TECHNIQUES FOR TIMERS ASSOCIATED WITH POWERING RECEIVER CIRCUITRY AT A WIRELESS DEVICE			NP	PAT-Active	US	13/629582	8923323	US-2013-0242818-A1	
11936	RF CHAIN USAGE IN A DUAL NETWORK ARCHITECTURE			NP	PAT-Active	US	13/631341	9271278	US-2013-0244656-A1	
11937	DISCOVERY AND OPERATION OF HYBRID WIRELESS WIDE AREA AND WIRELESS LOCAL AREA NETWORKS			NP	PAT-Active	US	13/631037	8917708	US-2014-0092885-A1	
11938	DISCOVERY AND OPERATION OF HYBRID WIRELESS WIDE AREA AND WIRELESS LOCAL AREA NETWORKS			CNT	PAT-Active	US	14/579131	9386617	US-2015-0110052-A1	
11939	METHOD AND APPARATUS FOR POWER CONTROL IN FULL-DUPLEX WIRELESS SYSTEMS WITH SIMULTANEOUS TRANSMISSION/RECEPTION			NP	PAT-Active	US	13/623294	8861443	US-2014-0078830-A1	
11940	ENHANCEMENTS TO WIRELESS NETWORKS TO SUPPORT SHORT MESSAGE SERVICE (SMS) COMMUNICATION IN THE PACKET SWITCHED DOMAIN			NP	PAT-Active	US	13/631378	9641297	US-2013-0265938-A1	
11941	ENHANCEMENTS TO WIRELESS NETWORKS TO SUPPORT SHORT MESSAGE SERVICE (SMS) COMMUNICATION IN THE PACKET SWITCHED DOMAIN			CNT	PAT-Active	US	14/259423	9634830	US-2014-0235283-A1	
11942	ENHANCEMENTS TO WIRELESS NETWORKS TO SUPPORT SHORT MESSAGE SERVICE (SMS) COMMUNICATION IN THE PACKET SWITCHED DOMAIN			CNT	PAT-Active	US	15/460152	8954416	US-2017-0188210-A1	
11943	FRAME STRUCTURE DESIGN FOR NEW CARRIER TYPE (NCT)			NP	PAT-Active	US	13/628129	9078109	US-2013-0265945-A1	
11944	FRAME STRUCTURE DESIGN FOR NEW CARRIER TYPE (NCT)			CNT	PAT-Active	US	14/725550	9712502	US-2015-0263839-A1	
11945	SIGNALING THREE-DIMENSIONAL VIDEO INFORMATION IN COMMUNICATION NETWORKS			NP	PAT-Active	US	13/626767	9584793	US-2013-0266289-A1	
11946	SIGNALING THREE-DIMENSIONAL VIDEO INFORMATION IN COMMUNICATION NETWORKS			CNT	PAT-Active	US	14/581756	9787967	US-2015-0113572-A1	
11947	SIGNALING THREE-DIMENSIONAL VIDEO INFORMATION IN COMMUNICATION NETWORKS			CNT	PAT-Active	US	15/693682	#####	US-2017-0353709-A1	
11948	QUALITY OF EXPERIENCE REPORTING FOR COMBINED UNICAST-MULTICAST/BROADCAST STREAMING OF MEDIA CONTENT			NP	PAT-Active	US	13/628340	9438883	US-2013-0268577-A1	
11949	QUALITY OF EXPERIENCE REPORTING FOR COMBINED UNICAST-MULTICAST/BROADCAST STREAMING OF MEDIA CONTENT			CNT	PAT-Active	US	14/053495	9161013	US-2014-0047123-A1	
11950	QUALITY OF EXPERIENCE REPORTING FOR COMBINED UNICAST-MULTICAST/BROADCAST STREAMING OF MEDIA CONTENT			DIV	PAT-Active	US	15/220256	#####	US-2016-0337676-A1	
11951	DYNAMIC RX/DIV FOR IDLE MODE IN A USER EQUIPMENT			NP	PAT-Active	US	13/423719	9144020	US-2013-0244665-A1	
11952	DYNAMIC RX/DIV FOR IDLE MODE IN A USER EQUIPMENT			CNT	PAT-Active	US	14/808421	9883456	US-2016-0329306-A1	
11953	SWITCHED MODE POWER SUPPLY AND A METHOD FOR OPERATING A SWITCHED MODE POWER SUPPLY			NP	PAT-Active	US	13/495067	9048730	US-2013-0335013-A1	
11954	SWITCHED-MODE POWER SUPPLY AND A TWO-PHASE DC TO DC CONVERTER HAVING SWITCHES AND A FILTER THAT DELIVER CURRENT FROM A NODE AMONG CONVERTER STAGES			NP	PAT-Active	US	13/495089	9118241	US-2013-0336012-A1	
11955	SWITCHED-MODE POWER SUPPLY EMPLOYING FIRST AND SECOND FEEDBACK SIGNALS AND A METHOD OF OPERATING THEREOF			NP	PAT-Active	US	13/495108	9035627	US-2013-0335048-A1	
11956	RADIO COMMUNICATION DEVICES AND METHODS FOR CONTROLLING A RADIO COMMUNICATION DEVICE			NP	PAT-Active	US	13/674123	9332452	US-2013-0324050-A1	
11957	COMMUNICATION DEVICES AND METHODS FOR OPERATING A COMMUNICATION DEVICE			NP	PAT-Active	US	13/803023	9954904	US-2013-0332615-A1	
11958	COMMUNICATION DEVICES AND METHODS FOR OPERATING A COMMUNICATION DEVICE			CNT	APP-Pending	US	15/919051		US-2018-0205768-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
11359	DEVICE FOR GENERATING A VECTOR-MODULATED OUTPUT SIGNAL AND METHOD FOR GENERATING A VECTOR-MODULATED OUTPUT SIGNAL			NP	PAT-Active	US	13/834736	9225565	US-2013-0239152-A1	
11360	DEVICE FOR GENERATING A VECTOR-MODULATED OUTPUT SIGNAL AND METHOD FOR GENERATING A VECTOR-MODULATED OUTPUT SIGNAL			CNT	PAT-Active	US	14/942336	9444666	US-2016-0142234-A1	
11361	MOBILE WIRELESS DEVICES AND METHODS OF OPERATION			NP	PAT-Active	US	13/688244	9072070	US-2014-0148178-A1	
11362	RADIO COMMUNICATION DEVICES AND METHODS FOR CONTROLLING A RADIO COMMUNICATION DEVICE			NP	PAT-Active	US	13/762408	9420475	US-2014-0226560-A1	
11363	CELL TRANSFER CONTROLLER AND METHOD FOR SELECTING A RADIO CELL			NP	PAT-Active	US	13/671639	8892106	US-2014-0126083-A1	
11364	METHODS AND ARRANGEMENTS FOR HIGH-SPEED ANALOG-TO-DIGITAL CONVERSION			NP	PAT-Active	US	13/631949	8754800	US-2014-0091960-A1	
11365	QoS-AWARE RADIO ACCESS NETWORK ARCHITECTURE FOR HTTP-BASED VIDEO STREAMING			NP	PAT-Active	US	13/688423	9246842	US-2013-0285868-A1	
11366	APPARATUS AND METHOD TO ENABLE DEVICE-TO-DEVICE (D2D) DISCOVERY IN CELLULAR NETWORKS			NP	PAT-Active	US	13/756013	9325485	US-2013-0273923-A1	
11367	EVOLVED NODE B USER EQUIPMENT AND METHOD FOR OPERATION OF NARROW BANDWIDTH USER EQUIPMENT IN WIDE BANDWIDTH BROADBAND NETWORKS			NP	PAT-Active	US	13/682950	9232437	US-2013-0272215-A1	
11368	ADAPTIVE UL-DL TDD CONFIGURATIONS IN A HETEROGENEOUS NETWORK			NP	PAT-Active	US	13/734355	9119097	US-2013-0272170-A1	
11369	ADAPTIVE UL-DL TDD CONFIGURATIONS IN A HETEROGENEOUS NETWORK			CNT	PAT-Active	US	14/823818	9736861	US-2015-0349842-A1	
11370	ADAPTIVE UL-DL TDD CONFIGURATIONS IN A HETEROGENEOUS NETWORK			CNT	PAT-Active	US	15/643237	#####	US-2017-0311350-A1	
11371	SMALL DATA COMMUNICATIONS IN A WIRELESS COMMUNICATION NETWORK			CNT	PAT-Active	US	14/794731	9814070	US-2015-0327301-A1	
11372	USER EQUIPMENT AND METHODS FOR HANDOVER ENHANCEMENT USING REFERENCE SIGNAL RECEIVED QUALITY (RSRQ)			NP	PAT-Active	US	13/631213	9130688	US-2013-0303231-A1	
11373	USER EQUIPMENT AND METHODS FOR HANDOVER ENHANCEMENT USING REFERENCE SIGNAL RECEIVED QUALITY (RSRQ)			CNT	PAT-Active	US	14/800130	9496973	US-2016-0314862-A1	
11374	METHOD SYSTEM AND APPARATUS OF TIME-DIVISION-DUPLEX (TDD) UPLINK-DOWNLINK (UL-DL) CONFIGURATION MANAGEMENT			NP	PAT-Active	US	13/681508	8982741	US-2013-0301489-A1	
11375	METHOD SYSTEM AND APPARATUS OF TIME-DIVISION-DUPLEX (TDD) UPLINK-DOWNLINK (UL-DL) CONFIGURATION MANAGEMENT			CNT	PAT-Active	US	14/532370	9673928	US-2015-0055524-A1	
11376	METHOD SYSTEM AND APPARATUS OF TIME-DIVISION-DUPLEX (TDD) UPLINK-DOWNLINK (UL-DL) CONFIGURATION MANAGEMENT			CNT	PAT-Active	US	15/614189	#####	US-2018-0063792-A1	
11377	SIGNAL INTERFERENCE MEASUREMENTS IN A WIRELESS COMMUNICATION NETWORK			NP	PAT-Active	US	13/681315	8854981	US-2013-0286867-A1	
11378	INTRACELL DEVICE-TO-DEVICE COMMUNICATION CONTROL			NP	PAT-Active	US	14/588090	9572186	US-2016-0192418-A1	
11379	SCHEDULING SYNCHRONIZATION SIGNALS IN A NEW CARRIER TYPE			CNT	PAT-Active	US	14/887103	#####	US-2016-0044615-A1	
11380	SCHEDULING AND HYBRID AUTOMATIC REPEAT REQUEST (HARQ) TIMING INDICATION FOR AN UPLINK-DOWNLINK (UL-DL) RECONFIGURATION			NP	PAT-Active	US	13/741776	9014064	US-2013-0301490-A1	
11381	USER EQUIPMENT POWER SAVINGS FOR MACHINE TYPE COMMUNICATIONS			NP	PAT-Active	US	13/718334	9407391	US-2013-0301499-A1	
11382	COORDINATED DYNAMIC POINT SELECTION (DPS) WITH CELL RANGE EXPANSION IN A COORDINATED MULTIPOINT (CoMP) SYSTEM			NP	PAT-Active	US	13/725370	9231729	US-2013-0303167-A1	
11383	RADIO COEXISTENCE IN WIRELESS NETWORKS			NP	PAT-Active	US	13/756563	9681362	US-2013-0301420-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
11984	PERFORMING A HANDOVER IN A HETEROGENEOUS WIRELESS NETWORK			NP	PAT-Active	US	13/756665	9225449	US-2013-0301439-A1	
11985	PACKET DATA NETWORK CONNECTIONS FOR MULTI PRIORITY WIRELESS DEVICES			NP	PAT-Active	US	13/729568	9294213	US-2013-0301547-A1	
11986	DETERMINING PROXIMITY OF USER EQUIPMENT FOR DEVICE-TO-DEVICE COMMUNICATION			NP	PAT-Active	US	13/681361	8874103	US-2013-0303160-A1	
11987	DETERMINING PROXIMITY OF USER EQUIPMENT FOR DEVICE-TO-DEVICE COMMUNICATION			CNT	PAT-Active	US	14/525100	9270400	US-2015-0045060-A1	
11988	MULTI-ACCESS SCHEME AND SIGNAL STRUCTURE FOR D2D COMMUNICATIONS			NP	PAT-Active	US	13/729164	9661658	US-2013-0272262-A1	
11989	USER EQUIPMENT CONFIGURED TO PROVIDE SYNCHRONIZATION INFORMATION FOR SIDELINK D2D COMMUNICATIONS USING ALLOCATED RESOURCE UNITS			CNT	PAT-Active	US	15/261439	8936521	US-2016-0381708-A1	
11990	USER EQUIPMENT CONFIGURED TO PROVIDE SYNCHRONIZATION INFORMATION FOR SIDELINK D2D COMMUNICATIONS USING ALLOCATED RESOURCE UNITS			CNT	PAT-Active	US	15/290580	#####	US-2016-0167974-A1	
11991	D2D CONNECTION RECOVERY SCHEMES			NP	PAT-Active	US	13/751252	9066256	US-2013-0272182-A1	
11992	EXCHANGING CONFIGURATION DATA			NP	PAT-Active	US	13/681370	9345024	US-2013-0272181-A1	
11993	INTERFERENCE NOTIFICATION IN DEVICE-TO-DEVICE COMMUNICATION			NP	PAT-Active	US	13/665715	8942173	US-2013-0272196-A1	
11994	ADAPTIVE UL-DL CONFIGURATIONS IN A TDD HETEROGENEOUS NETWORK			NP	PAT-Active	US	13/688437	9185620	US-2013-0322235-A1	
11995	DUAL-BAND FOLDED META-INSPIRED ANTENNA WITH USER EQUIPMENT EMBEDDED WIDEBAND CHARACTERISTICS			NP	PAT-Active	US	13/692186	9287630	US-2014-0152518-A1	
11996	TRANSMISSION POWER CONTROL SCHEMES FOR D2D COMMUNICATIONS			NP	PAT-Active	US	13/743652	9030984	US-2014-0196694-A1	
11997	HANDLING SIGNAL QUALITY MEASUREMENTS IN A WIRELESS COMMUNICATION NETWORK			PCT	PAT-Active	US	13/996699	9286098	US-2015-0146545-A1	
11998	HANDLING SIGNAL QUALITY MEASUREMENTS IN A WIRELESS COMMUNICATION NETWORK			CNT	PAT-Active	US	15/001013	#####	US-2016-0135071-A1	
11999	HANDLING SIGNAL QUALITY MEASUREMENTS IN A WIRELESS COMMUNICATION NETWORK			CNT	APP-Pending	US	16/038956		US-2018-0324615-A1	
12000	PUCCH RESOURCE ALLOCATION WITH ENHANCED PDCCH			NP	PAT-Active	US	13/673791	8743820	US-2013-0322352-A1	
12001	PUCCH RESOURCE ALLOCATION WITH ENHANCED PDCCH			CNT	PAT-Active	US	14/257709	9072088	US-2014-0241278-A1	
12002	PUCCH RESOURCE ALLOCATION WITH ENHANCED PDCCH			CNT	PAT-Active	US	14/711441	9743387	US-2015-0257143-A1	
12003	PUCCH RESOURCE ALLOCATION WITH ENHANCED PDCCH			CNT	PAT-Active	US	15/645162	#####	US-2017-0311396-A1	
12004	METHOD SYSTEM AND APPARATUS OF WIRELESS LOCAL AREA NETWORK (WLAN) COMMUNICATION IN CONJUNCTION WITH CELLULAR COMMUNICATION			NP	PAT-Active	US	13/681541	8988999	US-2013-0322238-A1	
12005	METHOD SYSTEM AND APPARATUS OF WIRELESS LOCAL AREA NETWORK (WLAN) COMMUNICATION IN CONJUNCTION WITH CELLULAR COMMUNICATION			CNT	PAT-Active	US	14/583143	9883421	US-2015-0189549-A1	
12006	METHOD SYSTEM AND APPARATUS OF WIRELESS LOCAL AREA NETWORK (WLAN) COMMUNICATION IN CONJUNCTION WITH CELLULAR COMMUNICATION			CNT	PAT-Active	US	15/846581	#####	US-2018-0192326-A1	
12007	METHOD SYSTEM AND APPARATUS OF WIRELESS LOCAL AREA NETWORK (WLAN) COMMUNICATION IN CONJUNCTION WITH CELLULAR COMMUNICATION			CNT	APP-Pending	US	16/515348			

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12008	DYNAMIC INTERFERENCE AVOIDANCE IN INTEGRATED MULTI-RADIO ACCESS TECHNOLOGIES (RAT) HETEROGENEOUS NETWORKS			NP	PAT-Active	US	13/753795	9198184	US-2014-0213310-A1	
12009	SUPPORTING MEASUREMENTS AND FEEDBACK FOR 3D MIMO WITH DATA TRANSMISSION OPTIMIZATION			NP	PAT-Active	US	13/728778	9225478	US-2014-0203240-A1	
12010	DEVICES AND METHODS FOR RADIO COMMUNICATION NETWORK GUIDED TRAFFIC OFFLOAD			NP	PAT-Active	US	13/687442	9203563	US-2014-0203239-A1	
12011	MECHANISMS FOR ROAMING BETWEEN 3GPP OPERATORS AND WLAN SERVICE PROVIDERS			NP	PAT-Active	US	13/665761	8417707	US-2014-0202059-A1	
12012	MECHANISMS FOR ROAMING BETWEEN 3GPP OPERATORS AND WLAN SERVICE PROVIDERS			CNT	PAT-Active	US	14/334097	9113402	US-2014-0348643-A1	
12013	MECHANISMS FOR ROAMING BETWEEN 3GPP OPERATORS AND WLAN SERVICE PROVIDERS			CNT	PAT-Active	US	14/794701	9402228	US-2015-0312747-A1	
12014	MECHANISMS FOR ROAMING BETWEEN 3GPP OPERATORS AND WLAN SERVICE PROVIDERS			CNT	PAT-Active	US	15/189958	9723547	US-2016-0302138-A1	
12015	MECHANISMS FOR ROAMING BETWEEN 3GPP OPERATORS AND WLAN SERVICE PROVIDERS			CNT	PAT-Active	US	15/633519	#####	US-2017-0295540-A1	
12016	SIMULTANEOUS TRANSMIT AND RECEIVE			PCT	PAT-Active	US	14/125253	8397795	US-2015-0304565-A1	
12017	TECHNIQUES FOR ROAMING BETWEEN HETEROGENEOUS WIRELESS NETWORKS			NP	PAT-Active	US	13/691215	9282456	US-2014-0132555-A1	
12018	SIMULTANEOUS TRANSMIT AND RECEIVE			PCT	PAT-Active	US	14/125256	9580772	US-2014-0301217-A1	
12019	APPARATUS SYSTEM AND METHOD OF SIMULTANEOUS CONNECTIVITY TO LOCATION ORIGIN TRANSCIEVERS			NP	PAT-Active	US	13/710952	9807815	US-2014-0161951-A1	
12020	LOCATION-AWARE MOBILE APPLICATION MANAGEMENT			CNT	APP-Pending	US	15/813182		US-2018-0167766-A1	
12021	LOCATION-AWARE MOBILE APPLICATION MANAGEMENT			DIV	APP-Pending	US	16/237776		US-2019-0141471-A1	
12022	COMMUNICATION DEVICE MOBILE TERMINAL METHOD FOR REQUESTING INFORMATION AND METHOD FOR PROVIDING INFORMATION			NP	PAT-Active	US	13/658840	8891896	US-2014-0113856-A1	
12023	Frequency-stabilized transceiver configuration			REL	PAT-Active	US	11/657379	8E41583		
12024	METHOD AND ARRANGEMENT FOR MINIMIZING THE AUTOCORRELATION ERROR IN THE DEMODULATION OF A SPREAD-SPECTRUM SIGNAL SUBJECT TO MULTIPATH PROPAGATION			NP	PAT-Closed	US	08/395304	6532255		
12025	METHOD AND CIRCUIT FOR COMPENSATION CONTROL OF OFFSET VOLTAGES OF A RADIO RECEIVING CIRCUIT INTEGRATED IN A CIRCUIT MODULE			CIP	PAT-Active	US	09/680050	6436593		
12026	Differential amplifier			NP	PAT-Active	US	05/606524	6373337		
12027	METHOD FOR ESTIMATING THE CHANNEL IMPULSE RESPONSE OF A MOBILE RADIO CHANNEL			CNT	PAT-Active	US	10/047614	6765951	US-2002-0150073-A1	
12028	Modulator-Demodulator			CNT	PAT-Active	US	10/078127	6486737	US-2002-0140514-A1	
12029	METHOD AND DEVICE FOR CHANNEL ENCODING IN AN INFORMATION TRANSFER SYSTEM			CNT	PAT-Active	US	10/112270	6885705	US-2002-0131392-A1	
12030	DIGITAL FILTER COMBINATION			PCT	PAT-Active	US	10/110423	6950643		
12031	Power Control During Inter-Generation Soft Handoffs			NP	PAT-Active	US	09/473777	6584087		
12032	Modulator circuit configuration			NP	PAT-Active	US	08/718895	6365666		
12033	Circuit configuration for the offset compensation of a signal			CNT	PAT-Active	US	10/174283	6944220	US-2002-0191720-A1	
12034	CIRCUIT CONFIGURATION FOR CONTROLLING NONLINEAR PATHS			NP	PAT-Active	US	08/809787	6515543	US-2001-0028190-A1	
12035	AMPLIFIER CIRCUIT WITH OFFSET COMPENSATION IN PARTICULAR FOR DIGITAL MODULATION DEVICES			NP	PAT-Active	US	08/853471	6719645	US-2001-0048344-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12036	Method and device for diversity transmission of coded information			ENT	PAT-Active	US	10/347540	7295625	US-2003-0135799-A1	
12037	ANALOG-TO-DIGITAL CONVERTER AND METHOD FOR CONVERTING AN ANALOG SIGNAL INTO A DIGITAL SIGNAL			PCT	PAT-Active	US	10/493711	6812880	US-2004-0061636-A1	
12038	Determination of a differential offset in a radio device and radio device			ENT	PAT-Active	US	10/352831	6973295	US-2003-0134604-A1	
12039	ANALOG-TO-DIGITAL CONVERTER WITH COMPLEMENTARY TRANSISTORS			NP	PAT-Active	US	09/943337	6580381	US-2002-0067298-A1	
12040	Telephone for connection to a public telephone network			ENT	PAT-Active	US	10/410861	6978159	US-2003-0179879-A1	
12041	DIGITAL/ANALOG CONVERTER			NP	PAT-Active	US	10/002334	6550785	US-2002-0121996-A1	
12042	Trimming method and trimming device for a pll circuit for two-point modulation			ENT	PAT-Active	US	10/646175	6933788	US-2004-0036539-A1	
12043	Receiver circuit in particular for a mobile radio			ENT	PAT-Active	US	10/384996	7336717	US-2003-0156863-A1	
12044	METHOD AND DEVICE FOR TRANSMITTING AND IDENTIFYING A MODULATION TYPE IN DIGITAL COMMUNICATION SYSTEMS BY WAY OF A PHASE ROTATION FACTOR APPLIED TO A TRAINING SEQUENCE			ENT	PAT-Active	US	10/706779	7313204	US-2004-0096012-A1	
12045	CIRCUIT CONFIGURATION FOR PRODUCING EXPONENTIAL PREDISTORTION FOR A VARIABLE AMPLIFIER			ENT	PAT-Active	US	10/639400	6788145	US-2004-0032298-A1	
12046	Demodulator and demodulation method for demodulating received signals			PCT	PAT-Active	US	10/488975	7317766	US-2005-0063490-A1	
12047	MOBILE STATION IN A MOBILE COMMUNICATION SYSTEM AND METHOD FOR ACCESSING A SERVICE AND/OR A DATA RECORD IN THE MOBILE STATIONS STANDBY MODE			PCT	PAT-Active	US	10/483561	7657287	US-2004-0248550-A1	
12048	Optimization of the operating point of power amplifiers in mobile stations			NP	PAT-Active	US	09/895595	7031677	US-2003-0003540-A1	
12049	Transmission Configuration in Particular for Mobile Radio Communication and Mobile Station with the Transmission Configuration			ENT	PAT-Active	US	10/705514	7308038	US-2004-0097250-A1	
12050	DEVICE AND METHOD FOR REGULATING THE OUTPUT POWER OF MOBILE			ENT	PAT-Active	US	10/715070	7418055	US-2004-0192207-A1	
12051	Interface for data transmission			ENT	PAT-Active	US	10/734441	7295619	US-2004-0141563-A1	
12052	TRANSMISSION ARRANGEMENT WITH POWER REGULATION			PCT	PAT-Active	US	10/482506	7277689	US-2004-0253996-A1	
12053	Transmitting arrangement for mobile radio			ENT	PAT-Active	US	10/797468	7499008	US-2004-0228421-A1	
12054	Transmission arrangement for transmitting data continuously in the time domain			ENT	PAT-Active	US	10/872815	7553272	US-2005-0032489-A1	
12055	DIGITAL/ANALOG CONVERTER CIRCUIT WITH A DEVICE FOR COMPENSATING NONLINEAR DISTORTIONS			ENT	PAT-Active	US	10/844072	6993872	US-2004-0212907-A1	
12056	Single Point Modulator Having a PLL Circuit			ENT	PAT-Active	US	10/917101	7453325	US-2005-0025276-A1	
12057	CLOCK CONTROL OF TRANSMISSION-SIGNAL PROCESSING DEVICES IN MOBILE RADIO TERMINAL DEVICES			PCT	PAT-Active	US	10/503547	8064559	US-2005-0201503-A1	
12058	Control system and method for operating a transceiver			ENT	PAT-Active	US	10/920150	8073439	US-2005-0085193-A1	
12059	Frequency conversion circuit arrangement and mobile radio comprising said circuit arrangement			ENT	PAT-Active	US	10/940114	7030667	US-2005-0107063-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12060	Method and device for controlling combined UMTS/GSM/EDGE radio systems			CNT	PAT-Active	US	11/423911	7515932	US-2006-0217139-A1	
12061	Mobile radio receiver device			CNT	PAT-Active	US	11/020747	7356324	US-2005-0170805-A1	
12062	Transmitting and receiving arrangement with a channel-oriented link			CNT	PAT-Active	US	12/687021	8189694	US-2010-0165868-A1	
12063	Transmitting and receiving arrangement with a channel-oriented link			PCI	PAT-Active	US	10/514332	7711056	US-2006-0235362-A1	
12064	METHOD AND DEVICE FOR CARRYING OUT A PLURALITY OF CORRELATION PROCEDURES IN A MOBILE TELEPHONY ENVIRONMENT			CNT	PAT-Active	US	11/075848	7522655	US-2005-0207479-A1	
12065	Method and device for passing parameters to a rake receiver			CNT	PAT-Active	US	11/045651	7675963	US-2005-0207472-A1	
12066	CIRCUIT ARRANGEMENT WITH RADIO-FREQUENCY MIXER AND RECEIVER ARRANGEMENT WITH THE CIRCUIT ARRANGEMENT			DIV	PAT-Active	US	12/852445	8521118	US-2010-0323649-A1	
12067	Reception arrangement with preamplifier circuit			CNT	PAT-Active	US	11/066533	7643814	US-2005-0192087-A1	
12068	Transmission arrangement particularly for mobile radio			CNT	PAT-Active	US	11/046510	7415077	US-2005-0186856-A1	
12069	Methods and Apparatuses for Detecting the TX Diversity Mode for Mobile Radio Receivers			CNT	PAT-Active	US	11/119483	7542726	US-2005-0260950-A1	
12070	Estimation of asymmetries between inphase and quadrature branches in multicarrier transmission systems			CNT	PAT-Active	US	11/075268	7523306	US-2005-0180518-A1	
12071	Method and device for correcting signal distortions in an amplifier device			PCI	PAT-Active	US	10/536653	7355472	US-2007-0006031-A1	
12072	Integrated transceiver circuit with low interference production and sensitivity			NP	PAT-Active	US	10/822544	7398074	US-2004-0229574-A1	
12073	Method and apparatus for correlative estimation of a mobile radio channel			NP	PAT-Active	US	10/833579	7310395	US-2004-0218703-A1	
12074	Channel qualification for an adaptive frequency hopping method by means of bit or packet error rate measurement and simultaneous field strength measurement			NP	PAT-Active	US	10/832685	7529288	US-2004-0258137-A1	
12075	CHANNEL QUALIFICATION FOR AN ADAPTIVE FREQUENCY HOPPING METHOD BY MEANS OF BIT OR PACKET ERROR RATE MEASUREMENT AND SIMULTANEOUS FIELD STRENGTH MEASUREMENT			CNT	PAT-Active	US	12/416203	8537877	US-2009-0185601-A1	
12076	CIRCUIT ARRANGEMENT AND METHOD FOR REDUCING AN ALIGNMENT ERROR IN A SIGMA-DELTA MODULATOR			NP	PAT-Active	US	10/869704	6927718	US-2005-0307472-A1	
12077	Method and device for calculating zero-crossing reference sequences for signal detection of angle-modulated signals based on zero crossings of the received signal			CNT	PAT-Active	US	11/373463	7564926	US-2006-0222107-A1	
12078	Determination and selection of transmission paths as a function of the operating situation for setting up rake fingers for rake receiver units in mobile communication terminals			NP	PAT-Active	US	10/957408	7508862	US-2005-0111526-A1	
12079	Method for prediction of a channel coefficient			NP	PAT-Active	US	10/974322	7577196	US-2005-0118955-A1	
12080	Method for converting an analog input signal and analog-to-digital converter			CNT	PAT-Active	US	11/352803	7280065	US-2006-0187104-A1	
12081	Method and apparatus for identification of transmission antenna diversity in a receiver			NP	PAT-Active	US	10/965341	8102957	US-2005-0123082-A1	
12082	Method and circuit arrangement for determining a charge consumed within a period in mobile devices			CNT	PAT-Active	US	11/371828	8068885	US-2006-0252467-A1	
12083	Devices with reciprocal wake-up function from the standby mode			NP	PAT-Active	US	10/925565	7408567	US-2005-0085550-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12084	Signal conditioning circuit			NP	PAT-Active	US	10/947963	7439667	US-2005-0113056-A1	
12085	METHOD AND ARRANGEMENT FOR DETECTING A COLLISION IN A COMMUNICATION NETWORK			NP	PAT-Active	US	10/868408	7434143	US-2005-0034011-A1	
12086	Method and apparatus for adapting threshold values in electronic signal processing devices			NP	PAT-Active	US	10/970905	7720648	US-2005-0117666-A1	
12087	Apparatus for Production of Scrambling Codes and Preambles			NP	PAT-Active	US	11/014174	7489722	US-2005-0152265-A1	
12088	Transmission/reception arrangement and method for reducing nonlinearities in output signals from a transmission/reception arrangement			NP	PAT-Active	US	11/049258	7539268	US-2006-0034356-A1	
12089	EFFICIENT SOFTWARE DOWNLOAD TO CONFIGURABLE COMMUNICATION DEVICE			CNT	PAT-Active	US	11/675313	7870233	US-2007-0168477-A1	
12090	Efficient Software Download to Configurable Communication Device			DIV	PAT-Active	US	12/908613	8078708	US-2011-0035475-A1	
12091	CONFIGURABLE ALL-DIGITAL COHERENT DEMODULATOR SYSTEM FOR SPREAD SPECTRUM APPLICATIONS			DIV	PAT-Active	US	12/708847	8204161	US-2010-0168396-A1	
12092	CONFIGURABLE CODE GENERATOR SYSTEM FOR SPREAD SPECTRUM APPLICATIONS			NP	PAT-Active	US	09/751782	6567017	US-2001-0048380-A1	
12093	GENERIC FINGER ARCHITECTURE FOR SPREAD SPECTRUM APPLICATIONS			NP	PAT-Active	US	09/920094	6458893	US-2002-0018518-A1	
12094	APPARATUS AND METHOD FOR A PROGRAMMABLE SECURITY PROCESSOR			DIV	PAT-Active	US	11/435010	7996684	US-2006-0206726-A1	
12095	APPARATUS AND METHOD FOR CONTROLLING A THREE-STATE BUS			NP	PAT-Active	US	09/565553	6686767		
12096	FLEXIBLE PREAMBLE PROCESSING FOR DETECTING A CODE SEQUENCE			NP	PAT-Active	US	09/927406	6694496	US-2002-0016949-A1	
12097	Power amplifier arrangement having two or more antennas coupling respective amplifiers to a supply potential			NP	PAT-Active	US	11/029853	7548732	US-2006-0181751-A1	
12098	Interleaving Circuit for a Multiband OFDM Transceiver			NP	PAT-Active	US	10/987191	7376117	US-2006-0152327-A1	
12099	Device for transmitting data between memories			CNT	PAT-Active	US	11/460888	7631153	US-2007-0028030-A1	
12100	Measuring circuit for the output of a power amplifier and a power amplifier comprising the measuring circuit			CNT	PAT-Active	US	11/534938	7345586	US-2007-0105042-A1	
12101	Method and apparatus for adaptive activation or deactivation of the coordination of the radio activities of two mobile-radio transmitting and/or receiving devices			CNT	PAT-Active	US	11/532666	7697897	US-2007-0006127-A1	
12102	METHOD AND APPARATUS FOR ADAPTIVE ACTIVATION OR DEACTIVATION OF THE COORDINATION OF THE RADIO ACTIVITIES OF TWO MOBILE-RADIO TRANSMITTING AND/OR RECEIVING DEVICES			CNT	PAT-Active	US	12/582681	7945211	US-2010-0040121-A1	
12103	Computer system for electronic data processing			PCT	PAT-Active	US	10/992925	8145822	US-2009-0235047-A1	
12104	Phase locked loop and method for phase correction of a frequency controllable oscillator			NP	PAT-Active	US	11/088039	7391276	US-2006-0082417-A1	
12105	Transmitting arrangement receiving arrangement transceiver and method for operation of a transmitting arrangement			NP	PAT-Active	US	11/193951	7502598	US-2005-0277399-A1	
12106	Device for processing radio transmission data with digital predistortion			NP	PAT-Active	US	11/112057	8155238	US-2005-0249309-A1	
12107	Transceiver with interference signal rejection and method for interference signal rejection			NP	PAT-Active	US	11/309514	7412217	US-2005-0245216-A1	
12108	TRANSCIVER CIRCUIT AND METHOD FOR PROVIDING LOCAL OSCILLATOR SIGNALS IN A TRANSCIVER CIRCUIT			NP	PAT-Active	US	11/101946	7684768	US-2005-0038417-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12109	DUAL CARRIER MODULATOR FOR A MULTIBAND OFDM UWB TRANSCIVER			NP	PAT-Active	US	11/040475	7512185	US-2005-0195765-A1	
12110	POWER REGULATION IN RADIO-FREQUENCY TRANSMITTERS			GP	PAT-Active	US	11/594567	9648572	US-2007-0109863-A1	
12111	CIRCUIT ARRANGEMENT RECEIVING DIFFERENT SUPPLY VOLTAGES			NP	PAT-Active	US	11/249810	7279943	US-2006-0382396-A1	
12112	Transmitting and receiving arrangement with interference signal suppression control			NP	PAT-Active	US	11/129990	7305216	US-2005-0266819-A1	
12113	Amplifier arrangement having an adjustable gain and use thereof			NP	PAT-Active	US	11/240686	7397307	US-2006-0066399-A1	
12114	Radio receiver for the reception of data bursts which are modulated with two modulation types			NP	PAT-Active	US	11/261008	7567626	US-2006-0116091-A1	
12115	Polar modulator and method for determining an amplitude offset in a polar modulator			NP	PAT-Active	US	11/255438	7489130	US-2006-0089113-A1	
12116	Digital programming interface between a baseband processor and an integrated radio-frequency module			NP	PAT-Active	US	11/220453	7587533	US-2006-0059280-A1	
12117	RADIO TRANSMITTER WITH VARIABLE AMPLIFIER UNITS IN THE BASEBAND SECTION AND IN THE RADIO-FREQUENCY SECTION OF THE TRANSMISSION PATH			NP	PAT-Active	US	11/300244	7596185	US-2006-0159137-A1	
12118	EMBEDDED COMMUNICATION TERMINAL			NP	PAT-Active	US	11/432712	8365269	US-2007-0011727-A1	
12119	Voltage-controlled oscillator circuit with analogue and digital actuation			NP	PAT-Active	US	11/298010	7301411	US-2006-0152292-A1	
12120	METHOD FOR COMPUTER-BASED DETERMINATION OF A POSITION IN A MAP NAVIGATION DEVICE AND MOBILE RADIO TELEPHONE			NP	PAT-Active	US	11/536499	8712689	US-2007-0101542-A1	
12121	Method for automatically setting up and/or controlling a telecommunication conference			NP	PAT-Active	US	11/264679	8428634	US-2007-0097886-A1	
12122	METHOD FOR AUTOMATICALLY SETTING UP AND/OR CONTROLLING A TELECOMMUNICATION CONFERENCE			CNT	PAT-Active	US	13/868018	9571291	US-2013-0235767-A1	
12123	Method for predistortion of a signal and a transmitting device having digital predistortion in particular for mobile radio			NP	PAT-Active	US	11/389383	7377408	US-2006-0228036-A1	
12124	CONTROLLABLE AMPLIFIER AND ITS USE			NP	PAT-Active	US	11/360720	7501887	US-2006-0202752-A1	
12125	Fast starting circuit for crystal oscillators			NP	PAT-Active	US	11/329572	7554414	US-2006-0170509-A1	
12126	MOBILE RADIO COMMUNICATION SYSTEM			NP	PAT-Active	US	11/346997	8023491	US-2006-0194560-A1	
12127	Mobile radio communication system			CNT	PAT-Active	US	12/504962	8254906	US-2009-0275327-A1	
12128	MOBILE RADIO COMMUNICATION SYSTEM			CNT	PAT-Active	US	13/211946	8432890	US-2011-0301864-A1	
12129	MOBILE RADIO COMMUNICATION SYSTEM			CNT	PAT-Active	US	13/542689	8737995	US-2012-0289229-A1	
12130	MOBILE RADIO COMMUNICATION SYSTEM			CNT	PAT-Active	US	15/860282	8888888	US-2018-0124668-A1	
12131	MOBILE RADIO COMMUNICATION SYSTEM			CNT	APP-Pending	US	16/523576			
12132	MOBILE RADIO COMMUNICATION SYSTEM			CNT	PAT-Active	US	14/259113	9894577	US-2014-0321426-A1	
12133	DIGITAL FILTER AND METHOD OF DETERMINING ITS COEFFICIENTS			NP	PAT-Active	US	11/410395	8775492	US-2006-0250287-A1	
12134	METHOD AND APPARATUS FOR CONTROLLING A TRANSMITTER			NP	PAT-Active	US	11/301741	7725086	US-2006-0154626-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12135	Amplifier arrangement and method of signal amplification			NP	PAT-Active	US	11/482921	7453321	US-2007-0918729-A1	
12136	Amplifier arrangement polar transmitter having the amplifier arrangement and method for amplifying signals			NP	PAT-Active	US	11/490787	7570940	US-2007-0926823-A1	
12137	Transmitting arrangement transceiver with a transmitting arrangement and method for signal processing			NP	PAT-Active	US	11/482559	7599669	US-2007-0921078-A1	
12138	COMPUTER-AIDED MAPPING OF SYSTEM INFORMATION MEDIUM ACCESS CONTROL PROTOCOL MESSAGES			DIV	PAT-Active	US	13/102750	8380204	US-2011-0211552-A1	
12139	COMPUTER-AIDED MAPPING OF SYSTEM INFORMATION MEDIUM ACCESS CONTROL PROTOCOL MESSAGES			CNT	PAT-Active	US	13/741703	8977271	US-2013-0126841-A1	
12140	COMPUTER-AIDED MAPPING OF SYSTEM INFORMATION MEDIUM ACCESS CONTROL PROTOCOL MESSAGES			CNT	PAT-Active	US	14/622614	9730032	US-2015-0245278-A1	
12141	COMPUTER-AIDED MAPPING OF SYSTEM INFORMATION MEDIUM ACCESS CONTROL PROTOCOL MESSAGES			CNT	PAT-Active	US	15/071754	#####	US-2016-0198312-A1	
12142	TRANSCIVER WITH CASCADED PHASE-LOCKED LOOPS			NP	PAT-Active	US	11/685288	8880605	US-2007-0275672-A1	
12143	FREQUENCY GENERATOR			CNT	PAT-Active	US	15/176706	8948450	US-2016-0385618-A1	
12144	Transmission path and method for signal processing in a transmission path			NP	PAT-Active	US	11/581507	7693499	US-2007-0105511-A1	
12145	Transmitting output stage with adjustable output power and process for amplifying a signal in a transmitting output stage			NP	PAT-Active	US	11/584319	7486133	US-2007-0096804-A1	
12146	Frequency tuning circuit use of the tuning circuit and method for frequency tuning			NP	PAT-Active	US	11/641330	7847642	US-2007-0222527-A1	
12147	Phase locked loop circuitry			NP	PAT-Active	US	11/699111	7787581	US-2007-0195917-A1	
12148	MIXER CIRCUIT AND RF TRANSMITTER USING SUCH MIXER CIRCUIT			CNT	PAT-Active	US	12/143613	8260218	US-2008-0254754-A1	
12149	MODULATION DEVICE FOR A TRANSMISSION PATH METHOD FOR SIGNAL PROCESSING IN A TRANSMISSION PATH AND TRANSMISSION PATH HAVING THE MODULATION DEVICE			NP	PAT-Active	US	11/709004	8374279	US-2007-0295702-A1	
12150	CIRCUIT ARRANGEMENT AND METHOD FOR SETTING AN ANALOG OUTPUT SIGNAL			NP	PAT-Active	US	11/831580	8116701	US-2008-0048781-A1	
12151	CIRCUIT ARRANGEMENT AND METHOD FOR SETTING AN ANALOG OUTPUT SIGNAL			CNT	PAT-Active	US	13/369795	8494462	US-2012-0142289-A1	
12152	TRANSCIVER ARRANGEMENT AND METHOD FOR PROCESSING A SIGNAL			NP	PAT-Active	US	11/705258	8254866	US-2007-0197170-A1	
12153	TRANSCIVER ARRANGEMENT AND METHOD FOR PROCESSING A SIGNAL			CNT	PAT-Active	US	13/548952	8843090	US-2012-0382867-A1	
12154	APPARATUS AND METHOD FOR IDENTIFYING SIGNAL FRAMES AS AUDIO SIGNAL FRAMES			NP	PAT-Active	US	11/673133	8065137	US-2007-0192096-A1	
12155	Digitally controlled oscillator device and method for generating an oscillating signal with a digitally controlled phase locked loop			NP	PAT-Active	US	11/401393	7573347	US-2007-0222526-A1	
12156	TRANSMITTER AND METHOD OF TRANSMITTING A SIGNAL			NP	PAT-Active	US	11/544319	7702032	US-2007-0237256-A1	
12157	Regulation of an Amplification Apparatus			NP	PAT-Active	US	11/479075	7456693	US-2008-0091674-A1	
12158	Oscillator and method for generating an oscillator signal			NP	PAT-Active	US	11/474825	7423495	US-2008-0207366-A1	
12159	DATA TRANSMISSION IN A TELECOMMUNICATION CONFERENCE			NP	PAT-Active	US	11/775888	8243684	US-2008-0313466-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12160	Amplifier stage operational amplifier and method for amplifying a signal			NP	PAT-Active	US	11/501266	7443238	US-2008-0924218-A1	
12161	Arrangement and method for determining a gradient factor for a digitally controlled oscillator and phase locked loop			NP	PAT-Active	US	11/840408	7573348	US-2008-0942753-A1	
12162	MESSAGE GENERATING ARRANGEMENT			NP	PAT-Active	US	11/765849	8406228	US-2007-0293251-A1	
12163	MESSAGE GENERATING ARRANGEMENT			CNT	PAT-Active	US	13/776113	9001738	US-2013-0170436-A1	
12164	MESSAGE GENERATING ARRANGEMENT			CNT	PAT-Active	US	14/330173	9380629	US-2014-0334362-A1	
12165	MESSAGE GENERATING ARRANGEMENT			CNT	APP-Pending	US	15/171923		US-2017-0118790-A1	
12166	Generating a traffic encryption key			NP	PAT-Active	US	12/026225	8259936	US-2010-0277767-A1	
12167	Method for compensation for any phase and/or amplitude error in a receiver			NP	PAT-Active	US	11/773213	8218683	US-2008-0085263-A1	
12168	DIVERSITY RECEIVER WITH CHANNEL ESTIMATOR			NP	PAT-Active	US	11/510318	7925230	US-2008-0051046-A1	
12169	DIVERSITY RECEIVER AND METHOD PERFORMED BY A DIVERSITY RECEIVER			CNT	PAT-Active	US	13/078124	8385866	US-2011-0195682-A1	
12170	DIVERSITY RECEIVER AND METHOD PERFORMED BY A DIVERSITY RECEIVER			CNT	PAT-Active	US	13/747944	8811924	US-2013-0182501-A1	
12171	DIVERSITY RECEIVER BASED ON DOPPLER FREQUENCY SHIFT VALUE			DIV	PAT-Active	US	13/076112	8498594	US-2012-0076242-A1	
12172	GROUPING OF USER TERMINAL CELL ACCESS INFORMATION IN A SYSTEM INFORMATION BLOCK			PCT	PAT-Active	US	12/441820	9226194	US-2009-0318142-A1	
12173	GROUPING OF USER TERMINAL CELL ACCESS INFORMATION IN A SYSTEM INFORMATION BLOCK			CNT	PAT-Active	US	14/942751	9974002	US-2016-0127879-A1	
12174	GROUPING OF USER TERMINAL CELL ACCESS INFORMATION IN A SYSTEM INFORMATION BLOCK			CNT	PAT-Active	US	15/948696	#####	US-2018-0227831-A1	
12175	AMPLIFIER ARRANGEMENT WITH CONTROLLABLE GAIN AND METHOD FOR CONTROLLING AN AMPLIFIER GAIN			NP	PAT-Active	US	11/528254	7446605	US-2008-0074184-A1	
12176	PHASE LOCKED LOOP TRANSCIVER DEVICE AND METHOD FOR GENERATING AN OSCILLATOR SIGNAL			REI	PAT-Active	US	13/440521	8644879		
12177	Phase/frequency detector phase locked loop method for phase/frequency detection and method for generating an oscillator signal			NP	PAT-Active	US	11/925539	7592874	US-2008-0190386-A1	
12178	METHOD FOR THE TRANSMISSION OF DATA FIELD OF TECHNOLOGY			CNT	PAT-Active	US	13/273256	8493909	US-2012-0026921-A1	
12179	METHOD FOR THE TRANSMISSION OF DATA FIELD OF TECHNOLOGY			CNT	PAT-Active	US	13/713905	9743388	US-2013-0142145-A1	
12180	METHOD FOR THE TRANSMISSION OF DATA FIELD OF TECHNOLOGY			CNT	PAT-Active	US	15/453558	#####	US-2017-0181025-A1	
12181	Method for the Transmission of Data			PCT	PAT-Active	US	10/595245	8040833	US-2007-0014274-A1	
12182	METHOD FOR THE TRANSMISSION OF DATA FIELD OF TECHNOLOGY			CNT	APP-Pending	US	15/984155		US-2018-0276701-A1	
12183	SHARED LINEARITY MAINTENANCE IN POWER AMPLIFIERS			NP	PAT-Active	US	11/876484	7557653	US-2008-0186092-A1	
12184	SHARED LINEARITY MAINTENANCE IN POWER AMPLIFIERS			CNT	PAT-Active	US	12/358256	7688136	US-2009-0128233-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12185	COMMUNICATION TERMINAL DEVICE			NP	PAT-Active	US	11/857291	8095078	US-2008-0976504-A1	
12186	Data transfer in a computing device			NP	PAT-Active	US	11/780504	8077644	US-2009-0922077-A1	
12187	LOOP FILTER AND PHASE-LOCKED LOOP			NP	PAT-Active	US	11/704544	8674754	US-2008-0191753-A1	
12188	DETECTION ARRANGEMENT, COUNTER UNIT, PHASE-LOCKED LOOP, DETECTION METHOD AND METHOD FOR GENERATING AN OSCILLATOR SIGNAL			NP	PAT-Active	US	11/705924	7804925	US-2008-0191921-A1	
12189	POLAR MODULATOR WITH SIGNED AMPLITUDE REDUCING PHASE TRANSITIONS			DIV	PAT-Active	US	13/085501	8180302	US-2011-0182373-A1	
12190	Amplifier-transmitter arrangement having an amplifier and method for amplifying a signal			NP	PAT-Active	US	11/698404	7538609	US-2008-0180168-A1	
12191	CIRCUIT AND METHOD			NP	PAT-Active	US	11/743864	7848715	US-2008-0274793-A1	
12192	CIRCUIT AND METHOD			DIV	PAT-Active	US	12/954872	8406705	US-2011-0088835-A1	
12193	INTERFERENCE SUPPRESSION PROCESSING UNIT AND A METHOD OF SUPPRESSING INTERFERENCE IN WIRELESS DATA COMMUNICATION			CNT	PAT-Active	US	13/099844	8553755	US-2011-0306171-A1	
12194	REGULATION OF AN AMPLIFICATION APPARATUS			NP	PAT-Active	US	11/599529	9407227	US-2008-0113635-A1	
12195	INTEGRATED CIRCUIT MEMORY DEVICE, METHOD OF OPERATING AN INTEGRATED CIRCUIT AND METHOD OF DESIGNING AN INTEGRATED CIRCUIT			NP	PAT-Active	US	11/688357	8882806	US-2008-0219037-A1	
12196	CIRCUIT ARRANGEMENT WITH INTERFERENCE PROTECTION			CNT	PAT-Active	US	12/778109	9673913	US-2010-0219882-A1	
12197	GENERATION OF A TRANSMISSION SIGNAL			NP	PAT-Active	US	12/136078	8888888	US-2008-0317167-A1	
12198	DISTANCE MEASUREMENT IN A RADIO COMMUNICATION DEVICE			NP	PAT-Active	US	11/698934	7639182	US-2008-0246651-A1	
12199	RADIO COMMUNICATION DEVICE AND METHOD FOR BOOTING A RADIO COMMUNICATION DEVICE			NP	PAT-Active	US	11/964338	9674176	US-2009-0170473-A1	
12200	RADIO COMMUNICATION DEVICE AND METHOD FOR BOOTING A RADIO COMMUNICATION DEVICE			CNT	PAT-Active	US	15/161577	9753740	US-2016-0266809-A1	
12201	MULTIBAND RF DEVICE			CNT	PAT-Active	US	14/526804	9374056	US-2015-0119115-A1	
12202	CIRCUIT ARRANGEMENT WITH IMPROVED DECOUPLING			NP	PAT-Active	US	11/731398	7983627	US-2008-0242235-A1	
12203	CIRCUIT ARRANGEMENT WITH IMPROVED DECOUPLING			CNT	PAT-Active	US	13/607063	8718578	US-2013-0302370-A1	
12204	CIRCUIT ARRANGEMENT WITH IMPROVED DECOUPLING			DIV	PAT-Active	US	13/165942	8265571	US-2011-0248792-A1	
12205	MULTI-MODE AMPLIFIER ARRANGEMENT AND METHOD FOR CONTROLLING AN AMPLIFIER ARRANGEMENT			NP	PAT-Active	US	11/751946	7605657	US-2008-0290943-A1	
12206	Saturation Handling			NP	PAT-Active	US	11/768172	7551034	US-2008-0315956-A1	
12207	TRANSMISSION UNIT AND A METHOD FOR TRANSMITTING DATA			NP	PAT-Active	US	12/014641	9385804	US-2009-0180462-A1	
12208	POLAR MODULATOR ARRANGEMENT AND POLAR MODULATION METHOD			NP	PAT-Active	US	11/768855	7545232	US-2008-0317168-A1	
12209	CONFIGURABLE TRANSCEIVER			NP	PAT-Active	US	12/051789	8279913	US-2009-0238249-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12210	CIRCUIT ARRANGEMENT FOR PROCESSING A RADIO-FREQUENCY SIGNAL			NP	PAT-Active	US	12/239315	9498907	US-2009-0988109-A1	
12211	MULTI-MODE MODULATOR			NP	PAT-Active	US	11/766558	7853212	US-2008-0318620-A1	
12212	Compensation of nonlinearity of single ended digital to analog converters			NP	PAT-Active	US	11/941811	7489261		
12213	Compensation of nonlinearity of single ended digital to analog converters			CNT	PAT-Active	US	12/358254	7675442	US-2009-0128383-A1	
12214	Compensation of nonlinearity of single ended digital to analog converters			CNT	PAT-Active	US	12/705705	7944381	US-2010-0141327-A1	
12215	COMPENSATION OF NONLINEARITY OF SINGLE ENDED DIGITAL TO ANALOG CONVERTERS			CSP	PAT-Active	US	13/103917	8663995	US-2011-0285453-A1	
12216	REUSE OF DIGITAL INTERFACE FOR MULTIPLE COMPONENTS			NP	PAT-Active	US	11/845449	8958507	US-2009-0061011-A1	
12217	Communication device and method for setting device resources			NP	PAT-Active	US	11/853974	8135444	US-2009-0070508-A1	
12218	METHOD FOR SETTING DATA TRANSMISSION PARAMETERS AND COMMUNICATION DEVICE			NP	PAT-Active	US	11/945417	8180091	US-2009-0137235-A1	
12219	METHOD FOR SETTING DATA TRANSMISSION PARAMETERS AND COMMUNICATION DEVICE			CNT	PAT-Active	US	13/466546	8588700	US-2012-0221719-A1	
12220	Polar Modulation without Analog Filtering			NP	PAT-Active	US	11/855782	7619487	US-2009-0072521-A1	
12221	Setting an Output Level of an Amplifier Apparatus			NP	PAT-Active	US	12/554534	8193858	US-2010-0075209-A1	
12222	Amplitude Attenuation Estimation and Recovery Systems for OFDM Signal used in Communication Systems			NP	PAT-Active	US	11/865393	7970462	US-2009-0086618-A1	
12223	HIGH BANDWIDTH MODULATION AND TRANSMISSION			NP	PAT-Active	US	12/241082	8254493	US-2010-0080319-A1	
12224	HIGH BANDWIDTH MODULATION AND TRANSMISSION			CNT	PAT-Active	US	13/570220	8566338	US-2012-0301879-A1	
12225	COMMUNICATION DEVICE PERFORMING MEASUREMENTS USING ASSIGNED TIME SLOTS			NP	PAT-Active	US	11/835192	9271174	US-2009-0042559-A1	
12226	SYSTEMS AND METHODS FOR PERFORMING MEASUREMENTS IN TRANSMISSION GAPS			CNT	PAT-Active	US	14/702222	9603043	US-2015-0245237-A1	
12227	SYSTEMS AND METHODS FOR PERFORMING MEASUREMENTS IN TRANSMISSION GAPS			CNT	PAT-Active	US	15/428492	#####	US-2017-0156074-A1	
12228	DETERMINING A RECEIVING QUALITY IN A RADIO COMMUNICATION DEVICE			NP	PAT-Active	US	11/836444	8532605	US-2009-0042532-A1	
12229	DETERMINING A RECEIVING QUALITY IN A RADIO COMMUNICATION DEVICE			CNT	PAT-Active	US	13/963300	9380470	US-2013-0322284-A1	
12230	Systems and Methods for Self-Calibrating Transceivers			NP	PAT-Active	US	11/947630	8176452	US-2009-0143015-A1	
12231	DIGITAL FILTER			NP	PAT-Active	US	12/201465	8271568	US-2010-0057821-A1	
12232	DIGITAL FILTER			CNT	PAT-Active	US	13/591316	9190983	US-2012-0331026-A1	
12233	DIGITAL FILTER			CNT	PAT-Active	US	14/925895	#####	US-2016-0049923-A1	
12234	APPARATUS AND METHOD USING FIRST AND SECOND CLOCKS			NP	PAT-Active	US	12/201505	8510589	US-2010-0058103-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12235	APPARATUS AND METHOD USING FIRST AND SECOND CLOCKS			CNT	PAT-Active	US	13/924526	9201447	US-2014-0906839-A1	
12236	APPARATUS AND METHOD USING FIRST AND SECOND CLOCKS			CNT	PAT-Active	US	14/925887	9921605	US-2016-0948154-A1	
12237	RADIO COMMUNICATION DEVICE AND METHOD FOR CONTROLLING FREQUENCY SELECTION			NP	PAT-Active	US	11/876234	8548482	US-2009-0104913-A1	
12238	RADIO COMMUNICATION DEVICE AND METHOD FOR CONTROLLING FREQUENCY SELECTION			CNT	PAT-Active	US	14/013200	9408189	US-2014-0923017-A1	
12239	FREQUENCY SYNTHESIS USING UPCONVERSION PLL PROCESSES			NP	PAT-Active	US	12/022957	8428212	US-2009-0190798-A1	
12240	Highly optimized digital IQ transmitter chain			NP	PAT-Active	US	12/044814	8213542	US-2009-0225803-A1	
12241	HIGHLY OPTIMIZED DIGITAL IQ TRANSMITTER CHAIN			CNT	PAT-Active	US	13/535827	8842777	US-2012-0263260-A1	
12242	MULTIMODE RECEIVER WITH ACTIVE BLOCKER SUPPRESSION			NP	PAT-Active	US	12/114264	8086205	US-2009-0275304-A1	
12243	MULTIMODE RECEIVER WITH ACTIVE BLOCKER SUPPRESSION			CNT	PAT-Active	US	13/325234	8678143	US-2012-0983236-A1	
12244	Retransmission of erroneous data			NP	PAT-Active	US	12/018932	8082478	US-2009-0193311-A1	
12245	WIRELESS COMMUNICATION DEVICE ANTENNA WITH TUNING ELEMENTS			NP	PAT-Active	US	12/475379	8405568	US-2010-0302123-A1	
12246	VARIABLE-SIZE MIXER FOR HIGH GAIN RANGE TRANSMITTER			NP	PAT-Active	US	12/416404	8422588	US-2010-0254490-A1	
12247	VARIABLE-SIZE MIXER FOR HIGH GAIN RANGE TRANSMITTER			CNT	PAT-Active	US	13/029820	9059661	US-2013-0290925-A1	
12248	VARIABLE-SIZE MIXER FOR HIGH GAIN RANGE TRANSMITTER			CNT	PAT-Active	US	13/828975	9184699	US-2013-0203366-A1	
12249	METHODS FOR CALIBRATING A TRANSMITTER AND RADIO TRANSMITTER			NP	PAT-Active	US	12/389155	8218047	US-2009-0163155-A1	
12250	Methods for calibrating a transmitter and radio transmitter			CNT	PAT-Active	US	13/543959	9231714	US-2012-0275862-A1	
12251	HIGH-FREQUENCY PRESTAGE AND RECEIVER			NP	PAT-Active	US	12/563607	8663512	US-2010-0081407-A1	
12252	CONTINUOUS OPEN LOOP CONTROL TO CLOSED LOOP CONTROL TRANSITION			NP	PAT-Active	US	12/170207	8792579	US-2010-0008410-A1	
12253	RADIO FREQUENCY COMMUNICATION DEVICES AND METHODS			NP	PAT-Active	US	12/116576	8175554	US-2009-0280755-A1	
12254	ADAPTATION TECHNIQUES IN MIMO			NP	PAT-Active	US	12/186368	8855257	US-2009-0702014-A1	
12255	ADAPTATION TECHNIQUES IN MIMO			CNT	PAT-Active	US	14/470066	9154201	US-2015-0092895-A1	
12256	TRANSMITTER WITH HYBRID CLOSED LOOP POWER CONTROL			NP	PAT-Active	US	12/233360	8315581	US-2010-0065026-A1	
12257	TRANSMITTER WITH HYBRID CLOSED LOOP POWER CONTROL			CNT	PAT-Active	US	13/644823	8699976	US-2013-0029616-A1	
12258	DIVERSITY RECEIVER			NP	PAT-Active	US	12/052527	8351489	US-2009-0238246-A1	
12259	Device and Method for Generating an Output Signal			NP	PAT-Active	US	12/491520	8098096	US-2009-0273400-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12260	CQI TABLE FOR WIRELESS MIMO NETWORKS			NP	PAT-Active	US	12/248739	8144797	US-2009-0245408-A1	
12261	CQI TABLE FOR WIRELESS MIMO NETWORK			CNT	PAT-Active	US	13/428784	8611453	US-2012-0182899-A1	
12262	PARTITIONED BLUETOOTH SYSTEM			NP	PAT-Active	US	12/192160	9195628	US-2010-0041336-A1	
12263	Circuit with single-ended input and differential output			NP	PAT-Active	US	12/174857	7777575	US-2010-0013562-A1	
12264	Jumpless Phase Modulation In A Polar Modulation Environment			NP	PAT-Active	US	12/239318	7872545	US-2010-0067617-A1	
12265	JUMPLESS PHASE MODULATION IN A POLAR MODULATION ENVIRONMENT			CNT	PAT-Active	US	12/972513	8502615	US-2011-0084777-A1	
12266	RADIO FREQUENCY COMMUNICATION DEVICES AND METHODS			NP	PAT-Active	US	12/200132	8568814	US-2010-0056294-A1	
12267	CHANNEL ESTIMATOR			NP	PAT-Active	US	12/170149	8428536	US-2010-0099549-A1	
12268	METHOD FOR DETERMINING ACTIVE COMMUNICATION SESSIONS AND COMMUNICATION SESSION INFORMATION SERVER			CNT	PAT-Active	US	14/253761	9686327	US-2014-0244758-A1	
12269	Decoder of Error Correction Codes			NP	PAT-Active	US	12/199414	8190977	US-2010-0058149-A1	
12270	METHODS FOR CONTROLLING AN UPLINK SIGNAL TRANSMISSION POWER AND COMMUNICATION DEVICES			NP	PAT-Active	US	12/210571	8311053	US-2010-0067496-A1	
12271	Method for Determining the Type of a Mobile Radio Base Station; Radio Communication Terminal and Network Device; Radio Communication Smart Card Device			NP	PAT-Active	US	12/233119	8180580	US-2010-0069119-A1	
12272	METHOD FOR DETERMINING THE TYPE OF A MOBILE RADIO BASE STATION; RADIO COMMUNICATION TERMINAL AND NETWORK DEVICES; RADIO COMMUNICATION SMART CARD DEVICE			CNT	PAT-Active	US	13/419136	8989748	US-2012-0172032-A1	
12273	METHODS AND APPARATUSES FOR DETERMINING CELL ACCESS DURING A CELL SEARCH			CNT	PAT-Active	US	14/615124	9681288	US-2015-0156621-A1	
12274	METHODS AND APPARATUSES FOR DETERMINING CELL ACCESS DURING A CELL SEARCH			CNT	APP-Pending	US	15/585358		US-2017-0237514-A1	
12275	IQ-MODULATION			NP	PAT-Active	US	12/397093	7989629	US-2010-0225409-A1	
12276	METHOD AND DEVICE FOR TRANSFERRING DATA			NP	PAT-Active	US	12/353029	8363767	US-2010-0177808-A1	
12277	MULTIBAND-OPERATION IN WIRELESS COMMUNICATION SYSTEMS			CNT	PAT-Active	US	14/179717	9788308	US-2014-0161577-A1	
12278	MULTIBAND-OPERATION IN WIRELESS COMMUNICATION SYSTEMS			CNT	APP-Pending	US	15/729206		US-2018-0255533-A1	
12279	FILTERING USING IMPEDANCE TRANSLATOR			NP	PAT-Active	US	12/419873	8180318	US-2010-0255791-A1	
12280	FILTERING USING IMPEDANCE TRANSLATOR			CNT	PAT-Active	US	13/451389	8644785	US-2012-0201175-A1	
12281	METHODS OF PREPARING A POWER SAVING STATE UNIVERSAL SERIAL BUS DEVICE AND UNIVERSAL SERIAL BUS HOST			NP	PAT-Active	US	12/565797	8332676	US-2011-0072264-A1	
12282	APPARATUS AND METHOD FOR MAPPING PHYSICAL CONTROL CHANNELS			NP	PAT-Active	US	12/501588	8583128	US-2011-0097895-A1	
12283	Minimizing Mutual Coupling			NP	PAT-Active	US	12/475352	8170510	US-2010-0304688-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12284	MINIMIZING MUTUAL COUPLING			CNT	PAT-Active	US	13/425084	8521107	US-2012-0178388-A1	
12285	PHASE-LOCK IN ALL-DIGITAL PHASE-LOCKED LOOPS			CNT	PAT-Active	US	13/770283	9214947	US-2013-0162355-A1	
12286	COMPENSATION OF PHASE LOCK LOOP (PLL) PHASE DISTRIBUTION CAUSED BY POWER AMPLIFIER RAMPING			NP	PAT-Active	US	12/488768	8058917	US-2010-0315140-A1	
12287	TIME-TO-DIGITAL CONVERTER WITH BUILT-IN SELF TEST			NP	PAT-Active	US	12/684771	8072361	US-2011-01659673-A1	
12288	TIME-TO-DIGITAL CONVERTER WITH BUILT-IN SELF TEST			CNT	PAT-Active	US	13/287788	8754793	US-2012-0044192-A1	
12289	Digital to Analog Converter Comprising Mixer			NP	PAT-Active	US	12/578301	8111182	US-2011-0085616-A1	
12290	PREDISTORTION OF AMPLIFIER INPUT SIGNALS			NP	PAT-Active	US	12/846416	8577311	US-2011-0025414-A1	
12291	Method for Transmitting a Data Signal in a MIMO System			CNT	PAT-Active	US	13/767088	8885753	US-2013-0183891-A1	
12292	METHOD FOR TRANSMITTING A DATA SIGNAL IN A MIMO SYSTEM			CNT	PAT-Active	US	14/515726	8997739	US-2015-0071377-A1	
12293	Oscillator with capacitance array			NP	PAT-Active	US	12/642806	8154356	US-2011-0148530-A1	
12294	OSCILLATOR WITH CONTROLLABLE FREQUENCY			NP	PAT-Active	US	12/721730	9413565	US-2011-0221539-A1	
12295	TEMPERATURE COMPENSATION FOR AN OSCILLATOR CRYSTAL			NP	PAT-Active	US	12/697285	9344095	US-2011-0187422-A1	
12296	On-Chip Self-Calibrating Delay Monitoring Circuitry			NP	PAT-Active	US	12/696731	8228106	US-2011-0127433-A1	
12297	ON-CHIP SELF CALIBRATING DELAY MONITORING CIRCUITRY			DIV	PAT-Active	US	13/535440	8461043	US-2012-0262213-A1	
12298	RADIO COMMUNICATION DEVICES INFORMATION PROVIDERS, METHODS FOR CONTROLLING A RADIO COMMUNICATION DEVICE AND METHODS FOR CONTROLLING AN INFORMATION PROVIDER			NP	PAT-Active	US	12/845800	8521109	US-2012-0028638-A1	
12299	RADIO COMMUNICATION DEVICES INFORMATION PROVIDERS, METHODS FOR CONTROLLING A RADIO COMMUNICATION DEVICE AND METHODS FOR CONTROLLING AN INFORMATION PROVIDER			CNT	PAT-Active	US	14/841471	9622320	US-2015-0373592-A1	
12300	SUPPRESSION OF LOW-FREQUENCY NOISE FROM PHASE DETECTOR IN PHASE CONTROL LOOP			NP	PAT-Active	US	12/758393	8330509	US-2011-0248753-A1	
12301	SATELLITE-BASED POSITION DETERMINATION			NP	PAT-Active	US	12/869726	8988282	US-2012-0050102-A1	
12302	SATELLITE-BASED POSITION DETERMINATION			CNT	PAT-Active	US	14/693178	9933524	US-2015-0276933-A1	
12303	METHOD AND APPARATUS FOR REQUESTING MEDIA REPLICATION IN A COLLABORATIVE COMMUNICATION SESSION AND METHOD AND APPARATUS FOR ASSIGNING A COMMUNICATION MEDIUM FOR A COLLABORATIVE COMMUNICATION SESSION			NP	PAT-Active	US	13/117213	8832186	US-2011-0295954-A1	
12304	METHOD AND APPARATUS FOR REQUESTING MEDIA REPLICATION IN A COLLABORATIVE COMMUNICATION SESSION AND METHOD AND APPARATUS FOR ASSIGNING A COMMUNICATION MEDIUM FOR A COLLABORATIVE COMMUNICATION SESSION			CNT	PAT-Active	US	14/451258	9225779	US-2014-0344368-A1	
12305	METHOD AND APPARATUS FOR REQUESTING MEDIA REPLICATION IN A COLLABORATIVE COMMUNICATION SESSION AND METHOD AND APPARATUS FOR ASSIGNING A COMMUNICATION MEDIUM FOR A COLLABORATIVE COMMUNICATION SESSION			CNT	PAT-Active	US	14/462423	9178941	US-2014-0355020-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12306	METHOD AND APPARATUS FOR REQUESTING MEDIA REPLICATION IN A COLLABORATIVE COMMUNICATION SESSION AND METHOD AND APPARATUS FOR ASSIGNING A COMMUNICATION MEDIUM FOR A COLLABORATIVE COMMUNICATION SESSION			CNT	PAT-Active	US	13/942437	8531806	US-2016-0072884-A1	
12307	COMMUNICATION TERMINAL METHOD FOR RECEIVING DATA AND COMPUTER PROGRAM PRODUCT			NP	PAT-Active	US	13/178528	9198228	US-2012-0098721-A1	
12308	USER EQUIPMENT AND METHOD FOR PERFORMING DOWNLINK AND/OR UPLINK POWER CONTROL			NP	PAT-Active	US	12/967180	8538472	US-2012-0145424-A1	
12309	USER EQUIPMENT AND METHOD FOR PERFORMING DOWNLINK AND/OR UPLINK POWER CONTROL			CNT	PAT-Active	US	13/955481	9307501	US-2013-0315170-A1	
12310	DC POWER CONTROL FOR POWER AMPLIFIERS			NP	PAT-Active	US	12/871094	8463208	US-2012-0092823-A1	
12311	DC POWER CONTROL FOR POWER AMPLIFIERS			CNT	PAT-Active	US	13/913659	8755759	US-2013-0273979-A1	
12312	CALIBRATION CIRCUIT AND METHOD FOR CALIBRATING CAPACITIVE COMPENSATION IN DIGITAL-TO-ANALOG CONVERTERS			NP	PAT-Active	US	12/987314	8325072	US-2012-0175258-A1	
12313	METHOD FOR PROCESSING DATA			NP	PAT-Active	US	12/939327	8473676	US-2012-0114016-A1	
12314	RF FEEDBACK RECEIVER ARRANGEMENT RF TRANSMIT ARRANGEMENT AND RF TRANSCEIVER ARRANGEMENT			NP	PAT-Active	US	13/941058	8639182	US-2012-0214426-A1	
12315	PA BIAS OPTIMIZATION FOR MODULATION SCHEMES WITH VARIABLE BANDWIDTH			NP	PAT-Active	US	12/882544	8655293	US-2012-0065849-A1	
12316	PA BIAS OPTIMIZATION FOR MODULATION SCHEMES WITH VARIABLE BANDWIDTH			CNT	PAT-Active	US	14/179861	8938205	US-2014-0162578-A1	
12317	RESOURCE ALLOCATION IN A MOBILE COMMUNICATION SYSTEM			PCT	PAT-Active	US	13/920157	9247479	US-2013-0273257-A1	
12318	RESOURCE ALLOCATION IN A MOBILE COMMUNICATION SYSTEM			INV	PAT-Active	US	14/943855	9980206	US-2016-0073320-A1	
12319	COEFFICIENT BOOST MULTIPLY ACCUMULATE UNIT			NP	PAT-Active	US	12/978826	8819100	US-2012-0165504-A1	
12320	RECEIVER FOR RECEIVING RF-SIGNALS IN A PLURALITY OF DIFFERENT COMMUNICATION BANDS AND TRANSCEIVER			NP	PAT-Active	US	13/027497	8649302	US-2012-0297064-A1	
12321	RECEIVER FOR RECEIVING RF-SIGNALS IN A PLURALITY OF DIFFERENT COMMUNICATION BANDS AND TRANSCEIVER			CNT	PAT-Active	US	14/176221	8953502	US-2014-0153016-A1	
12322	RECEIVER WITH WIDE DYNAMIC RANGE AND LOW POWER CONSUMPTION			NP	PAT-Active	US	12/984864	8971835	US-2012-0169419-A1	
12323	AMPLIFIER CIRCUIT MOBILE COMMUNICATION DEVICE AND METHOD FOR ADJUSTING A BIAS OF A POWER AMPLIFIER			NP	PAT-Active	US	13/073067	8497737	US-2012-0249236-A1	
12324	DIGITAL-TO-ANALOG CONVERSION ARRANGEMENT WITH POWER RANGE DEPENDENT D/A CONVERTER SELECTION			NP	PAT-Active	US	13/106992	8462035	US-2012-0286984-A1	
12325	JOINT ADAPTIVE BIAS POINT ADJUSTMENT AND DIGITAL PRE-DISTORTION FOR POWER AMPLIFIER			NP	PAT-Active	US	13/036758	8908751	US-2012-0219048-A1	
12326	COMMUNICATION DEVICES AND METHODS FOR NETWORK SIGNALING			NP	PAT-Active	US	13/043806	9374767	US-2012-0236244-A1	
12327	COMMUNICATION DEVICES AND METHODS FOR NETWORK SIGNALING			CNT	PAT-Active	US	15/150557	9632567	US-2016-0277945-A1	
12328	COMMUNICATION DEVICES AND METHODS FOR NETWORK SIGNALING			CNT	PAT-Active	US	15/453552	8888888	US-2017-0180974-A1	
12329	SIGNAL PROCESSING CIRCUIT AND METHOD			NP	PAT-Active	US	13/403240	8767868	US-2012-0215088-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12330	SIGNAL PROCESSING CIRCUIT AND METHOD			CNT	PAT-Active	US	14/278938	8934574	US-2014-0247905-A1	
12331	METHOD FOR TRANSMITTING A SIGNAL			NP	PAT-Active	US	13/083575	8711977	US-2012-0257686-A1	
12332	METHOD FOR TRANSMITTING A SIGNAL			CNT	PAT-Active	US	14/217889	8989309	US-2014-0198782-A1	
12333	MOBILE COMMUNICATION TERMINAL AND METHOD FOR REGISTERING A MOBILE COMMUNICATION TERMINAL IN A COMMUNICATION NETWORK			NP	PAT-Active	US	13/040286	8463265	US-2012-0226651-A1	
12334	MOBILE COMMUNICATION TERMINAL AND METHOD FOR REGISTERING A MOBILE COMMUNICATION TERMINAL IN A COMMUNICATION NETWORK			CNT	PAT-Active	US	13/913528	9175171	US-2013-0286660-A1	
12335	MOBILE COMMUNICATIONS RADIO RECEIVER FOR MULTIPLE NETWORK OPERATION			NP	PAT-Active	US	13/105069	8611952	US-2012-0286285-A1	
12336	MOBILE COMMUNICATIONS RADIO RECEIVER FOR MULTIPLE NETWORK OPERATION			DIV	PAT-Active	US	14/083553	9735819	US-2014-0294131-A1	
12337	MOBILE COMMUNICATIONS RADIO RECEIVER FOR PROCESSING SIGNALS FROM MULTIPLE NETWORKS			CNT	PAT-Active	US	15/855143	#####	US-2018-0086674-A1	
12338	RF DAC WITH CONFIGURABLE DAC MIXER INTERFACE AND CONFIGURABLE MIXER			NP	PAT-Active	US	13/106963	8604958	US-2012-0286983-A1	
12339	RF DAC WITH CONFIGURABLE DAC MIXER INTERFACE AND CONFIGURABLE MIXER			CNT	PAT-Active	US	14/100227	9143155	US-2014-0291959-A1	
12340	MOBILE COMMUNICATIONS RADIO RECEIVER FOR MULTIPLE NETWORK OPERATION			NP	PAT-Active	US	13/108925	8738074	US-2012-0289176-A1	
12341	MOBILE COMMUNICATIONS RADIO RECEIVER FOR MULTIPLE NETWORK OPERATION			DIV	PAT-Active	US	14/265423	9526126	US-2014-0235292-A1	
12342	RECEIVER OF A MOBILE COMMUNICATION DEVICE			NP	PAT-Active	US	13/108508	9088328	US-2012-0295604-A1	
12343	ADAPTIVE FILTERING OF BLOCKER SIGNALS IN DEMODULATORS			NP	PAT-Active	US	13/328388	8610495	US-2013-0154728-A1	
12344	MIXER CELL MODULATOR AND METHOD			NP	PAT-Active	US	13/464163	8704606	US-2012-0286891-A1	
12345	ANTENNA TUNER IN COMBINATION WITH MODIFIED FEEDBACK RECEIVER FOR IMPROVED ANTENNA MATCHING			NP	PAT-Active	US	13/081694	8452246	US-2012-0286675-A1	
12346	TRANSMIT CIRCUIT METHOD FOR ADJUSTING A BIAS OF A POWER AMPLIFIER AND METHOD FOR ADAPTING THE PROVISION OF A BIAS INFORMATION			NP	PAT-Active	US	13/191685	8761698	US-2013-0027129-A1	
12347	TRANSMIT CIRCUIT METHOD FOR ADJUSTING A BIAS OF A POWER AMPLIFIER AND METHOD FOR ADAPTING THE PROVISION OF A BIAS INFORMATION			DIV	PAT-Active	US	14/273672	9124316	US-2014-0246844-A1	
12348	TRANSMIT CIRCUIT METHOD FOR ADJUSTING A BIAS OF A POWER AMPLIFIER AND METHOD FOR ADAPTING THE PROVISION OF A BIAS INFORMATION			CNT	PAT-Active	US	14/808140	9520841	US-2015-0333711-A1	
12349	FEEDBACK RECEIVER FOR ANTENNA TUNER CALCULATIONS			NP	PAT-Active	US	13/273563	8601319	US-2013-0294556-A1	
12350	FEEDBACK RECEIVER FOR ANTENNA TUNER CALCULATIONS			CNT	PAT-Active	US	14/065762	8954022	US-2014-0057579-A1	
12351	RADIO DEVICES REGULATION SERVERS AND VERIFICATION SERVERS			CNT	PAT-Active	US	14/296337	9094337	US-2014-0287719-A1	
12352	RADIO DEVICES REGULATION SERVERS AND VERIFICATION SERVERS			CIP	PAT-Active	US	13/219745	8779890	US-2012-0182121-A1	
12353	SPLIT VARACTOR ARRAY WITH IMPROVED MATCHING AND VARACTOR SWITCHING SCHEME			NP	PAT-Active	US	13/281871	8779867	US-2013-0107978-A1	
12354	ADJUSTABLE DELAYER METHOD FOR DELAYING AN INPUT SIGNAL AND POLAR TRANSMITTER			NP	PAT-Active	US	13/184171	8909065	US-2013-0016982-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12355	ADJUSTABLE DELAYER METHOD FOR DELAYING AN INPUT SIGNAL AND POLAR TRANSMITTER			CNT	PAT-Active	US	14/560863	9438351	US-2015-0195041-A1	
12356	HIGH-SPEED LEVEL SHIFTER BETWEEN LOW-SIDE LOGIC AND HIGH-SIDE LOGIC			NP	PAT-Active	US	13/222215	8581627	US-2013-0049808-A1	
12357	DETECTION OF BINARY SIGNALING IN COMMUNICATIONS RADIO RECEIVER			NP	PAT-Active	US	13/455576	8862085	US-2013-0288629-A1	
12358	ADAPTIVE COMPENSATION OF NONLINEAR FREQUENCY DISTORTION IN POLAR TRANSMITTERS BASED ON A LEAST SQUARES ESTIMATION			NP	PAT-Active	US	13/326749	8798134	US-2013-0156083-A1	
12359	METHOD FOR PROCESSING A DATA SIGNAL AND RECEIVER CIRCUIT			NP	PAT-Active	US	13/544045	9210006	US-2014-0010275-A1	
12360	MODEM DEVICES APPLICATION PROCESSORS COMMUNICATION DEVICES METHODS FOR CONTROLLING A MODEM DEVICE METHODS FOR CONTROLLING AN APPLICATION PROCESSOR AND METHODS FOR CONTROLLING A COMMUNICATION DEVICE			PCT	PAT-Active	US	13/977163	9124585	US-2015-0010045-A1	
12361	MODEM DEVICES APPLICATION PROCESSORS COMMUNICATION DEVICES METHODS FOR CONTROLLING A MODEM DEVICE METHODS FOR CONTROLLING AN APPLICATION PROCESSOR AND METHODS FOR CONTROLLING A COMMUNICATION DEVICE			CNT	PAT-Active	US	14/316978	9144119	US-2014-0308943-A1	
12362	METHODS AND SYSTEMS TO PROVIDE LOW NOISE AMPLIFICATION			NP	PAT-Active	US	13/800811	9124229	US-2014-0266439-A1	
12363	ENVELOPE TRACKING SYSTEM AND METHOD FOR CALIBRATING A SUPPLY VOLTAGE OF AN ENVELOPE TRACKING POWER AMPLIFIER			NP	PAT-Active	US	13/779843	8737940		
12364	COMMUNICATION SYSTEMS AND METHODS SUPPORTING MULTIPLE MODULATION TECHNIQUES			NP	PAT-Active	US	13/755511	8867665	US-2014-0211870-A1	
12365	BIPOLAR TIME-TO-DIGITAL CONVERTER			NP	PAT-Active	US	13/843763	8970420	US-2014-0266848-A1	
12366	BIPOLAR TIME-TO-DIGITAL CONVERTER			CNT	PAT-Active	US	14/638149	9282007	US-2015-0241850-A1	
12367	COMMUNICATION DEVICES AND METHODS FOR RECEIVING DATA			NP	PAT-Active	US	13/682758	8873665	US-2014-0140424-A1	
12368	COMMUNICATIONS TERMINAL A NETWORK COMPONENT A METHOD FOR TRANSMITTING A SIGNAL AND A METHOD FOR PROVIDING FEEDBACK INFORMATION TO A COMMUNICATIONS TERMINAL			NP	PAT-Active	US	13/834421	#####	US-2014-0273874-A1	
12369	SCHEDULING TIMING DESIGN FOR A TDD SYSTEM			NP	PAT-Active	US	13/716975	9686089	US-2013-0242819-A1	
12370	SCHEDULING TIMING DESIGN FOR A TDD SYSTEM			CNT	PAT-Active	US	15/594267	#####	US-2017-0250790-A1	
12371	SCHEDULING TIMING DESIGN FOR A TDD SYSTEM			CNT	APP-Pending	US	15/408724			
12372	INTER-RAT COVERAGE DETERMINATION FOR ENERGY SAVING MANAGEMENT			NP	PAT-Active	US	13/730248	8805364	US-2013-0288690-A1	
12373	INTER-RAT COVERAGE DETERMINATION FOR ENERGY SAVING MANAGEMENT			CNT	PAT-Active	US	14/104633	9100911	US-2014-0106731-A1	
12374	INTER-RAT COVERAGE DETERMINATION FOR ENERGY SAVING MANAGEMENT			CNT	PAT-Active	US	14/753869	9288755	US-2015-0304942-A1	
12375	INTER-RAT COVERAGE DETERMINATION FOR ENERGY SAVING MANAGEMENT			CNT	APP-Pending	US	15/903284		US-2018-0192368-A1	
12376	INTER-RAT COVERAGE DETERMINATION FOR ENERGY SAVING MANAGEMENT			CNT	PAT-Active	US	15/003299	9942841	US-2016-0157174-A1	
12377	DEVICE ORIENTATION CAPABILITY EXCHANGE SIGNALING AND SERVER ADAPTATION OF MULTIMEDIA CONTENT IN RESPONSE TO DEVICE ORIENTATION			NP	PAT-Active	US	13/719402	8357272	US-2014-0040959-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12378	QUALITY-AWARE ADAPTIVE STREAMING OVER HYPERTEXT TRANSFER PROTOCOL USING QUALITY ATTRIBUTES IN MANIFEST FILE			NP	PAT-Active	US	13/711316	9125073	US-2014-0946498-A1	
12379	METHODS FOR QUALITY-AWARE ADAPTIVE STREAMING OVER HYPERTEXT TRANSFER PROTOCOL			CNT	APP-Pending	US	14/801199		US-2015-0334157-A1	
12380	METHOD AND APPARATUS FOR FEEDBACK IN 3D MIMO WIRELESS SYSTEMS			NP	PAT-Active	US	13/719343	8885752	US-2014-0029684-A1	
12381	METHOD AND APPARATUS FOR FEEDBACK IN 3D MIMO WIRELESS SYSTEMS			DIV	PAT-Active	US	14/511792	9344170	US-2015-0139121-A1	
12382	IDENTIFYING COVERAGE HOLES USING INTER-RAT HANDOVER MEASUREMENTS			NP	PAT-Active	US	13/730266	8868067	US-2014-0031030-A1	
12383	IDENTIFYING COVERAGE HOLES USING INTER-RAT HANDOVER MEASUREMENTS			CNT	PAT-Active	US	14/475256	9660710	US-2014-0376885-A1	
12384	IDENTIFYING COVERAGE HOLES USING INTER-RAT HANDOVER MEASUREMENTS			CNT	PAT-Active	US	15/488306	#####	US-2017-0233554-A1	
12385	COMMUNICATION PATH SWITCHING FOR MOBILE DEVICES			CNT	PAT-Active	US	14/620089	9389932	US-2015-0156702-A1	
12386	COVERAGE ADJUSTMENT IN E-UTRA NETWORKS			NP	PAT-Active	US	13/733110	8995255	US-2014-0036656-A1	
12387	COVERAGE ADJUSTMENT IN E-UTRA NETWORKS			CNT	PAT-Active	US	14/634626	9154978	US-2015-0189521-A1	
12388	COVERAGE ADJUSTMENT IN E-UTRA NETWORKS			CNT	PAT-Active	US	14/843547	9538433	US-2016-0007216-A1	
12389	COVERAGE ADJUSTMENT IN E-UTRA NETWORKS			CNT	PAT-Active	US	15/356405	9794809	US-2017-0071900-A1	
12390	COVERAGE ADJUSTMENT IN E-UTRA NETWORKS			CNT	PAT-Active	US	15/702089	#####	US-2018-0007572-A1	
12391	APPARATUS AND METHOD FOR CELL INFORMATION INDICATION IN A WIRELESS NETWORK			NP	PAT-Active	US	13/728740	9232509	US-2013-0286672-A1	
12392	SYSTEMS AND METHODS FOR ENHANCED USER EQUIPMENT ASSISTANCE INFORMATION IN WIRELESS COMMUNICATION SYSTEMS			NP	PAT-Active	US	13/719362	9513757	US-2013-0801500-A1	
12393	SYSTEMS AND METHODS FOR ENHANCED USER EQUIPMENT ASSISTANCE INFORMATION IN WIRELESS COMMUNICATION SYSTEMS			CNT	PAT-Active	US	15/276427	#####	US-2017-0013557-A1	
12394	ESTABLISHING OPERATING SYSTEM AND APPLICATION BASED ROUTING POLICIES IN MULTI-MODE USER EQUIPMENT			NP	PAT-Active	US	13/711338	9526022	US-2014-0040504-A1	
12395	ESTABLISHING APPLICATION-BASED ROUTING POLICIES IN MULTI-MODE USER EQUIPMENT USING OPERATING SYSTEM-SPECIFIC IDENTIFIERS			CNT	PAT-Active	US	15/373654	#####	US-2017-0094025-A1	
12396	HARQ-ACK HANDLING FOR UNINTENDED DOWNLINK SUB-FRAMES			NP	PAT-Active	US	13/721458	8958331	US-2014-0003302-A1	
12397	HARQ-ACK HANDLING FOR UNINTENDED DOWNLINK SUB-FRAMES			CNT	PAT-Active	US	14/605311	9105420	US-2015-0131496-A1	
12398	HARQ-ACK HANDLING FOR UNINTENDED DOWNLINK SUB-FRAMES			CNT	PAT-Active	US	14/729809	9673939	US-2015-0263826-A1	
12399	HARQ-ACK HANDLING FOR UNINTENDED DOWNLINK SUB-FRAMES			CNT	PAT-Active	US	15/614192	#####	US-2017-0338916-A1	
12400	APPARATUS AND METHOD TO EFFICIENTLY SEND DEVICE TRIGGER MESSAGES			NP	PAT-Active	US	13/755166	8989070	US-2014-0003313-A1	
12401	APPARATUS AND METHOD TO EFFICIENTLY SEND DEVICE TRIGGER MESSAGES			CNT	PAT-Active	US	14/666160	9432156	US-2015-0249952-A1	
12402	DEVICE-TO-DEVICE ON-DEMAND ADVERTISEMENT			NP	PAT-Active	US	13/713242	9059830	US-2014-0036792-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12403	HIGH EFFICIENCY DISTRIBUTED DEVICE-TO-DEVICE (D2D) CHANNEL ACCESS			NP	PAT-Active	US	13/687838	9191828	US-2014-0936876-A1	
12404	HIGH EFFICIENCY DISTRIBUTED DEVICE-TO-DEVICE (D2D) CHANNEL ACCESS			CNT	PAT-Active	US	14/883410	#####	US-2016-0102441-A1	
12405	HIGH EFFICIENCY DISTRIBUTED DEVICE-TO-DEVICE (D2D) CHANNEL ACCESS			CNT	APP-Pending	US	15/522272			
12406	REFERENCE SIGNAL CONFIGURATION FOR COORDINATED MULTIPOINT			NP	PAT-Active	US	13/796720	9106386	US-2014-0936796-A1	
12407	REFERENCE SIGNAL CONFIGURATION FOR COORDINATED MULTIPOINT			CNT	PAT-Active	US	14/798830	9572063	US-2016-0100394-A1	
12408	APPARATUS FOR IMPROVED MOBILITY IN A WIRELESS HETEROGENEOUS NETWORK			NP	PAT-Active	US	13/705624	9095474	US-2013-0273878-A1	
12409	SELECTIVE JOINER OF MACHINE-TYPE COMMUNICATION USER EQUIPMENT WITH WIRELESS CELL			NP	PAT-Active	US	13/795952	9246618	US-2013-030166-A1	
12410	SELECTIVE JOINER OF MACHINE-TYPE COMMUNICATION USER EQUIPMENT WITH WIRELESS CELL			CNT	PAT-Active	US	14/528747	#####	US-2016-0956994-A1	
12411	SIGNALING FOR DOWNLINK COORDINATED MULTIPOINT IN A WIRELESS COMMUNICATION SYSTEM			NP	PAT-Active	US	13/730289	9083479	US-2013-0301548-A1	
12412	SIGNALING FOR DOWNLINK COORDINATED MULTIPOINT IN A WIRELESS COMMUNICATION SYSTEM			CNT	PAT-Active	US	14/054260	9154251	US-2014-0044076-A1	
12413	SIGNALING FOR DOWNLINK COORDINATED MULTIPOINT IN A WIRELESS COMMUNICATION SYSTEM			CNT	PAT-Active	US	14/834292	9356724	US-2016-0365917-A1	
12414	SIGNALING FOR DOWNLINK COORDINATED MULTIPOINT IN A WIRELESS COMMUNICATION SYSTEM			CNT	PAT-Active	US	15/144117	9736780	US-2016-0261387-A1	
12415	COMMUNICATION DEVICES AND CELLULAR WIDE AREA RADIO BASE STATION			NP	PAT-Active	US	13/803241	9344885	US-2014-0273954-A1	
12416	COMMUNICATION DEVICES AND CELLULAR WIDE AREA RADIO BASE STATION			CNT	PAT-Active	US	15/131958	9622083	US-2016-0234687-A1	
12417	FAST HANDOVER METHOD FOR CROSS SECTOR SCENARIO IN MOBILE COMMUNICATION SYSTEMS			NP	PAT-Active	US	13/832947	9313706	US-2014-0274052-A1	
12418	FAST HANDOVER METHOD FOR CROSS SECTOR SCENARIO IN MOBILE COMMUNICATION SYSTEMS			CNT	PAT-Active	US	15/064904	9526042	US-2016-0302111-A1	
12419	COMMUNICATION TERMINAL DEVICE COMMUNICATION DEVICE COMMUNICATION NETWORK SERVER AND METHOD FOR CONTROLLING			NP	PAT-Active	US	13/779864	8989807	US-2014-0243039-A1	
12420	COMMUNICATION TERMINAL DEVICE COMMUNICATION DEVICE COMMUNICATION NETWORK SERVER AND METHOD FOR CONTROLLING			CNT	PAT-Active	US	14/609364	9380625	US-2016-0215984-A1	
12421	COMMUNICATION TERMINAL DEVICE COMMUNICATION DEVICE COMMUNICATION NETWORK SERVER AND METHOD FOR CONTROLLING			CNT	PAT-Active	US	15/145370	9943306	US-2016-0278154-A1	
12422	COMMUNICATION TERMINAL DEVICE COMMUNICATION DEVICE COMMUNICATION NETWORK SERVER AND METHOD FOR CONTROLLING			CNT	PAT-Active	US	15/905423	#####	US-2018-0249522-A1	
12423	HYBRID AUTOMATIC REPEAT REQUEST (HARQ) MAPPING FOR CARRIER AGGREGATION (CA)			NP	PAT-Active	US	13/853404	9094960	US-2013-0322358-A1	
12424	DYNAMIC SELECTION OF SPECTRUM ACCESS IN A SPECTRUM SHARING CONTEXT			NP	PAT-Active	US	13/736177	9565658	US-2014-0192685-A1	
12425	ENHANCED NODE B USER EQUIPMENT AND METHODS FOR DISCONTINUOUS RECEPTION IN INTER-ENB CARRIER AGGREGATION			NP	PAT-Active	US	13/729117	8913578	US-2014-0185467-A1	
12426	ENHANCED NODE B USER EQUIPMENT AND METHODS FOR DISCONTINUOUS RECEPTION IN INTER-ENB CARRIER AGGREGATION			CNT	PAT-Active	US	14/570555	9374783	US-2016-0173016-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12427	APPARATUS OF USER EQUIPMENT (UE) CONFIGURABLE FOR CONNECTIVITY WITH MULTIPLE CELL GROUPS			CNT	PAT-Active	US	15/176433	9686817	US-2016-0286604-A1	
12428	ENHANCED NODE B USER EQUIPMENT AND METHODS FOR DISCONTINUOUS RECEPTION IN INTER-ENB CARRIER AGGREGATION			CNT	PAT-Active	US	15/588126	#####	US-2017-0245320-A1	
12429	ENHANCED NODE B USER EQUIPMENT AND METHODS FOR DISCONTINUOUS RECEPTION IN INTER-ENB CARRIER AGGREGATION			CNT	APP-Pending	US	16/519689			
12430	TECHNIQUES FOR SENDING OR RECEIVING CHANNEL STATE INFORMATION REPORTS ASSOCIATED WITH A COORDINATED MULTI-POINT SCHEME			NP	PAT-Active	US	13/828781	#####	US-2014-0038623-A1	
12431	PERIODIC CHANNEL STATE INFORMATION REPORTING FOR COORDINATED MULTIPPOINT (CoMP) SYSTEMS			NP	PAT-Active	US	13/688794	9544801	US-2014-0096664-A1	
12432	PERIODIC CHANNEL STATE INFORMATION (CSI) REPORTING USING A PHYSICAL UPLINK CONTROL CHANNEL (PUCCH)			CNT	PAT-Active	US	14/145112	9554297	US-2014-0112300-A1	
12433	PERIODIC CHANNEL STATE INFORMATION (CSI) REPORTING USING A PHYSICAL UPLINK CONTROL CHANNEL (PUCCH)			CNT	PAT-Active	US	15/391313	#####	US-2017-0111898-A1	
12434	NETWORK ASSISTANCE FOR DEVICE-TO-DEVICE DISCOVERY			NP	PAT-Active	US	13/718745	9036603	US-2014-0036793-A1	
12435	NETWORK ASSISTANCE FOR DEVICE-TO-DEVICE DISCOVERY			CNT	PAT-Active	US	14/695930	#####	US-2015-0305077-A1	
12436	NETWORK ASSISTANCE FOR DEVICE-TO-DEVICE DISCOVERY			CNT	PAT-Active	US	15/868247	#####	US-2018-0234866-A1	
12437	USER EQUIPMENT EVOLVED NODE B AND METHOD FOR MULTICAST DEVICE-TO-DEVICE COMMUNICATIONS			NP	PAT-Active	US	13/716919	9544099	US-2014-0003319-A1	
12438	DOWN-SAMPLING OF CELL-SPECIFIC REFERENCE SIGNALS (CRS) FOR A NEW CARRIER TYPE (NCT)			PCT	PAT-Active	US	13/997741	9681428	US-2014-0254504-A1	
12439	HYBRID AUTOMATIC REPEAT REQUEST (HARQ) MAPPING FOR CARRIER AGGREGATION (CA)			NP	PAT-Active	US	13/853390	9088977	US-2013-0322357-A1	
12440	MEASUREMENT OF NODES IN COORDINATED MULTIPPOINT (CoMP) SYSTEMS			NP	PAT-Active	US	13/853388	9084855	US-2013-0322273-A1	
12441	COMMUNICATION CONTROLLER AND METHOD FOR TRANSMITTING DATA			NP	PAT-Active	US	13/792595	9591617	US-2014-0254488-A1	
12442	EPHEMERAL IDENTITY FOR DEVICE AND SERVICE DISCOVERY			NP	PAT-Active	US	13/712304	9883388	US-2014-0192601-A1	
12443	PREVENTING DROPPED CALLS THROUGH BEHAVIOR PREDICTION			NP	PAT-Active	US	13/721776	9462436	US-2014-0179279-A1	
12444	CELLULAR NETWORK SCANNING CONTROL BASED ON AMBIENT IDENTIFIABLE WIRELESS SIGNAL SOURCES			NP	PAT-Active	US	13/728186	9526083	US-2014-0187272-A1	
12445	CELLULAR NETWORK SCANNING CONTROL BASED ON AMBIENT IDENTIFIABLE WIRELESS SIGNAL SOURCES			CNT	APP-Pending	US	15/371120		US-2017-0238241-A1	
12446	LOCATION-BASED SELECTION OF WIRELESS PERIPHERAL DEVICES			NP	PAT-Active	US	13/726375	#####	US-2014-0175230-A1	
12447	CURRENT RE-USING WIDEBAND LOW-NOISE ACTIVE BALUN			NP	PAT-Active	US	13/795957	9048785	US-2014-0266469-A1	
12448	CURRENT RE-USING WIDEBAND LOW-NOISE ACTIVE BALUN			CNT	PAT-Active	US	14/727262	9281787	US-2015-0263682-A1	
12449	SYSTEMS AND METHODS UTILIZING ADAPTIVE ENVELOPE TRACKING			NP	PAT-Active	US	13/945096	9166830	US-2015-0023445-A1	
12450	SYSTEMS AND METHODS UTILIZING ADAPTIVE ENVELOPE TRACKING			CNT	PAT-Active	US	14/842104	9413299	US-2015-0372647-A1	
12451	RADIO FREQUENCY DIGITAL TO ANALOG CONVERTER			NP	PAT-Active	US	13/893031	8854242	US-2014-0269976-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12452	RADIO FREQUENCY DIGITAL TO ANALOG CONVERTER			CNT	PAT-Active	US	14/446534	9024796	US-2014-0341322-A1	
12453	PROTOCOL CONVERSION AND BANDWIDTH REDUCTION TECHNIQUE PROVIDING MULTIPLE NBD ISDN BASIC RATE INTERFACE LINKS OVER A WIRELESS CODE DIVISION MULTIPLE ACCESS COMMUNICATION SYSTEM			REX	PAT-Active	US	93/008990	6151332		
12454	FAST ACQUISITION OF TRAFFIC CHANNELS FOR A HIGHLY VARIABLE DATA RATE REVERSE LINK OF A CDMA WIRELESS COMMUNICATION SYSTEM			CNT	PAT-Active	US	10/179121	7602749	US-2002-0163898-A1	
12455	SYSTEM AND METHOD FOR MAINTAINING TIMING OF SYNCHRONIZATION MESSAGES OVER A REVERSE LINK OF A CDMA WIRELESS COMMUNICATION SYSTEM			CIP	PAT-Active	US	03/997732	7936728	US-2002-0080742-A1	
12456	SYSTEM AND METHOD FOR CONTROLLING SIGNAL STRENGTH OVER A REVERSE LINK OF A CDMA WIRELESS COMMUNICATION SYSTEM			CIP	PAT-Active	US	08/997733	7496072	US-2002-0071409-A1	
12457	SYSTEM AND METHOD FOR MAINTAINING TIMING OF SYNCHRONIZATION MESSAGES OVER A REVERSE LINK OF A CDMA WIRELESS COMMUNICATION SYSTEM			CNT	PAT-Active	US	10/895591	7771566	US-2005-0013284-A1	
12458	VARIABLE RATE CODING FOR ENABLING HIGH PERFORMANCE COMMUNICATION			CNT	PAT-Active	US	13/259254	9306705	US-2013-0223429-A1	
12459	VARIABLE RATE CODING FOR FORWARD LINK			NP	PAT-Active	US	09/447022	6785323		
12460	VARIABLE RATE CODING FOR FORWARD LINK			CNT	PAT-Active	US	10/890485	7426241	US-2005-0018635-A1	
12461	VARIABLE RATE CODING FOR A FORWARD AND REVERSE LINK			CNT	PAT-Active	US	12/210754	8194783	US-2009-0016368-A1	
12462	SUBSCRIBER UNIT AND METHOD FOR VARIABLE FORWARD ERROR CORRECTION (FEC) DECODING			CNT	PAT-Active	US	12/326487	8204140	US-2009-0135950-A1	
12463	VARIABLE RATE CODING FOR FORWARD AND REVERSE LINK			CNT	PAT-Active	US	14/183181	9294222	US-2014-0181622-A1	
12464	MAXIMIZING DATA RATE BY ADJUSTING CODES AND CODE RATES IN CDMA SYSTEM			CIP	PAT-Active	US	05/773253	6973140	US-2001-0048709-A1	
12465	COMBINED CLOSED LOOP/OPEN LOOP POWER CONTROL IN A TIME DIVISION DUPLEX COMMUNICATION SYSTEM			NP	PAT-Active	US	08/531359	6600772		
12466	USER EQUIPMENT USING COMBINED CLOSED LOOP/OPEN LOOP POWER CONTROL			CNT	PAT-Active	US	10/831902	6928102	US-2004-0196880-A1	
12467	MAINTENANCE OF CHANNEL USAGE IN A WIRELESS COMMUNICATION SYSTEM			CNT	PAT-Closed	US	13/211853	8908652	US-2013-0299506-A1	
12468	WEIGHTED OPEN LOOP POWER CONTROL IN A TIME DIVISION DUPLEX COMMUNICATION SYSTEM			NP	PAT-Active	US	08/532349	6587723		
12469	USER EQUIPMENT UTILIZING WEIGHTED OPEN LOOP POWER CONTROL			CNT	PAT-Active	US	10/082885	6577668	US-2002-0080762-A1	
12470	METHOD OF EMPLOYING WEIGHTED OPEN LOOP POWER CONTROL IN A BASE STATION			CNT	PAT-Active	US	15/083212	6584139	US-2002-0080766-A1	
12471	METHOD OF EMPLOYING WEIGHTED OPEN LOOP POWER CONTROL FOR A USER EQUIPMENT			CNT	PAT-Active	US	10/083230	6590927	US-2002-0080853-A1	
12472	BASE STATION UTILIZING A WEIGHTED OPEN LOOP POWER CONTROL			CNT	PAT-Active	US	13/083240	6577669	US-2002-0085504-A1	
12473	USER EQUIPMENT UTILIZING WEIGHTED OPEN LOOP POWER CONTROL			CNT	PAT-Active	US	10/446539	6845122	US-2003-0193916-A1	
12474	WEIGHTED OPEN LOOP POWER CONTROL			CNT	PAT-Active	US	10/755645	6956889	US-2004-0141467-A1	
12475	WEIGHTED OPEN LOOP POWER CONTROL TRANSMITTER CROSS REFERENCE TO RELATED APPLICATIONS			CNT	PAT-Active	US	11/978298	7532659	US-2008-0063029-A1	
12476	USER EQUIPMENT METHOD EMPLOYING A TIME DIVISION DUPLEX TECHNIQUE			CNT	PAT-Active	US	10/080482	6597724	US-2002-0080764-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12477	METHOD FOR OUTER LOOP/WEIGHTED OPEN LOOP POWER CONTROL APPARATUS EMPLOYED BY A BASE STATION			CNT	PAT-Active	US	10/081809	6600773	US-2002-0980765-A1	
12478	OUTER LOOP/WEIGHTED OPEN LOOP POWER CONTROL			CNT	PAT-Active	US	10/756758	6993063	US-2004-0141983-A1	
12479	USER EQUIPMENT FOR CONTROLLING TRANSMISSION POWER LEVELS			CNT	PAT-Active	US	12/330912	8942711	US-2009-0380496-A1	
12480	MINIMAL MAINTENANCE LINK TO SUPPORT SYNCHRONIZATION			NP	PAT-Active	US	09/778474	8175120	US-2001-0036200-A1	
12481	MINIMAL MAINTENANCE LINK TO SUPPORT SYNCHRONIZATION			CNT	PAT-Active	US	13/335575	8508268	US-2012-0093131-A1	
12482	MINIMAL MAINTENANCE LINK TO SUPPORT SYNCHRONIZATION			CNT	PAT-Active	US	13/938500	9301274	US-2013-0301636-A1	
12483	MINIMAL MAINTENANCE LINK TO SUPPORT SYNCHRONIZATION			CNT	PAT-Active	US	15/081747	9807714	US-2016-0212720-A1	
12484	RECEIVER FOR TIME DIVISION MULTIPLEX SYSTEM WITHOUT EXPLICIT TIME SLOT ASSIGNMENT			NP	PAT-Active	US	09/594112	6463074		
12485	RECEIVER FOR TIME DIVISION MULTIPLEX SYSTEM WITHOUT EXPLICIT TIME SLOT ASSIGNMENT			CIP	PAT-Active	US	10/266079	6445104	US-2003-0165155-A1	
12486	RECEIVER FOR TIME DIVISION MULTIPLEX SYSTEM WITHOUT EXPLICIT TIME SLOT ASSIGNMENT			CNT	PAT-Active	US	11/022353	8462689	US-2005-0105547-A1	
12487	TIME-SLOTTED DATA PACKETS WITH A PREAMBLE			NP	PAT-Active	US	09/845240	6925070	US-2002-0013135-A1	
12488	TIME-SLOTTED DATA PACKETS WITH A PREAMBLE			CNT	PAT-Active	US	11/189529	7885702	US-2005-0271028-A1	
12489	TIME-SLOTTED DATA PACKETS WITH A PREAMBLE			CNT	PAT-Active	US	13/026865	8467353	US-2011-0194537-A1	
12490	TIME-SLOTTED DATA PACKETS WITH A PREAMBLE			CNT	PAT-Active	US	13/891427	9237206	US-2013-0242950-A1	
12491	TIME-SLOTTED DATA PACKETS WITH A PREAMBLE			CNT	PAT-Active	US	14/095446	9398120	US-2015-0229743-A1	
12492	ANTENNA CONTROL SYSTEM AND METHOD			NP	PAT-Active	US	09/999172	8155086		
12493	ANTENNA CONTROL SYSTEM AND METHOD			CNT	PAT-Active	US	13/442513	8437330	US-2012-0201199-A1	
12494	ANTENNA CONTROL SYSTEM AND METHOD			CNT	PAT-Active	US	13/862149	9225395	US-2013-0330025-A1	
12495	ANTENNA CONTROL SYSTEM AND METHOD			CNT	PAT-Active	US	14/877687	9924468	US-2016-0029327-A1	
12496	ANTENNA CONTROL SYSTEM AND METHOD			CNT	PAT-Active	US	15/170565	9775115	US-2016-0278020-A1	
12497	ALTERNATE CHANNEL FOR CARRYING SELECTED MESSAGE TYPES			NP	PAT-Active	US	09/775304	6954448	US-2002-0101839-A1	
12498	ALTERNATE CHANNEL FOR CARRYING SELECTED MESSAGE TYPES			CNT	PAT-Active	US	11/235725	7502351	US-2006-0018293-A1	
12499	ALTERNATE CHANNEL FOR CARRYING SELECTED MESSAGE TYPES			CNT	PAT-Active	US	12/400872	8274954	US-2009-0175249-A1	
12500	ALTERNATE CHANNEL FOR CARRYING SELECTED MESSAGE TYPES			CNT	PAT-Active	US	14/201455	9325477	US-2014-0185570-A1	
12501	ALTERNATE CHANNEL FOR CARRYING SELECTED MESSAGE TYPES			CNT	PAT-Active	US	15/130706	9998888	US-2016-0234001-A1	
12502	USE OF CORRELATION COMBINATION TO ACHIEVE CHANNEL DETECTION			CIP	PAT-Active	US	10/119522	7551663		

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12503	METHODS, APPARATUSES AND SYSTEMS FOR SELECTIVE TRANSMISSION OF TRAFFIC DATA USING ORTHOGONAL SEQUENCES			CNT	PAT-Active	US	13/306547	8638877	US-2012-0218985-A1	
12504	USE OF CORRELATION COMBINATION TO ACHIEVE CHANNEL DETECTION			CNT	PAT-Active	US	14/137099	9247510	US-2014-0177608-A1	
12505	USE OF CORRELATION COMBINATION TO ACHIEVE CHANNEL DETECTION			CNT	PAT-Active	US	14/952474	#####	US-2016-0081048-A1	
12506	APPARATUS AND METHOD FOR PERFORMING INITIAL CELL SEARCH IN WIRELESS COMMUNICATION SYSTEMS			NP	PAT-Active	US	09/998885	6494935	US-2003-0031162-A1	
12507	FAST SWITCHING OF FORWARD LINK IN WIRELESS SYSTEM			NP	PAT-Active	US	09/847860	6853646	US-2002-0163894-A1	
12508	FAST SWITCHING OF FORWARD LINK IN WIRELESS SYSTEM			CNT	PAT-Active	US	11/053082	7289469	US-2005-0136923-A1	
12509	FAST SWITCHING OF FORWARD LINK IN WIRELESS SYSTEM			CNT	PAT-Active	US	11/978308	8218562	US-2008-0156185-A1	
12510	FAST SWITCHING OF FORWARD LINK IN WIRELESS SYSTEM			CNT	PAT-Active	US	13/533768	8718004	US-2017-0289177-A1	
12511	FAST SWITCHING OF FORWARD LINK IN WIRELESS SYSTEM			CNT	PAT-Active	US	14/245366	8363806	US-2014-0215258-A1	
12512	FAST SWITCHING OF FORWARD LINK IN WIRELESS SYSTEM			CNT	PAT-Active	US	14/618712	9648602	US-2015-0156755-A1	
12513	TRANSMISSION OF HEARTBEAT SIGNAL AT A LOWER LEVEL THAN HEARTBEAT REQUEST			CIP	PAT-Active	US	10/171080	7221664	US-2003-0086399-A1	
12514	TRANSMISSION OF HEARTBEAT SIGNAL AT A LOWER LEVEL THAN HEARTBEAT REQUEST			CNT	PAT-Active	US	11/805013	8134980	US-2007-023426-A1	
12515	SIGNALING FOR WIRELESS COMMUNICATIONS			CNT	PAT-Active	US	13/751608	9014118	US-2013-0196111-A1	
12516	MULTI-DETECTION OF HEARTBEAT TO REDUCE ERROR PROBABILITY			CIP	PAT-Active	US	10/171378	7384791	US-2003-0095517-A1	
12517	MULTI-DETECTION OF HEARTBEAT TO REDUCE ERROR PROBABILITY			CNT	PAT-Active	US	12/165472	9042400	US-2009-0086680-A1	
12518	SYSTEM FOR IMPROVED POWER SAVINGS DURING FULL DTX MODE OF OPERATION IN THE DOWNLINK			NP	PAT-Active	US	10/273478	7768953	US-2003-0086381-A1	
12519	MAC ARCHITECTURE IN WIRELESS COMMUNICATION SYSTEMS SUPPORTING H-ARQ			NP	PAT-Active	US	10/270822	7376879	US-2003-0086391-A1	
12520	MEDIUM ACCESS CONTROL-HIGH SPEED			CNT	PAT-Active	US	11/365148	7392452	US-2006-0242520-A1	
12521	MAC ARCHITECTURE IN WIRELESS COMMUNICATION SYSTEMS SUPPORTING H-ARQ			CNT	PAT-Active	US	12/144415	8271844	US-2008-0253346-A1	
12522	MAC ARCHITECTURE IN WIRELESS COMMUNICATION SYSTEMS SUPPORTING H-ARQ			CNT	PAT-Active	US	13/588775	8484525	US-2012-0307622-A1	
12523	MAC ARCHITECTURE IN WIRELESS COMMUNICATION SYSTEMS SUPPORTING H-ARQ			CNT	PAT-Active	US	13/892759	9072115	US-2013-0250920-A1	
12524	MAC ARCHITECTURE IN WIRELESS COMMUNICATION SYSTEMS SUPPORTING H-ARQ			CNT	PAT-Active	US	14/722380	9596056	US-2015-0356123-A1	
12525	SYSTEM FOR EFFICIENT RECOVERY OF MODE B BUFFERED DATA FOLLOWING SERVING HIGH SPEED DOWNLINK SHARED CHANNEL CELL CHANGE			NP	PAT-Active	US	10/334489	6717927	US-2003-0189909-A1	
12526	HIGH SPEED DOWNLINK SHARED CHANNEL CELL CHANGE			CNT	PAT-Active	US	10/787800	8085726	US-2004-0165054-A1	
12527	HIGH SPEED DOWNLINK SHARED CONTROL CHANNEL CELL CHANGE			CNT	PAT-Active	US	11/352556	8085728	US-2006-0153137-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12528	HIGH SPEED DOWNLINK SHARED CONTROL CHANNEL CELL CHANGE			CNT	PAT-Active	US	11/352569	8085729	US-2006-0126567-A1	
12529	HS-DSCH INTER-NODE B CELL CHANGE			CNT	PAT-Active	US	11/489975	8130721	US-2006-0256745-A1	
12530	HS-DSCH INTER-NODE B CELL CHANGE			CNT	PAT-Active	US	13/412143	8837431	US-2012-0170550-A1	
12531	HS-DSCH INTER-NODE B CELL CHANGE			CNT	PAT-Active	US	14/460631	9220337	US-2014-0362826-A1	
12532	HS-DSCH INTER-NODE B CELL CHANGE			CNT	PAT-Active	US	14/977504	9565603	US-2016-0112912-A1	
12533	METHOD AND APPARATUS FOR REDUCING UPLINK AND DOWNLINK TRANSMISSION ERRORS BY SUPPORTING ADAPTIVE MODULATION AND CODING AND HYBRID AUTOMATIC REPEAT REQUEST FUNCTIONS			NP	PAT-Active	US	10/434870	7408904	US-2004-0305786-A1	
12534	MOBILE UNIT HAVING INTERNET PROTOCOL FUNCTIONALITY			NP	PAT-Active	US	10/441432	7640038	US-2004-0343791-A1	
12535	MOBILE UNIT HAVING INTERNET PROTOCOL FUNCTIONALITY			CNT	PAT-Active	US	12/646491	8364198	US-2010-0094454-A1	
12536	MOBILE UNIT HAVING INTERNET PROTOCOL FUNCTIONALITY			CNT	PAT-Active	US	13/744258	8909232	US-2013-0137437-A1	
12537	MOBILE UNIT HAVING INTERNET PROTOCOL FUNCTIONALITY			CNT	PAT-Active	US	14/561168	9264086	US-2015-0141078-A1	
12538	MOBILE UNIT HAVING INTERNET PROTOCOL FUNCTIONALITY			CNT	PAT-Active	US	14/991781	9509356	US-2016-0119008-A1	
12539	METHOD AND APPARATUS FOR INTERCONNECTION OF PERSONAL AREA NETWORKS (PANS)			CNT	PAT-Active	US	11/127577	8116773	US-2005-0201348-A1	
12540	FAST HARQ ACKNOWLEDGEMENT GENERATION METHOD USING A STOPPING RULE FOR TURBO DECODING			CNT	PAT-Active	US	11/491310	7467345	US-2007-0158630-A1	
12541	INFORMATION STORAGE FOR RADIO RESOURCE MANAGEMENT			NP	PAT-Active	US	10/681026	7248878	US-2004-0192317-A1	
12542	BIAS ERROR COMPENSATED INITIAL TRANSMISSION POWER CONTROL FOR DATA SERVICES			NP	PAT-Active	US	10/721482	7274947	US-2004-0105426-A1	
12543	INITIAL CELL SEARCH IN WIRELESS COMMUNICATION SYSTEMS			NP	PAT-Active	US	10/772644	7444144	US-2004-0248602-A1	
12544	METHOD FOR IDENTIFYING A CODE GROUP REPRESENTATIVE OF A NUMBER OF BASE STATIONS			CNT	PAT-Active	US	12/258877	8086228	US-2009-0054084-A1	
12545	METHOD AND SYSTEM FOR MANAGING RADIO RESOURCES IN A TIME-SLOTTED COMMUNICATION SYSTEM			NP	PAT-Active	US	10/886735	7170877	US-2005-0041623-A1	
12546	METHOD AND SYSTEM FOR MANAGING RADIO RESOURCES IN A TIME-SLOTTED COMMUNICATION SYSTEM			CNT	PAT-Active	US	11/654765	9456451	US-2007-0115893-A1	
12547	SYSTEM FOR EFFICIENT RECOVERY OF NODE-B BUFFERED DATA FOLLOWING MAC LAYER RESET			NP	PAT-Active	US	10/616331	7706405	US-2004-0052229-A1	
12548	METHOD AND APPARATUS FOR STORING MOBILE STATION PHYSICAL MEASUREMENTS AND MAC PERFORMANCE STATISTICS IN A MANAGEMENT INFORMATION BASE OF AN ACCESS POINT			NP	PAT-Active	US	10/890790	6958982	US-2005-0050422-A1	
12549	METHOD AND APPARATUS FOR STORING MOBILE STATION PHYSICAL MEASUREMENTS AND MAC PERFORMANCE STATISTICS IN A MANAGEMENT INFORMATION BASE OF AN ACCESS POINT			CNT	PAT-Active	US	11/183549	8340051	US-2006-0018284-A1	
12550	METHOD AND APPARATUS FOR STORING MOBILE STATION PHYSICAL MEASUREMENTS AND MAC PERFORMANCE STATISTICS IN A MANAGEMENT INFORMATION BASE OF AN ACCESS POINT			CNT	PAT-Active	US	14/248169	9319994	US-2014-0293876-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12551	METHOD AND APPARATUS FOR STORING MOBILE STATION PHYSICAL MEASUREMENTS AND MAC PERFORMANCE STATISTICS IN A MANAGEMENT INFORMATION BASE OF AN ACCESS POINT			CNT	PAT-Active	US	15/132093	9048438	US-2016-0234056-A1	
12552	TRANSPORT FORMAT COMBINATION SELECTION IN A WIRELESS TRANSMIT/RECEIVE UNIT			NP	PAT-Active	US	11/019489	7215655	US-2005-0169293-A1	
12553	TFC AND E-TFC SELECTION FOR A USER EQUIPMENT			CNT	PAT-Active	US	11/705638	7522557	US-2007-0140179-A1	
12554	TRANSPORT FORMAT COMBINATION SELECTION IN A WIRELESS TRANSMIT/RECEIVE UNIT			CNT	PAT-Active	US	12/632516	8483348	US-2009-0195248-A1	
12555	TRANSPORT FORMAT COMBINATION SELECTION IN A WIRELESS TRANSMIT/RECEIVE UNIT			CNT	PAT-Active	US	14/511096	9942878	US-2015-0023310-A1	
12556	SYSTEM AND METHOD FOR CALL ROUTING AND PAGING ACROSS DIFFERENT TYPES OF NETWORKS			CNT	PAT-Active	US	12/839506	8385330	US-2011-0164024-A1	
12557	SYSTEM AND METHOD FOR CALL ROUTING AND PAGING ACROSS DIFFERENT TYPES OF NETWORKS			CNT	PAT-Active	US	14/187062	9088960	US-2014-0171131-A1	
12558	ORTHOGONAL FREQUENCY DIVISION MULTIPLEXING-CODE DIVISION MULTIPLE ACCESS SYSTEM			NP	PAT-Active	US	11/385168	7876806	US-2006-0245472-A1	
12559	ORTHOGONAL FREQUENCY DIVISION MULTIPLEXING-CODE DIVISION MULTIPLE ACCESS SYSTEM			CNT	PAT-Active	US	12/984101	8705641	US-2011-0142094-A1	
12560	ORTHOGONAL FREQUENCY DIVISION MULTIPLEXING-CODE DIVISION MULTIPLE ACCESS SYSTEM			CNT	PAT-Active	US	14/197440	9614578	US-2014-0185654-A1	
12561	HYBRID ORTHOGONAL FREQUENCY DIVISION MULTIPLE ACCESS SYSTEM AND METHOD			NP	PAT-Active	US	11/406878	7715460	US-2006-0236839-A1	
12562	HYBRID ORTHOGONAL FREQUENCY DIVISION MULTIPLE ACCESS WTRU AND METHOD			CNT	PAT-Active	US	12/775769	8023551	US-2010-0270664-A1	
12563	HYBRID ORTHOGONAL FREQUENCY DIVISION MULTIPLE ACCESS WTRU AND METHOD			CNT	PAT-Active	US	13/236147	8340153	US-2012-0098617-A1	
12564	HYBRID ORTHOGONAL FREQUENCY DIVISION MULTIPLE ACCESS WTRU AND METHOD			CNT	PAT-Active	US	13/706811	8767795	US-2013-0100895-A1	
12565	HYBRID ORTHOGONAL FREQUENCY DIVISION MULTIPLE ACCESS WTRU AND METHOD			CNT	PAT-Active	US	14/164670	9077468	US-2014-0204899-A1	
12566	HYBRID ORTHOGONAL FREQUENCY DIVISION MULTIPLE ACCESS SYSTEM AND METHOD			CNT	PAT-Active	US	14/791113	#####	US-2015-0326357-A1	
12567	FREQUENCY DOMAIN JOINT DETECTION FOR WIRELESS COMMUNICATION SYSTEMS			NP	PAT-Active	US	11/441881	7548577	US-2006-0274842-A1	
12568	METHOD AND APPARATUS FOR PROVIDING EFFICIENT PRECODING FEEDBACK IN A MIMO WIRELESS COMMUNICATION SYSTEM			NP	PAT-Active	US	11/840328	7881247	US-2008-0049702-A1	
12569	METHOD AND APPARATUS FOR CONTROLLING DISCONTINUOUS TRANSMISSION AND RECEPTION			NP	PAT-Active	US	11/948148	7941626	US-2008-0132230-A1	
12570	DYNAMIC CHANNEL QUALITY MEASUREMENT PROCEDURE FOR ADAPTIVE MODULATION AND CODING TECHNIQUES			NP	PAT-Active	US	10/029569	6810236	US-2002-0168944-A1	
12571	DYNAMIC CHANNEL QUALITY MEASUREMENT PROCEDURE IMPLEMENTED BY A BASE STATION FOR ADAPTIVE MODULATION AND CODING TECHNIQUES			CNT	PAT-Active	US	10/768213	6999901	US-2004-0185788-A1	
12572	DYNAMIC CHANNEL QUALITY MEASUREMENT PROCEDURE IMPLEMENTED IN A WIRELESS DIGITAL COMMUNICATION SYSTEM TO PRIORITIZE THE FORWARDING OF DOWNLINK DATA			CNT	PAT-Active	US	15/012746	9686803	US-2016-0150551-A1	
12573	DYNAMIC CHANNEL QUALITY MEASUREMENT PROCEDURE IMPLEMENTED BY USER EQUIPMENT FOR ADAPTIVE MODULATION AND CODING TECHNIQUES			CNT	PAT-Active	US	10/768223	7117256	US-2004-0185789-A1	
12574	DYNAMIC CHANNEL QUALITY MEASUREMENT PROCEDURE IMPLEMENTED IN A WIRELESS DIGITAL COMMUNICATION SYSTEM TO PRIORITIZE THE FORWARDING OF DOWNLINK DATA			CNT	PAT-Active	US	10/768312	7171163	US-2004-0185866-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12575	DYNAMIC CHANNEL QUALITY MEASUREMENT PROCEDURES FOR OPTIMIZING DATA TRANSMISSION IN A WIRELESS DIGITAL COMMUNICATION SYSTEM			CNT	PAT-Active	US	10/768313	7209711	US-2004-0185862-A1	
12576	WIRELESS COMMUNICATION METHOD AND APPARATUS FOR MINIMIZING OVERHEAD SIGNALING AND OPTIMIZING RADIO RESOURCE UTILIZATION			CNT	PAT-Active	US	11/656547	7639989	US-2007-0117519-A1	
12577	DYNAMIC CHANNEL QUALITY MEASUREMENT PROCEDURE IMPLEMENTED IN A WIRELESS DIGITAL COMMUNICATION SYSTEM TO PRIORITIZE THE FORWARDING OF DOWNLINK DATA			CNT	PAT-Active	US	12/648470	7904026	US-2010-0105337-A1	
12578	DYNAMIC CHANNEL QUALITY MEASUREMENT PROCEDURE IMPLEMENTED IN A WIRELESS DIGITAL COMMUNICATION SYSTEM TO PRIORITIZE THE FORWARDING OF DOWNLINK DATA			CNT	PAT-Active	US	13/042134	8213036	US-2011-0159908-A1	
12579	DYNAMIC CHANNEL QUALITY MEASUREMENT PROCEDURE IMPLEMENTED IN A WIRELESS DIGITAL COMMUNICATION SYSTEM TO PRIORITIZE THE FORWARDING OF DOWNLINK DATA			CNT	PAT-Active	US	13/534561	8437702	US-2012-0263151-A1	
12580	DYNAMIC CHANNEL QUALITY MEASUREMENT PROCEDURE IMPLEMENTED IN A WIRELESS DIGITAL COMMUNICATION SYSTEM TO PRIORITIZE THE FORWARDING OF DOWNLINK DATA			CNT	PAT-Active	US	13/782664	9253789	US-2013-0176970-A1	
12581	APPARATUS SYSTEM AND METHOD OF BEAM SELECTION FOR BEAMFORMED DIVERSITY WIRELESS COMMUNICATION			NP	PAT-Active	US	13/798852	9091879	US-2014-0126620-A1	
12582	APPARATUS SYSTEM AND METHOD OF BEAM SELECTION FOR BEAMFORMED DIVERSITY WIRELESS COMMUNICATION			CNT	PAT-Active	US	14/619293	9531450	US-2015-0222333-A1	
12583	APPARATUS SYSTEM AND METHOD OF CONTROLLING DATA FLOW OVER A COMMUNICATION NETWORK USING A TRANSFER RESPONSE			NP	PAT-Active	US	13/798504	9654604	US-2014-0140197-A1	
12584	Apparatus system and method of controlling data flow over a communication network			CNT	PAT-Active	US	14/998744	9813530	US-2016-0134728-A1	
12585	Apparatus system and method of controlling data flow over a communication network			CNT	PAT-Active	US	15/782768	#####	US-2018-0334946-A1	
12586	Apparatus system and method of controlling data flow over a communication network			CNT	APP-Pending	US	16/231790		US-2019-0335923-A1	
12587	COMMUNICATION TERMINAL DEVICE AND METHOD FOR CONTROLLING			NP	PAT-Active	US	13/759162	9228338	US-2014-0219181-A1	
12588	COMMUNICATION TERMINAL DEVICE AND METHOD FOR CONTROLLING			CNT	PAT-Active	US	14/924919	9571592	US-2016-0305949-A1	
12589	COMMUNICATION TERMINAL COMMUNICATION DEVICE METHOD FOR PROCESSING A PAGING MESSAGE AND METHOD FOR CONTROLLING A COMMUNICATION TERMINAL			NP	PAT-Active	US	13/787965	9584986	US-2014-0256385-A1	
12590	COMMUNICATION DEVICE AND METHOD FOR RECEIVING INFORMATION			NP	PAT-Active	US	13/743380	9883515	US-2014-0198732-A1	
12591	COMMUNICATION DEVICE AND METHOD FOR RECEIVING INFORMATION			NP	PAT-Active	US	13/781872	9554361	US-2014-0247813-A1	
12592	RADIO COMMUNICATION DEVICES AND CELLULAR WIDE AREA RADIO BASE STATION			NP	PAT-Active	US	13/779835	9532400	US-2014-0243038-A1	
12593	COMMUNICATION TERMINAL NETWORK COMPONENT BASE STATION AND METHOD FOR COMMUNICATING			PCT	PAT-Active	US	13/977055	9516624	US-2013-0272251-A1	
12594	METHOD AND APPARATUS FOR GENERATING A PLURALITY OF MODULATED SIGNALS			NP	PAT-Active	US	13/790853	9054921	US-2014-0260893-A1	
12595	CAPACITIVE DIGITAL TO ANALOG CONVERTER			NP	PAT-Active	US	13/688867	8836559	US-2014-0146913-A1	
12596	CAPACITIVE DIGITAL TO ANALOG CONVERTER			REV	PAT-Active	US	14/457184	9184763	US-2014-0347203-A1	
12597	DIGITAL TO ANALOG CONVERTER COMPRISING MIXER			NP	PAT-Active	US	13/688980	8947806	US-2014-0146914-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12598	DIGITAL TO ANALOG CONVERTER COMPRISING MIXER			CNT	PAT-Active	US	14/336088	9444485	US-2014-0328429-A1	
12599	COMMUNICATIONS TERMINAL AND A METHOD FOR SELECTING A TRANSMIT ANTENNA FOR A TRANSMISSION TO A RADIO COMMUNICATIONS NETWORK			NP	PAT-Active	US	13/772529	9379798	US-2014-0233865-A1	
12600	COMMUNICATIONS TERMINAL AND A METHOD FOR SELECTING A TRANSMIT ANTENNA FOR A TRANSMISSION TO A RADIO COMMUNICATIONS NETWORK			CNT	PAT-Active	US	15/162651	9660711	US-2016-0365086-A1	
12601	COMMUNICATIONS TERMINAL AND A METHOD FOR SELECTING A TRANSMIT ANTENNA FOR A TRANSMISSION TO A RADIO COMMUNICATIONS NETWORK			CNT	APP-Pending	US	15/490256		US-2018-0062718-A1	
12602	METHOD FOR USING CODEBOOK INDEXING TO ACHIEVE HIGH BIT DENSITIES IN A DIRECT-SEQUENCE CDMA SPREAD SPECTRUM COMMUNICATION SYSTEM			NP	PAT-Active	US	09/002747	7301983		
12603	RADIO COMMUNICATION DEVICES AND CELLULAR WIDE AREA RADIO BASE STATION			NP	PAT-Active	US	13/779884	8855645	US-2014-0243040-A1	
12604	DEVICE AND METHOD FOR FREQUENCY OFFSET ESTIMATION			PCT	PAT-Active	US	14/233366	9584355	US-2015-0319027-A1	
12605	WIRELESS STATION AND METHODS FOR TOF POSITIONING USING REVERSE-DIRECTION GRANT			PCT	PAT-Active	US	14/124444	8313811	US-2014-0365549-A1	
12606	AMPLIFIER STAGE			NP	PAT-Active	US	13/773852	9590575	US-2014-0246045-A1	
12607	TRANSFORMER AND ELECTRICAL CIRCUIT			NP	PAT-Active	US	14/183618	9837199	US-2014-0240063-A1	
12608	TRANSFORMER AND ELECTRICAL CIRCUIT			CNT	APP-Pending	US	15/019980		US-2016-0181005-A1	
12609	USING MULTIPLE SOURCES OF LOCATION-AID DATA TO DETERMINE POSITION INFORMATION			NP	PAT-Active	US	13/797599	9110157	US-2014-0278077-A1	
12610	APPARATUS SYSTEM AND METHOD OF WIRELESS BACKHAUL AND ACCESS COMMUNICATION VIA A COMMON ANTENNA ARRAY			NP	PAT-Active	US	13/868541	9231681	US-2014-0204845-A1	
12611	APPARATUS SYSTEM AND METHOD OF WIRELESS BACKHAUL AND ACCESS COMMUNICATION VIA A COMMON ANTENNA ARRAY			CNT	PAT-Active	US	14/953564	9621248	US-2016-0094286-A1	
12612	APPARATUS SYSTEM AND METHOD OF WIRELESS BACKHAUL AND ACCESS COMMUNICATION VIA A COMMON ANTENNA ARRAY			CNT	PAT-Active	US	15/447420	#####	US-2017-0180128-A1	
12613	INTERFERENCE CANCELLATION RADIO RECEIVER			NP	PAT-Active	US	13/929228	9042429	US-2015-0003509-A1	
12614	APPARATUS SYSTEM AND METHOD OF WIRELESS BACKHAUL COMMUNICATION BETWEEN WIRELESS COMMUNICATION NODES			NP	PAT-Active	US	13/865625	9326273	US-2014-0206368-A1	
12615	DUAL COMMUNICATION CIRCUIT DEVICE SELECTING COMMUNICATION CIRCUIT BASED ON COMMUNICATION ACTIVITY HISTORY			NP	PAT-Active	US	13/870010	9544416	US-2014-0323175-A1	
12616	SELECTING FIRST OR SECOND SUBSCRIBER IDENTITY MODULE BASED ON PRIORITY			CNT	PAT-Active	US	15/376776	9832783	US-2017-0127432-A1	
12617	METHOD AND APPARATUS FOR AUTONOMOUS CLUSTER HEAD SELECTION FOR MACHINE-TYPE-COMMUNICATIONS (MTC)			NP	PAT-Active	US	14/012062	9578635	US-2014-0092833-A1	
12618	USER EQUIPMENT AND METHOD FOR ENHANCED UPLINK POWER CONTROL			NP	PAT-Active	US	13/971971	9264963	US-2015-0055454-A1	
12619	USER EQUIPMENT AND METHOD FOR ENHANCED UPLINK POWER CONTROL			CNT	PAT-Active	US	14/995227	9538487	US-2016-0174170-A1	
12620	USER EQUIPMENT AND METHOD FOR ENHANCED UPLINK POWER CONTROL			CNT	PAT-Active	US	15/385632	#####	US-2017-0265150-A1	
12621	DEVICE-TO-DEVICE CONTENTION MANAGEMENT SCHEME FOR MOBILE BROADBAND NETWORKS			NP	PAT-Active	US	13/931415	9277439	US-2015-0003322-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12622	PHASE INTERPOLATOR			NP	PAT-Active	US	13/873826	9077511	US-2014-0321513-A1	
12623	CIRCUIT AND METHOD FOR SOFTWARE TRACING			NP	PAT-Active	US	13/833392	9438428	US-2013-0246676-A1	
12624	POWER SENSING IN WIRELESS SYSTEM			NP	PAT-Active	US	14/155374	9537518	US-2015-0372723-A1	
12625	DISTRIBUTED MOBILITY ANCHORING FOR WIRELESS NETWORKS			DIV	PAT-Active	US	14/806353	9629075	US-2015-0327051-A1	
12626	STATISTICS FOR OPTIMIZING DISTRIBUTED MOBILITY ANCHORING FOR WIRELESS NETWORKS			NP	PAT-Active	US	13/942252	9247490	US-2014-0273039-A1	
12627	METHOD AND DEVICE FOR PROCESSING A SIGNAL BASED ON A FIRST AND A SECOND COVARIANCE MEASURE			NP	PAT-Active	US	13/927715	9461757	US-2015-0003260-A1	
12628	PROVIDING ASSISTANCE TO A BASE STATION FROM USER EQUIPMENT			NP	PAT-Active	US	13/845328	8948475	US-2013-0242837-A1	
12629	PROVIDING ASSISTANCE TO A BASE STATION FROM USER EQUIPMENT			CNT	PAT-Active	US	14/070243	#####	US-2014-0056200-A1	
12630	SWITCHING DISCONTINUOUS RECEPTION PARAMETERS			NP	PAT-Active	US	13/845178	8386571	US-2013-0265928-A1	
12631	SYSTEMS AND METHODS FOR DEVICE-TO-DEVICE COMMUNICATION IN THE ABSENCE OF NETWORK COVERAGE			NP	PAT-Active	US	13/930565	9288756	US-2014-0094119-A1	
12632	HYBRID AUTOMATIC REPEAT REQUEST (HARQ) MAPPING FOR CARRIER AGGREGATION (CA)			NP	PAT-Active	US	13/867018	9681326	US-2014-0092824-A1	
12633	METHOD OF ENHANCED INTERFERENCE MEASUREMENTS FOR CHANNEL STATE INFORMATION (CSI) FEEDBACK			NP	PAT-Active	US	14/027401	9781638	US-2014-0092878-A1	
12634	METHOD OF ENHANCED INTERFERENCE MEASUREMENTS FOR CHANNEL STATE INFORMATION (CSI) FEEDBACK			CNT	PAT-Active	US	15/579778	#####	US-2017-0347286-A1	
12635	MANAGEMENT APPARATUS AND METHOD TO SUPPORT WLAN OFFLOADING			NP	PAT-Active	US	13/830981	9516556	US-2014-0092742-A1	
12636	MANAGEMENT APPARATUS AND METHOD TO SUPPORT WLAN OFFLOADING			CNT	APP-Pending	US	15/298546		US-2017-0041827-A1	
12637	ANDSF POLICIES FOR WLAN AND PLMN SELECTION			NP	PAT-Active	US	13/895261	9083775	US-2014-0092886-A1	
12638	ANDSF PARAMETERS FOR WLAN NETWORK SELECTION			NP	PAT-Active	US	13/830465	9497740	US-2014-0092731-A1	
12639	ANDSF PARAMETERS FOR WLAN NETWORK SELECTION			CNT	PAT-Active	US	15/286236	9324401	US-2017-0026868-A1	
12640	SELECTIVE JOINER OF USER EQUIPMENT WITH WIRELESS CELL			NP	PAT-Active	US	13/802491	8923880	US-2014-0094185-A1	
12641	DETERMINATION OF ENHANCED PHYSICAL DOWNLINK CONTROL CHANNEL CANDIDATES IN A WIRELESS COMMUNICATION NETWORK			NP	PAT-Active	US	13/830277	9107362	US-2014-0092823-A1	
12642	DETERMINATION OF ENHANCED PHYSICAL DOWNLINK CONTROL CHANNEL CANDIDATES IN A WIRELESS COMMUNICATION NETWORK			CNT	PAT-Active	US	14/743205	9386487	US-2015-0289240-A1	
12643	DETERMINATION OF ENHANCED PHYSICAL DOWNLINK CONTROL CHANNEL CANDIDATES IN A WIRELESS COMMUNICATION NETWORK			CNT	PAT-Active	US	15/171402	9603095	US-2016-0278060-A1	
12644	DETERMINATION OF ENHANCED PHYSICAL DOWNLINK CONTROL CHANNEL CANDIDATES IN A WIRELESS COMMUNICATION NETWORK			CNT	PAT-Active	US	15/426987	#####	US-2017-0150484-A1	
12645	METHOD AND DEVICE FOR REDUCING POWER DRAIN WHILE CAMPED ON A WIRELESS LOCAL AREA NETWORK			NP	PAT-Active	US	13/070518	8780775	US-2013-0292853-A1	
12646	METHOD AND APPARATUS FOR CELL DETECTION IN A WIRELESS COMMUNICATION SYSTEM			NP	PAT-Active	US	12/842469	8663063	US-2012-0020335-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12647	METHOD FOR FACILITATING SYNCHRONISATION BETWEEN A COMMUNICATIONS NETWORK AND A WIRELESS COMMUNICATIONS DEVICE OPERATING IN A CPC DTX MODE AND A WIRELESS COMMUNICATIONS DEVICE			NP	PAT-Active	US	13/540576	8088940	US-2013-0021932-A1	
12648	WIRELESS COMMUNICATION DEVICE AND METHOD FOR PERFORMING NEIGHBOR CELL ANALYSIS DURING CONTINUOUS PACKET CONNECTIVITY MODE			NP	PAT-Active	US	12/941786	8675554	US-2012-0113825-A1	
12649	SELF-CORRECTING MULTIRATE FILTER			NP	PAT-Active	US	13/342258	8693601	US-2013-0170531-A1	
12650	MINIMALISTIC LTE MAINTENANCE TIMING ADVANCE METHOD			CNT	PAT-Active	US	14/216912	9344986	US-2014-0198757-A1	
12651	IMS BASED P2P STREAMING AND DOWNLOAD SERVICES			NP	PAT-Active	US	14/041363	9388498	US-2014-0095730-A1	
12652	ENHANCED VIDEO DECODING WITH APPLICATION LAYER FORWARD ERROR CORRECTION			NP	PAT-Active	US	14/032719	#####	US-2014-0119459-A1	
12653	ENERGY-AWARE MULTIMEDIA ADAPTATION FOR STREAMING AND CONVERSATIONAL SERVICES			NP	PAT-Active	US	14/041476	9629131	US-2014-0095670-A1	
12654	PERIODIC CHANNEL STATE INFORMATION REPORTING FOR COORDINATED MULTIPPOINT (CoMP) SYSTEMS			NP	PAT-Active	US	13/886619	9369922	US-2014-0038703-A1	
12655	PERIODIC CHANNEL STATE INFORMATION REPORTING FOR TIME DIVISION DUPLEX (TDD) CARRIER AGGREGATION SYSTEMS			NP	PAT-Active	US	13/886795	9161254	US-2014-0092787-A1	
12656	PERIODIC CHANNEL STATE INFORMATION REPORTING FOR TIME DIVISION DUPLEX (TDD) CARRIER AGGREGATION SYSTEMS			CNT	PAT-Active	US	14/473292	9848351	US-2014-0369244-A1	
12657	PERIODIC CHANNEL STATE INFORMATION REPORTING FOR TIME DIVISION DUPLEX (TDD) CARRIER AGGREGATION SYSTEMS			CNT	PAT-Active	US	14/946576	9848353	US-2016-0080134-A1	
12658	PERIODIC CHANNEL STATE INFORMATION REPORTING FOR TIME DIVISION DUPLEX (TDD) CARRIER AGGREGATION SYSTEMS			CNT	APP-Pending	US	15/727869		US-2018-0027442-A1	
12659	SYSTEMS AND METHODS FOR WIRELESS SIGNAL MEASUREMENT AND REPORTING FOR DEVICE-TO-DEVICE COMMUNICATION			DIV	PAT-Active	US	14/875894	9743390	US-2016-0029262-A1	
12660	TRANSMISSION OF UPLINK CONTROL INFORMATION IN INTER-ENB CARRIER AGGREGATION			NP	PAT-Active	US	13/927823	9301183	US-2014-0092865-A1	
12661	HYBRID AUTOMATIC REPEAT REQUEST (HARQ) MAPPING FOR CARRIER AGGREGATION (CA)			NP	PAT-Active	US	13/867020	9439095	US-2014-0092786-A1	
12662	MACHINE TYPE COMMUNICATION MONITORING FRAMEWORK FOR 3GPP SYSTEMS			NP	PAT-Active	US	13/928628	9025445	US-2014-0098208-A1	
12663	MACHINE TYPE COMMUNICATION MONITORING FRAMEWORK FOR 3GPP SYSTEMS			CNT	PAT-Active	US	14/684155	9386486	US-2015-0215801-A1	
12664	MACHINE TYPE COMMUNICATION MONITORING FRAMEWORK FOR 3GPP SYSTEMS			CNT	PAT-Active	US	14/955933	9942791	US-2016-0088509-A1	
12665	MACHINE TYPE COMMUNICATION MONITORING FRAMEWORK FOR 3GPP SYSTEMS			CNT	APP-Pending	US	15/906100		US-2018-0192318-A1	
12666	SYSTEMS AND METHODS FOR LOW POWER CONSUMPTION IN WIRELESS COMMUNICATION SYSTEMS			NP	PAT-Active	US	13/928690	9462555	US-2014-0092799-A1	
12667	SYSTEMS AND METHODS FOR LOW POWER CONSUMPTION IN WIRELESS COMMUNICATION SYSTEMS			DIV	PAT-Active	US	15/259319	#####	US-2016-0081730-A1	
12668	SYSTEMS AND METHODS FOR SEMI-PERSISTENT SCHEDULING OF WIRELESS COMMUNICATIONS			NP	PAT-Active	US	13/928722	9973319	US-2014-0092829-A1	
12669	SYSTEMS AND METHODS FOR SEMI-PERSISTENT SCHEDULING OF WIRELESS COMMUNICATIONS			CNT	APP-Pending	US	15/941504		US-2018-0227104-A1	
12670	COMMUNICATION DEVICE MOBILE TERMINAL METHOD FOR REQUESTING INFORMATION AND METHOD FOR PROVIDING INFORMATION			NP	PAT-Active	US	13/803042	9407302	US-2014-0153482-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12671	METHOD AND RELATED MOBILE DEVICE FOR SEARCHING FOR A MOBILE NETWORK			NP	PAT-Active	US	13/937046	9185640	US-2015-0911207-A1	
12672	SYNCHRONIZING PHASES BETWEEN LOCAL LO GENERATION CIRCUITS			NP	PAT-Active	US	14/047117	9054855	US-2015-0998543-A1	
12673	APPARATUS AND METHOD FOR DETERMINING INFORMATION ON A POWER VARIATION OF A TRANSMIT SIGNAL			NP	PAT-Active	US	14/341115	9588158	US-2015-0935543-A1	
12674	APPARATUS AND METHOD FOR DETERMINING INFORMATION ON A POWER VARIATION OF A TRANSMIT SIGNAL			CNT	PAT-Active	US	15/415854	#####	US-2017-0295547-A1	
12675	DEVICE AND METHOD FOR CHANNEL ESTIMATION AND SIGNAL DEMODULATION			NP	PAT-Active	US	14/099766	9338032	US-2015-0156036-A1	
12676	METHOD AND RELATED MOBILE DEVICE FOR CELL SEARCH IN MULTI RADIO ACCESS TECHNOLOGY SYSTEMS			NP	PAT-Active	US	13/954563	9360940	US-2015-0938137-A1	
12677	POWER SAVING TECHNIQUE FOR DIGITAL TO TIME CONVERTERS			NP	PAT-Active	US	14/038996	9847676	US-2015-0991364-A1	
12678	METHOD FOR NOISE SHAPING AND A NOISE SHAPING FILTER			NP	APP-Pending	US	13/946437		US-2015-0923413-A1	
12679	MOBILE RADIO COMMUNICATION DEVICES MOBILE RADIO COMMUNICATION NETWORKS AND METHODS FOR CONTROLLING THE SAME			NP	PAT-Active	US	14/025901	9301331	US-2015-0975971-A1	
12680	MOBILE RADIO COMMUNICATION DEVICES MOBILE RADIO COMMUNICATION NETWORKS AND METHODS FOR CONTROLLING THE SAME			CNT	PAT-Active	US	15/047733	#####	US-2016-0323929-A1	
12681	COMMUNICATION TERMINAL DEVICE AND METHOD FOR OPERATING A COMMUNICATION TERMINAL DEVICE			NP	PAT-Active	US	14/028583	9246637	US-2015-0978251-A1	
12682	METHOD TO IDENTIFY AND DIFFERENTIATE BACKGROUND TRAFFIC			PCT	PAT-Active	US	14/124536	9444569	US-2015-0936569-A1	
12683	NETWORK SELECTION IN A HETEROGENEOUS NETWORK			PCT	PAT-Active	US	14/786145	9872197	US-2015-0973287-A1	
12684	APPARATUS AND A METHOD FOR DETERMINING INFORMATION ON AN AMPLITUDE ERROR OF A TRANSMIT SIGNAL			NP	PAT-Active	US	14/591210	9264180	US-2015-0244604-A1	
12685	PLATFORM INDEPENDENT ANTENNA			NP	PAT-Active	US	14/134632	#####	US-2015-0180123-A1	
12686	COMMUNICATION DEVICE AND METHOD FOR PERFORMING RADIO COMMUNICATION			NP	APP-Pending	US	14/062982		US-2014-0149584-A1	
12687	COMMUNICATION DEVICE AND METHOD FOR PERFORMING RADIO COMMUNICATION			CNT	APP-Pending	US	15/197621		US-2016-0901456-A1	
12688	HYBRID BEAMFORMING FOR DATA TRANSMISSION			PCT	PAT-Active	US	14/125258	9225404	US-2015-0199292-A1	
12689	ORTHOGONAL BEAMFORMING FOR MULTIPLE USER MULTIPLE-INPUT AND MULTIPLE-OUTPUT (MU-MIMO)			PCT	PAT-Active	US	14/125330	9461723	US-2014-0341048-A1	
12690	REPORTING OF USER PLANE CONGESTION			PCT	PAT-Active	US	14/125324	#####	US-2015-0103664-A1	
12691	PHYSICAL UPLINK CONTROL CHANNEL (PUCCH) RESOURCE ALLOCATION (RA) FOR A HYBRID AUTOMATIC RETRANSMISSION RE-QUEST-ACKNOWLEDGE (HARQ-ACK) TRANSMISSION			PCT	PAT-Active	US	14/125325	9397945	US-2015-0916311-A1	
12692	PHYSICAL UPLINK CONTROL CHANNEL (PUCCH) RESOURCE ALLOCATION (RA) FOR A HYBRID AUTOMATIC RETRANSMISSION RE-QUEST-ACKNOWLEDGE (HARQ-ACK) TRANSMISSION			CNT	PAT-Active	US	14/555317	9191326	US-2015-0987723-A1	
12693	PHYSICAL UPLINK CONTROL CHANNEL (PUCCH) RESOURCE ALLOCATION (RA) FOR A HYBRID AUTOMATIC RETRANSMISSION RE-QUEST-ACKNOWLEDGE (HARQ-ACK) TRANSMISSION			CNT	PAT-Active	US	14/927089	9608916	US-2016-0966302-A1	
12694	PHYSICAL UPLINK CONTROL CHANNEL (PUCCH) RESOURCE ALLOCATION (RA) FOR A HYBRID AUTOMATIC RETRANSMISSION RE-QUEST-ACKNOWLEDGE (HARQ-ACK) TRANSMISSION			CNT	PAT-Active	US	15/403004	9794919	US-2017-0135091-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12695	PHYSICAL UPLINK CONTROL CHANNEL (PUCCH) RESOURCE ALLOCATION (RA) FOR A HYBRID AUTOMATIC RETRANSMISSION REQUEST-ACKNOWLEDGE (HARQ-ACK) TRANSMISSION			CNT	PAT-Active	US	15/725203	#####	US-2018-0098318-A1	
12696	COMMUNICATION OF POWER CONSUMPTION CONFIGURATIONS DURING HANDOVER			PCT	PAT-Active	US	14/125481	9515699	US-2015-0195800-A1	
12697	ADAPTIVE SECTORIZATION OF A SPATIAL REGION FOR PARALLEL MULTI-USER TRANSMISSIONS			PCT	PAT-Active	US	14/126037	9461727	US-2015-0131750-A1	
12698	SEQUENCE GENERATION FOR CELL SPECIFIC REFERENCE SIGNAL (CRS)			PCT	PAT-Active	US	13/125642	9265068	US-2015-0185677-A1	
12699	CARRIER TYPE (NCT) INFORMATION EMBEDDED IN SYNCHRONIZATION SIGNAL			PCT	PAT-Active	US	14/128343	9516656	US-2014-0254567-A1	
12700	SIMULTANEOUS TRANSMIT AND RECEIVE (STR) STRUCTURES IMMUNE TO PHASE AND AMPLITUDE IMBALANCES			PCT	PAT-Active	US	14/128278	9387564	US-2015-0005867-A1	
12701	CSI-RS ANTENNA PORTS EXTENSION AND 3D CODEBOOK DESIGN			PCT	PAT-Active	US	14/128338	9438451	US-2015-0180684-A1	
12702	TECHNIQUES FOR BEAMFORMING TO MITIGATE MULTI-USER LEAKAGE AND INTERFERENCE			PCT	PAT-Active	US	14/128614	9252853	US-2015-0200718-A1	
12703	TECHNIQUES FOR USER PLANE CONGESTION MITIGATION			PCT	PAT-Active	US	14/129952	9603104	US-2015-0201352-A1	
12704	CHANNEL QUALITY INFORMATION FEEDBACK TECHNIQUES			PCT	PAT-Active	US	14/411409	9986477	US-2015-0163039-A1	
12705	CHANNEL QUALITY INFORMATION FEEDBACK TECHNIQUES			CNT	APP-Pending	US	15/990643		US-2019-0007878-A1	
12706	RANK INDICATOR INHERITANCE FOR SUBFRAME RESTRICTED CHANNEL STATE INFORMATION REPORTING			PCT	PAT-Active	US	14/759109	9854480	US-2015-0344817-A1	
12707	APPARATUS AND METHOD FOR CROSS-CARRIER QUASI CO-LOCATION SIGNALING IN A NEW CARRIER TYPE (NCT) WIRELESS NETWORK			PCT	PAT-Active	US	14/759116	9763154	US-2015-0343882-A1	
12708	APPARATUS AND METHOD FOR CONTROL CHANNEL MONITORING IN A NEW CARRIER TYPE (NCT) WIRELESS NETWORK			PCT	PAT-Active	US	14/759119	#####	US-2015-0343818-A1	
12709	PERFORMANCE MONITORING OF WIRELESS LOCAL AREA NETWORK (WLAN) OFFLOADING IN WIRELESS CELLULAR NETWORKS			PCT	PAT-Active	US	14/128018	9936431	US-2015-0103648-A1	
12710	MAPPING SPECIAL SUBFRAMES IN A WIRELESS COMMUNICATION NETWORK			PCT	PAT-Active	US	14/127891	9503892	US-2015-0005870-A1	
12711	RESOURCE MANAGEMENT IN MULTIPLE RADIO ACCESS NETWORKS			PCT	PAT-Active	US	14/122961	9258734	US-2015-0043336-A1	
12712	MANAGING COMMUNICATIONS IN MULTIPLE RADIO ACCESS NETWORKS			PCT	PAT-Active	US	14/122963	9277493	US-2015-0043342-A1	
12713	INTERFERENCE AVERAGING AND INTERFERENCE RESOURCE GROUPS IN A WIRELESS COMMUNICATION SYSTEM			PCT	PAT-Active	US	14/127900	9525446	US-2015-0264694-A1	
12714	INTERFERENCE AVERAGING AND INTERFERENCE RESOURCE GROUPS IN A WIRELESS COMMUNICATION SYSTEM			CNT	PAT-Active	US	15/343196	9908033	US-2017-0078909-A1	
12715	INTERFERENCE AVERAGING AND INTERFERENCE RESOURCE GROUPS IN A WIRELESS COMMUNICATION SYSTEM			CNT	PAT-Active	US	15/852986	#####	US-2018-0191388-A1	
12716	CENTRALIZED PARTITIONING OF USER DEVICES IN A HETEROGENEOUS WIRELESS NETWORK			PCT	PAT-Active	US	14/129197	9226211	US-2015-0201374-A1	
12717	ENERGY-HARVESTING DEVICES IN WIRELESS NETWORKS			PCT	PAT-Active	US	14/127928	9271242	US-2015-0201342-A1	
12718	ENHANCED PHYSICAL DOWNLINK CONTROL CHANNEL SCRAMBLING AND DEMODULATION REFERENCE SIGNAL SEQUENCE GENERATION			PCT	PAT-Active	US	14/127118	9402251	US-2014-0355531-A1	
12719	ENHANCED PHYSICAL DOWNLINK CONTROL CHANNEL SCRAMBLING AND DEMODULATION REFERENCE SIGNAL SEQUENCE GENERATION			PCT	PAT-Active	US	15/183742	#####	US-2016-0295567-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12720	BLIND DECODING FOR AN ENHANCED PHYSICAL DOWNLINK CONTROL CHANNEL (EPDCCH)			NP	PAT-Active	US	13/931102	9167574	US-2014-098283-A1	
12721	BLIND DECODING FOR AN ENHANCED PHYSICAL DOWNLINK CONTROL CHANNEL (EPDCCH)			ENT	PAT-Active	US	14/882289	9549404	US-2016-003798-A1	
12722	BLIND DECODING FOR AN ENHANCED PHYSICAL DOWNLINK CONTROL CHANNEL (EPDCCH)			ENT	PAT-Active	US	15/374623	9872289	US-2017-012788-A1	
12723	BLIND DECODING FOR AN ENHANCED PHYSICAL DOWNLINK CONTROL CHANNEL (EPDCCH)			ENT	PAT-Active	US	15/861385	#####	US-2018-0132213-A1	
12724	ADVANCED WIRELESS COMMUNICATION SYSTEMS AND TECHNIQUES			PSP	APP-Closed	US	61/821635			
12725	CHANNEL STATE INFORMATION FEEDBACK SCHEME FOR COOPERATIVE MULTI-POINT TRANSMISSION AND CARRIER AGGREGATION SCENARIO			PCT	PAT-Active	US	14/126654	9277471	US-2014-026983-A1	
12726	CHANNEL STATE INFORMATION FEEDBACK SCHEME FOR COOPERATIVE MULTI-POINT TRANSMISSION AND CARRIER AGGREGATION SCENARIO			ENT	PAT-Active	US	15/013658	9674753	US-2016-0157241-A1	
12727	LONG-TERM EVOLUTION DEVICE-TO-DEVICE DISCOVERY USING CONTROL CHANNEL			PCT	PAT-Active	US	14/126998	9324432	US-2015-0043438-A1	
12728	SIGNALING QoS REQUIREMENTS AND UE POWER PREFERENCE IN LTE-A NETWORKS			PCT	PAT-Active	US	14/127092	9420511	US-2015-0230179-A1	
12729	EXTENDED DISCONTINUOUS RECEPTION (DRX) CYCLE LENGTH IN WIRELESS COMMUNICATION NETWORKS			PCT	PAT-Active	US	14/127521	9998971	US-2014-0285215-A1	
12730	COVERAGE BOOSTING TRANSMISSION METHOD FOR LTE TECHNOLOGY			PCT	PAT-Active	US	14/124964	9585075	US-2014-0286302-A1	
12731	SYSTEM AND METHOD OF CELL OUTAGE COMPENSATION IN CELLULAR SYSTEMS			PCT	PAT-Active	US	14/124457	9363727	US-2014-0295856-A1	
12732	FREQUENCY OFFSET MEASUREMENT ENHANCEMENTS FOR LONG TERM EVOLUTION (LTE)			PCT	PAT-Active	US	14/125767	9332499	US-2015-0329874-A1	
12733	INTER-RAT MOBILITY OF IN-DEVICE COEXISTENCE			PCT	PAT-Active	US	14/119228	9253698	US-2015-0249547-A1	
12734	INTER-RAT MOBILITY OF IN-DEVICE COEXISTENCE			ENT	PAT-Active	US	14/990239	9572077	US-2016-0119842-A1	
12735	FAST MODULATION AND CODING SCHEME ADAPTATION PROTOCOL FOR LONG TERM EVOLUTION WITH MULTIPLE-USER MULTIPLE INPUT MULTIPLE OUTPUT			PCT	PAT-Active	US	14/125472	9609564	US-2015-0171939-A1	
12736	SPECTRUM SHARING BASED ON SELF-ORGANIZING NETWORKS			PCT	PAT-Active	US	14/766873	9821260	US-2015-0382201-A1	
12737	SPECTRUM SHARING BASED ON SELF-ORGANIZING NETWORKS			ENT	PAT-Active	US	15/810832	#####	US-2018-0098305-A1	
12738	SPECTRUM SHARING BASED ON SELF-ORGANIZING NETWORKS			ENT	APP-Pending	US	15/540656			
12739	METHOD AND SYSTEM FOR THE MANAGEMENT OF CELL INTERFERENCE IN A WIRELESS COMMUNICATION NETWORK			PCT	PAT-Active	US	14/125726	9204401	US-2015-0036597-A1	
12740	PUCCH RESOURCE COMPRESSION FOR EPDCCH IN TDD MODE			PCT	PAT-Active	US	14/652590	9532316	US-2015-0341922-A1	
12741	PUCCH RESOURCE COMPRESSION FOR EPDCCH IN TDD MODE			ENT	PAT-Active	US	15/386404	9872282	US-2017-0201977-A1	
12742	PUCCH RESOURCE COMPRESSION FOR EPDCCH IN TDD MODE			ENT	PAT-Active	US	15/867065	#####	US-2018-0132213-A1	
12743	PUCCH RESOURCE COMPRESSION FOR EPDCCH IN TDD MODE			ENT	PAT-Active	US	15/037752	#####	US-2018-0343648-A1	
12744	APPARATUS SYSTEM AND METHOD OF LAWFUL INTERCEPTION (LI) IN A CELLULAR NETWORK			PCT	PAT-Active	US	14/129296	#####	US-2015-0016413-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12745	APPARATUS SYSTEM AND METHOD OF COMMUNICATING NON-CELLULAR ACCESS NETWORK INFORMATION OVER A CELLULAR NETWORK			PCT	PAT-Active	US	14/129295	9525538	US-2015-0382281-A1	
12746	APPARATUS SYSTEM AND METHOD OF COMMUNICATING NON-CELLULAR ACCESS NETWORK INFORMATION OVER A CELLULAR NETWORK			CNT	PAT-Active	US	15/294731	#####	US-2017-0142691-A1	
12747	CONTENT URL AUTHENTICATION FOR DASH			PCT	PAT-Active	US	14/653451	9419973	US-2015-0350205-A1	
12748	CONTENT URL AUTHENTICATION FOR DASH			CNT	PAT-Active	US	15/221499	9413404	US-2017-0134356-A1	
12749	PRESENCE SERVICE USING IMS BASED DASH SERVICE			PCT	PAT-Active	US	14/653455	9801054	US-2015-0334152-A1	
12750	PRESENCE SERVICE USING IMS BASED DASH SERVICE			CNT	PAT-Active	US	15/725205	#####	US-2018-0035450-A1	
12751	LINK-AWARE STREAMING ADAPTATION			PCT	APP-Pending	US	14/763123		US-2015-0373077-A1	
12752	DYNAMIC CONFIGURATION OF UPLINK (UL) AND DOWNLINK (DL) FRAME RESOURCES FOR A TIME DIVISION DUPLEX (TDD) TRANSMISSION			PCT	PAT-Active	US	14/125605	9282571	US-2015-0188890-A1	
12753	DYNAMIC CONFIGURATION OF UPLINK (UL) AND DOWNLINK (DL) FRAME RESOURCES FOR A TIME DIVISION DUPLEX (TDD) TRANSMISSION			CNT	PAT-Active	US	15/013520	8860912	US-2016-0156454-A1	
12754	DYNAMIC CONFIGURATION OF UPLINK (UL) AND DOWNLINK (DL) FRAME RESOURCES FOR A TIME DIVISION DUPLEX (TDD) TRANSMISSION			CNT	APP-Pending	US	16/148990		US-2019-0059095-A1	
12755	DYNAMIC CONFIGURATION OF UPLINK (UL) AND DOWNLINK (DL) FRAME RESOURCES FOR A TIME DIVISION DUPLEX (TDD) TRANSMISSION			CNT	PAT-Active	US	15/722889	#####	US-2018-0027581-A1	
12756	COMMUNICATION OF SECURITY KEY INFORMATION			PCT	PAT-Active	US	14/125806	9313802	US-2014-0307872-A1	
12757	COMMUNICATION OF SECURITY KEY INFORMATION			CNT	PAT-Active	US	15/070461	9942914	US-2016-0198343-A1	
12758	COMMUNICATION OF SECURITY KEY INFORMATION			CNT	APP-Pending	US	16/893212		US-2018-0167963-A1	
12759	LAWFUL INTERCEPTION FOR DEVICE-TO-DEVICE (D2D) COMMUNICATION			PCT	PAT-Active	US	14/125608	9532213	US-2015-0138087-A1	
12760	METHOD APPARATUS AND SYSTEM FOR HANDLING IN-DEVICE COEXISTENCE INTERFERENCE IN A WIRELESS NETWORK			PCT	PAT-Active	US	14/126809	#####	US-2014-0247759-A1	
12761	METHOD APPARATUS AND SYSTEM FOR MANAGING BEARERS IN A WIRELESS COMMUNICATION SYSTEM			PCT	PAT-Active	US	14/653221	9448322	US-2015-0351139-A1	
12762	METHOD APPARATUS AND SYSTEM FOR MANAGING BEARERS IN A WIRELESS COMMUNICATION SYSTEM			CNT	APP-Pending	US	15/804786		US-2018-0063861-A1	
12763	CHANNEL STATE INFORMATION REFERENCE SIGNAL PATTERNS FOR TIME DIVISION DUPLEX SYSTEMS IN LONG TERM EVOLUTION WIRELESS NETWORKS			PCT	PAT-Active	US	14/126599	9455811	US-2014-0198675-A1	
12764	SYSTEMS AND METHODS FOR MOBILITY OPTIMIZATION IN A HETEROGENEOUS NETWORK			PCT	PAT-Active	US	14/127923	9973986	US-2014-0198767-A1	
12765	SYSTEMS AND METHODS FOR GENERATING A DISCOVERY SIGNAL IN A DEVICE-TO-DEVICE OR NETWORK COMMUNICATION			PCT	PAT-Active	US	14/127929	9203568	US-2014-0198764-A1	
12766	SYSTEMS AND METHODS FOR EFFICIENT TRAFFIC OFFLOAD WITHOUT SERVICE DISRUPTION			PCT	PAT-Active	US	14/128217	9313803	US-2015-0223133-A1	
12767	SYSTEMS AND METHODS FOR EFFICIENT TRAFFIC OFFLOAD WITHOUT SERVICE DISRUPTION			CNT	PAT-Active	US	15/060390	9788201	US-2016-0183149-A1	
12768	SYSTEMS AND METHODS FOR EFFICIENT TRAFFIC OFFLOAD WITHOUT SERVICE DISRUPTION			CNT	PAT-Active	US	15/697862	#####	US-2018-0110064-A1	
12769	SYSTEMS AND METHODS FOR EFFICIENT TRAFFIC OFFLOAD WITHOUT SERVICE DISRUPTION			CNT	APP-Pending	US	16/448906			

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12770	FAST SMALL CELL DISCOVERY			PCT	PAT-Active	US	14/127479	9743305	US-2014-0198676-A1	
12771	DEVICE-TO-DEVICE DISCOVERY WITH DIRECT RADIO SIGNALS			PCT	PAT-Active	US	14/122546	9526001	US-2014-0378123-A1	
12772	TECHNIQUES AND SYSTEMS FOR EXTENDED DISCONTINUOUS RECEPTION			PCT	PAT-Active	US	14/125871	9357463	US-2015-0215889-A1	
12773	TECHNIQUES AND SYSTEMS FOR EXTENDED DISCONTINUOUS RECEPTION			CNT	PAT-Active	US	15/141341	#####	US-2016-0245406-A1	
12774	MANAGER FOR DASH MEDIA STREAMING			NP	PAT-Active	US	14/140764	9444863	US-2014-0365566-A1	
12775	DATA PROCESSING DEVICE AND METHOD FOR DETERMINING A CLOCK RELATIONSHIP			NP	PAT-Active	US	14/474332	9898034	US-2015-0074444-A1	
12776	TECHNIQUES FOR FILTERING CANDIDATE CELLS			NP	PAT-Active	US	14/480307	#####	US-2015-0071193-A1	
12777	SUBSCRIBER IDENTITY MODULE DATA ROUTING DEVICES, METHODS FOR ROUTING SUBSCRIBER IDENTITY MODULE DATA CONTROL CIRCUITS AND METHODS FOR CONTROLLING A CHANGE OF A ROUTING			NP	PAT-Active	US	14/045955	9615232	US-2015-0099559-A1	
12778	MOBILE TERMINALS AND METHODS FOR PERFORMING A MEASUREMENT			NP	PAT-Active	US	14/474331	#####	US-2015-0071191-A1	
12779	MULTIPLEXING OF CHANNEL STATE INFORMATION AND HYBRID AUTOMATIC REPEAT REQUEST - ACKNOWLEDGEMENT INFORMATION			NP	PAT-Active	US	13/934095	9294230	US-2014-0003452-A1	
12780	MULTIPLEXING OF CHANNEL STATE INFORMATION AND HYBRID AUTOMATIC REPEAT REQUEST - ACKNOWLEDGEMENT INFORMATION			CNT	PAT-Active	US	15/019915	9661619	US-2016-0165692-A1	
12781	MULTIPLEXING OF CHANNEL STATE INFORMATION AND HYBRID AUTOMATIC REPEAT REQUEST - ACKNOWLEDGEMENT INFORMATION			CNT	PAT-Active	US	15/479655	9974064	US-2017-0208565-A1	
12782	MULTIPLEXING OF CHANNEL STATE INFORMATION AND HYBRID AUTOMATIC REPEAT REQUEST - ACKNOWLEDGEMENT INFORMATION			CNT	APP-Pending	US	15/909471		US-2018-0199336-A1	
12783	UPLINK POWER CONTROL FOR PHYSICAL UPLINK CONTROL CHANNEL			NP	PAT-Active	US	13/953906	9338768	US-2014-0029532-A1	
12784	UPLINK CONTROL INFORMATION TRANSMISSION WITH LARGE NUMBER OF BITS			NP	PAT-Active	US	13/953521	9313779	US-2014-0029533-A1	
12785	UPLINK CONTROL INFORMATION TRANSMISSION WITH LARGE NUMBER OF BITS			CNT	PAT-Active	US	15/061612	#####	US-2016-0192352-A1	
12786	SYSTEMS AND METHODS FOR TRACKING ELAPSED TIME			NP	PAT-Active	US	14/084946	9317059	US-2015-0143156-A1	
12787	USER EQUIPMENT WITH REDUCED POWER CONSUMPTION OPERATIONAL MODES			PCT	PAT-Active	US	14/126723	9042279	US-2014-0269452-A1	
12788	SYSTEMS AND METHODS FOR ACCESS NETWORK SELECTION AND TRAFFIC ROUTING			PCT	PAT-Active	US	14/128184	8967727	US-2015-0105076-A1	
12789	SYSTEMS AND METHODS FOR ACCESS NETWORK SELECTION AND TRAFFIC ROUTING			CNT	APP-Pending	US	15/941467		US-2018-0227738-A1	
12790	SYSTEMS AND METHODS FOR WLAN NETWORK SELECTION			PCT	PAT-Active	US	14/126960	9380444	US-2014-0295913-A1	
12791	SHARED SPECTRUM REASSIGNMENT IN A SPECTRUM SHARING CONTEXT			PCT	PAT-Active	US	14/128993	9554416	US-2014-0321425-A1	
12792	MEASURING LINK PERFORMANCE USING MULTIPLE RADIO ACCESS NETWORKS			PCT	PAT-Active	US	14/365492	9456368	US-2015-0215795-A1	
12793	NETWORK ASSISTED DEVICE TO DEVICE DISCOVERY			PCT	PAT-Active	US	14/267671	#####	US-2016-0014589-A1	
12794	NETWORK ASSISTED DEVICE TO DEVICE DISCOVERY			CNT	PAT-Active	US	15/722382	#####	US-2018-0027401-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12795	WIRELESS LOCAL AREA NETWORK (WLAN) TRAFFIC OFFLOADING			PCT	PAT-Active	US	14/125610	9706522	US-2014-0386159-A1	
12796	RADIO ACCESS TECHNOLOGY SELECTION IN A HETEROGENEOUS NETWORK			PCT	PAT-Active	US	14/769187	9814021	US-2015-0382224-A1	
12797	NETWORK SELECTION IN A HETEROGENEOUS NETWORK			PCT	PAT-Active	US	14/766728	#####	US-2015-0373604-A1	
12798	REPORTING OF USER PLANE CONGESTION (UPCON) USING A UPCON CONTAINER			PCT	PAT-Active	US	14/125800	9560512	US-2015-0036896-A1	
12799	END-TO-END (E2E) TUNNELING FOR MULTI-RADIO ACCESS TECHNOLOGY (MULTI-RAT)			PCT	PAT-Active	US	14/125601	9456378	US-2015-0383459-A1	
12800	NETWORK ASSISTED DEVICE-TO-DEVICE DISCOVERY FOR PEER-TO-PEER APPLICATIONS			PCT	APP-Pending	US	14/128301		US-2014-0206348-A1	
12801	MULTIMEDIA ADAPTATION BASED ON VIDEO ORIENTATION			PCT	PAT-Active	US	14/125595	9782938	US-2015-0256861-A1	
12802	MULTIMEDIA ADAPTATION BASED ON VIDEO ORIENTATION			ENT	APP-Pending	US	15/685812		US-2017-0353743-A1	
12803	SIGNALING AND CHANNEL DESIGNS FOR D2D COMMUNICATIONS			PCT	PAT-Active	US	14/125973	9451604	US-2015-0046732-A1	
12804	COOPERATIVE MULTIPLE BEAM TRANSMISSION			NP	PAT-Active	US	14/142293	9473276	US-2015-0043439-A1	
12805	ADAPTIVE CELL RANGE EXPANSION MECHANISMS FOR LTE CELLS			NP	PAT-Active	US	14/105957	9683271	US-2015-0172977-A1	
12806	ADJUSTING TUNING SEGMENTS IN A DIGITALLY-CONTROLLED OSCILLATOR			NP	PAT-Active	US	13/901481	9490825	US-2014-0347137-A1	
12807	CALIBRATED TEMPERATURE MEASUREMENT SYSTEM			NP	PAT-Active	US	13/904743	9470585	US-2014-0355851-A1	
12808	CONTINUOUS-TIME INCREMENTAL ANALOG-TO-DIGITAL CONVERTER			NP	PAT-Active	US	13/363884	8688664	US-2013-0184116-A1	
12809	COMMON-MODE FEEDBACK CIRCUIT			NP	PAT-Active	US	13/078490	8427237	US-2012-0154049-A1	
12810	DIGITAL VOLTAGE-CONTROLLED ATTENUATOR			NP	PAT-Active	US	13/207649	8447256	US-2013-0040591-A1	
12811	METHOD AND SYSTEM FOR CONTROLLING SIGNAL TRANSMISSION OF A WIRELESS COMMUNICATION DEVICE			NP	PAT-Active	US	13/079473	8538354	US-2012-0352520-A1	
12812	HYBRID AUTOMATIC REPEAT REQUEST-ACKNOWLEDGE (HARQ-ACK) CODEBOOK GENERATION FOR INTER-BAND TIME DIVISION DUPLEX (TDD) CARRIER AGGREGATION (CA)			PCT	PAT-Active	US	14/129128	9362998	US-2015-0133494-A1	
12813	RADIO-FREQUENCY TRANSMITTER AND AMPLIFIER			NP	PAT-Active	US	12/718692	8515364	US-2011-0217940-A1	
12814	RADIO-FREQUENCY TRANSMITTER AND AMPLIFIER			ENT	PAT-Active	US	13/968995	8942649	US-2014-0051374-A1	
12815	RADIO-FREQUENCY TRANSMITTER AND AMPLIFIER			ENT	PAT-Active	US	14/570882	9838047	US-2015-0173900-A1	
12816	RECONFIGURABLE DIVERSITY RECEIVER			NP	PAT-Active	US	12/748915	8606196	US-2011-0237211-A1	
12817	REDUCING TRANSMISSION SIGNAL ARTIFACT SPACING			NP	PAT-Active	US	13/912673	9055594	US-2014-0384132-A1	
12818	SELF-CALIBRATED DAC WITH REDUCED GLITCH MAPPING			NP	PAT-Active	US	13/192950	8493251	US-2013-0027235-A1	
12819	SIGNAL DUTY CYCLE REDUCTION			NP	PAT-Active	US	13/907796	9008231	US-2014-0385701-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12820	SYSTEM AND METHOD FOR MULTIPLE BAND TRANSMISSION			NP	PAT-Active	US	12/895086	8198968	US-2012-0981203-A1	
12821	SYSTEM AND METHOD FOR A DUAL-PATH TRANSMITTER			NP	PAT-Active	US	13/207776	8494460	US-2013-0938434-A1	
12822	SYSTEM AND METHOD FOR A MULTI-BAND TRANSMITTER			NP	PAT-Active	US	13/207786	8447246	US-2013-0939438-A1	
12823	SYSTEM AND METHOD FOR CONTROLLING CURRENT TO CERTAIN COMPONENTS OF A WIRELESS COMMUNICATION DEVICE			NP	PAT-Active	US	13/184180	9059766	US-2013-0918619-A1	
12824	SYSTEM AND METHOD FOR CRYSTAL OSCILLATOR FREQUENCY TUNING			NP	PAT-Active	US	12/879525	8138844	US-2012-0963594-A1	
12825	SYSTEM AND METHOD FOR ESTIMATING AND CORRECTING PHASE SHIFT IN A WIRELESS COMMUNICATION DEVICE			NP	PAT-Active	US	13/173972	8891668	US-2013-0903891-A1	
12826	SYSTEM AND METHOD FOR FREQUENCY-AGILE TRANSMISSION IN A WIRELESS COMMUNICATION DEVICE			NP	PAT-Active	US	13/208698	8934504	US-2013-0939368-A1	
12827	SYSTEM AND METHOD FOR IMPROVING POWER EFFICIENCY OF A TRANSMITTER			NP	PAT-Active	US	13/207712	8693961	US-2013-0940586-A1	
12828	SYSTEM AND METHOD FOR LINEARIZATION OF A MIXER			NP	PAT-Active	US	13/419150	8483127		
12829	SYSTEM AND METHOD FOR PRESERVING INPUT IMPEDANCE OF A CURRENT-MODE CIRCUIT			NP	PAT-Active	US	13/207672	8463206	US-2013-0943695-A1	
12830	SYSTEM AND METHOD FOR REDUCING LOCK ACQUISITION TIME OF A PHASE LOCKED LOOP			NP	PAT-Active	US	13/080196	8599985	US-2012-0257791-A1	
12831	SYSTEM AND METHOD FOR REDUCING OR ELIMINATING TEMPERATURE DEPENDENCE OF A COHERENT RECEIVER IN A WIRELESS COMMUNICATION DEVICE			NP	PAT-Active	US	13/208180	8489044	US-2013-0939394-A1	
12832	SYSTEM AND METHOD FOR SUPPORTING DIFFERENT TYPES OF OSCILLATOR CIRCUITS			NP	PAT-Active	US	13/100656	8486752	US-2012-0280847-A1	
12833	SYSTEM AND METHOD FOR SUPPORTING DIFFERENT TYPES OF OSCILLATOR CIRCUITS			NP	PAT-Active	US	13/911876	8952761	US-2013-0285755-A1	
12834	SYSTEM AND METHOD FOR SWITCH LEAKAGE CANCELLATION			NP	PAT-Active	US	12/882306	8451046	US-2012-0962307-A1	
12835	SYSTEM AND METHOD FOR TUNING AN ANTENNA IN A WIRELESS COMMUNICATION DEVICE			NP	PAT-Active	US	13/352083	9203138	US-2013-0183910-A1	
12836	SYSTEM AND METHOD FOR TUNING AN ANTENNA IN A WIRELESS COMMUNICATION DEVICE			NP	PAT-Active	US	13/053966	8938026	US-2012-0243579-A1	
12837	SYSTEMS AND METHODS FOR SPURIOUS EMISSION CANCELLATION			NP	PAT-Active	US	12/882495	8204456	US-2012-0964847-A1	
12838	TECHNIQUE TO GENERATE DIVIDE BY TWO AND 25 DUTY CYCLE			NP	PAT-Active	US	13/079516	8442472	US-2012-0252393-A1	
12839	TEMPERATURE DEPENDENT VOLTAGE REGULATOR			NP	PAT-Active	US	12/905241	8922178	US-2012-0984613-A1	
12840	TEMPERATURE COMPENSATION CIRCUIT			NP	PAT-Active	US	13/181287	8535932	US-2013-0915895-A1	
12841	TEMPERATURE COMPENSATION CIRCUIT			NP	PAT-Active	US	13/971025	8893588	US-2013-0235136-A1	
12842	TEMPERATURE MEASUREMENT SYSTEM			NP	PAT-Active	US	13/904649	9488529	US-2014-0953650-A1	
12843	DIFFERENTIAL TRANSMISSION LINE SHIELDED BY TWO OR MORE SPACED GROUPS OF SHIELDS			NP	PAT-Active	US	13/467447	8912291	US-2013-0390514-A1	
12844	TUNABLE WIDE-BAND DISTRIBUTION CIRCUIT			NP	PAT-Active	US	13/594640	8954018	US-2014-0955218-A1	
12845	VARIABLE INDUCTOR FOR IC OSCILLATOR			NP	PAT-Active	US	13/720705	8867521	US-2014-0167867-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12846	MULTI-STANDARD SYSTEMS AND METHODS WITH INTERFERER MITIGATION			NP	PAT-Active	US	14/230275	9659058	US-2015-0282098-A1	
12847	SYSTEMS AND METHODS FOR FREQUENCY DOMAIN CALIBRATION AND CHARACTERIZATION			NP	PAT-Active	US	14/143116	9148153	US-2015-0188547-A1	
12848	SYSTEMS AND METHODS FOR FREQUENCY DOMAIN CALIBRATION AND CHARACTERIZATION			ENT	PAT-Active	US	14/857145	9537495	US-2016-0079892-A1	
12849	SYSTEMS AND METHODS FOR FREQUENCY DOMAIN CALIBRATION AND CHARACTERIZATION			CNT	PAT-Active	US	15/354066	#####	US-2017-0070232-A1	
12850	SYSTEMS AND METHODS FOR FREQUENCY DOMAIN CALIBRATION AND CHARACTERIZATION			CNT	APP-Pending	US	16/458609			
12851	SYSTEMS AND METHODS FOR FREQUENCY DOMAIN CALIBRATION AND CHARACTERIZATION			ENT	PAT-Active	US	15/441603	#####	US-2017-0170833-A1	
12852	SYSTEMS AND METHODS TO COMPENSATE FOR MEMORY EFFECTS USING ENHANCED MEMORY POLYNOMIALS			NP	PAT-Active	US	14/178930	9628305	US-2015-0229498-A1	
12853	METHOD AND SYSTEM FOR ENABLING DEVICE-TO-DEVICE COMMUNICATION			PCT	PAT-Active	US	14/126983	9363702	US-2015-0195197-A1	
12854	DEVICE TRIGGER RECALL/REPLACE FEATURE FOR 3GPP/M2M SYSTEMS			PCT	PAT-Active	US	14/124984	9554296	US-2015-0181564-A1	
12855	DISCONTINUOUS RECEPTION (DRX) RECONFIGURATION			PCT	PAT-Active	US	14/125592	9237478	US-2015-0201375-A1	
12856	ALWAYS-ON BEARER FOR SMALL DATA TRANSFERS IN LTE SYSTEMS			PCT	PAT-Active	US	14/126252	9609802	US-2015-0223284-A1	
12857	ENHANCED NODE B CONFIGURED FOR USER PLANE EPS OPTIMIZATION			CNT	PAT-Active	US	15/086358	#####	US-2016-0212638-A1	
12858	EBG DESIGNS FOR MITIGATING RADIO FREQUENCY INTERFERENCE			NP	PAT-Active	US	14/258583	#####	US-2015-0303562-A1	
12859	EBG DESIGNS FOR MITIGATING RADIO FREQUENCY INTERFERENCE			ENT	APP-Pending	US	15/556886			
12860	METHOD AND RELATED MOBILE DEVICE FOR REFERENCE SIGNAL TIME DIFFERENCE BASED LOCALIZATION			NP	PAT-Active	US	14/580685	9702965	US-2015-0215884-A1	
12861	METHOD AND DEVICE FOR DETECTING INTERFERENCE SCENARIO			NP	PAT-Active	US	14/546183	#####	US-2015-0156724-A1	
12862	POSITIONING APPARATUS AND METHOD			ENT	PAT-Active	US	10/172801	6738713	US-2003-0005283-A1	
12863	POSITIONING APPARATUS AND METHOD			CNT	PAT-Active	US	10/074993	6538308	US-2002-0183925-A1	
12864	RECEIVER			NP	PAT-Active	US	09/473454	6795487		
12865	PCI PARTITION AND ALLOCATION FOR CELLULAR NETWORK			PCT	PAT-Active	US	14/433815	9838932	US-2015-0245221-A1	
12866	METHOD TO ENABLE OPTIMIZATION FOR SMALL DATA IN AN EVOLVED PACKET CORE (EPC)			PCT	PAT-Active	US	14/126611	9223309	US-2014-0265779-A1	
12867	TECHNIQUES FOR DEPLOYING SMALL CELLS AS SECONDARY CELLS FOR USER EQUIPMENT			PCT	PAT-Active	US	14/652478	9686677	US-2015-0341838-A1	
12868	IMPROVED HANDOVER WITH PING PONG AVOIDANCE IN A WIRELESS NETWORK			PCT	PAT-Active	US	14/763204	9973915	US-2015-0373596-A1	
12869	UE-BASED D2D DISCOVERY			PCT	PAT-Active	US	14/763205	9973916	US-2015-0367942-A1	
12870	UE-BASED D2D DISCOVERY			ENT	APP-Pending	US	15/947323		US-2018-0234829-A1	
12871	TARGETED GROUP-BASED DISCOVERY FOR WIRELESS COMMUNICATION DEVICES			PCT	PAT-Active	US	14/762762	9738672	US-2015-0355023-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12872	PATH SWITCHING PROCEDURE FOR DEVICE-TO-DEVICE COMMUNICATION			PCT	PAT-Active	US	14/762764	9756497	US-2015-0336033-A1	
12873	COORDINATION OF CAPACITY AND COVERAGE OPTIMIZATION OF SELF-ORGANIZING NETWORKS			PCT	PAT-Active	US	14/765524	9998023	US-2015-0373563-A1	
12874	COORDINATION OF CAPACITY AND COVERAGE OPTIMIZATION OF SELF-ORGANIZING NETWORKS			ENT	APP-Pending	US	15/977780		US-2016-0263016-A1	
12875	MULTICAST-BASED GROUP COMMUNICATIONS IN AD-HOC ARRANGEMENTS OF WIRELESS DEVICES			PCT	PAT-Active	US	14/765285	9788303	US-2015-0373510-A1	
12876	MULTICAST-BASED GROUP COMMUNICATIONS IN AD-HOC ARRANGEMENTS OF WIRELESS DEVICES			ENT	APP-Pending	US	15/691723		US-2017-0367072-A1	
12877	TECHNIQUES FOR CONNECTIONLESS SMALL DATA TRANSMISSION			PCT	PAT-Active	US	14/129951	9693336	US-2014-0334380-A1	
12878	METHOD AND APPARATUS FOR CONFIGURING AND USING SMALL DATA RADIO BEARERS			PCT	PAT-Active	US	14/768350	9967858	US-2015-0373733-A1	
12879	ESTABLISHMENT OF CONNECTION TO THE INTERNET IN CELLULAR NETWORK			PCT	PAT-Active	US	14/770880	9807591	US-2016-0097346-A1	
12880	ESTABLISHMENT OF CONNECTION TO THE INTERNET			PCT	PAT-Active	US	15/711839	#####	US-2018-0014177-A1	
12881	APPARATUS SYSTEM AND METHOD OF USER-EQUIPMENT (UE) CENTRIC TRAFFIC ROUTING			PCT	PAT-Active	US	14/772495	#####	US-2016-0020890-A1	
12882	QUALITY OF EXPERIENCE AWARE MULTIMEDIA ADAPTIVE STREAMING			PCT	PAT-Active	US	14/768298	#####	US-2016-0014184-A1	
12883	QUALITY OF EXPERIENCE AWARE MULTIMEDIA ADAPTIVE STREAMING			ENT	PAT-Active	US	16/174128	#####	US-2019-0075446-A1	
12884	WIRELESS LOCAL AREA NETWORK (WLAN) TRAFFIC LOAD MEASUREMENT PROVISIONING TO WIRELESS CELLULAR NETWORKS			PCT	APP-Pending	US	14/771839		US-2016-0029249-A1	
12885	INTERNET PROTOCOL (IP) MULTIMEDIA SUBSYSTEM (IMS) BASED PEER-TO-PEER (P2P) CONTENT DISTRIBUTION			PCT	APP-Pending	US	14/776625		US-2016-0046099-A1	
12886	TECHNIQUES TO FACILITATE DUAL CONNECTIVITY			PCT	PAT-Active	US	14/770141	9807590	US-2016-0014836-A1	
12887	CONTROL OF WLAN SELECTION POLICIES IN ROAMING SCENARIOS			PCT	PAT-Active	US	14/770069	9743268	US-2016-0021606-A1	
12888	USER EQUIPMENT AND METHOD FOR DISTRIBUTED CHANNEL ACCESS FOR D2D COMMUNICATIONS			PCT	PAT-Active	US	14/124217	9343046	US-2014-0395858-A1	
12889	NETWORK-ASSISTED LTE CHANNEL ACQUISITION			PCT	PAT-Active	US	14/771853	9807743	US-2016-0021593-A1	
12890	NETWORK SCHEDULED DEVICE-TO-DEVICE COMMUNICATION			PCT	PAT-Active	US	14/781497	#####	US-2016-0044704-A1	
12891	METHOD AND APPARATUS FOR CONTROLLING SMALL DATA TRANSMISSION ON THE UPLINK			PCT	PAT-Active	US	14/124938	9930596	US-2015-0230234-A1	
12892	SPECTRUM RECLAIMING IN A LEASED SPECTRUM SYSTEM			PCT	PAT-Active	US	14/361745	9326156	US-2015-0354852-A1	
12893	USER EQUIPMENT AND METHOD FOR ASSISTED THREE-DIMENSIONAL BEAMFORMING			PCT	PAT-Active	US	14/368597	9564957	US-2016-0191131-A1	
12894	APPARATUS SYSTEM AND METHOD OF USER-EQUIPMENT (UE) CENTRIC ACCESS NETWORK SELECTION			NP	PAT-Active	US	14/093476	9414392	US-2014-0153511-A1	
12895	APPARATUS SYSTEM AND METHOD OF USER-EQUIPMENT (UE) CENTRIC ACCESS NETWORK SELECTION			ENT	PAT-Active	US	15/006270	#####	US-2016-0142163-A1	
12896	APPARATUS SYSTEM AND METHOD OF CELLULAR NETWORK COMMUNICATIONS CORRESPONDING TO A NON-CELLULAR NETWORK			NP	PAT-Active	US	14/068221	#####	US-2014-0161103-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12887	APPARATUS SYSTEM AND METHOD OF CELLULAR NETWORK COMMUNICATIONS CORRESPONDING TO A NON-CELLULAR NETWORK			CNT	PAT-Active	US	15/607607	#####	US-2017-0332291-A1	
12888	APPARATUS SYSTEM AND METHOD OF CELLULAR NETWORK COMMUNICATIONS CORRESPONDING TO A NON-CELLULAR NETWORK			CNT	PAT-Active	US	15/715463	#####	US-2018-0320383-A1	
12889	EXTENDED PAGING DISCONTINUOUS RECEPTION (DRX) CYCLES IN WIRELESS COMMUNICATION NETWORKS			PCT	PAT-Active	US	14/779024	9754876	US-2016-0057701-A1	
12890	EXTENDED PAGING DISCONTINUOUS RECEPTION (DRX) CYCLES IN WIRELESS COMMUNICATION NETWORKS			PCT	PAT-Active	US	15/730313	#####	US-2018-0398280-A1	
12901	COMMUNICATION OF PREFERRED POWER CONSUMPTION CONFIGURATIONS			PCT	PAT-Active	US	14/125593	9277440	US-2015-0392841-A1	
12902	COMMUNICATION OF PREFERRED POWER CONSUMPTION CONFIGURATIONS			CNT	PAT-Active	US	15/013386	9843958	US-2016-0157178-A1	
12903	COMMUNICATION OF PREFERRED POWER CONSUMPTION CONFIGURATIONS			CNT	PAT-Active	US	15/697385	#####	US-2017-0374577-A1	
12904	DYNAMIC HYBRID AUTOMATIC REPEAT REQUEST-ACKNOWLEDGEMENT (HARQ-ACK) TRANSMISSION WITH ENHANCED PHYSICAL DOWNLINK CONTROL CHANNELS			PCT	PAT-Active	US	14/125706	9378806	US-2015-0195822-A1	
12905	DYNAMIC HYBRID AUTOMATIC REPEAT REQUEST-ACKNOWLEDGEMENT (HARQ-ACK) TRANSMISSION WITH ENHANCED PHYSICAL DOWNLINK CONTROL CHANNELS			CNT	PAT-Active	US	15/182392	9603132	US-2016-0374087-A1	
12906	DISCONTINUOUS RECEPTION (DRX) ENHANCEMENTS IN LTE SYSTEMS			PCT	PAT-Active	US	14/125749	9332456	US-2015-0395083-A1	
12907	DISCONTINUOUS RECEPTION (DRX) ENHANCEMENTS IN LTE SYSTEMS			CNT	PAT-Active	US	14/757660	9943164	US-2016-0128127-A1	
12908	DISCONTINUOUS RECEPTION (DRX) ENHANCEMENTS IN LTE SYSTEMS			CNT	PAT-Active	US	15/244576	#####	US-2016-0366722-A1	
12909	DISCONTINUOUS RECEPTION (DRX) ENHANCEMENTS IN LTE SYSTEMS			CNT	APP-Pending	US	16/015810		US-2018-0302820-A1	
12910	STREAMING WITH COORDINATION OF VIDEO ORIENTATION (CVO)			PCT	PAT-Active	US	14/125598	9215262	US-2015-0085074-A1	
12911	STREAMING WITH COORDINATION OF VIDEO ORIENTATION (CVO)			CNT	PAT-Active	US	14/956130	9438658	US-2016-0080053-A1	
12912	STREAMING WITH COORDINATION OF VIDEO ORIENTATION (CVO)			CNT	PAT-Active	US	15/232331	#####	US-2016-0352799-A1	
12913	APPARATUS FOR RECEIVING RANGING SIGNALS			NP	PAT-Active	US	09/731167	6664921	US-2002-0332766-A1	
12914	TIME REFERENCE SYSTEM			NP	PAT-Active	US	12/562099	8184046	US-2019-0186286-A1	
12915	RETROSPECTIVE EPHEMERIS COLLECTION			NP	PAT-Active	US	14/273741	3885786	US-2015-0363342-A1	
12916	METHOD APPARATUS AND COMPUTER PROGRAM FOR DETERMINING AN INTERPOLATED COMPLEX VALUED SAMPLE			NP	PAT-Active	US	14/708431	9871882	US-2015-0363362-A1	
12917	HYBRID REFERENCE SIGNALS FOR WIRELESS COMMUNICATION			PCT	PAT-Active	US	14/778037	#####	US-2016-0284514-A1	
12918	PHYSICAL RESOURCE BLOCK (PRB)-RESTRICTED INTERFERENCE AVERAGING IN A WIRELESS COMMUNICATION SYSTEM			PCT	PAT-Active	US	14/764547	#####	US-2015-0367960-A1	
12919	QUASI CO-LOCATION AND PDSCH RESOURCE ELEMENT MAPPING SIGNALING FOR NETWORK ASSISTED INTERFERENCE MITIGATION			PCT	PAT-Active	US	14/764540	#####	US-2015-0365154-A1	
12920	MOBILE-TERMINATED EMERGENCY CALL			PCT	PAT-Active	US	14/358880	8763072	US-2015-0172895-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12921	ENODEB REFERENCE SIGNAL REDUCTION			PCT	PAT-Active	US	14/766932	9730050	US-2016-0926843-A1	
12922	LOW POWER DEVICE TO DEVICE TRANSMISSION			PCT	PAT-Active	US	14/769411	9826391	US-2015-0382365-A1	
12923	USER EQUIPMENT HANDOVER ERROR REPORTING			PCT	PAT-Active	US	14/359874	9763127	US-2015-0237516-A1	
12924	REDUCTION OF BUFFER OVERFLOW			PCT	PAT-Active	US	14/762783	#####	US-2016-0057042-A1	
12925	SMALL DATA COMMUNICATIONS			PCT	PAT-Active	US	14/782784	9900772	US-2016-0079417-A1	
12926	MULTIPLE-INPUT MULTIPLE-OUTPUT CELLULAR NETWORK COMMUNICATIONS			PCT	PAT-Active	US	14/784257	9954587	US-2016-0065290-A1	
12927	SMALL DATA COMMUNICATIONS			PCT	PAT-Active	US	14/782783	#####	US-2016-0057797-A1	
12928	DASH-AWARE NETWORK APPLICATION FUNCTION (D-NAF)			PCT	PAT-Active	US	14/853779	9906526	US-2015-0326572-A1	
12929	DASH-AWARE NETWORK APPLICATION FUNCTION (D-NAF)			CNT	APP-Pending	US	15/808748		US-2018-0065856-A1	
12930	MULTIPLE RADIO LINK CONTROL (RLC) GROUPS			PCT	PAT-Active	US	14/785116	#####	US-2016-0094446-A1	
12931	HYBRID DIGITAL AND ANALOG BEAMFORMING FOR LARGE ANTENNA ARRAYS			PCT	PAT-Active	US	14/784256	9647735	US-2016-0080051-A1	
12932	NETWORK-LEVEL DEVICE PROXIMITY DETECTION			NP	PAT-Active	US	14/138175	9462567	US-2014-0248931-A1	
12933	WIRELESS TRANSMISSION PRECODING			PCT	PAT-Active	US	14/778040	#####	US-2016-0398593-A1	
12934	RSRP MOBILITY STATE ESTIMATION FOR CELLULAR DEVICE			PCT	PAT-Active	US	14/127930	9591581	US-2015-0225050-A1	
12935	SYSTEMS METHODS AND DEVICES FOR TRAFFIC OFFLOADING			NP	PAT-Active	US	14/318098	9380484	US-2015-0092503-A1	
12936	SYSTEMS METHODS AND DEVICES FOR TRAFFIC OFFLOADING			CNT	PAT-Active	US	15/137974	9832677	US-2016-0255531-A1	
12937	SYSTEMS METHODS AND DEVICES FOR TRAFFIC OFFLOADING			CNT	PAT-Active	US	15/804670	#####	US-2018-0132127-A1	
12938	BANG-BANG TIME TO DIGITAL CONVERTER SYSTEMS AND METHODS			NP	PAT-Active	US	14/513348	9395698	US-2016-0103423-A1	
12939	SYSTEMS AND METHODS USING A CENTRALIZED NODE TO COLLECT RAN USER PLANE CONGESTION INFORMATION			PCT	APP-Pending	US	14/771859		US-2016-0025247-A1	
12940	DIAMETER/XML PROTOCOL CONVERSION			PCT	APP-Pending	US	14/778983		US-2016-0056932-A1	
12941	REMOVAL OF IRRELEVANCE IN PHASE-MODULATED DIGITAL CARRIER SIGNALS			NP	PAT-Active	US	14/139166	9325351	US-2015-0172083-A1	
12942	COLLABORATIVE RADIO RESOURCES ALLOCATIONS TO APPLICATIONS OF MOBILE UNITS			NP	PAT-Active	US	12/966268	8478320	US-2012-0149310-A1	
12943	COLLABORATIVE RADIO RESOURCES ALLOCATIONS TO APPLICATIONS OF MOBILE UNITS			CNT	PAT-Active	US	13/908673	9204446	US-2013-0258984-A1	
12944	COLLABORATIVE RADIO RESOURCES ALLOCATIONS TO APPLICATIONS OF MOBILE UNITS			CNT	PAT-Active	US	14/927460	#####	US-2016-0020656-A1	
12945	WIRELESS INTERFERENCE MITIGATION			PCT	PAT-Active	US	14/440701	9683669	US-2015-0256279-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12946	WIRELESS INTERFERENCE MITIGATION			PCT	PAT-Active	US	14/440335	9654313	US-2015-030395B-A1	
12947	PACKET DATA CONNECTIONS IN A WIRELESS COMMUNICATION SYSTEM USING A WIRELESS LOCAL AREA NETWORK			PCT	APP-Pending	US	14/440338		US-2015-0282026-A1	
12948	INFORMATION SIGNALLING FOR NETWORK ASSISTED INTERFERENCE MITIGATION			PCT	PAT-Active	US	14/440337	#####	US-2015-0295695-A1	
12949	INFORMATION SIGNALLING FOR NETWORK ASSISTED INTERFERENCE MITIGATION			CNT	PAT-Active	US	15/056033	#####	US-2018-0316371-A1	
12950	USE OF SCHEDULING REQUEST AND RANDOM ACCESS FOR LTE ADVANCED NETWORKS			PCT	PAT-Active	US	14/440430	9671209	US-2015-0289261-A1	
12951	WIRELESS INTERFERENCE MITIGATION			PCT	PAT-Active	US	14/646524	9723506	US-2015-0286280-A1	
12952	NOTIFICATION OF RECEIVER CAPABILITIES			PCT	APP-Pending	US	14/440863		US-2015-0304063-A1	
12953	SELECTION OF ACKNOWLEDGMENT TIMING IN WIRELESS COMMUNICATIONS			PCT	PAT-Active	US	14/440860	#####	US-2015-0304087-A1	
12954	SELECTION OF ACKNOWLEDGMENT TIMING IN WIRELESS COMMUNICATIONS			CNT	PAT-Active	US	15/683549	#####	US-2017-0353204-A1	
12955	DEVICE-TO-DEVICE COMMUNICATION			PCT	PAT-Active	US	14/440429	9674847	US-2015-0289262-A1	
12956	MEASUREMENT REPORTING IN D2D COMMUNICATION			PCT	PAT-Active	US	14/440444	9763128	US-2015-0271959-A1	
12957	METHOD OF PROCESSING RECEIVED DIGITIZED SIGNALS AND MOBILE RADIO COMMUNICATION TERMINAL DEVICE			NP	PAT-Active	US	14/580243	9736852	US-2016-0182172-A1	
12958	METHOD OF PROCESSING RECEIVED DIGITIZED SIGNALS AND MOBILE RADIO COMMUNICATION TERMINAL DEVICE			CNT	APP-Pending	US	15/659674		US-2018-0070366-A1	
12959	COMMUNICATION TERMINAL AND METHOD FOR DETERMINING A POWER SCALING FACTOR			NP	PAT-Active	US	14/556863	9665059	US-2015-0288362-A1	
12960	CALIBRATING RF PATH DELAY AND IQ PHASE IMBALANCE FOR POLAR TRANSMIT SYSTEM			NP	PAT-Active	US	14/575793	9413563	US-2016-0182167-A1	
12961	CALIBRATING RF PATH DELAY AND IQ PHASE IMBALANCE FOR POLAR TRANSMIT SYSTEM			CNT	PAT-Active	US	15/231379	9954626	US-2016-0352439-A1	
12962	METHODS AND DEVICES FOR DETERMINING INTERMODULATION DISTORTIONS			NP	PAT-Active	US	14/935416	9608743	US-2016-0134311-A1	
12963	TRANSCIVER DEVICE AND A METHOD FOR GENERATING A COMPENSATION SIGNAL			NP	PAT-Active	US	14/550277	9680671	US-2015-0180685-A1	
12964	METHOD BASEBAND SIGNAL GENERATOR AND COMPUTER PROGRAM FOR PROVIDING A BASEBAND SIGNAL			NP	PAT-Active	US	14/550412	9363117	US-2015-0180690-A1	
12965	ACCESS POINT POSITION DETERMINATION BY MOBILE DEVICES CROWD SOURCING			PCT	PAT-Active	US	15/113481	#####	US-2017-0034657-A1	
12966	COMMUNICATION DEVICE AND METHOD FOR RECEIVING A SIGNAL			NP	PAT-Active	US	14/565454	9595988	US-2016-0173154-A1	
12967	COMMUNICATION TERMINAL AND A METHOD FOR REPORTING A CHANNEL QUALITY			NP	PAT-Active	US	14/593024	9398575	US-2015-0236237-A1	
12968	APPARATUS FOR PROVIDING A CONTROL SIGNAL FOR A VARIABLE IMPEDANCE MATCHING CIRCUIT AND A METHOD THEREOF			DIV	APP-Pending	US	16/119207		US-2018-0375538-A1	
12969	CIRCUIT TRANSMISSION SYSTEM AND METHOD FOR DETERMINING PROXIMITY OF AN OBJECT			NP	PAT-Active	US	14/594235	9964087	US-2015-0234077-A1	
12970	CIRCUIT TRANSMISSION SYSTEM AND METHOD FOR DETERMINING PROXIMITY OF AN OBJECT			CNT	PAT-Active	US	15/251092	#####	US-2016-0375487-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12971	CIRCUIT TRANSMISSION SYSTEM AND METHOD FOR DETERMINING PROXIMITY OF AN OBJECT			CNT	APP-Pending	US	16/258349		US-2019-0215720-A1	
12972	COMMUNICATION TERMINAL AND METHOD FOR CONTROLLING POWER CONSUMPTION OF A COMMUNICATION TERMINAL			NP	PAT-Active	US	14/530893	9693312	US-2016-0127988-A1	
12973	METHOD AND RELATED MOBILE DEVICE FOR DETERMINING A REFERENCE SIGNAL RECEIVED POWER			NP	PAT-Active	US	14/661552	9769687	US-2015-0281988-A1	
12974	METHOD AND RELATED MOBILE DEVICE FOR CELL SEARCHING WITH LOW MEMORY REQUIREMENT			NP	PAT-Active	US	14/661439	9414304	US-2015-0382055-A1	
12975	ADJACENT CHANNEL LEAKAGE REDUCTION IN SCALABLE WIRELESS COMMUNICATION NETWORK			NP	PAT-Active	US	14/142594	9572047	US-2015-0189518-A1	
12976	HARQ TIMING DESIGN FOR A TDD SYSTEM			NP	PAT-Active	US	14/141265	9331759	US-2014-0295842-A1	
12977	TIMING SYNCHRONIZATION IN DISCOVERY SIGNALS			NP	PAT-Active	US	14/142572	9398052	US-2014-0293988-A1	
12978	NETWORK ASSISTED INTERFERENCE CANCELLATION AND SUPPRESSION WITH RESPECT TO INTERFERING CONTROL CHANNEL TRANSMISSIONS			NP	PAT-Active	US	14/141220	9380090	US-2014-0293890-A1	
12979	USER EQUIPMENT AND METHODS FOR CELL RESELECTION USING SCALED TIME-TO-TRIGGER AND A3 OFFSET VALUES			CNT	PAT-Active	US	14/845019	8674757	US-2016-0066243-A1	
12980	PATTERN INDICATOR SIGNAL FOR NEW DMRS PATTERN			NP	PAT-Active	US	14/137500	9258104	US-2014-0302887-A1	
12981	RECONFIGURATION CONTROL CHANNEL RESOURCE MAPPING COLLISION AVOIDANCE			NP	PAT-Active	US	14/141876	9445338	US-2014-0301290-A1	
12982	NETWORK-ASSISTED TO DIRECT DEVICE DISCOVERY SWITCH			NP	PAT-Active	US	14/141222	9781556	US-2014-0301289-A1	
12983	USER EQUIPMENT AND METHOD FOR CELL ASSOCIATION AND BEAMFORMING TRAINING WITH A MMWAVE CAPABLE SMALL CELL			PCT	PAT-Active	US	15/026803	#####	US-2016-0249269-A1	
12984	METHOD FOR CERTIFICATION OF RECONFIGURABLE RADIO EQUIPMENT WHEN RECONFIGURATION SOFTWARE DEVELOPED BY THIRD PARTY			NP	PAT-Active	US	14/138282	9354910	US-2015-0178112-A1	
12985	APPARATUS AND METHOD FOR SINGLE-TONE DEVICE DISCOVERY IN WIRELESS COMMUNICATION NETWORKS			NP	PAT-Active	US	14/142071	9647818	US-2014-0182550-A1	
12986	APPARATUS AND METHOD FOR SINGLE-TONE DEVICE DISCOVERY IN WIRELESS COMMUNICATION NETWORKS			CNT	APP-Pending	US	15/589255		US-2017-0173815-A1	
12987	USER EQUIPMENT AND METHODS FOR ADAPTING SYSTEM PARAMETERS BASED ON EXTENDED PAGING CYCLES			NP	PAT-Active	US	14/132974	9294714	US-2014-0321343-A1	
12988	USER EQUIPMENT AND METHODS FOR ADAPTING SYSTEM PARAMETERS BASED ON EXTENDED PAGING CYCLES			CNT	PAT-Active	US	15/076500	#####	US-2017-0055239-A1	
12989	USER EQUIPMENT AND METHODS FOR ADAPTING SYSTEM PARAMETERS BASED ON EXTENDED PAGING CYCLES			CNT	APP-Pending	US	16/530732			
12990	ARCHITECTURE FOR WEB-BASED REAL-TIME COMMUNICATIONS (WEBRTC) TO ACCESS INTERNET PROTOCOL MULTIMEDIA SUBSYSTEM (IMS)			NP	PAT-Active	US	14/141034	9621845	US-2014-0325078-A1	
12991	RESUMING PACKET SERVICES IN A MOBILE NETWORK			NP	PAT-Active	US	14/141067	9320061	US-2015-0093326-A1	
12992	RESUMING PACKET SERVICES IN A MOBILE NETWORK			CNT	PAT-Active	US	14/990054	9750017	US-2016-0115967-A1	
12993	RESUMING PACKET SERVICES IN A MOBILE NETWORK			CNT	PAT-Active	US	15/688159	#####	US-2017-0359823-A1	
12994	RESUMING PACKET SERVICES IN A MOBILE NETWORK			CNT	APP-Pending	US	16/536254			
12995	INTERACTIVE ZOOMING IN VIDEO CONFERENCING			NP	PAT-Active	US	14/109121	9307192	US-2014-0320587-A1	
12996	RTSP-BASED UE CONFIGURABLE FOR VIDEO REGION-OF-INTEREST (ROI) SIGNALING			CNT	PAT-Active	US	15/083897	9743360	US-2016-0227166-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
12997	MTSI BASED UE CONFIGURABLE FOR VIDEO REGION-OF-INTEREST (ROI) SIGNALING			CNT	PAT-Active	US	15/682168	#####	US-2017-0374647-A1	
12998	RADIO ACCESS TECHNOLOGY INFORMATION STORAGE IN A MOBILE NETWORK			NP	PAT-Active	US	14/132525	9325947	US-2014-0323128-A1	
12999	USER EQUIPMENT AND METHOD FOR FEEDBACK OF USER EQUIPMENT PERFORMANCE METRICS DURING DYNAMIC RADIO SWITCHING			NP	PAT-Active	US	14/107480	9392539	US-2014-0323133-A1	
13000	DEVICE-TO-DEVICE (D2D) PREAMBLE DESIGN			NP	PAT-Active	US	14/140823	9414306	US-2014-0321360-A1	
13001	APPARATUS AND METHOD FOR CONGESTION CONTROL IN WIRELESS COMMUNICATION NETWORKS			NP	PAT-Active	US	14/141985	9288434	US-2014-0321272-A1	
13002	DEVICE AND METHOD FOR PUBLIC LAND MOBILE NETWORK SEARCHING			NP	PAT-Active	US	14/144856	9357474	US-2015-0189575-A1	
13003	USER EQUIPMENT AND METHODS FOR CODEBOOK SUBSAMPLING FOR ENHANCED 4TX CODEBOOKS			NP	PAT-Active	US	14/108648	9071297	US-2014-0352795-A1	
13004	USER EQUIPMENT AND METHODS FOR CODEBOOK SUBSAMPLING FOR ENHANCED 4TX CODEBOOKS			CNT	PAT-Active	US	14/739815	9553643	US-2016-0086493-A1	
13005	USER EQUIPMENT AND METHODS FOR CODEBOOK SUBSAMPLING FOR ENHANCED 4TX CODEBOOKS			CNT	PAT-Active	US	15/413182	#####	US-2017-0372136-A1	
13006	PROXIMITY-BASED SERVICES DISCOVERY PRIVACY			NP	PAT-Active	US	14/141843	9559761	US-2014-0357228-A1	
13007	USER EQUIPMENT AND METHOD FOR USER EQUIPMENT FEEDBACK OF FLOW-TO-RAT MAPPING PREFERENCES			NP	PAT-Active	US	14/136554	9794870	US-2015-0084980-A1	
13008	ENHANCED NODE B AND METHOD FOR RRC CONNECTION ESTABLISHMENT FOR SMALL DATA TRANSFERS			NP	PAT-Active	US	14/140932	9191378	US-2014-0191288-A1	
13009	ENHANCED NODE B AND METHOD FOR RRC CONNECTION ESTABLISHMENT FOR SMALL DATA TRANSFERS			CNT	PAT-Active	US	14/918990	9930647	US-2016-0192410-A1	
13010	MOVING AD HOC NETWORK SMALL CELL RELAY HANDOVER			NP	PAT-Active	US	14/138315	9351229	US-2015-0181502-A1	
13011	MOVING AD HOC NETWORK SMALL CELL RELAY HANDOVER			CNT	PAT-Active	US	15/162075	#####	US-2016-0269966-A1	
13012	METHOD FOR EFFICIENT CHANNEL ESTIMATION AND BEAMFORMING IN FDD SYSTEM BY EXPLOITING UPLINK-DOWNLINK CORRESPONDENCE			NP	PAT-Active	US	14/109211	9814037	US-2015-0083338-A1	
13013	METHOD FOR EFFICIENT CHANNEL ESTIMATION AND BEAMFORMING IN FDD SYSTEM BY EXPLOITING UPLINK-DOWNLINK CORRESPONDENCE			CNT	APP-Pending	US	15/304360		US-2018-0110049-A1	
13014	LICENSE SHARED ACCESS IN CELLULAR NETWORK			NP	PAT-Active	US	14/136755	9713147	US-2015-0181601-A1	
13015	SUBSPACE TRACKING IN FULL DIMENSION MIMO			NP	PAT-Active	US	14/141206	9655107	US-2015-0083543-A1	
13016	APPARATUS SYSTEM AND METHOD OF CONTROLLING A WIRELESS DOCKING DEVICE			NP	PAT-Active	US	14/227395	9315981	US-2015-0282073-A1	
13017	METHOD AND DEVICE FOR INTERFERER SCHEDULING DETECTION AND NOISE AND INTERFERER PARAMETER ESTIMATION			NP	PAT-Active	US	14/660094	9832667	US-2015-0271687-A1	
13018	DECODER AND METHOD FOR DECODING AN ENCODED SEQUENCE OF BITS			NP	PAT-Active	US	14/445146	9419656	US-2016-0036465-A1	
13019	RADIO COMMUNICATION DEVICES AND METHODS FOR CONTROLLING A RADIO COMMUNICATION DEVICE			NP	PAT-Active	US	14/801872	9673850	US-2016-0048970-A1	
13020	METHOD AND DEVICE FOR PROCESSING RESOURCE BLOCKS			NP	PAT-Active	US	14/680029	9787446	US-2015-0270834-A1	
13021	QUANTIZATION CIRCUIT AND METHOD FOR QUANTIZING AN INPUT QUANTITY			NP	PAT-Active	US	14/630953	9432039	US-2015-0280724-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
13012	ENVELOPE TRACKING PATH DELAY FINE TUNING AND CALIBRATION			NP	PAT-Active	US	14/564162	9692366	US-2016-0164650-A1	
13023	APPARATUS AND METHOD FOR GENERATING A TRANSMIT SIGNAL			NP	PAT-Active	US	14/858133	9722645	US-2016-0182101-A1	
13024	SYSTEMS AND METHODS FOR COMBINING POWER THROUGH A TRANSFORMER			NP	PAT-Active	US	14/165152	9306503	US-2015-0214896-A1	
13025	SYSTEMS AND METHODS FOR ENHANCING PROBABILITY OF INTERNAL MEASUREMENTS IN CROWDED ENVIRONMENTS			NP	PAT-Active	US	14/276355	9356631	US-2015-0335779-A1	
13026	MANAGEMENT TECHNIQUES FOR WIRELESS NETWORK MOBILITY PROCEDURES			PCT	PAT-Active	US	14/411498	9826390	US-2015-0146532-A1	
13027	MANAGEMENT TECHNIQUES FOR WIRELESS NETWORK MOBILITY PROCEDURES			CNT	APP-Pending	US	15/436693		US-2018-0020341-A1	
13028	MANAGEMENT TECHNIQUES FOR WIRELESS NETWORK MOBILITY PROCEDURES			CNT	APP-Pending	US	16/418273		US-2019-0313237-A1	
13029	PROVISIONING OF APPLICATION CATEGORIES AT A USER EQUIPMENT DURING NETWORK CONGESTION			PCT	PAT-Active	US	14/770666	#####	US-2016-0014632-A1	
13030	PROVISIONING OF APPLICATION CATEGORIES AT A USER EQUIPMENT DURING NETWORK CONGESTION			CIP	PAT-Active	US	14/590772	8743341	US-2015-0117213-A1	
13031	PROVISIONING OF APPLICATION CATEGORIES AT A USER EQUIPMENT DURING NETWORK CONGESTION			CNT	PAT-Active	US	15/644327	#####	US-2017-0311229-A1	
13032	TECHNIQUES FOR ADJACENT CHANNEL INTERFERENCE MITIGATION			PCT	PAT-Active	US	14/771269	9988558	US-2016-0007302-A1	
13033	TECHNIQUES FOR ADJACENT CHANNEL INTERFERENCE MITIGATION			CNT	APP-Pending	US	16/005519		US-2018-0356031-A1	
13034	PROXIMITY DETECTION IN A DEVICE TO DEVICE NETWORK			PCT	PAT-Active	US	14/771130	9883338	US-2016-0007152-A1	
13035	PROXIMITY DETECTION IN A DEVICE TO DEVICE NETWORK			CNT	PAT-Active	US	15/861510	#####	US-2018-0146331-A1	
13036	SYSTEMS METHODS AND DEVICES FOR DISTRIBUTED SCHEDULING FOR DEVICE-TO-DEVICE INTERFERENCE MITIGATION			PCT	PAT-Active	US	14/771866	9974048	US-2016-0037547-A1	
13037	SYSTEMS METHODS AND DEVICES TO SUPPORT INTRA-CELL COO-AWARE RADIO RESOURCE ALLOCATION			NP	PAT-Active	US	14/227775	9642034	US-2015-0281999-A1	
13038	SYSTEMS METHODS AND DEVICES FOR DISTRIBUTED SETUP FOR A DEVICE-TO-DEVICE SESSION			NP	PAT-Active	US	14/226956	9474095	US-2015-0382228-A1	
13039	METHODS APPARATUSES AND SYSTEMS FOR RETRIEVING DATA FROM A WIRELESS LOCAL AREA NETWORK (WLAN) ACCESS POINT			PCT	PAT-Active	US	14/779548	#####	US-2016-0044660-A1	
13040	USER EQUIPMENT GENERATION AND SIGNALING OF FEEDBACK FOR SUPPORTING ADAPTIVE DEMODULATION REFERENCE SIGNAL TRANSMISSION			NP	PAT-Active	US	14/229529	9337974	US-2015-0282123-A1	
13041	TIME DIVISION DUPLEX (TDD) UPLINK DOWNLINK (UL-DL) RECONFIGURATION			NP	PAT-Active	US	14/226264	9385608	US-2015-0003303-A1	
13042	TIME DIVISION DUPLEX (TDD) UPLINK DOWNLINK (UL-DL) RECONFIGURATION			INV	PAT-Active	US	15/136743	9844054	US-2016-0255628-A1	
13043	TIME DIVISION DUPLEX (TDD) UPLINK DOWNLINK (UL-DL) RECONFIGURATION			CNT	PAT-Active	US	15/801126	#####	US-2018-0070356-A1	
13044	TECHNIQUES FOR WIRELESS NETWORK DISCOVERY AND SELECTION SUPPORT			NP	PAT-Active	US	14/227937	9451535	US-2014-0293982-A1	
13045	TECHNIQUES FOR WIRELESS NETWORK DISCOVERY AND SELECTION SUPPORT			CNT	PAT-Active	US	14/951295	9648555	US-2016-0081013-A1	
13046	TECHNIQUES FOR WIRELESS NETWORK DISCOVERY AND SELECTION SUPPORT			CNT	PAT-Active	US	15/589912	#####	US-2018-0063776-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
13042	PAGING REPETITION FOR INCREASED ROBUSTNESS FOR EXTENDED PAGING CYCLES			PCT	PAT-Active	US	14/773296	9763235	US-2016-092934A-1	
13048	WIRELESS LOCAL AREA NETWORK (WLAN) SELECTION RULES			PCT	PAT-Active	US	14/779228	#####	US-2016-0950619-A1	
13049	QUEUING MECHANISM FOR CLIENT SIDE NETWORK TRAFFIC TO REDUCE RADIO POWER CONSUMPTION ON MOBILE CLIENTS			NP	PAT-Active	US	14/226690	9420537	US-2015-0282086-A1	
13050	DYNAMICAL TIME DIVISION DUPLEX UPLINK AND DOWNLINK CONFIGURATION IN A COMMUNICATIONS NETWORK			NP	PAT-Active	US	14/247675	8991653	US-2015-0029910-A1	
13051	DYNAMICAL TIME DIVISION DUPLEX UPLINK AND DOWNLINK CONFIGURATION IN A COMMUNICATIONS NETWORK			CNT	PAT-Active	US	15/256105	9756649	US-2016-0374141-A1	
13052	DYNAMICAL TIME DIVISION DUPLEX UPLINK AND DOWNLINK CONFIGURATION IN A COMMUNICATIONS NETWORK			CNT	PAT-Active	US	15/456125	#####	US-2017-0188373-A1	
13053	DYNAMICAL TIME DIVISION DUPLEX UPLINK AND DOWNLINK CONFIGURATION IN A COMMUNICATIONS NETWORK			CNT	APP-Pending	US	16/034177		US-2018-0338313-A1	
13054	DOWNLINK SELECTION IN A FULL DIMENSIONAL MULTIPLE-INPUT MULTIPLE-OUTPUT SYSTEM			NP	PAT-Active	US	14/231158	9585174	US-2015-0029875-A1	
13055	NETWORK COVERAGE HOLE DETECTION			NP	PAT-Active	US	14/255216	8265076	US-2015-0031308-A1	
13056	NETWORK COVERAGE HOLE DETECTION			CNT	PAT-Active	US	15/006758	9549421	US-2016-0142961-A1	
13057	NETWORK COVERAGE HOLE DETECTION			CNT	PAT-Active	US	15/394468	9775081	US-2017-0111830-A1	
13058	GENERATION AND USE OF A USER EQUIPMENT LOCATION DISTRIBUTION IN A WIRELESS COMMUNICATION NETWORK			PCT	PAT-Active	US	14/779557	9699081	US-2016-0044453-A1	
13059	METHOD FOR CLOSED-LOOP TUNER IN A RECEIVER ANTENNA			NP	PAT-Active	US	14/569116	9559434	US-2016-0172768-A1	
13060	CIRCUIT INTEGRATED CIRCUIT RECEIVER TRANSCIVER AND A METHOD FOR AMPLIFYING AN INPUT SIGNAL			NP	PAT-Active	US	14/698135	9356556	US-2015-0381114-A1	
13061	CIRCUIT AN INTEGRATED CIRCUIT A TRANSMITTER A RECEIVER A TRANSCIVER A METHOD FOR OBTAINING CALIBRATION DATA AND A METHOD FOR GENERATING A LOCAL OSCILLATOR SIGNAL			NP	PAT-Active	US	14/620488	9537585	US-2015-0280842-A1	
13062	APPARATUS AND METHOD FOR GENERATING AN OSCILLATOR SIGNAL			NP	PAT-Active	US	14/718248	9431958	US-2015-0372644-A1	
13063	APPARATUS AND METHOD FOR GENERATING AN OSCILLATOR SIGNAL			CNT	PAT-Active	US	15/243343	9803208	US-2016-0358457-A1	
13064	SYSTEMS METHODS AND DEVICES FOR IMPROVED INTER-FREQUENCY MEASUREMENT			NP	PAT-Active	US	14/497514	9973958	US-2015-0215803-A1	
13065	ENABLING D2D FUNCTIONALITY FOR PUBLIC SAFETY APPLICATIONS			NP	PAT-Active	US	14/497913	9674682	US-2015-0215757-A1	
13066	SYSTEMS METHODS AND DEVICES FOR SELECTIVE INTERFERENCE COORDINATION IN A CELLULAR PROTOCOL			NP	PAT-Active	US	14/498679	9774436	US-2015-0215100-A1	
13067	MEASUREMENT GAP REPETITION PATTERNS FOR INTER-FREQUENCY OFFLOADING IN HETEROGENEOUS WIRELESS NETWORKS			NP	PAT-Active	US	14/488774	9867073	US-2015-0215837-A1	
13068	MEASUREMENT GAP REPETITION PATTERNS FOR INTER-FREQUENCY OFFLOADING IN HETEROGENEOUS WIRELESS NETWORKS			CNT	PAT-Active	US	15/895173	#####	US-2018-0227785-A1	
13069	MEASUREMENT GAP REPETITION PATTERNS FOR INTER-FREQUENCY OFFLOADING IN HETEROGENEOUS WIRELESS NETWORKS			CNT	APP-Pending	US	16/595637			
13070	EFFICIENT RECEIVER YIELDING FOR DISTRIBUTED D2D COMMUNICATIONS			NP	PAT-Active	US	14/496842	9661652	US-2015-0215088-A1	
13071	APPARATUS SYSTEM AND METHOD OF CONTROLLING RADIO ACCESS TECHNOLOGY (RAT) COMMUNICATION MANAGERS			NP	PAT-Active	US	14/492342	9344939	US-2015-0215835-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
13072	APPARATUS METHOD AND SYSTEM OF INTER-NODE COMMUNICATION			NP	PAT-Active	US	14/492333	9736834	US-2015-0215834-A1	
13073	MECHANISM FOR 256-QAM CAPABLE USER EQUIPMENT TO OPERATE SEAMLESSLY WITH A NODE			PCT	PAT-Active	US	14/443998	9986544	US-2017-0270978-A1	
13074	MECHANISM FOR 256-QAM CAPABLE USER EQUIPMENT TO OPERATE SEAMLESSLY WITH A NODE			ENT	PAT-Active	US	14/716846	#####	US-2015-0256287-A1	
13075	PERIODIC CHANNEL STATUS INFORMATION (CSI) REPORTING FOR ENHANCED INTERFERENCE MANAGEMENT AND TRAFFIC ADAPTATION (EIMTA) SYSTEMS WITH CSI SUBFRAME SETS			NP	PAT-Active	US	14/495641	9571251	US-2015-0215928-A1	
13076	PERIODIC CHANNEL STATUS INFORMATION (CSI) REPORTING FOR ENHANCED INTERFERENCE MANAGEMENT AND TRAFFIC ADAPTATION (EIMTA) SYSTEMS WITH CSI SUBFRAME SETS			ENT	PAT-Active	US	14/700428	9749892	US-2015-0237521-A1	
13077	PERIODIC CHANNEL STATUS INFORMATION (CSI) REPORTING FOR ENHANCED INTERFERENCE MANAGEMENT AND TRAFFIC ADAPTATION (EIMTA) SYSTEMS WITH CSI SUBFRAME SETS			ENT	PAT-Active	US	15/675258	#####	US-2018-0254752-A1	
13078	RANDOM ACCESS PROCEDURE FOR DUAL CONNECTIVITY			NP	PAT-Active	US	14/495292	9544920	US-2015-0215967-A1	
13079	APPARATUS SYSTEM AND METHOD OF SECURING COMMUNICATIONS OF A USER EQUIPMENT (UE) IN A WIRELESS LOCAL AREA NETWORK			NP	PAT-Active	US	14/492356	9426649	US-2015-0215777-A1	
13080	USER EQUIPMENT AND METHOD FOR TRANSMIT POWER CONTROL FOR D2D TRANSMISSIONS			NP	PAT-Active	US	14/482060	9560574	US-2015-0223141-A1	
13081	USER EQUIPMENT UPLINK TOGGING FOR DUAL CONNECTIVITY NETWORKS			NP	PAT-Active	US	14/517362	9689802	US-2015-0215861-A1	
13082	USER EQUIPMENT AND METHODS FOR DEVICE-TO-DEVICE COMMUNICATION OVER AN LTE AIR INTERFACE			NP	PAT-Active	US	14/493030	9491725	US-2015-0215882-A1	
13083	DISCONTINUOUS RECEPTION ALIGNMENT IN DUAL CONNECTIVITY NETWORKS			NP	PAT-Active	US	14/528755	9872334	US-2015-0215912-A1	
13084	DISCONTINUOUS RECEPTION ALIGNMENT IN DUAL CONNECTIVITY NETWORKS			ENT	PAT-Active	US	15/332754	#####	US-2017-0241983-A1	
13085	DISCONTINUOUS RECEPTION ALIGNMENT IN DUAL CONNECTIVITY NETWORKS			ENT	APP-Pending	US	15/988280		US-2018-0352803-A1	
13086	RADIO RESOURCE CONTROL MESSAGING FOR DUAL CONNECTIVITY NETWORKS			NP	PAT-Active	US	14/528860	9578544	US-2015-0215923-A1	
13087	RADIO RESOURCE CONTROL MESSAGING FOR DUAL CONNECTIVITY NETWORKS			ENT	PAT-Active	US	15/437249	#####	US-2017-0230864-A1	
13088	APPLICATION SPECIFIC CONGESTION CONTROL IN A WIRELESS NETWORK			NP	PAT-Active	US	14/517698	9392531	US-2015-0215845-A1	
13089	SYSTEMS METHODS AND DEVICES FOR SYNCHRONIZATION AND RESOURCE ALLOCATION FOR DEVICE-TO-DEVICE COMMUNICATION			PCT	APP-Pending	US	15/032078		US-2016-0374039-A1	
13090	METHOD AND APPARATUS FOR WI-FI LOCATION DETERMINATION			PCT	APP-Pending	US	15/123797		US-2017-0215876-A1	
13091	DYNAMIC SHARED ACCESS SPECTRUM SELECTION			NP	PAT-Active	US	14/229742	9462478	US-2015-0231971-A1	
13092	SECURITY KEY REFRESH FOR DUAL CONNECTIVITY			ENT	APP-Pending	US	15/197118		US-2019-0385425-A1	
13093	USER EQUIPMENT AND METHOD FOR RESOURCE ALLOCATION AND DEVICE-TO-DEVICE DISCOVERY HOPPING			PCT	APP-Pending	US	14/778528		US-2016-0100401-A1	
13094	USER EQUIPMENT DISCOVERY RESOURCE POOL SIGNALING FOR USER EQUIPMENTS CONFIGURED FOR PRO-SE DIRECT DISCOVERY			ENT	APP-Pending	US	15/110729		US-2018-0268144-A1	
13095	POWER SAVING AND DEVICE TRAFFIC OFFLOAD			NP	PAT-Active	US	14/227943	9408142	US-2015-0282067-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
13096	NETWORK ASSISTED DEVICE-TO-DEVICE DISCOVERY FOR PEER-TO-PEER APPLICATIONS			PCT	APP-Pending	US	14/783573		US-2016-0956703-A1	
13097	SYSTEMS AND METHODS FOR MOBILITY STATE ESTIMATION FRAMEWORK FOR LTE NETWORK			PCT	PAT-Active	US	14/902292	9847823	US-2016-0373994-A1	
13098	DEVICE SYSTEM AND METHOD OF CONFIGURING A RADIO TRANSCEIVER			NP	PAT-Active	US	14/506194	9614951	US-2015-0244400-A1	
13099	USER EQUIPMENT COMPUTER READABLE MEDIUM AND METHOD TO DETERMINE THE MOBILITY OF USER EQUIPMENT IN A LONG-TERM EVOLUTION NETWORK			PCT	PAT-Active	US	15/111880	#####	US-2016-0338032-A1	
13100	ENHANCEMENT TO THE BUFFER STATUS REPORT FOR COORDINATED UPUNK GRANT ALLOCATION IN DUAL CONNECTIVITY IN AN LTE NETWORK			NP	PAT-Active	US	14/582384	9635655	US-2015-0245349-A1	
13101	INTERFERENCE REDUCTION USING HYBRID SIGNALING			NP	PAT-Active	US	14/582346	9577778	US-2015-0245366-A1	
13102	SCHEDULING FOR AN UNLICENSED CARRIER TYPE			NP	PAT-Active	US	14/582378	9838049	US-2015-0245376-A1	
13103	MECHANISMS TO OPTIMIZE AND ALIGN DISCONTINUOUS RECEPTION CONFIGURATION OF DEVICE-TO-DEVICE CAPABLE USER EQUIPMENT			NP	PAT-Active	US	14/581285	9992744	US-2015-0245295-A1	
13104	USER EQUIPMENT AND EVOLVED NODE-B AND METHODS FOR RANDOM ACCESS FOR MACHINE TYPE COMMUNICATION			PCT	PAT-Active	US	15/111762	8907095	US-2016-0338111-A1	
13105	ARRAY SYNCHRONISATION WITH COUNTERS			PCT	PAT-Active	US	10/539337	7603541	US-2006-0168423-A1	
13106	INJECTION LOCKED RING OSCILLATOR BASED DIGITAL-TO-TIME CONVERTER AND METHOD FOR PROVIDING A FILTERED INTERPOLATED PHASE SIGNAL			NP	PAT-Active	US	14/570299	9813556	US-2016-0173119-A1	
13107	METHOD OF PROCESSING RECEIVED DIGITIZED SIGNALS AND MOBILE RADIO COMMUNICATION TERMINAL DEVICE			NP	PAT-Active	US	14/580296	9407490	US-2016-0182271-A1	
13108	CELL SEARCH METHOD AND COMMUNICATION TERMINAL			NP	PAT-Active	US	14/387086	9456373	US-2015-0343813-A1	
13109	METHOD FOR DETERMINING A PERFORMANCE OF A MIMO COMMUNICATION AND COMMUNICATION DEVICE			NP	PAT-Active	US	14/284468	9577768	US-2015-0341127-A1	
13110	PROCESSOR ARRAY INCLUDING DELAY ELEMENTS ASSOCIATED WITH PRIMARY BUS NODES			PCT	PAT-Active	US	10/543370	7374582	US-2006-0155956-A1	
13111	PROCESSOR ARRAY			PCT	PAT-Active	US	10/521889	7549081	US-2005-0257105-A1	
13112	Method and Device in a Communication Network			NP	PAT-Active	US	12/794128	8463312	US-2010-0311449-A1	
13113	METHOD AND DEVICE IN A COMMUNICATION NETWORK			ENT	PAT-Active	US	13/907753	8892154	US-2013-0260776-A1	
13114	METHOD AND DEVICE IN A COMMUNICATION NETWORK			ENT	PAT-Active	US	14/538353	9807771	US-2015-0173081-A1	
13115	POWER CONTROL			NP	PAT-Active	US	12/264531	8555998	US-2009-0149213-A1	
13116	ACCESSING A BASE STATION			NP	PAT-Active	US	13/472267	8712468	US-2012-0295803-A1	
13117	BEARER MOBILITY AND SPLITTING IN A RADIO ACCESS NETWORK-BASED 3RD GENERATION PARTNERSHIP PROJECT NETWORK HAVING AN INTEGRATED WIRELESS LOCAL AREA NETWORK			NP	PAT-Active	US	14/583172	9596707	US-2015-0264726-A1	
13118	BEARER MOBILITY AND SPLITTING IN A RADIO ACCESS NETWORK-BASED 3RD GENERATION PARTNERSHIP PROJECT NETWORK HAVING AN INTEGRATED WIRELESS LOCAL AREA NETWORK			ENT	PAT-Active	US	15/394954	#####	US-2017-0215173-A1	
13119	BEARER MOBILITY AND SPLITTING IN A RADIO ACCESS NETWORK-BASED 3RD GENERATION PARTNERSHIP PROJECT NETWORK HAVING AN INTEGRATED WIRELESS LOCAL AREA NETWORK			ENT	APP-Pending	US	16/409350			

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
13120	METHOD APPARATUS AND COMPUTER READABLE MEDIUM FOR SWITCHING BETWEEN LOWER ENERGY AND HIGHER ENERGY WIRELESS COMMUNICATION TECHNIQUES			NP	PAT-Active	US	14/565368	9874643	US-2015-0264514-A1	
13121	METHOD APPARATUS AND COMPUTER READABLE MEDIUM FOR SWITCHING BETWEEN LOWER ENERGY AND HIGHER ENERGY WIRELESS COMMUNICATION TECHNIQUES			CNT	PAT-Active	US	15/496567	9998905	US-2017-0230814-A1	
13122	METHOD APPARATUS AND COMPUTER READABLE MEDIUM FOR SWITCHING BETWEEN LOWER ENERGY AND HIGHER ENERGY WIRELESS COMMUNICATION TECHNIQUES			CNT	PAT-Active	US	15/981135	#####	US-2018-0359625-A1	
13123	METHOD APPARATUS AND COMPUTER READABLE MEDIUM FOR SWITCHING BETWEEN LOWER ENERGY AND HIGHER ENERGY WIRELESS COMMUNICATION TECHNIQUES			CNT	APP-Pending	US	15/548528			
13124	SYSTEMS METHODS AND DEVICES FOR OPPORTUNISTIC NETWORKING			NP	PAT-Active	US	14/580735	8794033	US-2015-0264699-A1	
13125	SYSTEMS METHODS AND DEVICES FOR OPPORTUNISTIC NETWORKING			CNT	APP-Pending	US	15/708560		US-2018-0006776-A1	
13126	SYSTEMS AND METHODS FOR JOINT HANDOVER OF USER EQUIPMENT AND SECONDARY CELL GROUP IN 3GPP LTE DUAL CONNECTIVITY			NP	PAT-Active	US	14/581689	9936427	US-2015-0264621-A1	
13127	EFFICIENT COORDINATION BETWEEN A 3GPP NODE AND MTC DEVICES FOR COVERAGE ENHANCEMENT MODE			NP	PAT-Active	US	14/582540	8708336	US-2015-0264511-A1	
13128	UPLINK CHANNEL TRANSMISSION IN DUAL CONNECTIVITY			PCT	PAT-Active	US	15/254932	#####	US-2017-0222694-A1	
13129	UPLINK CHANNEL TRANSMISSION IN DUAL CONNECTIVITY			CNT	APP-Pending	US	16/412299			
13130	SYSTEMS METHODS AND DEVICES FOR DEVICE-TO-DEVICE COMMUNICATION MODE SELECTION			NP	PAT-Active	US	14/582911	8769644	US-2015-0264677-A1	
13131	APPARATUSES SYSTEMS AND METHODS FOR MEASURING QUALITY OF CELL DISCOVERY SIGNAL			NP	PAT-Active	US	14/577419	9838951	US-2015-0264636-A1	
13132	APPARATUSES SYSTEMS AND METHODS FOR MEASURING QUALITY OF CELL DISCOVERY SIGNAL			CNT	PAT-Active	US	15/798504	#####	US-2018-0049314-A1	
13133	CONVEYANCE OF APPLICATION COMMUNICATION PATTERNS FROM AN EXTERNAL APPLICATION SERVER TO A 3RD GENERATION PARTNERSHIP PROJECT SYSTEM			NP	PAT-Active	US	14/583188	8894464	US-2015-0264517-A1	
13134	METHOD OF PROCESSING RECEIVED DIGITIZED SIGNALS AND MOBILE RADIO COMMUNICATION TERMINAL DEVICE			NP	PAT-Active	US	14/566736	9967807	US-2016-0174138-A1	
13135	METHODS AND DEVICES FOR CHANNEL ESTIMATION AND OFDM RECEIVER			NP	PAT-Active	US	14/692267	8806912	US-2016-0315791-A1	
13136	FINE TIMING MEASUREMENT BURST MANAGEMENT			NP	PAT-Active	US	14/448805	9320009	US-2015-0271776-A1	
13137	ENHANCED NODE B UE AND METHOD FOR SELECTING CELL DISCOVERY SIGNALS IN LTE NETWORKS			NP	PAT-Active	US	14/583281	9888430	US-2015-0264638-A1	
13138	ENHANCED NODE B UE AND METHOD FOR SELECTING CELL DISCOVERY SIGNALS IN LTE NETWORKS			CNT	APP-Pending	US	15/824121		US-2018-0084458-A1	
13139	METHODS SYSTEMS AND DEVICES FOR MODULATION AND CODING SCHEME SIGNALING FOR COMMON CONTROL CHANNEL			NP	PAT-Active	US	14/581619	#####	US-2015-0271606-A1	
13140	TECHNIQUES AND CONFIGURATIONS ASSOCIATED WITH OPERATION OF AN EVOLVED NODE B AT MULTIPLE COVERAGE ENHANCEMENT LEVELS			NP	PAT-Active	US	14/563923	9439084	US-2015-0271686-A1	
13141	TECHNIQUES AND CONFIGURATIONS ASSOCIATED WITH OPERATION OF AN EVOLVED NODE B AT MULTIPLE COVERAGE ENHANCEMENT LEVELS			CNT	PAT-Active	US	15/230228	#####	US-2017-0034818-A1	
13142	APPARATUSES SYSTEMS AND METHODS FOR DIFFERENTIATION OF PAYLOAD SIZE FOR O2D DISCOVERY			NP	PAT-Active	US	14/570857	9578484	US-2015-0271657-A1	
13143	TECHNIQUES FOR COORDINATED APPLICATION OF WIRELESS NETWORK SELECTION AND TRAFFIC ROUTING RULES			PCT	APP-Pending	US	15/129372		US-2017-0181070-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
13144	REDUCTION OF USER PLANE CONGESTION			PCT	PAT-Active	US	14/783043	9935694	US-2016-093685-A1	
13145	SIGNALING MESSAGE SYNCHRONIZATION			NP	PAT-Active	US	14/316412	9924521	US-2015-029955-A1	
13146	USER EQUIPMENT AND EVOLVED NODE B SUPPORTING MACHINE TYPE COMMUNICATION AND SMALL DATA COMMUNICATION			NP	PAT-Active	US	14/313818	9313812	US-2015-0029818-A1	
13147	APPARATUS SYSTEM AND METHOD OF STEERING DATA RADIO BEARER TRAFFIC TO A WIRELESS LOCAL AREA NETWORK LINK			NP	PAT-Active	US	14/314256	9650794	US-2015-0043447-A1	
13148	METHOD APPARATUS AND SYSTEM FOR ELECTRICAL DOWNTILT ADJUSTMENT IN A MULTIPLE INPUT MULTIPLE OUTPUT SYSTEM			PCT	PAT-Active	US	14/911262	9762306	US-2016-0191135-A1	
13149	SELECTING A RADIO NODE FOR DATA TRAFFIC OFFLOADING			NP	PAT-Active	US	14/338638	9554403	US-2015-0025879-A1	
13150	COVERAGE EXTENSION LEVEL FOR COVERAGE LIMITED DEVICE			NP	PAT-Active	US	14/300837	9498995	US-2015-0043445-A1	
13151	COVERAGE EXTENSION LEVEL FOR COVERAGE LIMITED DEVICE			CNT	PAT-Active	US	15/357032	9900786	US-2017-0195127-A1	
13152	COVERAGE EXTENSION LEVEL FOR COVERAGE LIMITED DEVICE			CNT	PAT-Active	US	15/842528	#####	US-2018-0184306-A1	
13153	USER EQUIPMENT REALLOCATION BETWEEN NODES			NP	PAT-Active	US	14/332561	9357513	US-2015-0043404-A1	
13154	TECHNIQUES FOR DEVICE-TO-DEVICE COMMUNICATIONS			NP	PAT-Active	US	14/454639	9608710	US-2015-0043398-A1	
13155	SIGNALING FOR PROXIMITY SERVICES AND O2D DISCOVERY IN AN LTE NETWORK			NP	PAT-Active	US	14/314957	9788186	US-2015-0043448-A1	
13156	SIGNALING FOR PROXIMITY SERVICES AND O2D DISCOVERY IN AN LTE NETWORK			CNT	PAT-Active	US	15/186779	#####	US-2016-0392251-A1	
13157	SIGNALING RADIO BEARER OPTIMIZATIONS AND OTHER TECHNIQUES FOR SUPPORTING SMALL DATA TRANSMISSIONS			NP	PAT-Active	US	14/318008	9681354	US-2015-0043449-A1	
13158	POWER SAVING MODE OPTIMIZATIONS AND RELATED PROCEDURES			NP	PAT-Active	US	14/318085	9564958	US-2015-0043403-A1	
13159	LICENSED SHARED ACCESS FOR LONG TERM EVOLUTION			NP	PAT-Active	US	14/280363	9374827	US-2015-0134717-A1	
13160	REDUCED HANDOVER LATENCY FOR LICENSED SHARED ACCESS			NP	PAT-Active	US	14/280149	9563558	US-2015-0334610-A1	
13161	ADAPTIVE QUALITY OF SERVICE FOR WIRELESS NETWORKS			NP	PAT-Active	US	14/293240	9615260	US-2015-0350918-A1	
13162	IDLE MODE CELL SELECTION FOR LICENSED SHARED ACCESS			NP	PAT-Active	US	14/308427	9485664	US-2015-0373552-A1	
13163	APPARATUS SYSTEM AND METHOD OF SELECTIVELY PROVIDING INTERNET PROTOCOL (IP) SESSION CONTINUITY			NP	PAT-Active	US	14/316825	#####	US-2015-0025956-A1	
13164	TECHNIQUES FOR COMMUNICATION BETWEEN SERVICE CAPABILITY SERVER AND INTERWORKING FUNCTION FOR DEVICE TRIGGER RECALL/REPLACE			NP	PAT-Active	US	14/488620	9391081	US-2015-0195672-A1	
13165	TECHNIQUES FOR COMMUNICATION BETWEEN SERVICE CAPABILITY SERVER AND INTERWORKING FUNCTION FOR DEVICE TRIGGER RECALL/REPLACE			CNT	PAT-Active	US	15/060120	9936026	US-2016-0191630-A1	
13166	TECHNIQUES FOR COMMUNICATION BETWEEN SERVICE CAPABILITY SERVER AND INTERWORKING FUNCTION FOR DEVICE TRIGGER RECALL/REPLACE			CNT	PAT-Active	US	15/872863	#####	US-2018-0295796-A1	
13167	TECHNIQUES FOR EFFICIENT SMALL CELL DISCOVERY			NP	PAT-Active	US	14/318452	9480007	US-2015-0025819-A1	
13168	CONGESTION MEASUREMENT AND REPORTING FOR REAL-TIME DELAY-SENSITIVE APPLICATIONS			NP	PAT-Active	US	14/314850	9516541	US-2015-0072171-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
13169	USER EQUIPMENT AND METHODS FOR FAST HANDOVER FAILURE RECOVERY IN 3GPP LTE NETWORK			NP	PAT-Active	US	14/279562	9258747	US-2015-0978335-A1	
13170	COVERAGE EXTENSION LEVEL FOR COVERAGE LIMITED DEVICE			NP	PAT-Active	US	14/311938	9374151	US-2015-0043420-A1	
13171	COVERAGE EXTENSION LEVEL FOR COVERAGE LIMITED DEVICE			CNT	PAT-Active	US	15/186832	#####	US-2016-0392548-A1	
13172	USER EQUIPMENT AND METHOD FOR PACKET BASED DEVICE-TO-DEVICE (D2D) DISCOVERY IN AN LTE NETWORK			NP	PAT-Active	US	14/280799	9326122	US-2015-0045016-A1	
13173	USER EQUIPMENT AND METHOD FOR PACKET BASED DEVICE-TO-DEVICE (D2D) DISCOVERY IN AN LTE NETWORK			CNT	PAT-Active	US	15/096504	9860732	US-2016-0337835-A1	
13174	EARLY TTT TERMINATION			PCT	APP-Pending	US	14/912588		US-2016-0205601-A1	
13175	DEVICES AND METHODS FOR SENDING OR RECEIVING ASSISTANCE DATA			PCT	APP-Pending	US	14/912587		US-2016-0205651-A1	
13176	DRX OPERATION FOR UL/DL RECONFIGURATION			NP	PAT-Active	US	14/316188	9264933	US-2015-0078349-A1	
13177	DRX OPERATION FOR UL/DL RECONFIGURATION			CNT	PAT-Active	US	14/991696	8867078	US-2016-0128131-A1	
13178	DRX OPERATION FOR UL/DL RECONFIGURATION			CNT	PAT-Active	US	15/659425	#####	US-2017-0332271-A1	
13179	HIGH-SPEED DIGITAL SIGNAL PROCESSING SYSTEMS			NP	PAT-Active	US	14/575939	9337874		
13180	FREQUENCY GENERATOR METHOD AND COMPUTER PROGRAM			NP	PAT-Active	US	14/861056	9748936	US-2016-0182026-A1	
13181	COMMUNICATIONS IN AN AD-HOC MULTICAST NETWORK			PCT	PAT-Active	US	14/892158	#####	US-2016-0113036-A1	
13182	ENABLING DIRECT TRANSPORT LAYER CONNECTIVITY			NP	PAT-Active	US	14/332533	9426836	US-2015-0029936-A1	
13183	USER EQUIPMENT DISTRIBUTION INFORMATION COLLECTION			NP	PAT-Active	US	14/451894	9398465	US-2015-0045043-A1	
13184	USER EQUIPMENT DISTRIBUTION INFORMATION COLLECTION			CNT	PAT-Active	US	15/088959	9918298	US-2016-0219445-A1	
13185	DELIVERY OF TARGETED MEDIA CONTENT			NP	PAT-Active	US	14/487349	9796443	US-2015-0081851-A1	
13186	DELIVERY OF TARGETED MEDIA CONTENT			CNT	PAT-Active	US	15/613785	#####	US-2017-0272963-A1	
13187	TRANSMISSION OF PHYSICAL BROADCAST CHANNEL (PBCH) CONTENTS			NP	PAT-Active	US	14/316180	9386476	US-2015-0078348-A1	
13188	TRANSMISSION OF PHYSICAL BROADCAST CHANNEL (PBCH) CONTENTS			CNT	PAT-Active	US	15/202164	#####	US-2016-0315739-A1	
13189	TRANSMISSION OF PHYSICAL BROADCAST CHANNEL (PBCH) CONTENTS			CNT	APP-Pending	US	16/153584		US-2019-0053093-A1	
13190	REDUCTION OF PACKET RETRANSMISSIONS IN DUAL CONNECTIVITY SYSTEMS			NP	PAT-Active	US	14/317837	9462629	US-2015-0085646-A1	
13191	SYSTEMS METHODS AND DEVICES FOR DEVICE-TO-DEVICE DISCOVERY			NP	PAT-Active	US	14/316156	9504088	US-2015-0085764-A1	
13192	SYSTEMS METHODS AND DEVICES WITH DIFFERENT RADIO LINK FAILURE TIMERS BASED ON USER EQUIPMENT SPEED			NP	PAT-Active	US	14/317184	9258725	US-2015-0087317-A1	
13193	SYSTEMS METHODS AND DEVICES WITH DIFFERENT RADIO LINK FAILURE TIMERS BASED ON USER EQUIPMENT SPEED			CNT	PAT-Active	US	14/986245	9420627	US-2016-0128134-A1	
13194	EMERGENCY CALL HANDLING			NP	PAT-Active	US	14/495468	9615234	US-2015-0111517-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
13195	EMERGENCY CALL HANDLING			CNT	PAT-Active	US	15/477725	#####	US-2017-0208180-A1	
13196	MITIGATION OF TRAFFIC CONGESTION IN DUAL CONNECTIVITY SYSTEMS			NP	PAT-Active	US	14/317900	9560684	US-2015-0085667-A1	
13197	BEARER SPLIT RATIO FOR DUAL CONNECTIVITY SYSTEMS			NP	PAT-Active	US	14/496152	9572185	US-2015-0085800-A1	
13198	HARD TIMELINES FOR TDD-FDD CARRIER AGGREGATION			NP	PAT-Active	US	14/318143	9538565	US-2015-0085713-A1	
13199	SYSTEMS METHODS AND DEVICES TO SUPPORT INTRA-APPLICATION FLOW PRIORITIZATION			NP	PAT-Active	US	14/316819	9917786	US-2015-0381592-A1	
13200	SYSTEMS METHODS AND DEVICES TO SUPPORT INTRA-APPLICATION FLOW PRIORITIZATION			CNT	PAT-Active	US	15/880213	#####	US-2018-0152388-A1	
13201	SCHEDULING IN A MULTIPLE USER MULTIPLE-INPUT AND MULTIPLE OUTPUT COMMUNICATIONS NETWORK			NP	PAT-Active	US	14/494857	9698889	US-2016-0088648-A1	
13202	SYSTEMS METHODS AND DEVICES FOR CONTROLLING TRANSPORT OF RATELESSLY CODED MESSAGES			NP	PAT-Active	US	14/316929	9615395	US-2015-0146815-A1	
13203	SYSTEMS METHODS AND DEVICES FOR EFFICIENT DEVICE-TO-DEVICE CHANNEL CONTENTION			NP	PAT-Active	US	14/316175	9572371	US-2015-0117332-A1	
13204	METRICS FOR TRAFFIC STEERING IN A WIRELESS NETWORK			NP	PAT-Active	US	14/339710	9479915	US-2015-0111569-A1	
13205	METRICS FOR TRAFFIC STEERING IN A WIRELESS NETWORK			CNT	PAT-Active	US	15/272383	#####	US-2017-0013496-A1	
13206	USER EQUIPMENT POSITIONING IN LONG-TERM EVOLUTION COORDINATED MULTIPPOINT COMMUNICATION SYSTEMS			PCT	APP-Pending	US	15/301352		US-2017-0164143-A1	
13207	FEEDBACK CONTROL DURING PLANNED GAPS IN DATA STREAMS			NP	PAT-Active	US	14/315201	9590787	US-2015-0381332-A1	
13208	TCP TRAFFIC ADAPTATION IN WIRELESS SYSTEMS			NP	PAT-Active	US	14/314387	9661657	US-2015-0146614-A1	
13209	GENERATION OF RANDOM ACCESS PREAMBLES			NP	PAT-Active	US	14/317450	9730114	US-2015-0078264-A1	
13210	THROUGHPUT CHARACTERIZATION			PCT	PAT-Active	US	14/779243	9800486	US-2016-0090131-A1	
13211	SYSTEM AND METHOD FOR GENERATING A DATA DEPENDENT CLOCK FOR A DAC IN A MODULATOR			NP	PAT-Active	US	14/303945	9197258	US-2015-0365113-A1	
13212	PHASE TRACKER FOR A PHASE LOCKED LOOP			NP	PAT-Active	US	14/494718	9584135	US-2016-0087639-A1	
13213	HIGH-ORDER SIGMA DELTA FOR A DIVIDER-LESS DIGITAL PHASE-LOCKED LOOP			NP	PAT-Active	US	14/317435	9571107	US-2015-0381188-A1	
13214	DIGITAL-TO-TIME CONVERTER SPUR REDUCTION			NP	PAT-Active	US	14/318829	9768809	US-2015-0381214-A1	
13215	APPARATUS AND METHODS FOR A CAPACITIVE DIGITAL-TO-ANALOG CONVERTER BASED POWER AMPLIFIER			NP	PAT-Active	US	14/570879	9525381	US-2016-0173032-A1	
13216	COARSE TUNING SELECTION FOR PHASE LOCKED LOOPS			NP	PAT-Active	US	14/578773	9548746	US-2016-0182065-A1	
13217	LOAD BALANCING IN A WIRELESS CELLULAR NETWORK BASED ON USER EQUIPMENT MOBILITY			NP	PAT-Active	US	14/535651	9735705	US-2015-0312826-A1	
13218	NON-ORTHOGONAL MULTIPLE ACCESS (NOMA) WIRELESS SYSTEMS AND METHODS			NP	PAT-Active	US	14/632291	#####	US-2015-0312974-A1	
13219	METHOD APPARATUS AND SYSTEM FOR MEASURING A POSITION OF A USER EQUIPMENT IN A WIRELESS NETWORK			PCT	PAT-Active	US	15/125561	#####	US-2017-0223655-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
13220	USER EQUIPMENT AND METHODS FOR MEASUREMENT OF REFERENCE SIGNAL RECEIVED QUALITY			NP	PAT-Active	US	14/571053	9713049	US-2015-0312817-A1	
13221	USER EQUIPMENT AND METHODS FOR MEASUREMENT OF REFERENCE SIGNAL RECEIVED QUALITY			CNT	PAT-Active	US	15/639547	#####	US-2017-0311215-A1	
13222	LISTEN BEFORE TALK PROTOCOL SELECTION			PCT	PAT-Active	US	15/124953	#####	US-2017-0034851-A1	
13223	CHANNEL RESERVATION FOR OPERATION IN AN UNLICENSED SPECTRUM			NP	PAT-Active	US	14/543670	8794821	US-2015-0312793-A1	
13224	USER EQUIPMENT AND METHODS FOR HANDOVER USING MEASUREMENT REPORTING BASED ON MULTIPLE EVENTS			NP	PAT-Active	US	14/578861	9560560	US-2015-0312818-A1	
13225	UE ENB AND METHOD FOR CHANNEL ACCESS PRIORITY FOR DISTRIBUTED D2D			NP	PAT-Active	US	14/572309	9398484	US-2015-0312915-A1	
13226	STORING A VALUE OF A COUNTER FOR A WIRELESS LOCAL AREA NETWORK			NP	PAT-Active	US	14/575876	9698669	US-2015-0308853-A1	
13227	STORING A VALUE OF A COUNTER FOR A WIRELESS LOCAL AREA NETWORK			CNT	PAT-Active	US	15/601786	#####	US-2017-0257783-A1	
13228	SIMULTANEOUS SCHEDULING REQUEST TRANSMISSION IN DUAL CONNECTIVITY			NP	PAT-Active	US	14/696587	8867207	US-2015-0312930-A1	
13229	REFERENCE SIGNAL ENHANCEMENT FOR SHARED CELL			NP	PAT-Active	US	14/555255	#####	US-2015-0270936-A1	
13230	REFERENCE SIGNAL ENHANCEMENT FOR SHARED CELL			CNT	PAT-Active	US	15/392826	#####	US-2017-0113150-A1	
13231	APPARATUS AND METHODS FOR REDUCING SOFT BUFFER SIZE IN MTC DEVICES			NP	PAT-Active	US	14/582512	9654584	US-2015-0312371-A1	
13232	APPARATUS AND METHODS FOR REDUCING SOFT BUFFER SIZE IN MTC DEVICES			DEV	PAT-Active	US	15/484898	9918184	US-2017-023480-A1	
13233	APPARATUS METHOD AND SYSTEM OF ESTABLISHING A CONNECTION BETWEEN A CELLULAR NODE AND A CORE NETWORK			NP	PAT-Active	US	14/582879	9467926	US-2015-0312841-A1	
13234	RADIO COMMUNICATION DEVICE AND METHOD FOR OPERATION THEREOF			NP	PAT-Active	US	14/571414	9980313	US-2016-0174289-A1	
13235	SYSTEMS METHODS AND DEVICES FOR PRIORITIZING INTER-FREQUENCY MEASUREMENTS			NP	PAT-Active	US	14/583263	9743289	US-2015-0327286-A1	
13236	DEMODULATION REFERENCE SIGNAL (DMRS) SEQUENCE DESIGN FOR DEVICE-TO-DEVICE (D2D) DISCOVERY			CNT	APP-Pending	US	15/791308		US-2018-0109938-A1	
13237	SYSTEMS METHODS AND DEVICES FOR CELL SELECTION BASED ON PRIORITIZED MODES			NP	PAT-Active	US	14/580779	9398500	US-2015-0327133-A1	
13238	TENTATIVE GRANT FOR EFFICIENT DEVICE-TO- DEVICE COMMUNICATIONS			NP	PAT-Active	US	14/581770	9860906	US-2015-0327296-A1	
13239	SYSTEMS AND METHODS FOR IN-DEVICE CO-EXISTENCE INTERFERENCE AVOIDANCE FOR DUAL CONNECTIVITY			NP	PAT-Active	US	14/582777	9503485	US-2015-0327280-A1	
13240	SYSTEMS METHODS AND DEVICES FOR SYNCHRONIZATION SOURCE SELECTION FOR DEVICE-TO-DEVICE COMMUNICATION			NP	APP-Pending	US	14/582580		US-2015-0327201-A1	
13241	LAWFUL INTERCEPT REPORTING IN WIRELESS NETWORKS USING PUBLIC SAFETY RELAYS			NP	APP-Pending	US	14/671728		US-2018-0326302-A1	
13242	MOBILITY MANAGEMENT ENTITY USER EQUIPMENT AND METHODS FOR MACHINE TYPE COMMUNICATION			NP	PAT-Active	US	14/571025	9603186	US-2015-0327327-A1	
13243	TECHNIQUES TO MANAGE RADIO FREQUENCY CHAINS			NP	PAT-Active	US	14/581889	9729175	US-2015-0327103-A1	
13244	PRIORITIZED CELL IDENTIFICATION AND MEASUREMENT METHOD			PCT	PAT-Active	US	15/122495	9843956	US-2017-0072904-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
13245	PRIORITIZED CELL IDENTIFICATION AND MEASUREMENT METHOD			CNT	PAT-Pending	US	15/827221		US-2018-0981996-A1	
13246	USER EQUIPMENT AND METHODS TO INDICATE POWER SAVING MODE CONFIGURATION TO RAN NODES			PCT	PAT-Active	US	15/115770	9877236	US-2017-0913515-A1	
13247	APPARATUS SYSTEM AND METHOD OF COMMUNICATING WIRELESS LOCAL AREA NETWORK (WLAN) OFFLOADING INFORMATION BETWEEN CELLULAR MANAGERS			NP	PAT-Active	US	14/562730	9538418	US-2015-0327117-A1	
13248	SYSTEMS METHODS AND DEVICES FOR FLEXIBLE RETRANSMISSIONS			NP	PAT-Active	US	14/582492	9725283	US-2015-0327275-A1	
13249	SYSTEMS DEVICES AND METHODS FOR INTERWORKING BETWEEN A UNIVERSAL MOBILE TELECOMMUNICATIONS SYSTEM (UMTS) NETWORK AND A WIRELESS LOCAL AREA NETWORK (WLAN)			NP	PAT-Active	US	14/583057	9877256	US-2015-0273729-A1	
13250	SYSTEMS DEVICES AND METHODS FOR INTERWORKING BETWEEN A UNIVERSAL MOBILE TELECOMMUNICATIONS SYSTEM (UMTS) NETWORK AND A WIRELESS LOCAL AREA NETWORK (WLAN)			CNT	PAT-Active	US	15/822368	#####	US-2018-077623-A1	
13251	SYSTEMS DEVICES AND METHODS FOR LONG TERM EVOLUTION AND WIRELESS LOCAL AREA INTERWORKING			NP	PAT-Active	US	14/583027	9467921	US-2015-0327129-A1	
13252	SYSTEMS DEVICES AND METHODS FOR LONG TERM EVOLUTION AND WIRELESS LOCAL AREA INTERWORKING			CNT	PAT-Active	US	15/260920	8994586	US-2016-0381617-A1	
13253	SYSTEMS DEVICES AND METHODS FOR LONG TERM EVOLUTION AND WIRELESS LOCAL AREA INTERWORKING			CNT	PAT-Active	US	15/820280	#####	US-2018-077622-A1	
13254	METHOD FOR DETERMINING A CHANNEL ESTIMATE AND COMMUNICATION DEVICE			NP	PAT-Active	US	14/495908	9313002		
13255	COMMUNICATION DEVICE AND METHOD FOR TRANSMITTING DATA IN ACCORDANCE WITH A RETRANSMISSION PROTOCOL			NP	PAT-Active	US	14/314642	#####	US-2015-0381321-A1	
13256	APPARATUS AND METHOD FOR PROVIDING OSCILLATOR SIGNALS			NP	PAT-Active	US	14/580952	9484854	US-2016-0156310-A1	
13257	TRAFFIC ENGINEERING IN HETEROGENEOUS MILLIMETER-WAVE AND LTE SMALL CELL SYSTEMS			NP	PAT-Active	US	14/577766	9713129	US-2016-0183242-A1	
13258	USER EQUIPMENT AND PROTOCOL AND METHODS FOR DEVICE-TO-DEVICE COMMUNICATION			PCT	PAT-Active	US	14/914331	9986447	US-2016-0234702-A1	
13259	USER EQUIPMENT AND PROTOCOL AND METHODS FOR DEVICE-TO-DEVICE COMMUNICATION			CNT	PAT-Active	US	15/858429	#####	US-2018-0192309-A1	
13260	USER EQUIPMENT AND MOBILITY MANAGEMENT ENTITY AND METHODS FOR PERIODIC UPDATE IN CELLULAR NETWORKS			PCT	PAT-Active	US	14/916843	#####	US-2016-0255602-A1	
13261	CIRCUIT SWITCHED FALL BACK IMPROVEMENTS			NP	PAT-Active	US	14/472569	9749905	US-2016-0066218-A1	
13262	METHODS FOR APERIODIC CSI REPORT TRIGGERING FOR FLEXIBLE SUBFRAMES IN LTE TDD EIMTA SYSTEMS WITH DYNAMIC UL-DL RECONFIGURATION			PCT	PAT-Active	US	14/583595	#####	US-2016-0381587-A1	
13263	COMMUNICATION SYSTEMS AND METHODS			NP	PAT-Active	US	14/697360	#####	US-2015-0350992-A1	
13264	RADIO RESOURCE CONTROL (RRC) PROTOCOL FOR INTEGRATED WLAN/3GPP RADIO ACCESS TECHNOLOGIES			NP	PAT-Active	US	14/583222	9609566	US-2015-0350988-A1	
13265	INTERWORKING/CO-EXISTENCE OF INTEGRATED WLAN/3GPP RAT ARCHITECTURES WITH LEGACY WLAN/3GPP INTERWORKING SOLUTIONS			NP	PAT-Active	US	14/583336	#####	US-2015-0350989-A1	
13266	IN-BAND CONTROL SIGNALING FOR INTEGRATED WLAN/3GPP RAT ARCHITECTURES			NP	PAT-Active	US	14/583347	9860872	US-2015-0351079-A1	
13267	AUTONOMOUS ENHANCED NODE B			NP	PAT-Active	US	14/318351	9888376	US-2015-0195796-A1	
13268	METHOD AND ENHANCED NODE B FOR GEOGRAPHIC BIN DATA COLLECTION AND REPORTING			NP	PAT-Active	US	14/318076	9510314	US-2015-0185805-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
13269	TRAJECTORY MODIFICATION TECHNIQUE FOR POLAR TRANSMITTER			NP	PAT-Active	US	14/496519	9425834	US-2016-0984251-A1	
13270	TRAJECTORY MODIFICATION TECHNIQUE FOR POLAR TRANSMITTER			DIV	PAT-Active	US	15/243132	#####	US-2017-0247955-A1	
13271	TRAJECTORY MODIFICATION TECHNIQUE FOR POLAR TRANSMITTER			ENT	APP-Pending	US	16/134210		US-2019-0260404-A1	
13272	USER EQUIPMENT (UE) SUPPORTING PACKET-SWITCHED EMERGENCY CALLS OVER IP MULTIMEDIA SUBSYSTEM (IMS)			NP	PAT-Active	US	14/340936	9633530	US-2015-0105965-A1	
13273	CONTROLLING SUBSCRIBER IDENTITY MODULE (SIM) ACTIVE STATE IN A MULTIPLE SIMs RADIO			NP	PAT-Active	US	14/517868	9461695	US-2016-0112064-A1	
13274	COMMUNICATION TERMINAL AND METHOD FOR CONTROLLING A DATA TRANSMISSION			NP	PAT-Active	US	14/472396	9716667	US-2016-0066335-A1	
13275	WIRELESS FIDELITY (WI-FI) CLEAR CHANNEL ASSESSMENT (CCA) DETECTION AND TRANSMISSION DECISION MAKING IN A PORTABLE DEVICE			NP	PAT-Active	US	14/757315	9673921	US-2017-0187473-A1	
13276	APPARATUS METHOD AND SYSTEM OF CONTROLLING COMMUNICATIONS OF A MULTIRADIO DEVICE			NP	PAT-Active	US	14/472464	9532370	US-2016-0086339-A1	
13277	USER EQUIPMENT AND METHODS FOR CSI ENHANCEMENTS USING INTERFERENCE CANCELLATION AND SUPPRESSION RECEIVERS			NP	PAT-Active	US	14/573164	8590713	US-2015-0373732-A1	
13278	LTE-LI COMMUNICATION DEVICES AND METHODS FOR APERIODIC BEACON AND REFERENCE SIGNAL TRANSMISSION			NP	PAT-Active	US	14/669366	#####	US-2015-0373674-A1	
13279	COMMUNICATION SYSTEMS AND METHODS			NP	PAT-Active	US	14/581938	9680678	US-2015-0373682-A1	
13280	GROUP CARRIER SCHEDULING FOR UNLICENSED LONG TERM EVOLUTION NETWORK			NP	PAT-Active	US	14/575866	9603164	US-2016-0007373-A1	
13281	GROUP CARRIER SCHEDULING FOR UNLICENSED LONG TERM EVOLUTION NETWORK			ENT	PAT-Active	US	15/463400	#####	US-2017-0213727-A1	
13282	SYSTEM AND METHOD ON MEASUREMENT REPORT FOR LTE UNLICENSED SYSTEM			PSP	APP-Closed	US	62/020316			
13283	METHOD APPARATUS AND SYSTEM FOR USING A USER EQUIPMENT AS A SMALL EVOLVED NODEB FOR A SMALL CELL			PCT	PAT-Active	US	15/511571	#####	US-2017-0302763-A1	
13284	PREVENTING A MOBILE DEVICE FROM REPEATING A REQUEST TOWARD A MOBILE NETWORK			PCT	PAT-Active	US	15/112116	9900828	US-2016-0345243-A1	
13285	PREVENTING A MOBILE DEVICE FROM REPEATING A REQUEST TOWARD A MOBILE NETWORK			ENT	PAT-Active	US	15/816472	#####	US-2018-0082570-A1	
13286	AN APPARATUS AND METHOD ENHANCING QUALITY OF SERVICE ARCHITECTURE FOR LTE			PCT	PAT-Active	US	15/900817	#####	US-2017-0195227-A1	
13287	TECHNIQUES FOR SECURELY RECEIVING CRITICAL COMMUNICATION CONTENT ASSOCIATED WITH A CRITICAL COMMUNICATION SERVICE			NP	PAT-Active	US	14/670233	#####	US-2016-0344726-A1	
13288	SYSTEMS AND METHODS FOR ADJUSTING WIRELESS SCAN RATES			NP	PAT-Active	US	14/498961	9654915	US-2016-0094939-A1	
13289	SYSTEMS AND METHODS FOR ADJUSTING WIRELESS SCAN RATES			ENT	APP-Pending	US	15/591851		US-2017-0374590-A1	
13290	METHOD AND SYSTEM OF ADVANCED INTERFERENCE CANCELLATION ON PDSCH AT THE UE			PCT	PAT-Active	US	14/903575	#####	US-2016-0173262-A1	
13291	METHOD AND APPARATUS FOR VOICE DATA TRANSMISSION			PCT	APP-Pending	US	15/505542		US-2017-0286389-A1	
13292	CONTENT ACCESS AUTHENTICATION FOR DYNAMIC ADAPTIVE STREAMING OVER HYPERTEXT TRANSFER PROTOCOL			NP	PAT-Active	US	14/487714	9497180	US-2015-0113804-A1	
13293	CONTENT ACCESS AUTHENTICATION FOR DYNAMIC ADAPTIVE STREAMING OVER HYPERTEXT TRANSFER PROTOCOL			ENT	PAT-Active	US	15/335307	8980136	US-2017-0303121-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
13294	RADIO LINK FAILURE HANDLING FOR DUAL CONNECTIVITY			NP	PAT-Active	US	14/491639	9674852	US-2015-0117183-A1	
13295	RADIO LINK FAILURE HANDLING FOR DUAL CONNECTIVITY			ENT	PAT-Active	US	15/614208	#####	US-2017-0273095-A1	
13296	RADIO LINK FAILURE HANDLING FOR DUAL CONNECTIVITY			ENT	PAT-Active	US	16/008019	#####	US-2018-0288778-A1	
13297	CELLULAR UP-LINK HARMONIC SPURS MITIGATION IN WI-FI AND BLUETOOTH RECEIVERS			NP	PAT-Active	US	14/571827	9369217	US-2016-0173209-A1	
13298	DIGITAL TO ANALOG CONVERTER CIRCUITS APPARATUS AND METHOD FOR GENERATING A HIGH FREQUENCY TRANSMISSION SIGNAL AND METHODS OF DIGITAL TO ANALOG CONVERSION			NP	PAT-Active	US	14/835033	9571120	US-2016-0094235-A1	
13299	NETWORK MANAGEMENT			PCT	PAT-Active	US	14/903576	#####	US-2016-0156440-A1	
13300	RESOURCE SELECTION IN DEVICE TO DEVICE COMMUNICATION			PCT	PAT-Active	US	15/023063	#####	US-2016-0234853-A1	
13301	CONTENT DISTRIBUTION			NP	PAT-Active	US	14/499029	9912985	US-2016-0094872-A1	
13302	WIRELESS LOCAL AREA NETWORK (WLAN) CONNECTIVITY OPTION DISCOVERY			NP	PAT-Active	US	14/485902	#####	US-2015-0117423-A1	
13303	WIRELESS LOCAL AREA NETWORK (WLAN) CONNECTIVITY OPTION DISCOVERY			ENT	APP-Pending	US	16/444416		US-2019-0306868-A1	
13304	SYMBOL CONSTELLATION DESIGN			NP	PAT-Active	US	14/573984	9584351	US-2016-0182267-A1	
13305	HANDOVER AT SPECTRUM RELEASE FOR LICENSED SHARED ACCESS			NP	PAT-Active	US	14/495517	9538431	US-2016-0088533-A1	
13306	HANDOVER AT SPECTRUM RELEASE FOR LICENSED SHARED ACCESS			ENT	PAT-Active	US	15/384537	#####	US-2017-0295525-A1	
13307	PRINCIPAL EIGEN BEAM QUANTIZATION FOR MIMO SYSTEMS			NP	PAT-Active	US	14/798820	9906280	US-2016-0013838-A1	
13308	DEVICES FOR PACKET SYSTEM BEARER SPLITTING			PCT	PAT-Active	US	15/121709	#####	US-2016-0366813-A1	
13309	EVOLVED NODE-B AND METHODS FOR SUPPORTING CO-EXISTENCE WITH WI-FI NETWORKS IN AN UNLICENSED FREQUENCY BAND			NP	PAT-Active	US	14/473008	9801207	US-2015-0146645-A1	
13310	SIGNAL DESIGNS FOR D2D SUBFRAMES			NP	PAT-Active	US	14/498276	9681487	US-2015-0146647-A1	
13311	SIGNAL DESIGNS FOR D2D SUBFRAMES			ENT	PAT-Active	US	15/492844	#####	US-2017-0273106-A1	
13312	SIGNAL DESIGNS FOR D2D SUBFRAMES			ENT	APP-Pending	US	15/408378			
13313	ABORTING AN EXTENDED SERVICE REQUEST PROCEDURE			PCT	APP-Pending	US	15/325398		US-2017-0202049-A1	
13314	RADIO LINK MONITORING			NP	PAT-Active	US	14/498993	9974095	US-2015-0146562-A1	
13315	RADIO LINK MONITORING			ENT	PAT-Active	US	15/826730	#####	US-2018-0160450-A1	
13316	APPARATUS SYSTEM AND METHOD OF PROVIDING OFFLOADABILITY INFORMATION TO A USER-EQUIPMENT (UE)			NP	PAT-Active	US	14/492035	9906963	US-2015-0195743-A1	
13317	APPARATUS SYSTEM AND METHOD OF PROVIDING OFFLOADABILITY INFORMATION TO A USER-EQUIPMENT (UE)			ENT	PAT-Active	US	14/871499	9820187	US-2016-0021570-A1	
13318	APPARATUS SYSTEM AND METHOD OF PROVIDING OFFLOADABILITY INFORMATION TO A USER-EQUIPMENT (UE)			ENT	APP-Pending	US	15/724282		US-2018-0027450-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
13319	APPARATUS SYSTEM AND METHOD OF ACCESS NETWORK DISCOVERY AND SELECTION FUNCTION (ANDSF) FOR TRAFFIC OFFLOADING			NP	PAT-Active	US	14/492035	9894581	US-2015-0195759-A1	
13320	APPARATUS SYSTEM AND METHOD OF ACCESS NETWORK DISCOVERY AND SELECTION FUNCTION (ANDSF) FOR TRAFFIC OFFLOADING			CNT	APP-Pending	US	15/864352		US-2018-0132154-A1	
13321	POWER HEADROOM REPORTING WITH DUAL CONNECTIVITY			NP	PAT-Active	US	14/495729	9480029	US-2015-0195796-A1	
13322	POWER HEADROOM REPORTING WITH DUAL CONNECTIVITY			CNT	PAT-Active	US	15/276091	#####	US-2017-0013571-A1	
13323	POWER HEADROOM REPORTING WITH DUAL CONNECTIVITY			CNT	APP-Pending	US	16/162972			
13324	SYSTEM AND METHOD FOR CONTROLLING A LICENSED SHARED ACCESS RADIO			NP	PAT-Active	US	14/538575	9512376	US-2016-0135220-A1	
13325	SYSTEM AND METHOD FOR CONTROLLING A LICENSED SHARED ACCESS RADIO			CNT	PAT-Active	US	15/342584	9801225	US-2017-0055309-A1	
13326	APPARATUS SYSTEMS AND METHODS FOR PAGING ENHANCEMENTS FOR LOW COMPLEXITY USER EQUIPMENT COORDINATION TECHNIQUES FOR RADIO RESOURCE CONTROL STATE MANAGEMENT IN DUAL-CONNECTIVITY ARCHITECTURES			PCT	APP-Pending	US	13/126560		US-2017-0085165-A1	
13327	COORDINATION TECHNIQUES FOR DISCONTINUOUS RECEPTION (DRX) OPERATIONS IN DUAL-CONNECTIVITY ARCHITECTURES			NP	PAT-Active	US	14/497010	#####	US-2015-0148599-A1	
13328	COORDINATION TECHNIQUES FOR DISCONTINUOUS RECEPTION (DRX) OPERATIONS IN DUAL-CONNECTIVITY ARCHITECTURES			PCT	PAT-Active	US	15/026548	#####	US-2016-0248405-A1	
13329	SYSTEMS AND METHODS FOR MODULATION AND CODING SCHEME SELECTION AND CONFIGURATION			NP	PAT-Active	US	14/496970	9467269	US-2015-0195818-A1	
13330	SYSTEMS AND METHODS FOR MODULATION AND CODING SCHEME SELECTION AND CONFIGURATION			CNT	PAT-Active	US	15/241361	#####	US-2016-0373287-A1	
13331	SYSTEMS METHODS AND DEVICES FOR HYBRID FULL-DIMENSIONAL MULTIPLE-INPUT MULTIPLE-OUTPUT			NP	PAT-Active	US	14/498517	9787376	US-2015-0195020-A1	
13332	SYSTEMS METHODS AND DEVICES FOR APPLICATION AWARE ACCESS CONTROL FOR COMMUNICATION ON A MOBILE NETWORK			NP	PAT-Active	US	14/494169	#####	US-2015-0195712-A1	
13333	SYSTEMS AND METHODS FOR MODULATION AND CODING SCHEME SELECTION AND CONFIGURATION			NP	APP-Pending	US	14/498502		US-2015-0195819-A1	
13334	SYSTEMS AND METHODS FOR MODULATION AND CODING SCHEME SELECTION AND CONFIGURATION			CNT	APP-Pending	US	16/457387			
13335	DISCONTINUOUS RECEPTION (DRX) ALIGNMENT TECHNIQUES FOR DUAL-CONNECTIVITY ARCHITECTURES			NP	PAT-Active	US	14/583653	#####	US-2015-0195867-A1	
13336	DISCONTINUOUS RECEPTION (DRX) ALIGNMENT TECHNIQUES FOR DUAL-CONNECTIVITY ARCHITECTURES			CNT	PAT-Active	US	15/396477	#####	US-2017-0111956-A1	
13337	SYSTEMS METHODS AND DEVICES FOR ENHANCING SPECTRAL EFFICIENCY WITH NETWORK-ASSISTED ADVANCED RECEIVERS			NP	PAT-Active	US	14/499178	9629143	US-2015-0195820-A1	
13338	INTERACTIVE VIDEO CONFERENCING			NP	PAT-Active	US	14/582376	9386275	US-2015-0195490-A1	
13339	INTERACTIVE VIDEO CONFERENCING			CNT	PAT-Active	US	15/180510	9794515	US-2016-0295166-A1	
13340	INTERACTIVE VIDEO CONFERENCING			CNT	PAT-Active	US	15/710589	#####	US-2018-0013980-A1	
13341	CLIENT/SERVER SIGNALING COMMANDS FOR DASH			NP	PAT-Active	US	14/583936	#####	US-2015-0195328-A1	
13342	CLIENT/SERVER SIGNALING COMMANDS FOR DASH			CNT	APP-Pending	US	16/408101			
13343	STRUCTURED SUPER-POSITIONING CODING TO ENHANCE CONTROL CHANNEL CAPACITY			NP	PAT-Active	US	14/498427	#####	US-2016-0095090-A1	
13344	OPTIMIZING SYNCHRONIZATION OF AUDIO AND NETWORK TASKS IN VOICE OVER PACKET SWITCHED NETWORKS			NP	PAT-Active	US	14/500119	9787742	US-2016-0084605-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
13345	USER EQUIPMENT AND METHODS FOR OPERATION IN COVERAGE ENHANCEMENT MODE WITH PHYSICAL RANDOM ACCESS CHANNEL PREAMBLE			NP	PAT-Active	US	14/498874	9456405	US-2015-0215911-A1	
13346	USER EQUIPMENT AND METHODS FOR OPERATION IN COVERAGE ENHANCEMENT MODE WITH PHYSICAL RANDOM ACCESS CHANNEL PREAMBLE			CNT	PAT-Active	US	15/264956	9973944	US-2017-0134967-A1	
13347	USER EQUIPMENT AND METHODS FOR OPERATION IN COVERAGE ENHANCEMENT MODE WITH PHYSICAL RANDOM ACCESS CHANNEL PREAMBLE			CNT	APP-Pending	US	15/935462		US-2018-0213418-A1	
13348	EVOLVED NODE-B AND USER EQUIPMENT AND METHODS FOR OPERATION IN A COVERAGE ENHANCEMENT MODE			NP	PAT-Active	US	14/461396	9763210	US-2015-0213910-A1	
13349	EVOLVED NODE-B AND USER EQUIPMENT AND METHODS FOR OPERATION IN A COVERAGE ENHANCEMENT MODE			CNT	PAT-Active	US	15/701090	#####	US-2018-0027516-A1	
13350	EVOLVED NODE-B AND USER EQUIPMENT AND METHODS FOR OPERATION IN A COVERAGE ENHANCEMENT MODE			CNT	APP-Pending	US	15/538823			
13351	TECHNIQUES AND CONFIGURATIONS ASSOCIATED WITH MACHINE TYPE COMMUNICATION IN ENHANCED COVERAGE MODE			NP	PAT-Active	US	14/479825	#####	US-2015-0076224-A1	
13352	USER EQUIPMENT AND METHOD FOR TRANSMITTING A DATA STREAM TO AN EVOLVED NODE B			NP	PAT-Active	US	14/575448	9572130	US-2016-0183218-A1	
13353	TECHNIQUES AND CONFIGURATIONS ASSOCIATED WITH USER EQUIPMENT-INITIATED CONGESTION REPORTING			NP	PAT-Active	US	14/495704	8832782	US-2015-0117187-A1	
13354	GATEWAY ARRANGEMENTS FOR WIRELESS COMMUNICATION NETWORKS			NP	PAT-Active	US	14/513041	9596628	US-2015-0117408-A1	
13355	GATEWAY ARRANGEMENTS FOR WIRELESS COMMUNICATION NETWORKS			CNT	APP-Pending	US	15/418493		US-2017-0142762-A1	
13356	METHODS DEVICES AND COMPUTER READABLE MEDIA FOR DYNAMIC SCHEDULING			NP	PAT-Active	US	14/497934	9467260	US-2016-0094322-A1	
13357	USER EQUIPMENT AND METHODS OF BEARER OPERATION FOR CARRIER AGGREGATION			PCT	PAT-Active	US	14/917154	#####	US-2016-0234847-A1	
13358	USER EQUIPMENT AND METHODS OF BEARER OPERATION FOR CARRIER AGGREGATION			CNT	APP-Pending	US	15/994154		US-2018-0317237-A1	
13359	USER EQUIPMENT AND METHODS OF BEARER OPERATION FOR CARRIER AGGREGATION			CNT	APP-Pending	US	16/406791			
13360	SIGNALING FOR INTER-CELL D2D DISCOVERY IN AN LTE NETWORK			PCT	PAT-Active	US	15/026174	9992781	US-2016-0219541-A1	
13361	SIGNALING FOR INTER-CELL D2D DISCOVERY IN AN LTE NETWORK			CNT	PAT-Active	US	15/717540	#####	US-2018-0026459-A1	
13362	RESOURCE ALLOCATION FOR D2D DISCOVERY IN AN LTE NETWORK			PCT	PAT-Active	US	15/026753	9826539	US-2016-0255615-A1	
13363	RESOURCE ALLOCATION FOR D2D DISCOVERY IN AN LTE NETWORK			CNT	PAT-Active	US	15/730287	9999063	US-2018-0035441-A1	
13364	RESOURCE ALLOCATION FOR D2D DISCOVERY IN AN LTE NETWORK			CNT	PAT-Active	US	15/942974	#####	US-2018-0227932-A1	
13365	COMMUNICATION TERMINAL AND METHOD FOR CONTROLLING A CELL RESELECTION			NP	PAT-Active	US	14/459379	9990588	US-2016-0050597-A1	
13366	INTERPOLATOR SYSTEMS AND METHODS			NP	PAT-Active	US	14/551266	9387689	US-2016-0149584-A1	
13367	CIRCUIT AND METHOD FOR PROVIDING A RADIO FREQUENCY SIGNAL			NP	PAT-Active	US	14/856781	9450627	US-2016-0182100-A1	
13368	TECHNIQUES FOR IDENTIFYING PHYSICAL HYBRID AUTOMATIC REQUEST INDICATOR CHANNEL RESOURCES			PCT	PAT-Active	US	15/022484	#####	US-2016-0234809-A1	
13369	DEVICES AND METHOD FOR RETRIEVING AND UTILIZING NEIGHBORING WLAN INFORMATION FOR LTE LAA OPERATION			NP	PAT-Active	US	14/670767	8872233	US-2015-0351115-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
13370	NEIGHBOR CELL SYSTEM INFORMATION PROVISIONING			NP	PAT-Active	US	14/704195	#####	US-2016-0921584-A1	
13371	SYSTEMS APPARATUSES AND METHODS FOR LIGHTWEIGHT OVER-THE-AIR SIGNALING MECHANISMS IN DATA COMMUNICATIONS			NP	PAT-Active	US	14/669908	9801228	US-2016-0929426-A1	
13372	SYSTEMS AND METHODS FOR VARYED CELL BARRING TIMES			PCT	PAT-Active	US	15/119941	#####	US-2017-0135024-A1	
13373	APPARATUS COMPUTER-READABLE MEDIUM AND METHOD TO DETERMINE A USER EQUIPMENT LOCATION IN A CELLULAR NETWORK USING SIGNALS FROM A WIRELESS LOCAL AREA NETWORK (WLAN)			NP	PAT-Active	US	14/669243	9668099	US-2016-0303703-A1	
13374	APPARATUS COMPUTER-READABLE MEDIUM AND METHOD TO DETERMINE A USER EQUIPMENT LOCATION IN A CELLULAR NETWORK USING SIGNALS FROM A WIRELESS LOCAL AREA NETWORK (WLAN)			ENT	PAT-Active	US	15/591252	#####	US-2017-0378517-A1	
13375	METHOD FOR TRANSMITTING A PLURALITY OF UPLINK MESSAGES AND MOBILE RADIO COMMUNICATION TERMINAL DEVICE			NP	PAT-Active	US	14/670519	9621307	US-2016-0385591-A1	
13376	COMMUNICATION DEVICE AND METHOD FOR PROCESSING A RECEIVED SIGNAL			NP	PAT-Active	US	14/844044	9698837	US-2016-0112090-A1	
13377	MAXIMUM LIKELIHOOD SEQUENCE DETECTION IN THE PHASE DOMAIN			NP	PAT-Active	US	14/570566	9276704		
13378	PACKET DATA UNIT MAPPING INTO TIME RESOURCE PATTERNS FOR EFFICIENT DEVICE-TO-DEVICE COMMUNICATIONS			PCT	PAT-Active	US	15/324574	#####	US-2017-0215187-A1	
13379	SYSTEMS METHODS AND DEVICES FOR PROXIMITY SERVICES FOR MULTI-CARRIER CAPABLE MOBILE DEVICES			NP	APP-Pending	US	14/671908		US-2016-0044552-A1	
13380	LOAD BALANCING SCHEMES FOR IDLE MODE USER EQUIPMENT			NP	PAT-Active	US	14/668662	9683278	US-2016-0044638-A1	
13381	LOAD BALANCING SCHEMES FOR IDLE MODE USER EQUIPMENT			ENT	PAT-Active	US	15/631947	#####	US-2017-0288849-A1	
13382	PDCCCH DESIGN FOR NARROWBAND DEPLOYMENT			PCT	APP-Pending	US	15/324441		US-2017-0223725-A1	
13383	VIRTUALIZED NETWORK FUNCTION MANAGEMENT			PCT	APP-Pending	US	15/323905		US-2017-0150399-A1	
13384	METHODS AND APPARATUS OF EVOLVED NODE B AND USER EQUIPMENT FOR CAPABILITY INFORMATION SETTING			PCT	PAT-Active	US	13/326419	9813899	US-2017-0215065-A1	
13385	APPARATUS METHOD AND SYSTEM OF CONTROLLING COMMUNICATIONS OF A MULTI-RADIO DEVICE			NP	PAT-Active	US	14/494672	9586659	US-2016-0088572-A1	
13386	RANDOM ACCESS PROCEDURE FOR HANDOVER			NP	PAT-Active	US	14/582364	9939524	US-2016-0192399-A1	
13387	RANDOM ACCESS PROCEDURE FOR HANDOVER			ENT	APP-Pending	US	15/877268		US-2019-0029048-A1	
13388	CONTEXT-AWARE RESOURCE MANAGEMENT FOR VIDEO STREAMING SERVICES			NP	PAT-Active	US	14/540312	9807592	US-2016-0142902-A1	
13389	TECHNIQUES AND CONFIGURATIONS ASSOCIATED WITH PARTITIONING OF A COMMUNICATION BAND			NP	PAT-Active	US	14/563930	9602953	US-2016-0165606-A1	
13390	APPARATUS AND A METHOD FOR PREDICTING A FUTURE STATE OF AN ELECTRONIC COMPONENT			PCT	APP-Pending	US	15/751268		US-2018-0231601-A1	
13391	A RECEIVER AND A METHOD FOR REDUCING A DISTORTION COMPONENT WITHIN A BASEBAND RECEIVE SIGNAL			PCT	PAT-Active	US	15/575867	#####	US-2018-0159585-A1	
13392	NOISE-SHAPING CIRCUIT DIGITAL-TO-TIME CONVERTER ANALOG-TO-DIGITAL CONVERTER DIGITAL-TO-ANALOG CONVERTER FREQUENCY SYNTHESIZER TRANSMITTER RECEIVER TRANSCIVER METHOD FOR SHAPING NOISE IN AN INPUT SIGNAL			NP	PAT-Active	US	14/856854	9580647	US-2016-0182072-A1	
13393	SYSTEMS AND METHODS FOR SKEWING DC/DC CONVERTER PHASES TO MITIGATE SPURS			NP	PAT-Active	US	14/572679	9502964	US-2016-0172966-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
13394	METHODS AND DEVICES FOR MULTI-DEVICE LINK AGGREGATION			NP	PAT-Active	US	14/670967	#####	US-2016-0285746-A1	
13395	ANTENNA SYSTEM			NP	PAT-Active	US	14/671470	#####	US-2016-0285159-A1	
13396	MODIFIED ARCHITECTURE FOR CLOUD RADIO ACCESS NETWORKS AND APPROACH FOR COMPRESSION OF FRONT-HAUL DATA			PCT	PAT-Active	US	15/501467	#####	US-2017-0238361-A1	
13397	GENERATING BROADCASTING AND RECEIVING SYSTEM INFORMATION BLOCKS			NP	PAT-Active	US	14/578171	9893173	US-2016-0073326-A1	
13398	SUBSCRIBER IDENTITY MODULE PROVIDER APPARATUS FOR OVER-THE-AIR PROVISIONING OF SUBSCRIBER IDENTITY MODULE CONTAINERS AND METHODS			NP	PAT-Active	US	14/573132	9439069	US-2016-0183066-A1	
13399	EVOLVED NODE-B USER EQUIPMENT AND METHODS FOR MISSION-CRITICAL MACHINE TYPE COMMUNICATION			NP	PAT-Active	US	14/548762	9894553	US-2016-0150437-A1	
13400	SYSTEMS APPARATUSES AND METHODS FOR MANAGING USER EQUIPMENT MOBILITY INFORMATION			NP	PAT-Active	US	14/569295	9913180	US-2016-0173358-A1	
13401	EVOLVED NODE-B USER EQUIPMENT AND METHODS FOR TRANSITION BETWEEN UNLICENSED AND LICENSED FREQUENCY BANDS			NP	PAT-Active	US	14/575589	9930652	US-2016-0183220-A1	
13402	SYSTEMS METHODS AND DEVICES FOR LTE WI-FI AND BLUETOOTH COEXISTENCE			NP	PAT-Active	US	14/579402	8730014	US-2016-0183282-A1	
13403	SOFT BUFFER MANAGEMENT			NP	PAT-Active	US	14/579974	9577793	US-2016-0088635-A1	
13404	RESOURCE ALLOCATION			NP	PAT-Active	US	14/581520	9603140	US-2016-0088593-A1	
13405	APPARATUS AND METHOD FOR DIGITAL TO-TIME CONVERTER SPUR DITHERING			NP	PAT-Active	US	14/577885	9803439	US-2016-0182262-A1	
13406	DIGITAL TO ANALOG CONVERTER CELL FOR SIGNED OPERATION			NP	PAT-Active	US	14/571531	9379883	US-2016-0173269-A1	
13407	ADJUSTING POWER AMPLIFIER STIMULI BASED ON OUTPUT SIGNALS			NP	PAT-Active	US	14/663640	9571135	US-2016-0277045-A1	
13408	SYSTEMS AND METHODS FOR MANAGING CIRCUIT SWITCHED FALLBACK CALLS			NP	PAT-Active	US	14/686506	#####	US-2016-0100336-A1	
13409	METHOD AND APPARATUS FOR CORRECTING INCONVENIENT POWER AMPLIFIER LOAD CHARACTERISTICS IN AN ENVELOPE TRACKING BASED SYSTEM			NP	PAT-Active	US	14/565617	9425742	US-2016-0173030-A1	
13410	HYSTERETIC CURRENT CONTROL WITH EVENT DITHERING			NP	PAT-Active	US	14/643235	9800343	US-2016-0268889-A1	
13411	MOBILE COMMUNICATION IN MACRO-CELL ASSISTED SMALL CELL NETWORKS			PCT	PAT-Active	US	15/508331	#####	US-2017-0311217-A1	
13412	APPARATUS SYSTEM AND METHOD OF RELAY BACKHAULING WITH MILLIMETER WAVE CARRIER AGGREGATION			PCT	PAT-Active	US	15/503477	#####	US-2017-0236893-A1	
13413	SYSTEM AND METHOD OF MTC DEVICE OPERATIONS			NP	PAT-Active	US	14/711847	9961657	US-2016-0095076-A1	
13414	INTERACTIVE VIDEO CONFERENCING			NP	PAT-Active	US	14/704437	9516226	US-2016-0180099-A1	
13415	INTERACTIVE VIDEO CONFERENCING			CNT	PAT-Active	US	15/365746	9832369	US-2017-0085782-A1	
13416	INTERACTIVE VIDEO CONFERENCING			CNT	PAT-Active	US	15/801100	#####	US-2018-0054563-A1	
13417	INTERACTIVE VIDEO CONFERENCING			CNT	APP-Pending	US	16/152295		US-2019-0037131-A1	
13418	SYSTEM AND METHOD OF HANDLING UPLINK TRANSMISSION COLLISION FOR ENHANCED COVERAGE MODE US			NP	PAT-Active	US	14/718975	9953356	US-2016-0094986-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
13419	DEVICE-TO-DEVICE ASSISTED POSITIONING IN WIRELESS CELLULAR TECHNOLOGIES			NP	PAT-Active	US	14/671803	9713117	US-2016-095080-A1	
13420	USER EQUIPMENT AND SYNCHRONIZATION METHODS FOR DEVICE TO DEVICE (D2D) COMMUNICATION			PCT	PAT-Active	US	15/505387	#####	US-2017-0273042-A1	
13421	APPARATUS SYSTEM AND METHOD OF WIRELESS LOCAL AREA NETWORK (WLAN) SETTING OF A USER EQUIPMENT (UE)			PCT	PAT-Active	US	15/506013	#####	US-2017-0245208-A1	
13422	CONSTRUCTION OF TRANSMISSION PATTERNS FOR D2D COMMUNICATION			NP	PAT-Active	US	14/671315	9488471	US-2016-095112-A1	
13423	CONSTRUCTION OF TRANSMISSION PATTERNS FOR D2D COMMUNICATION			CNT	APP-Pending	US	15/839596		US-2018-0184423-A1	
13424	TRANSMISSION OF COMMON CONTROL MESSAGES FOR MACHINE-TYPE COMMUNICATION (MTC) USER EQUIPMENTS WITH REDUCED BANDWIDTH			PCT	APP-Pending	US	15/501152		US-2017-0230851-A1	
13425	CODEBOOK FOR FULL-DIMENSION MULTIPLE INPUT MULTIPLE OUTPUT COMMUNICATIONS			NP	PAT-Active	US	14/668655	9425875	US-2016-094260-A1	
13426	CODEBOOK FOR FULL-DIMENSION MULTIPLE INPUT MULTIPLE OUTPUT COMMUNICATIONS			CNT	PAT-Active	US	15/216378	#####	US-2016-0329934-A1	
13427	CODEBOOK FOR FULL-DIMENSION MULTIPLE INPUT MULTIPLE OUTPUT COMMUNICATIONS			CNT	APP-Pending	US	16/031438		US-2018-0351607-A1	
13428	DOWNLINK CONTROL INFORMATION (DCI) DESIGN FOR LTE DEVICES			NP	PAT-Active	US	14/723284	9955465	US-2016-0106382-A1	
13429	INCREASED CARRIER MONITORING			PCT	PAT-Active	US	15/512822	#####	US-2017-0251511-A1	
13430	INCREASED CARRIER MONITORING			CNT	APP-Pending	US	16/222904		US-2019-0141469-A1	
13431	NETWORK FUNCTIONS VIRTUALIZATION			PCT	APP-Pending	US	15/510898		US-2017-0257276-A1	
13432	NETWORK FUNCTIONS VIRTUALIZATION			CNT	APP-Pending	US	16/408231		US-2019-0334777-A1	
13433	METHOD FOR MITIGATING INTERFERENCE AND INTERFERENCE MITIGATING RECEIVER			PCT	APP-Pending	US	15/738468		US-2019-0819805-A1	
13434	MECHANISMS FOR CO-EXISTENCE OF LTE-U NETWORK WITH ITSELF AND WITH OTHER TECHNOLOGIES			PCT	APP-Pending	US	14/917931		US-2016-0249978-A1	
13435	APPARATUS SYSTEM AND METHOD OF DIFFERENTIATING BETWEEN AN IMS CONNECTION AND A NON-IMS CONNECTION			NP	PAT-Active	US	14/864976	#####	US-2016-0127422-A1	
13436	SYSTEM AND METHOD FOR TDD COMMUNICATIONS			NP	PAT-Active	US	14/580074	9775151	US-2016-0020891-A1	
13437	SMOOTH UE TRANSFER WITHIN AN EVOLVED PACKET CORE			NP	PAT-Active	US	14/671829	#####	US-2016-0095036-A1	
13438	OPPORTUNISTIC SIGNAL TRANSMISSION FOR INTER-RAT CO-EXISTENCE			NP	PAT-Active	US	14/718042	9867056	US-2016-0103404-A1	
13439	OPPORTUNISTIC SIGNAL TRANSMISSION FOR INTER-RAT CO-EXISTENCE			CNT	PAT-Active	US	15/864824	#####	US-2018-0317994-A1	
13440	COVERAGE CONSTRAINED DEVICES AND PAGING METHOD			NP	PAT-Active	US	14/706152	9769780	US-2016-0100380-A1	
13441	METHODS AND APPARATUSES OF WLAN ALARM NOTIFICATION IN CELLULAR NETWORKS			NP	PAT-Active	US	14/668663	#####	US-2016-0105809-A1	
13442	CARRIAGE OF MEDIA CONTENT QUANTITY INFORMATION			NP	PAT-Active	US	14/701380	#####	US-2016-0105478-A1	
13443	SIGNALING EXTENDED EARFCN AND E-UTRA BANDS IN UMTS NETWORKS			PCT	PAT-Active	US	15/026786	9867206	US-2016-0255640-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
13444	SIGNALING EXTENDED EARFCN AND E-UTRA BANDS IN UMTS NETWORKS			CNT	PAT-Active	US	15/862181	#####	US-2018-0196352-A1	
13445	DATA THROUGHPUT FOR CELL-EDGE USERS IN A LTE NETWORK USING DOWN-LINK REPEATERS AND UP-LINK HARQ RELAYS			NP	PAT-Active	US	13/324598	8918692	US-2012-0158279-A1	
13446	RELAY NODE AND METHOD FOR RELAY NODE OPERATION WITH IMPROVED DATA THROUGHPUT FOR CELL-EDGE USERS			CNT	PAT-Active	US	14/565181	9300440	US-2015-0163021-A1	
13447	DATA THROUGHPUT FOR CELL-EDGE USERS IN A LTE NETWORK USING DOWN-LINK REPEATERS AND UP-LINK HARQ RELAYS			CNT	PAT-Active	US	15/067302	9674766	US-2016-0265969-A1	
13448	RELAY NODE OPERATION WITH IMPROVED DATA THROUGHPUT			CNT	PAT-Active	US	15/614214	#####	US-2017-0325152-A1	
13449	IMPROVING DATA THROUGHPUT FOR CELL-EDGE USERS IN AN LTE NETWORK			CNT	PAT-Active	US	15/823656	#####	US-2018-0092023-A1	
13450	DATA THROUGHPUT FOR CELL-EDGE USERS IN AN LTE NETWORK			CNT	APP-Pending	US	16/513938			
13451	CONNECTION CONTROL FOR MACHINE TYPE COMMUNICATION (MTC) DEVICES			PCT	APP-Pending	US	15/514444		US-2017-0251516-A1	
13452	SYSTEMS METHODS AND APPARATUSES FOR BEARER SPLITTING IN MULTI-RADIO HETNET			NP	PAT-Active	US	14/705669	9698800	US-2016-0119839-A1	
13453	APPARATUSES SYSTEMS AND METHODS FOR PROBABILISTIC TRANSMISSION OF DEVICE-TO-DEVICE (D2D) DISCOVERY MESSAGES			PCT	APP-Pending	US	15/505387		US-2017-0280482-A1	
13454	OPTIMIZING APPLICATIONS BEHAVIOR IN A DEVICE FOR POWER AND PERFORMANCE			NP	APP-Pending	US	14/671954		US-2016-0286430-A1	
13455	POWER CONSERVATION VIA GNSS-WIRELESS ACTIVITY SYNCHRONIZATION			NP	PAT-Active	US	14/721938	#####	US-2016-0345378-A1	
13456	DISCRETE FILTER HAVING A TAP SELECTION CIRCUIT			DIV	PAT-Active	US	11/488566	7412471	US-2006-0259532-A1	
13457	SQUARE ROOT RAISED COSINE SYMMETRIC FILTER FOR MOBILE TELECOMMUNICATIONS			NP	PAT-Closed	US	03/429058	6731706		
13458	SQUARE ROOT RAISED COSINE SYMMETRIC FILTER FOR MOBILE TELECOMMUNICATIONS			CNT	PAT-Active	US	10/793978	9178404	US-2004-0172433-A1	
13459	INTER-CELL INTERFERENCE COORDINATION IN WIRELESS NETWORKS			NP	PAT-Active	US	13/556126	8971801	US-2013-0390120-A1	
13460	APPARATUS FOR AN ENHANCED NODE B FOR INTER-CELL INTERFERENCE COORDINATION IN WIRELESS NETWORKS			CNT	PAT-Active	US	14/621775	9635676	US-2015-0237637-A1	
13461	HIGH SPEED HANDOVERS IN A WIRELESS NETWORK			NP	PAT-Active	US	13/556131	9883431	US-2013-0095839-A1	
13462	COMMUNICATION TERMINAL AND METHOD FOR ESTABLISHING A CSFB CALL			NP	PAT-Active	US	14/706020	9913306	US-2016-0330778-A1	
13463	SYSTEM AND METHOD FOR MEASUREMENT REPORTING IN AN UNLICENSED SPECTRUM			NP	PAT-Active	US	14/693653	#####	US-2016-0307350-A1	
13464	SYSTEM AND METHOD TO ADDRESS RESOURCE COLLISION FOR ASYMMETRIC REGION ALLOCATION			NP	PAT-Active	US	14/692510	9887822	US-2016-0128055-A1	
13465	ENHANCED PHYSICAL DOWNLINK CONTROL CHANNEL IN MACHINE-TYPE COMMUNICATION			PCT	PAT-Active	US	15/520981	#####	US-2018-0026759-A1	
13466	D2D COMMUNICATION DEVICES AND METHOD OF TRANSMISSION FOR OVERLAPPED D2D RESOURCE POOLS			NP	PAT-Active	US	14/669340	9888508	US-2016-0135239-A1	
13467	APPARATUS SYSTEM AND METHOD OF SELECTING A MOBILITY MODE OF A USER EQUIPMENT (UE)			NP	PAT-Active	US	14/670438	9838957	US-2016-0135120-A1	
13468	APPARATUS SYSTEM AND METHOD OF COMMUNICATING BETWEEN A CELLULAR MANAGER AND A USER EQUIPMENT (UE) VIA A WLAN ACCESS DEVICE			NP	PAT-Active	US	14/747085	#####	US-2016-0128110-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
13469	EARLY TERMINATION OF REPEATED TRANSMISSIONS FOR MTC			PCT	PAT-Active	US	15/517430	#####	US-2017-0303248-A1	
13470	EARLY TERMINATION OF REPEATED TRANSMISSIONS FOR MTC			CNT	APP-Closed	US	16/192271			
13471	COMPUTING APPARATUS WITH CROSS-SUBFRAME SCHEDULING			NP	PAT-Active	US	14/711781	9800387	US-2016-0134403-A1	
13472	RAN PAGING MECHANISM TO ENABLE ENHANCED COVERAGE MODE			NP	PAT-Active	US	14/753158	9648582	US-2016-0135141-A1	
13473	EVOLVED NODE-B USER EQUIPMENT AND METHODS FOR CHANNEL QUALITY INDICATOR (CQI) FEEDBACK			NP	PAT-Active	US	14/670692	9450662	US-2016-0142123-A1	
13474	SYSTEMS APPARATUSES AND METHODS FOR PROCESSING RANDOM ACCESS RESPONSE MESSAGES FOR COVERAGE CONSTRAINED DEVICES			NP	PAT-Active	US	14/698165	9730249	US-2016-0143059-A1	
13475	SYSTEMS AND METHODS FOR SIGNALING IN AN INCREASED CARRIER MONITORING WIRELESS COMMUNICATION ENVIRONMENT			NP	PAT-Active	US	14/704448	9635574	US-2016-0142926-A1	
13476	SYSTEMS AND METHODS FOR SIGNALING IN AN INCREASED CARRIER MONITORING WIRELESS COMMUNICATION ENVIRONMENT			CNT	PAT-Active	US	15/452153	9800395	US-2017-0180106-A1	
13477	SYSTEMS AND METHODS FOR SIGNALING IN AN INCREASED CARRIER MONITORING WIRELESS COMMUNICATION ENVIRONMENT			CNT	PAT-Active	US	15/694617	9942023	US-2018-0313537-A1	
13478	SYSTEMS AND METHODS FOR SIGNALING IN AN INCREASED CARRIER MONITORING WIRELESS COMMUNICATION ENVIRONMENT			CNT	PAT-Active	US	15/902345	#####	US-2018-0183562-A1	
13479	SYSTEMS AND METHODS FOR SIGNALING IN AN INCREASED CARRIER MONITORING WIRELESS COMMUNICATION ENVIRONMENT			CNT	PAT-Active	US	16/103773	#####	US-2019-0307184-A1	
13480	METHOD FOR PERFORMING MOBILE COMMUNICATIONS AND MOBILE RADIO COMMUNICATION TERMINAL DEVICE			NP	PAT-Active	US	14/670498	9560571	US-2016-0286454-A1	
13481	METHOD AND DEVICE FOR CANCELING A BIAS OF A RADIO CHANNEL SEQUENCE			NP	PAT-Active	US	14/993157	#####	US-2016-0248612-A1	
13482	METHOD FOR PERFORMING MOBILE COMMUNICATIONS AND MOBILE TERMINAL DEVICE			NP	PAT-Active	US	14/656813	9277836		
13483	APPARATUS AND A METHOD FOR PROVIDING OSCILLATOR SIGNALS			NP	PAT-Active	US	15/045783	9467158	US-2016-0285489-A1	
13484	DIGITAL-TO-ANALOG CONVERTER CIRCUIT AN APPARATUS FOR PROVIDING A RADIO FREQUENCY TRANSMIT SIGNAL AND A METHOD OF DIGITAL-TO-ANALOG CONVERSION			NP	PAT-Active	US	15/048143	9490834	US-2016-0285470-A1	
13485	HIGH LINEARITY PUSH-PULL COMMON-GATE AMPLIFIER			NP	PAT-Active	US	14/629793	9537457	US-2016-0248390-A1	
13486	ENVELOPE TRACKING IN CONNECTION WITH SIMULTANEOUS TRANSMISSION IN ONE OR MORE FREQUENCY BANDS			NP	PAT-Active	US	14/568313	9461590	US-2016-0173031-A1	
13487	TERMINAL DEVICE AND MOBILE RADIO COMMUNICATION BY TERMINAL DEVICE			NP	APP-Pending	US	14/661074		US-2016-0278072-A1	
13488	A MOBILE COMMUNICATIONS DEVICE AND A METHOD FOR CONTROLLING A MOBILE COMMUNICATIONS DEVICE RECEIVER			PCT	PAT-Active	US	15/738805	#####	US-2018-0167884-A1	
13489	METHOD AND DEVICE FOR PROTECTING A DATA TRANSPORT BLOCK AGAINST MEMORY ERRORS AND TRANSMISSION ERRORS			NP	PAT-Active	US	14/993311	#####	US-2016-0277148-A1	
13490	SIGNAL BUFFERING FOR LICENSED SHARED ACCESS (LSA) TECHNOLOGY			NP	PAT-Active	US	14/580723	9491634	US-2016-0183267-A1	
13491	METHODS AND DEVICES FOR CONTROLLING SPEECH QUALITY			NP	PAT-Active	US	15/007335	#####	US-2016-0285573-A1	
13492	APPARATUSES AND METHODS FOR SHIFTING A DIGITAL SIGNAL BY A SHIFT TIME TO PROVIDE A SHIFTED SIGNAL			PCT	PAT-Active	US	15/811851	#####	US-2018-0167056-A1	
13493	APPARATUSES AND METHODS FOR SHIFTING A DIGITAL SIGNAL BY A SHIFT TIME TO PROVIDE A SHIFTED SIGNAL			CNT	APP-Pending	US	16/543756			
13494	RECEIVER AND A METHOD FOR REDUCING A DISTORTION COMPONENT RELATED TO A BASEBAND TRANSMIT SIGNAL IN A BASEBAND RECEIVE SIGNAL			NP	PAT-Active	US	15/046935	9698840	US-2016-0285487-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
13495	APPARATUS AND A METHOD FOR PROCESSING A SIGNAL DEPENDING ON A RECEIVED RADIO FREQUENCY SIGNAL			NP	PAT-Active	US	15/045786	#####	US-2016-0285587-A1	
13496	FREQUENCY CORRECTION IN A MULTI-CARRIER COMMUNICATION SYSTEM			PCT	PAT-Active	US	11/908253	7957341	US-2009-0279476-A1	
13497	FREQUENCY CORRECTION IN A MULTI-CARRIER COMMUNICATION SYSTEM			ENT	PAT-Active	US	13/154331	8526431	US-2011-0235590-A1	
13498	FREQUENCY CORRECTION IN A MULTI-CARRIER COMMUNICATION SYSTEM			CNT	PAT-Active	US	14/017145	9326262	US-2014-0003403-A1	
13499	FREQUENCY CORRECTION IN A MULTI-CARRIER COMMUNICATION SYSTEM			CNT	PAT-Active	US	14/992903	#####	US-2016-0126014-A1	
13500	FREQUENCY CORRECTION IN A MULTI-CARRIER COMMUNICATION SYSTEM			CNT	APP-Pending	US	15/036752		US-2018-0324734-A1	
13501	APPARATUS METHOD AND COMPUTER PROGRAM FOR TRANSCEIVERS OF A MOBILE COMMUNICATION SYSTEM			PCT	PAT-Active	US	15/572844	#####	US-2018-0160363-A1	
13502	APPARATUS METHOD AND COMPUTER PROGRAM FOR TRANSCEIVERS OF A MOBILE COMMUNICATION SYSTEM			ENT	APP-Pending	US	16/508409			
13503	REFERENCE SIGNAL POWER MEASUREMENT FILTERING			PCT	APP-Pending	US	15/736453		US-2019-0342812-A1	
13504	QUANTIZED EIGEN BEAMS FOR CONTROLLING ANTENNA ARRAY ELEMENTS IN A WIRELESS NETWORK			NP	PAT-Active	US	14/695300	9397736	US-2016-0148617-A1	
13505	QUANTIZED EIGEN BEAMS FOR CONTROLLING ANTENNA ARRAY ELEMENTS IN A WIRELESS NETWORK			ENT	PAT-Active	US	15/210977	#####	US-2016-0352395-A1	
13506	INTERACTIVE VIDEO CONFERENCING			NP	PAT-Active	US	14/807294	#####	US-2016-0165185-A1	
13507	INTERACTIVE VIDEO CONFERENCING			CNT	APP-Pending	US	15/668150		US-2017-0332042-A1	
13508	DEVICE AND METHOD FOR PROCESSING AUDIO DATA			NP	PAT-Active	US	14/670441	9713192	US-2016-0286594-A1	
13509	PHASED ARRAY WEIGHTING FOR POWER EFFICIENCY IMPROVEMENT WITH HIGH PEAK-TO-AVERAGE POWER RATIO SIGNALS			NP	PAT-Active	US	14/668274	#####	US-2016-0285491-A1	
13510	A METHOD AND AN APPARATUS FOR DETERMINING A NOISE SHAPED QUANTIZED PARAMETER CONTRIBUTING TO THE GENERATION OF AN OUTPUT SIGNAL			PCT	PAT-Active	US	15/750257	#####	US-2018-0292384-A1	
13511	METHOD AND AN APPARATUS FOR DETERMINING A NOISE SHAPED QUANTIZED PARAMETER CONTRIBUTING TO THE GENERATION OF AN OUTPUT SIGNAL			CNT	APP-Pending	US	16/516281			
13512	NETWORK-INITIATED DISCOVERY AND PATH SELECTION PROCEDURES FOR MULTI-HOP UNDERLAY NETWORKS			NP	PAT-Active	US	14/729511	9942944	US-2016-0192432-A1	
13513	REFERENCE SIGNAL PRESENCE DETECTION BASED LICENSE ASSISTED ACCESS AND REFERENCE SIGNAL SEQUENCE DESIGN			NP	PAT-Active	US	14/747663	8900134	US-2016-0173249-A1	
13514	CIRCUIT INTEGRATED CIRCUIT RECEIVER TRANSCEIVER AND METHOD FOR RECEIVING A SIGNAL			NP	PAT-Active	US	15/077197	8974024	US-2016-0316434-A1	
13515	TECHNIQUES TO SUPPORT INTEGRATED BLUETOOTH/BGPP RADIO ACCESS TECHNOLOGIES			NP	PAT-Active	US	14/671788	9503842	US-2016-0286340-A1	
13516	USER EQUIPMENT PORT CONTROL PROTOCOL SERVER AND METHODS FOR SIGNALING DEVICE AND APPLICATION FEEDBACK			NP	PAT-Active	US	14/659955	8554305	US-2015-0195750-A1	
13517	CIRCUIT SWITCHED FALLBACK			PCT	PAT-Active	US	15/114718	#####	US-2016-0345210-A1	
13518	AT COMMAND FOR SECURE ESM INFORMATION			NP	PAT-Active	US	14/701520	9730062	US-2016-0323739-A1	
13519	AT COMMAND FOR SECURE ESM INFORMATION			CNT	PAT-Active	US	15/628246	8924360	US-2017-0389807-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
13520	AT COMMAND FOR SECURE FSM INFORMATION			CNT	PAT-Active	US	15/884549	#####	US-2018-0152844-A1	
13521	ELECTRONIC DEVICES AND METHOD OF CONTROLLING AN ELECTRONIC DEVICE			NP	APP-Pending	US	14/623574		US-2016-0238057-A1	
13522	METHODS AND DEVICES FOR PROVIDING A ROBUST DATA COMMUNICATION BETWEEN A CLIENT AND A SERVER			PCT	APP-Pending	US	15/738060		US-2018-0234207-A1	
13523	USER EQUIPMENT AND BASE STATION FOR DYNAMIC CSI-RS AND CSI-M TRANSMISSION IN LTE SYSTEMS			NP	PAT-Active	US	14/707142	#####	US-2016-0212733-A1	
13524	USER EQUIPMENT AND BASE STATION CONFIGURED FOR APERIODIC CSI REFERENCES SIGNALS(CSI-RS) WITH APERIODIC REPORT TRIGGERING			CNT	APP-Pending	US	16/032704		US-2019-0014569-A1	
13525	LTE-A SYSTEMS AND METHOD OF DRS BASED POSITIONING			NP	PAT-Active	US	14/662886	9886373	US-2016-0205498-A1	
13526	TECHNIQUES FOR MONITORING VIRTUALIZED NETWORK FUNCTIONS OR NETWORK FUNCTIONS VIRTUALIZATION INFRASTRUCTURE			NP	PAT-Active	US	14/751498	8912558	US-2016-0205034-A1	
13527	TECHNIQUES FOR MONITORING VIRTUALIZED NETWORK FUNCTIONS OR NETWORK FUNCTIONS VIRTUALIZATION INFRASTRUCTURE			CNT	APP-Pending	US	15/887915		US-2018-0183892-A1	
13528	SYSTEMS METHODS AND DEVICES FOR DIRECT COMMUNICATION			NP	PAT-Active	US	14/751436	8699353	US-2016-0212108-A1	
13529	SYSTEMS METHODS AND DEVICES FOR DIRECT COMMUNICATION			CNT	PAT-Active	US	15/608772	#####	US-2018-0013737-A1	
13530	SYSTEMS METHODS AND DEVICES FOR DIRECT COMMUNICATION			CNT	APP-Pending	US	16/516904			
13531	PUBLIC SAFETY DISCOVERY AND COMMUNICATION USING A UE-TO-UE RELAY			NP	PAT-Active	US	14/812833	9992806	US-2016-0212780-A1	
13532	USER EQUIPMENT AND CODEBOOK SEARCH METHOD FOR 4TX DUAL CODEBOOK (RANK1)			PCT	PAT-Active	US	15/575276	#####	US-2018-0167115-A1	
13533	RES-GCD ADAPTATION HARDWARE ACCELERATOR FOR INTERFERENCE CANCELLATION IN FULL-DUPLEX WIRELESS SYSTEMS			NP	PAT-Active	US	14/861421	9935635	US-2017-0085252-A1	
13534	POWER OPTIMIZATION FOR CHANNEL STATE REPORTS IN A WIRELESS COMMUNICATION NETWORK			PCT	APP-Pending	US	15/745999		US-2018-0213482-A1	
13535	DEVICE AND METHOD FOR MITIGATING LOWPASS FILTER GROUP DELAY			PCT	PAT-Active	US	15/760450	#####	US-2018-0262369-A1	
13536	METHOD FOR PROCESSING RADIO SIGNALS AND MOBILE TERMINAL DEVICE			NP	APP-Pending	US	14/751149		US-2016-0381610-A1	
13537	METHOD AND DEVICE FOR DETERMINING CHANNEL STATE INFORMATION			PCT	APP-Pending	US	15/738086		US-2018-0234155-A1	
13538	ENCODING CIRCUIT METHOD FOR TRANSMITTING DATA OVER A DATA BUS AND RADIO COMMUNICATION DEVICE			NP	PAT-Active	US	14/748293	#####	US-2016-0380721-A1	
13539	METHOD AND DEVICE FOR DETECTING A TRANSMISSION FROM AN INTERFERING RADIO CELL			PCT	PAT-Active	US	15/738390	#####	US-2018-0179959-A1	
13540	METHODS AND DEVICES FOR CHANNEL ESTIMATION FOR MOBILE SYSTEMS OF INSUFFICIENT CYCLIC PREFIX LENGTH			PCT	PAT-Active	US	15/565557	#####	US-2018-0123837-A1	
13541	COMMUNICATION DEVICE AND METHOD FOR STORING DATA			PCT	APP-Pending	US	15/738817		US-2018-0183547-A1	
13542	MULTI-TRANSMISSION CAPABLE DATA TRANSMISSION SYSTEM AND METHOD OF OPERATING THE SAME			PCT	APP-Pending	US	15/796416			
13543	TRANSCIVER DEVICE AND METHOD OF PROCESSING SIGNALS			NP	PAT-Active	US	14/751181	9537530	US-2016-0380866-A1	
13544	TRANSCIVER DEVICE AND METHOD OF PROCESSING SIGNALS			CNT	PAT-Active	US	15/393309	9866264	US-2017-0113079-A1	
13545	ARCHITECTURE AND CONTROL OF ANALOG SELF-INTERFERENCE CANCELLATION			NP	PAT-Active	US	14/751779	8722718	US-2016-0380706-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
13546	ENHANCED LISTEN-BEFORE-TALK (LBT) FOR UNLICENSED BAND OPERATION WITH CELL SPLITTING			NP	PAT-Active	US	14/740563	9615279	US-2016-0215448-A1	
13547	DEVICES AND METHODS FOR EPDOCH MONITORING IN WIRELESS COMMUNICATION SYSTEMS			NP	PAT-Active	US	14/748802	#####	US-2016-0219557-A1	
13548	DEVICES AND METHODS FOR HARQ-ACK FEEDBACK SCHEME ON PUSCH IN WIRELESS COMMUNICATION SYSTEMS			NP	PAT-Active	US	14/751054	9686064	US-2016-0212734-A1	
13549	DEVICES AND METHODS FOR HARQ-ACK FEEDBACK SCHEME ON PUSCH IN WIRELESS COMMUNICATION SYSTEMS			CNT	PAT-Active	US	15/624324	#####	US-2018-0034610-A1	
13550	DEVICES AND METHODS FOR HARQ-ACK FEEDBACK SCHEME ON PUSCH IN WIRELESS COMMUNICATION SYSTEMS			CNT	APP-Pending	US	16/536818			
13551	OTDOA (OBSERVED TIME DIFFERENCE OF ARRIVAL) POSITIONING ENHANCEMENT BY USING HETEROGENEOUS REFERENCE SIGNALS			PCT	APP-Pending	US	15/539896		US-2018-0011163-A1	
13552	DEVICE AND METHOD TO IMPROVE HORIZONTAL AND VERTICAL POSITIONING ACCURACY			PCT	PAT-Active	US	15/524842	#####	US-2017-0374638-A1	
13553	DEVICE AND METHOD TO IMPROVE HORIZONTAL AND VERTICAL POSITIONING ACCURACY			CNT	APP-Pending	US	16/407148			
13554	APERIODIC CHANNEL STATE INFORMATION (CSI) REPORTING FOR CARRIER AGGREGATION			NP	PAT-Active	US	14/708545	9483491	US-2016-0227530-A1	
13555	APERIODIC CHANNEL STATE INFORMATION (CSI) REPORTING FOR CARRIER AGGREGATION			CNT	PAT-Active	US	15/877579	#####	US-2018-0302894-A1	
13556	PRECODING RESOURCE BLOCK GROUP BUNDLING ENHANCEMENT FOR FULL DIMENSION MULTI-IN-MULTI-OUTPUT			NP	PAT-Active	US	14/820879	#####	US-2016-0227520-A1	
13557	PRECODING RESOURCE BLOCK GROUP BUNDLING ENHANCEMENT FOR FULL DIMENSION MULTI-IN-MULTI-OUTPUT			CNT	APP-Pending	US	16/399731		US-2019-0260436-A1	
13558	ADAPTIVE PAGING TECHNIQUES FOR EXTENDED COVERAGE-CAPABLE DEVICES			NP	PAT-Active	US	14/976736	9974049	US-2016-0227514-A1	
13559	ADAPTIVE PAGING TECHNIQUES FOR EXTENDED COVERAGE-CAPABLE DEVICES			CNT	APP-Pending	US	15/979013		US-2018-0263015-A1	
13560	POWER HEADROOM REPORTING WITH CHANNEL SELECTION			PCT	PAT-Active	US	15/540923	#####	US-2018-0007643-A1	
13561	POWER HEADROOM REPORTING WITH CHANNEL SELECTION			CNT	APP-Pending	US	16/243856		US-2019-0349869-A1	
13562	SYSTEM AND METHODS FOR SUPPORT OF FREQUENCY HOPPING FOR UES WITH REDUCED BANDWIDTH SUPPORT			NP	APP-Pending	US	14/748814		US-2016-0228639-A1	
13563	UPLINK SCHEDULING FOR LICENSE ASSISTED ACCESS			PCT	PAT-Active	US	15/537024	#####	US-2017-0366308-A1	
13564	CHIP RATE SELECTABLE SQUARE ROOT RAISED COSINE FILTER FOR MOBILE TELECOMMUNICATIONS			NP	PAT-Active	US	09/467487	6650688		
13565	OUTAGE NOTIFICATION AND CONTEXT PRESERVATION FOR ENERGY-HARVESTING DEVICES			NP	APP-Pending	US	14/817679		US-2017-0041915-A1	
13566	DOWNLINK SIGNALING FOR UE SPECIFIC CYCLIC PREFIX TRANSMISSION			NP	PAT-Active	US	14/928820	#####	US-2017-0127411-A1	
13567	CARRIER MEASUREMENTS FOR MULTI-CARRIER DEVICES			NP	PAT-Active	US	14/794724	#####	US-2017-0013630-A1	
13568	UPLINK SYNCHRONIZATION WITH ASSISTED mmWAVE ENHANCED ROBE B			NP	PAT-Active	US	14/827976	#####	US-2017-0055298-A1	
13569	CELL SEARCH AND SYNCHRONIZATION IN MILLIMETER-WAVE CAPABLE SMALL CELLS			NP	PAT-Active	US	14/977412	9930656	US-2017-0181134-A1	
13570	MOBILE TERMINAL DEVICES AND METHODS OF PERFORMING RADIO MEASUREMENTS			NP	PAT-Active	US	14/251177	9961580	US-2016-0381588-A1	
13571	DOCKING STATION AND METHOD TO CONNECT TO A DOCKING STATION			NP	PAT-Active	US	14/963372	9827320	US-2017-0171884-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
13572	ENERGY EFFICIENT POLYNOMIAL KERNEL GENERATION IN FULL-DUPLEX RADIO COMMUNICATION			NP	PAT-Active	US	14/748766	9893745	US-2016-0380653-A1	
13573	METHOD FOR POWER SAVING AND POWER SAVING CIRCUIT FOR A MOBILE DEVICE			PCT	APP-Pending	US	15/738449			
13574	METHOD FOR FEEDBACK REPORTING AND A MOBILE COMMUNICATIONS DEVICE			NP	PAT-Active	US	14/751217	9729221	US-2016-0380687-A1	
13575	METHOD AND RELATED MOBILE DEVICE FOR FAST BLIND DECODING			PCT	APP-Pending	US	15/738677		US-2018-0234112-A1	
13576	SYSTEM AND A METHOD FOR DETERMINING A CORRECTION FOR AN OUTPUT VALUE OF A TIME-TO-DIGITAL CONVERTER WITHIN A PHASE-LOCKED LOOP			PCT	PAT-Active	US	15/575830	#####	US-2018-0131390-A1	
13577	SYSTEMS AND METHODS FOR AGGREGATING AN ENHANCED MULTIMEDIA BROADCAST MULTICAST SERVICE OVER MULTIPLE FREQUENCY CARRIERS			NP	PAT-Active	US	14/976240	#####	US-2016-0243412-A1	
13578	DEVICE SYSTEM AND METHOD EMPLOYING UNIFIED FLEXIBLE 5G AIR INTERFACE			PCT	APP-Pending	US	15/542716		US-2018-0007673-A1	
13579	SYSTEMS METHODS AND DEVICES FOR RADIO ACCESS TECHNOLOGY COORDINATION			PCT	PAT-Active	US	15/542032	#####	US-2018-0020462-A1	
13580	SYSTEMS METHODS AND DEVICES FOR RADIO ACCESS TECHNOLOGY COORDINATION			ENT	APP-Pending	US	16/418703		US-2019-0274148-A1	
13581	SYSTEMS AND METHODS FOR ENHANCED MBMS WITH MIMO SUPPORT			NP	PAT-Active	US	14/865238	#####	US-2016-0254920-A1	
13582	ARCHITECTURE FOR WIRELESS NETWORK ACCESS			PCT	APP-Pending	US	15/765540		US-2018-0310230-A1	
13583	LOW-POWER WAKEUP RADIO FOR MOBILE DEVICES			PCT	APP-Pending	US	15/758902		US-2018-0255515-A1	
13584	APPARATUS SYSTEM AND METHOD OF OFFLOADING TRAFFIC OF A SECONDARY CELL GROUP (SCG)			PCT	APP-Pending	US	15/550123		US-2018-0349062-A1	
13585	SYSTEMS METHODS AND DEVICES FOR DEVICE-TO-DEVICE RELAY COMMUNICATION			NP	PAT-Active	US	14/835944	9936530	US-2016-0270134-A1	
13586	TIME SYNCHRONIZATION FOR NODES IN A WIRELESS PERSONAL AREA NETWORK (WPAN)			PCT	APP-Pending	US	15/575746		US-2018-0124731-A1	
13587	POWER SAVE IN MACHINE TYPE COMMUNICATION DEVICE			PCT	APP-Pending	US	15/738979		US-2019-0268845-A1	
13588	TRANSMISSION TOGGLE UPLINK COMPENSATION			PCT	APP-Pending	US	15/738993		US-2019-0334663-A1	
13589	COMMUNICATION TERMINAL AND METHOD FOR HANDLING UPLOAD TRAFFIC CONGESTION			PCT	PAT-Active	US	15/739177	#####	US-2018-0175818-A1	
13590	METHOD FOR DETERMINING A PRECODING MATRIX AND PRECODING MODULE			PCT	APP-Pending	US	15/571348		US-2019-0089427-A1	
13591	SIGNAL PROCESSING APPARATUS AND METHOD FOR PROCESSING A SIGNAL			NP	PAT-Active	US	14/751195	9312875		
13592	A CIRCUIT AND A METHOD FOR GENERATING A RADIO FREQUENCY SIGNAL			PCT	APP-Pending	US	15/811860		US-2018-0234060-A1	
13593	FRAMEWORK FOR UNLICENSED SPECTRUM USAGE MONITORING AND REPORTING IN LTE NETWORKS			NP	PAT-Active	US	14/998068	9699324	US-2017-0187886-A1	
13594	SYSTEMS AND METHODS FOR CROSS-LAYER BEARER SPLITTING AND CROSS-RADIO ACCESS TECHNOLOGY RETRANSMISSION			NP	APP-Pending	US	14/851771		US-2017-0076890-A1	
13595	SYSTEMS AND METHODS FOR ELIMINATION OF PDCCH IN RESOURCE ALLOCATION SIGNALING FOR MTC DEVICES			NP	PAT-Active	US	14/856483	#####	US-2017-0079012-A1	
13596	SYSTEMS METHODS AND DEVICES FOR SECURE DEVICE-TO-DEVICE DISCOVERY AND COMMUNICATION			NP	PAT-Active	US	14/863168	9693894	US-2016-0269185-A1	
13597	PROCEDURES TO PROVISION AND ATTACH A CELLULAR INTERNET OF THINGS DEVICE TO A CLOUD SERVICE PROVIDER			NP	PAT-Active	US	14/927965	9693178	US-2016-0275147-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
13598	PROCEDURES TO PROVISION AND ATTACH A CELLULAR INTERNET OF THINGS DEVICE TO A CLOUD SERVICE PROVIDER			DIV	PAT-Active	US	15/632790	#####	US-2017-0311115-A1	
13599	MME OVERLOAD OR UNDERLOAD MITIGATION BY MME VNF APPARATUS AND METHOD			NP	PAT-Active	US	14/881019	9768694	US-2016-0269925-A1	
13600	MME OVERLOAD OR UNDERLOAD MITIGATION BY MME VNF APPARATUS AND METHOD			ENT	PAT-Active	US	15/676790	#####	US-2018-0063741-A1	
13601	METHOD AND APPARATUS FOR EFFECTIVELY PERFORMING LINEAR TRANSFORMATIONS			DIV	PAT-Active	US	11/099838	7337204	US-2005-0177607-A1	
13602	CONTROL OF TRANSMISSION POWER IN A COMMUNICATION SYSTEM			NP	PAT-Closed	US	03/412077	6751448		
13603	SYSTEMS METHODS AND DEVICES FOR UPLINK TRANSMISSIONS WITH REDUCED SIGNALING OVERHEAD			PCT	PAT-Active	US	15/546257	#####	US-2018-0203665-A1	
13604	DEVICE SYSTEM AND METHOD OF QUASI-ORTHOGONAL MULTIPLE ACCESS			PCT	PAT-Active	US	15/553363	#####	US-2018-0124684-A1	
13605	ANTENNA SYSTEM			NP	APP-Pending	US	14/865829		US-2017-0093091-A1	
13606	RECEIVER AND A METHOD FOR REDUCING A DISTORTION COMPONENT WITHIN A BASEBAND RECEIVE SIGNAL			PCT	APP-Pending	US	15/747771		US-2018-0219573-A1	
13607	COLLAPSING PARABOLOID DISH AND METHOD			NP	PAT-Active	US	08/540649	6625288		
13608	RESOLVING CONCURRENT COMMUNICATIONS AT A RELAY USER EQUIPMENT (UE)			PCT	PAT-Active	US	15/957062	#####	US-2018-0069664-A1	
13609	CARRIER-SENSING TECHNIQUES FOR LTE-BASED TRANSMISSIONS OVER UNLICENSED CARRIERS			PCT	APP-Pending	US	15/558083		US-2018-0049241-A1	
13610	METHODS APPARATUSES AND SYSTEMS FOR ENHANCEMENT OF EVOLVED PHYSICAL DOWNLINK CONTROL CHANNEL FOR MACHINE TYPE COMMUNICATIONS			NP	PAT-Active	US	14/828071	#####	US-2016-0302174-A1	
13611	USER EQUIPMENT CONTROLLED MOBILITY IN AN EVOLVED RADIO ACCESS NETWORK			PCT	PAT-Active	US	15/542262	#####	US-2017-0374612-A1	
13612	USER EQUIPMENT CONTROLLED MOBILITY IN AN EVOLVED RADIO ACCESS NETWORK			PCT	APP-Pending	US	16/454546			
13613	RANDOM ACCESS PROCEDURE FOR ENHANCED COVERAGE SUPPORT			NP	PAT-Active	US	14/861878	9918344	US-2016-0302234-A1	
13614	RANDOM ACCESS PROCEDURE FOR ENHANCED COVERAGE SUPPORT			ENT	APP-Pending	US	15/881082		US-2018-0152968-A1	
13615	USER EQUIPMENT RADIO FREQUENCY AND BAND CAPABILITY FOR CARRIER AGGREGATION MEASUREMENT GAP			PCT	APP-Pending	US	15/542260		US-2018-0066774-A1	
13616	DEVICE SYSTEM AND METHOD OF CELL SPECIFIC PROBABILITY LOAD BALANCING			NP	PAT-Active	US	14/859633	9854591	US-2016-0302118-A1	
13617	USER EQUIPMENT AND METHODS FOR PHYSICAL UPLINK CONTROL CHANNEL (PUCCH) RESOURCE ALLOCATION AND COMMUNICATION			PCT	PAT-Active	US	15/559991	#####	US-2018-0069675-A1	
13618	USER EQUIPMENT AND METHODS FOR PHYSICAL UPLINK CONTROL CHANNEL (PUCCH) RESOURCE ALLOCATION AND COMMUNICATION			ENT	APP-Pending	US	16/446860			
13619	COMMUNICATION TERMINAL AND METHOD FOR PERFORMING A CELL SEARCH			NP	PAT-Active	US	15/357751	#####	US-2017-0183068-A1	
13620	METHODS OF PERFORMING COMMUNICATIONS MOBILE TERMINAL DEVICES AND BASEBAND MODEMS			PCT	PAT-Active	US	15/758746	#####	US-2019-0036738-A1	
13621	RECEIVER WITH TUNABLE RECEIVING CHAIN			PCT	APP-Pending	US	15/760959			
13622	METHODS FOR RADIO COMMUNICATION AND COMMUNICATION DEVICES			PCT	APP-Pending	US	15/753996		US-2018-0248810-A1	
13623	COMMUNICATION DEVICE AND METHOD FOR COMMUNICATING USING A FREQUENCY RANGE			NP	APP-Pending	US	14/828537		US-2017-0059193-A1	
13624	TRANSMISSION DESIGNS FOR RADIO ACCESS TECHNOLOGIES			PCT	APP-Pending	US	15/560472		US-2018-0063820-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
13625	APPARATUS FOR CORRECTING LINEARITY OF A DIGITAL-TO-ANALOG CONVERTER			NP	PAT-Active	US	14/736155	9509326	US-2016-0365867-A1	
13626	APPARATUS FOR CORRECTING LINEARITY OF A DIGITAL-TO-ANALOG CONVERTER			CNT	PAT-Active	US	15/334218	#####	US-2017-0063388-A1	
13627	APPARATUS FOR CORRECTING LINEARITY OF A DIGITAL-TO-ANALOG CONVERTER			CNT	APP-Pending	US	16/218334		US-2019-0123751-A1	
13628	DYNAMIC LOW IF INJECTION SIDE SELECTION			NP	PAT-Active	US	14/750640	9413402		
13629	INTEGRATED ANTENNA WITH DISPLAY UNIFORMITY			NP	PAT-Active	US	13/863742	#####	US-2017-0090038-A1	
13630	BASE STATION FRONT END PREPROCESSING			NP	APP-Pending	US	15/074951		US-2016-0315674-A1	
13631	SOFTWARE DEFINED CELLULAR SYSTEM WITH DISTRIBUTED ANTENNAS			NP	PAT-Active	US	14/971915	#####	US-2016-0316356-A1	
13632	SOFTWARE DEFINED CELLULAR SYSTEM WITH DISTRIBUTED ANTENNAS			CNT	APP-Pending	US	16/552897			
13633	EVOLVED NODE-B USER EQUIPMENT AND METHODS FOR PAGING USING A BITMAP OF PAGING INDICATORS			NP	PAT-Active	US	14/834963	9955463	US-2017-0058871-A1	
13634	SENSE AMPLIFIER HAVING INTEGRATED γ MULTIPLEXOR AND METHOD THEREFOR			NP	PAT-Active	US	09/543131	6643206	US-2002-0145928-A1	
13635	EVOLVED NODE-B SHARED SPECTRUM CONTROLLER AND METHOD FOR COMMUNICATION IN SHARED SPECTRUM			PCT	PAT-Active	US	15/566190	#####	US-2018-0115993-A1	
13636	EVOLVED NODE-B SHARED SPECTRUM CONTROLLER AND METHOD FOR COMMUNICATION IN SHARED SPECTRUM			CNT	APP-Pending	US	16/563766			
13637	EVOLVED NODE-B LOCAL CONTROLLER AND METHOD FOR ALLOCATION OF SPECTRUM FOR SECONDARY USAGE			PCT	APP-Pending	US	15/760570		US-2019-0045367-A1	
13638	PERFORMING PRIMARY CELL FUNCTIONS IN A SECONDARY CELL			NP	PAT-Active	US	14/957488	9894702	US-2016-0338137-A1	
13639	TECHNIQUES FOR DETERMINING POWER OFFSETS OF A PHYSICAL DOWNLINK SHARED CHANNEL			PCT	APP-Pending	US	15/567820		US-2018-0124708-A1	
13640	METHODS APPARATUS OF ENB AND UE FOR MTC WITH NARROWBAND DEPLOYMENT			PCT	PAT-Active	US	15/129263	#####	US-2017-0180086-A1	
13641	METHODS FOR PERFORMING RADIO MEASUREMENTS AND MOBILE TERMINAL DEVICES			NP	PAT-Active	US	14/930702	#####	US-2017-0127505-A1	
13642	CELL CHANGE IN A MULTI-CARRIER OPERATING CELLULAR RADIO NETWORK			NP	APP-Closed	US	15/346778		US-2017-0171790-A1	
13643	DEVICE SYSTEM AND GLOBAL NAVIGATION SATELLITE SYSTEM METHOD USING LOCAL FINE TIME INFORMATION			NP	APP-Pending	US	14/879251		US-2017-0102462-A1	
13644	COMMUNICATION DEVICE AND A METHOD FOR OPERATING A COMMUNICATION DEVICE			NP	PAT-Active	US	14/855411	9768971	US-2017-0079009-A1	
13645	COMMUNICATION DEVICE AND METHOD FOR RECEIVING SIGNALS IN A FREQUENCY RANGE			PCT	PAT-Active	US	15/757375	#####	US-2018-0242340-A1	
13646	COMMUNICATION DEVICE AND METHOD FOR RECEIVING SIGNALS IN A FREQUENCY RANGE			CNT	APP-Pending	US	16/512461			
13647	COMMUNICATION TERMINAL AND METHOD FOR COMMUNICATING DATA			PCT	PAT-Active	US	15/758740	#####	US-2019-0037386-A1	
13648	BEAMFORMING DEVICE			PCT	APP-Pending	US	15/745141		US-2018-0212653-A1	
13649	COMMUNICATION TERMINAL AND METHOD FOR TRANSMITTING A SIGNALING MESSAGE			PCT	APP-Pending	US	15/762612		US-2018-0288824-A1	
13650	RADIO RECEIVER AND METHOD FOR DETECTING A LAYER OF A MULTI-LAYERED SIGNAL			PCT	PAT-Active	US	15/755352	#####	US-2018-0248719-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
13651	METHODS OF PROCESSING SIGNALS APPARATUS AND BASE STATION			PCT	APP-Pending	US	15/756981		US-2018-0287673-A1	
13652	MEASUREMENT GAP ENHANCEMENT TO REDUCE MEASUREMENT DELAY			PCT	PAT-Active	US	15/566138	#####	US-2018-0298253-A1	
13653	MEASUREMENT GAP CONFIGURATION IN DUAL CONNECTIVITY ENHANCEMENT			PCT	APP-Pending	US	15/565726		US-2018-0377596-A1	
13654	PAGING ENHANCEMENT FOR EXTENDED DRX IN CELLULAR SYSTEMS			PCT	PAT-Active	US	15/566201	#####	US-2018-0338281-A1	
13655	CARRIER AGGREGATION ENHANCEMENT			PCT	APP-Pending	US	15/565644		US-2018-0383664-A1	
13656	REDUCTION OF CONCURRENT SIGNALING IN A RELAY USER EQUIPMENT (UE)			PCT	PAT-Active	US	15/566543	#####	US-2018-0146494-A1	
13657	REDUCTION OF CONCURRENT SIGNALING IN A RELAY USER EQUIPMENT (UE)			CNT	APP-Pending	US	16/448256			
13658	CONTENTION FREE PHYSICAL UPLINK SHARED CONTROL CHANNEL (PUSCH) TRANSMISSION USING LISTEN BEFORE TALK			PCT	APP-Pending	US	15/566511		US-2018-0302858-A1	
13659	UE-TO-NETWORK RELAY INITIATION AND CONFIGURATION			PCT	APP-Pending	US	15/566850		US-2018-0398370-A1	
13660	UE-TO-NETWORK RELAY INITIATION AND CONFIGURATION			CNT	APP-Pending	US	16/408092			
13661	MEASUREMENT METHOD IN CARRIER AGGREGATION AND ASYNCHRONOUS DUAL CONNECTIVITY			PCT	APP-Pending	US	15/565574		US-2018-0082748-A1	
13662	ATTENTION (AT) COMMANDS FOR PACKET DATA NETWORK CONNECTION OFFLOAD			PCT	PAT-Active	US	15/567300	#####	US-2018-0150481-A1	
13663	ATTENTION (AT) COMMANDS FOR PACKET DATA NETWORK CONNECTION OFFLOAD			CNT	APP-Pending	US	16/408166			
13664	APPARATUS SYSTEM AND METHOD OF PROCESSING PDCP PDUS OF AN E-RAB			PCT	PAT-Active	US	15/537890	#####	US-2017-0367007-A1	
13665	DISPLAY INTEGRATED ANTENNA			NP	APP-Pending	US	14/751707		US-2016-0328057-A1	
13666	APPARATUS FOR OVERLOAD RECOVERY OF AN INTEGRATOR IN A SIGMA-DELTA MODULATOR			NP	PAT-Active	US	14/751083	9680486	US-2016-0380646-A1	
13667	APPARATUS FOR OVERLOAD RECOVERY OF AN INTEGRATOR IN A SIGMA-DELTA MODULATOR			CNT	PAT-Active	US	15/494408	#####	US-2017-0248692-A1	
13668	APPARATUS FOR OVERLOAD RECOVERY OF AN INTEGRATOR IN A SIGMA-DELTA MODULATOR			CNT	APP-Pending	US	16/271727		US-2019-0173485-A1	
13669	APPARATUS FOR OVERLOAD RECOVERY OF AN INTEGRATOR IN A SIGMA-DELTA MODULATOR			CNT	APP-Pending	US	16/457058		US-2019-0326925-A1	
13670	SYSTEMS METHODS AND DEVICES FOR DIRECT COMMUNICATION USING A PCS PROTOCOL			NP	PAT-Active	US	14/751546	9693154	US-2016-0212244-A1	
13671	NON-CONTENTION BASED LOW LATENCY SCHEDULING REQUEST TRANSMISSION			PCT	APP-Pending	US	15/565436		US-2018-0132268-A1	
13672	NON-CONTENTION BASED LOW LATENCY SCHEDULING REQUEST TRANSMISSION			CNT	APP-Pending	US	16/408456		US-2019-0357246-A1	
13673	TRANSMITTING SYSTEM INFORMATION CHANGE NOTIFICATIONS TO MTC DEVICES			PCT	APP-Pending	US	15/567473		US-2018-0124685-A1	
13674	EVOLVED NODE-B SPECTRUM ACCESS SYSTEM (SAS) CONTROLLER AND METHOD FOR COMMUNICATION IN SHARED SPECTRUM			PCT	PAT-Active	US	15/566695	#####	US-2018-0132111-A1	
13675	EVOLVED NODE-B SPECTRUM ACCESS SYSTEM (SAS) CONTROLLER AND METHOD FOR COMMUNICATION IN SHARED SPECTRUM			CNT	APP-Pending	US	15/529403			
13676	SEAMLESS MOBILITY FOR 5G AND LTE SYSTEMS AND DEVICES			PCT	PAT-Active	US	15/569505	#####	US-2018-0302834-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
13677	SEAMLESS MOBILITY FOR 5G AND LTE SYSTEMS AND DEVICES			ENT	APP-Pending	US	15/584653			
13678	RF POWER AMPLIFIER AND METHODS FOR IMPROVING THE EFFICIENCY THEREOF			NP	PAT-Active	US	09/579528	6825719		
13679	USER EQUIPMENT (UE) AND METHODS FOR DYNAMIC MILLIMETER WAVE PENCIL CELL COMMUNICATION			PCT	APP-Pending	US	15/747273		US-2018-0220308-A1	
13680	MOBILE COMMUNICATIONS DEVICE AND A METHOD FOR CONTROLLING A MOBILE COMMUNICATIONS DEVICE			NP	PAT-Active	US	14/864883	9980105	US-2017-0094485-A1	
13681	METHODS FOR PERFORMING WIRELESS COMMUNICATIONS MOBILE TERMINAL DEVICES AND SERVERS			NP	PAT-Active	US	18/860760	9807679	US-2017-0085133-A1	
13682	METHOD FOR PERFORMING MOBILE COMMUNICATIONS MOBILE TERMINAL DEVICE AND MOBILE BASEBAND PROCESSING CIRCUIT			PCT	APP-Pending	US	15/757378		US-2019-0029501-A1	
13683	RADIO RECEIVER AND METHOD FOR PROCESSING AN UPLINK TRANSPORT BLOCK			NP	PAT-Active	US	15/738242	#####	US-2017-0086171-A1	
13684	MOBILE TERMINAL DEVICE AND METHOD FOR PROCESSING SIGNALS			NP	APP-Pending	US	14/865067		US-2017-0094886-A1	
13685	METHODS FOR PERFORMING MOBILE COMMUNICATIONS BETWEEN MOBILE TERMINAL DEVICES BASE STATIONS AND NETWORK CONTROL DEVICES			PCT	APP-Pending	US	15/758759		US-2019-0045397-A1	
13686	METHODS AND DEVICES FOR SHARED SPECTRUM ALLOCATION			PCT	APP-Pending	US	16/305931		US-2019-0191314-A1	
13687	UPLINK INTERFERENCE MANAGEMENT IN SHARED SPECTRUM NETWORKS			ENT	PAT-Active	US	15/041943	#####	US-2019-0097509-A1	
13688	UPLINK INTERFERENCE MANAGEMENT IN SHARED SPECTRUM NETWORKS			ENT	APP-Pending	US	15/590381			
13689	IDENTIFYING VICTIMS AND AGGRESSORS IN FULL DUPLEX COMMUNICATION SYSTEMS			PCT	PAT-Active	US	15/751093	#####	US-2018-0241493-A1	
13690	LOW OVERHEAD SYSTEM INFORMATION ACQUISITION FOR WIRELESS COMMUNICATION			PCT	APP-Pending	US	15/571332		US-2018-0288683-A1	
13691	METHOD AND A SYSTEM FOR CONTROLLING A PLURALITY OF ELECTRONIC COMPONENTS ARBITRARILY ASSIGNABLE TO A PLURALITY OF INTEGRATED CIRCUITS OF A MOBILE COMMUNICATIONS DEVICE			NP	PAT-Active	US	15/223521	9755867	US-2017-0062583-A1	
13692	MOBILE TERMINAL DEVICES MOBILE PROCESSING CIRCUITS AND METHODS OF PROCESSING SIGNALS			NP	PAT-Active	US	14/864995	#####	US-2017-0093538-A1	
13693	SYSTEM AND METHOD FOR DYNAMIC MARKING FOR INTERNET PROTOCOL BEARER SPLITTING			PCT	PAT-Active	US	15/568768	#####	US-2018-0146487-A1	
13694	SYSTEM AND METHOD FOR DYNAMIC MARKING FOR INTERNET PROTOCOL BEARER SPLITTING			ENT	APP-Pending	US	16/508251			
13695	LOW LATENCY CONTENTION BASED SCHEDULING REQUEST			PCT	APP-Pending	US	15/575320		US-2018-0152950-A1	
13696	UPLINK RESOURCE COLLISION REDUCTION IN FD-MIMO			PCT	PAT-Active	US	15/572984	#####	US-2018-0145794-A1	
13697	ADAPTIVE VIDEO STREAMING USING DYNAMIC RADIO ACCESS NETWORK INFORMATION			PCT	APP-Pending	US	15/570826		US-2018-0139254-A1	
13698	ADAPTIVE VIDEO CONTENT FOR CELLULAR COMMUNICATION			PCT	APP-Pending	US	15/569168		US-2018-0152499-A1	
13699	ENHANCED SUPPORT VEHICLE-TO-ANYTHING (V2X) COMMUNICATION			PCT	APP-Pending	US	15/577292		US-2018-0152819-A1	
13700	ENHANCED OVERLAP CODE DIVISION MULTIPLE ACCESS (CDMA)			PCT	APP-Pending	US	15/573377		US-2018-0109346-A1	
13701	PDCH STATUS REPORTING FOR MULTI-RAT OFFLOADING			PCT	PAT-Active	US	15/565458	#####	US-2018-0124642-A1	
13702	LATENCY REDUCTION TECHNIQUES FOR RADIO ACCESS NETWORKS			PCT	APP-Pending	US	15/571700		US-2018-0310324-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
13703	METHODS IN SHORT RANGE RADIO COMMUNICATION MASTER SUBSYSTEMS MOBILE DEVICES AND MULTI-MODE RADIO COMMUNICATION SYSTEMS			NP	PAT-Active	US	14/934257	9832598	US-2017-0134882-A1	
13704	AN APPARATUS AND A METHOD FOR GENERATING A RADIO FREQUENCY SIGNAL			PCT	PAT-Active	US	15/754043	#####	US-2018-0248740-A1	
13705	USER EQUIPMENT (UE) AND METHODS FOR COMMUNICATION USING DIRECTIONAL TRANSMISSION AND RECEPTION			PCT	APP-Pending	US	15/741619		US-2018-0198504-A1	
13706	DISTRIBUTED LINK SCHEDULING TECHNIQUE FOR DEVICE TO DEVICE COMMUNICATION			PCT	APP-Pending	US	15/575344		US-2018-0132190-A1	
13707	DYNAMIC PARTITION RESOURCE ALLOCATION IN 5G NETWORKS			PCT	APP-Pending	US	15/574765		US-2018-0152269-A1	
13708	PROXY COORDINATED WIRELESS COMMUNICATION OPERATION FOR VEHICULAR ENVIRONMENTS			PCT	APP-Pending	US	15/577885		US-2018-0167790-A1	
13709	METHODS APPARATUS AND SYSTEMS FOR MULTI-POINT MULTI-CELL SINGLE-USER BASED MULTIPLE INPUT AND MULTIPLE OUTPUT TRANSMISSIONS			NP	PAT-Active	US	14/928758	9905344	US-2016-0248561-A1	
13710	METHODS APPARATUS AND SYSTEMS FOR MULTI-POINT MULTI-CELL SINGLE-USER BASED MULTIPLE INPUT AND MULTIPLE OUTPUT TRANSMISSIONS			CNT	PAT-Active	US	15/873629	#####	US-2018-0212727-A1	
13711	METHODS APPARATUS AND SYSTEMS FOR MULTI-POINT MULTI-CELL SINGLE-USER BASED MULTIPLE INPUT AND MULTIPLE OUTPUT TRANSMISSIONS			CNT	APP-Pending	US	16/408107			
13712	PREAMBLE-BASED TRANSMISSION POWER DETECTION			NP	PAT-Active	US	14/872065	#####	US-2017-0093504-A1	
13713	METHODS AND APPARATUS FOR FLEXIBLE MOBILE STEERING IN CELLULAR NETWORKS			PCT	APP-Pending	US	15/512511		US-2018-0375759-A1	
13714	COMMUNICATION DEVICE AND METHOD FOR SIGNAL DETERMINATION IN RADIO COMMUNICATION			NP	PAT-Active	US	15/229898	9705713	US-2017-0070375-A1	
13715	AN APPARATUS AND A METHOD FOR GENERATING A RADIO FREQUENCY SIGNAL			PCT	APP-Pending	US	15/753551		US-2018-0262383-A1	
13716	HYBRID IQ AND POLAR TRANSMITTER			NP	PAT-Active	US	14/861085	9418657		
13717	CLOSED-LOOP POWER CONTROL IN MULTI-TRANSMISSION WIRELESS SYSTEMS			NP	PAT-Active	US	14/865362	#####	US-2017-0094608-A1	
13718	ENABLING RADIO FREQUENCY MULTIPLEXING IN A WIRELESS SYSTEM			NP	PAT-Active	US	14/835828	#####	US-2017-0063404-A1	
13719	WIRELESS CIRCUITRY WITH SCALABLE ACCURACY			NP	PAT-Active	US	14/872015	#####	US-2017-0094606-A1	
13720	WIRELESS CIRCUITRY WITH SCALABLE ACCURACY			CNT	APP-Pending	US	16/542821			
13721	SECURE FIRMWARE UPGRADE FOR CELLULAR IOT			PCT	APP-Pending	US	15/575906		US-2018-0150289-A1	
13722	OFDMA-BASED MULTIPLEXING OF UPLINK CONTROL INFORMATION			PCT	PAT-Active	US	15/573314	#####	US-2018-0110541-A1	
13723	OFDMA-BASED MULTIPLEXING OF UPLINK CONTROL INFORMATION			CNT	APP-Pending	US	16/406808			
13724	NETWORK DISCOVERY AND BEAM ACQUISITION IN 5G RAT BEAM CELL OPERATION			PCT	APP-Pending	US	15/747409		US-2018-0243458-A1	
13725	DYNAMIC SPECTRUM ACCESS WITH FLEXIBLE BANDWIDTH FOR LICENSED SHARED ACCESS SYSTEMS			PCT	APP-Pending	US	15/742481		US-2018-0206214-A1	
13726	RECEIVE BEAM INDICATION FOR 5G SYSTEMS			PCT	PAT-Active	US	15/747397	#####	US-2018-0215605-A1	
13727	RECEIVE BEAM INDICATION FOR 5G SYSTEMS			CNT	APP-Pending	US	16/562111			
13728	PHYSICAL BROADCAST CHANNEL DESIGN			PCT	APP-Pending	US	15/565466		US-2018-0131491-A1	
13729	PHYSICAL BROADCAST CHANNEL DESIGN			CNT	APP-Pending	US	16/408461		US-2019-0349913-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
13730	SYSTEM AND METHODS FOR SYSTEM OPERATION FOR NARROWBAND-LTE FOR CELLULAR IOT			PCT	APP-Pending	US	15/746771		US-2018-0213468-A1	
13731	VIRTUAL MOBILE MANAGEMENT ENTITY MANAGEMENT			PCT	APP-Pending	US	15/741285		US-2018-0206108-A1	
13732	SYNCHRONIZATION SIGNALS AND CHANNEL STRUCTURE FOR NARROWBAND-LTE DEPLOYMENTS			PCT	APP-Pending	US	15/741282		US-2018-0184390-A1	
13733	CONVERGENCE LAYER FOR 5G COMMUNICATION SYSTEMS			PCT	APP-Pending	US	15/745290		US-2018-0227219-A1	
13734	CHANNEL QUALITY INDEX (CQI) REPORTING FOR SUPERPOSITION TRANSMISSIONS SCHEMES			PCT	APP-Pending	US	15/742435		US-2018-0220399-A1	
13735	ENHANCED RACH (RANDOM ACCESS CHANNEL) DESIGN FOR 5G CIOI (CELLULAR INTERNET OF THINGS)			PCT	APP-Pending	US	15/747221		US-2018-0220452-A1	
13736	BEARER SPLITTING			PCT	APP-Pending	US	15/743403		US-2018-0206262-A1	
13737	LAYER 2 RELAY PROTOCOLS AND MOBILITY RELAY METHOD			PCT	APP-Pending	US	15/745868		US-2018-0213577-A1	
13738	PERFORMING MISSION CRITICAL COMMUNICATIONS AT A USER EQUIPMENT (UE)			PCT	APP-Pending	US	15/748157		US-2018-0227958-A1	
13739	APPARATUS SYSTEM AND METHOD OF COMMUNICATING BETWEEN A CELLULAR MANAGER AND A USER EQUIPMENT (UE) VIA A WLAN NODE			PCT	PAT-Active	US	15/746865	#####	US-2019-0124511-A1	
13740	RMS EMERGENCY CALL ROUTING TECHNIQUES			PCT	APP-Pending	US	15/750825		US-2018-0227419-A1	
13741	UCI FOR CARRIER AGGREGATION			PCT	APP-Pending	US	15/741911		US-2018-0205525-A1	
13742	ENHANCED PHYSICAL SIGNAL STRUCTURE FOR LTE V2V COMMUNICATIONS			PCT	APP-Pending	US	15/751262		US-2018-0227155-A1	
13743	DEMODULATION IN WIRELESS COMMUNICATIONS			PCT	APP-Pending	US	15/744009		US-2018-0212733-A1	
13744	ENHANCED SOUNDING REFERENCE SIGNALING FOR UPLINK BEAM TRACKING			PCT	APP-Pending	US	15/743094		US-2019-0084751-A1	
13745	MEASUREMENT FOR DEVICE-TO-DEVICE (D2D) COMMUNICATION			PCT	APP-Pending	US	15/742806		US-2018-0206140-A1	
13746	CODEBOOK DESIGN FOR BEAMFORMED CSI-RS FOR FD-MIMO			PCT	APP-Pending	US	15/743800		US-2018-0205438-A1	
13747	MULTI-USER MULTIPLE INPUT MULTIPLE OUTPUT COMMUNICATION SYSTEMS AND METHODS			PCT	PAT-Active	US	15/744007	#####	US-2018-0198495-A1	
13748	HARQ FEEDBACK CONFIGURATION TECHNIQUES FOR BROADBAND WIRELESS COMMUNICATION NETWORKS			PCT	APP-Pending	US	15/751453			
13749	CONFIGURATION OF MEASUREMENT SUBFRAMES FOR A USER EQUIPMENT (UE)			PCT	APP-Pending	US	15/749487		US-2018-0220386-A1	
13750	METHODS TO ENABLE HIGH DATA RATE RELAY OPERATION USING D2D AIR-INTERFACE			PCT	PAT-Active	US	15/742801	#####	US-2018-0206176-A1	
13751	RESOURCE ACCESS IN DEVICE TO DEVICE COMMUNICATION			PCT	PAT-Active	US	15/743548	#####	US-2018-0206260-A1	
13752	RESOURCE ACCESS IN DEVICE TO DEVICE COMMUNICATION			CNY	APP-Pending	US	16/515319			
13753	LIGHTWEIGHT 5-1 LITE PROTOCOL DESIGN FOR CELLULAR INTERNET OF THINGS			PCT	APP-Pending	US	15/743168		US-2019-0098531-A1	
13754	METHOD OF MEASUREMENT GAP ENHANCEMENT			PCT	APP-Pending	US	15/743915		US-2018-0213425-A1	
13755	AUTOMATIC GAIN CONTROL GAIN ADJUSTMENT			NP	PAT-Active	US	15/186563	9844012	US-2017-0048808-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
13756	USER EQUIPMENT CAPABILITY REPORTING			PCT	APP-Pending	US	15/743562		US-2018-0206113-A1	
13757	ENERGY DETECTION THRESHOLD ADAPTATION FOR LICENSED ASSISTED ACCESS OF LTE IN UNLICENSED BAND			PCT	APP-Pending	US	15/751127		US-2018-0234886-A1	
13758	METHODS FOR CQI FEEDBACK AND RRM MEASUREMENTS WITH DYNAMIC POWER SHARING AMONG MULTIPLE LAA CELLS FOR DL-ONLY TRANSMISSION			PCT	APP-Pending	US	15/745409		US-2018-0212740-A1	
13759	BEAMFORMING TRAINING REFERENCE SIGNAL DESIGN			PCT	APP-Pending	US	15/746983		US-2019-0013848-A1	
13760	TRANSMIT BEAMFORMING			PCT	PAT-Active	US	15/747080	#####	US-2019-0212659-A1	
13761	MACHINE TYPE COMMUNICATION RELAYING			PCT	PAT-Active	US	15/745572	#####	US-2018-0213379-A1	
13762	FLEXIBLE CSI RS CONFIGURATION FOR FD-MIMO SYSTEMS			PCT	PAT-Active	US	15/753960	#####	US-2018-0219601-A1	
13763	RADIO RESOURCE CONTROL IN CELLULAR/WLAN AGGREGATION			PCT	APP-Pending	US	15/746341		US-2018-0234869-A1	
13764	COMMUNICATION DEVICE AND METHOD FOR SIGNAL DETERMINATION IN RADIO COMMUNICATION			PCT	APP-Pending	US	15/778240		US-2018-0351590-A1	
13765	ELECTRICAL SYSTEMS AND METHODS FOR PERFORMING OUT-OF-BAND COMMUNICATIONS			PCT	APP-Pending	US	15/771426		US-2018-0342150-A1	
13766	RADIO COMMUNICATION DEVICES AND METHODS FOR PERFORMING WIRELESS PEER-TO-PEER DISCOVERY			NP	PAT-Active	US	14/948488	9832680	US-2017-0150337-A1	
13767	COMMUNICATION DEVICE AND METHOD FOR PERFORMING RADIO COMMUNICATION			NP	APP-Pending	US	14/864874		US-2017-0294678-A1	
13768	CIRCUIT ARRANGEMENT MOBILE DEVICE AND METHOD FOR AMPLIFYING A SIGNAL			PCT	PAT-Active	US	15/758736	#####	US-2018-0302052-A1	
13769	Communication device and method for signal determination in radio communication			NP	PAT-Active	US	14/998117	9808921	US-2017-0187554-A1	
13770	METHOD FOR SOLVING CONFLICTS IN SCHEDULING CELL BROADCAST MESSAGE RECEPTION AND IDLE MODE TASKS OF A MOBILE DEVICE			NP	PAT-Active	US	15/354452	#####	US-2017-0181184-A1	
13771	HYBRID I-Q POLAR TRANSMITTER WITH QUADRATURE LOCAL OSCILLATOR (LO) PHASE CORRECTION			NP	PAT-Active	US	15/071867	9565043		
13772	APPARATUS FOR REDUCING A MAGNETIC COUPLING BETWEEN A FIRST ELECTRONIC CIRCUIT AND A SECOND ELECTRONIC CIRCUIT			PCT	PAT-Active	US	15/776983	#####	US-2018-0331769-A1	
13773	MULTI-HARMONIC MATCHING NETWORKS			NP	PAT-Active	US	14/978251	9979375	US-2017-0179917-A1	
13774	MULTI-HARMONIC MATCHING NETWORKS			ENT	APP-Pending	US	15/926360		US-2018-0243368-A1	
13775	BEAMFORMED PHYSICAL DOWNLINK CONTROL CHANNELS (BPDCCHs) FOR NARROW BEAM BASED WIRELESS COMMUNICATION			PCT	APP-Pending	US	15/753953		US-2018-0254853-A1	
13776	MANAGING ASPECTS OF RECEIVE BEAMFORMING			PCT	APP-Pending	US	15/747010		US-2018-0219594-A1	
13777	INTER-BEAM MOBILITY CONTROL IN MIMO COMMUNICATION SYSTEMS			PCT	PAT-Active	US	15/747027	#####	US-2019-0013857-A1	
13778	INDICATION OF TDD UPLINK AND DOWNLINK CONFIGURATIONS			PCT	APP-Pending	US	15/747270		US-2018-0220407-A1	
13779	CIOT ARCHITECTURE FOR EFFICIENT DATA TRANSMISSION			PCT	APP-Pending	US	15/743574		US-2018-0206093-A1	
13780	APPARATUS AND METHOD FOR REPORTING SYSTEM FRAME NUMBER (SFN) AND SUBFRAME OFFSET IN DUAL CONNECTIVITY (DC) ENHANCEMENT			PCT	APP-Pending	US	15/755529		US-2018-0245463-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
13781	MULTI-USER BASED SPLITTING FOR MULTI-RAT AGGREGATION			PCT	PAT-Active	US	15/742878	#####	US-2018-0378365-A1	
13782	RECEIVED SIGNAL STRENGTH INDICATOR MEASUREMENT FOR LICENSED ASSISTED ACCESS			PCT	APP-Pending	US	15/751838		US-2018-0241985-A1	
13783	DUAL CONNECTIVITY FOR RELIABILITY			PCT	APP-Pending	US	15/748717		US-2018-0235022-A1	
13784	WIRELESS PERSONAL AREA NETWORK UNDERLYING CELLULAR NETWORKS			PCT	APP-Pending	US	15/755330		US-2018-0253611-A1	
13785	GRANT-LESS PUSCH UPLINK			PCT	APP-Pending	US	15/750121		US-2018-0167161-A1	
13786	METHODS AND APPARATUSES FOR CHANNEL ESTIMATION FOR NB-PBCH IN NB-LTE SYSTEMS			PCT	APP-Pending	US	15/749307		US-2018-0227142-A1	
13787	BEAM INTERPOLATION IN MASSIVE MIMO SYSTEMS			PCT	PAT-Active	US	15/758305	#####	US-2018-0268945-A1	
13788	METHODS AND DEVICES FOR CELL SEARCH			NP	APP-Pending	US	15/086252		US-2017-0289360-A1	
13789	EQUALIZER AND METHOD FOR EQUALIZING A RECEIVE SIGNAL			PCT	APP-Pending	US	15/777537		US-2018-0337804-A1	
13790	DEVICE AND METHOD FOR RADIO ACCESS TECHNOLOGY SEARCH			NP	PAT-Active	US	14/964606	9748941	US-2017-0171799-A1	
13791	METHOD FOR SHARING A WIRELESS TRANSMISSION MEDIUM IN A TERMINAL DEVICE AND WIRELESS COMMUNICATION DEVICE AND WIRELESS COMMUNICATION CIRCUIT RELATED THERETO			NP	PAT-Active	US	15/357778	#####	US-2017-0181142-A1	
13792	COMMUNICATION DEVICE AND METHOD FOR SIGNAL DETERMINATION			NP	PAT-Active	US	15/356806	9825727	US-2017-0180066-A1	
13793	CIRCUIT AND A METHOD FOR ATTACHING A TIME STAMP TO A TRACE MESSAGE			NP	APP-Pending	US	15/350318		US-2017-0180236-A1	
13794	MOBILE COMMUNICATIONS DEVICE AND A METHOD FOR CONTROLLING A MOBILE COMMUNICATIONS DEVICE			NP	APP-Pending	US	15/356092		US-2017-0180550-A1	
13795	COMMUNICATION DEVICE AND METHOD FOR PERFORMING RADIO COMMUNICATION			PCT	APP-Pending	US	15/775845		US-2018-0331878-A1	
13796	COMMUNICATION TERMINAL AND METHOD FOR CHANNEL ESTIMATION			PCT	PAT-Active	US	15/776098	#####	US-2019-0074899-A1	
13797	METHOD AND DEVICE FOR TEMPERATURE CONTROL IN A RADIO RECEIVER			NP	APP-Pending	US	15/347886		US-2017-0167745-A1	
13798	DEVICE AND METHOD FOR DEVICE TO DEVICE COMMUNICATION			PCT	APP-Pending	US	15/776800		US-2018-0332491-A1	
13799	COMMUNICATION DEVICE AND METHOD FOR PERFORMING RADIO COMMUNICATION			NP	PAT-Active	US	15/356767	9883479	US-2017-0181107-A1	
13800	MOBILE TERMINAL DEVICE AND METHOD FOR PROCESSING SIGNALS			NP	PAT-Active	US	15/356776	#####	US-2017-0180159-A1	
13801	RANDOM ACCESS PROCEDURE FOR BEAM BASED CELL-LESS OPERATION IN 5G RAT			PCT	PAT-Active	US	15/751676	#####	US-2018-0235013-A1	
13802	RADIO NETWORK ACCESS OF WEARABLE DEVICES			PCT	APP-Pending	US	15/749728		US-2018-0213582-A1	
13803	DEVICE AND METHOD FOR ENHANCED SEAMLESS MOBILITY			PCT	APP-Pending	US	15/756189		US-2018-0248736-A1	
13804	EVOLVED NODE-B (ENB) USER EQUIPMENT (UE) AND METHODS FOR FLEXIBLE DUPLEX COMMUNICATION			PCT	PAT-Active	US	15/756210	#####	US-2018-0359762-A1	
13805	EVOLVED NODE-B (ENB) USER EQUIPMENT (UE) AND METHODS FOR FLEXIBLE DUPLEX COMMUNICATION			PCT	APP-Pending	US	16/407143		US-2019-0335478-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
13806	REFERENCE SIGNALS FOR INITIAL ACQUISITION IN 5G SYSTEMS			PCT	PAT-Active	US	15/758670	#####	US-2018-0306495-A1	
13807	REFERENCE SIGNALS FOR INITIAL ACQUISITION IN 5G SYSTEMS			CNT	APP-Pending	US	16/407154			
13808	TRANSMISSION OF UPLINK CONTROL INFORMATION IN WIRELESS SYSTEMS			PCT	APP-Pending	US	15/759034			
13809	TRANSMISSION OF UPLINK CONTROL INFORMATION IN WIRELESS SYSTEMS			PCT	APP-Pending	US	15/760975		US-2018-0263021-A1	
13810	TRANSMISSION OF UPLINK CONTROL INFORMATION IN WIRELESS SYSTEMS			CNT	APP-Pending	US	15/963482		US-2018-0245958-A1	
13811	ARCHITECTURE AND CONTROL OF HYBRID COUPLER BASED ANALOG SELF-INTERFERENCE CANCELLATION			NP	PAT-Active	US	14/976647	9602149		
13812	BYPASS RING TO IMPROVE NOISE ISOLATION OF COILS AND INDUCTORS			NP	PAT-Active	US	14/958365	9496231		
13813	ANTENNA ARRANGEMENT			NP	PAT-Active	US	14/757569	#####	US-2017-0187113-A1	
13814	DEVICE AND METHOD OF CONFIGURABLE SYNCHRONIZATION SIGNAL AND CHANNEL DESIGN			PCT	PAT-Active	US	15/564859	#####	US-2018-0091249-A1	
13815	DEVICE AND METHOD OF CONFIGURABLE SYNCHRONIZATION SIGNAL AND CHANNEL DESIGN			CNT	APP-Pending	US	16/408193		US-2019-0334646-A1	
13816	ACK/NACK SIGNALS FOR NEXT GENERATION LTE DEVICES AND SYSTEMS			PCT	APP-Pending	US	15/574581		US-2018-0135014-A1	
13817	ACK/NACK SIGNALS FOR NEXT GENERATION LTE DEVICES AND SYSTEMS			CNT	APP-Pending	US	16/408223			
13818	USER EQUIPMENT (UE) AND METHODS FOR REGISTRATION OF CIRCUIT-SWITCHED (CS) SERVICES IN MULTI-MODE OPERATION			PCT	APP-Pending	US	15/768329		US-2018-0310190-A1	
13819	SECURE DIRECT DISCOVERY AMONG USER EQUIPMENT			PCT	APP-Pending	US	15/749704		US-2018-0234827-A1	
13820	SYSTEMS METHODS AND DEVICES FOR V2X SERVICES OVER WIRELESS WIDE AREA NETWORKS			PCT	PAT-Active	US	15/741684	#####	US-2018-0206288-A1	
13821	SYSTEMS METHODS AND DEVICES FOR RESOURCE ALLOCATION ADJUSTMENTS FOR WIRELESS TRANSMISSIONS			PCT	APP-Pending	US	15/742406		US-2018-0376474-A1	
13822	SYSTEMS METHODS AND DEVICES FOR CELLULAR SYNCHRONIZATION REFERENCES			PCT	APP-Pending	US	15/742416		US-2018-0213498-A1	
13823	SYSTEMS METHODS AND DEVICES FOR SHARING A WIRELESS MEDIUM USING LISTEN BEFORE TALK			PCT	APP-Pending	US	15/742388		US-2018-0206269-A1	
13824	DETERMINATION OF NUMBER OF PHYSICAL UPLINK CONTROL CHANNEL REPETITIONS FOR MACHINE TYPE COMMUNICATIONS			PCT	APP-Pending	US	15/749757		US-2019-0182824-A1	
13825	CONFIGURATION OF NON-UE-SPECIFIC SEARCH SPACE FOR M-PDCCH			PCT	APP-Pending	US	15/743589		US-2018-0212736-A1	
13826	V2X PERFORMANCE ENHANCEMENTS IN HIGH SPEED ENVIRONMENTS			PCT	APP-Pending	US	15/754260		US-2018-0241508-A1	
13827	SYSTEM INFORMATION CHANGE NOTIFICATION TECHNIQUES FOR WIRELESS COMMUNICATIONS NETWORKS			PCT	APP-Pending	US	15/751843		US-2018-0270738-A1	
13828	CONGESTION CONTROL FOR VEHICULAR-TO-ANYTHING SERVICES			PCT	APP-Pending	US	15/754531		US-2018-0242190-A1	
13829	RADIO COMMUNICATION DEVICE AND METHOD OF MOBILE RADIO CELL MEASUREMENT REPORTING			PCT	APP-Pending	US	15/776801		US-2018-0332492-A1	
13830	LATTICE REDUCTION-AIDED SYMBOL DETECTION			PCT	APP-Pending	US	15/763880		US-2018-0287675-A1	
13831	METHOD AND DEVICE FOR SCHEDULING CELL QUALITY MEASUREMENTS IN A MOBILE RECEIVER			NP	PAT-Active	US	15/357366	#####	US-2017-0188274-A1	
13832	METHOD AND DEVICE FOR SCHEDULING CELL QUALITY MEASUREMENTS IN A MOBILE RECEIVER			CNT	APP-Pending	US	16/507501			

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
13833	COMMUNICATION TERMINAL AND METHOD FOR SELECTING A COMMUNICATION ANTENNA			NP	APP-Pending	US	15/357824		US-2017-0181071-A1	
13834	FAST FOURIER TRANSFORM ARCHITECTURE			PCT	APP-Pending	US	15/777248		US-2018-0336161-A1	
13835	METHOD AND APPARATUS FOR REDUCING POWER OF A CDMA MOBILE STATION BY CONTROLLED TRANSITION FROM CONTROL HOLD TO ACTIVE STATE			NP	PAT-Active	US	15/431646	7203527	US-2003-0227882-A1	
13836	POWER CONTROL OF PLURAL PACKET DATA CONTROL CHANNELS			NP	PAT-Active	US	10/455783	7353039	US-2004-0043784-A1	
13837	AIR INTERFACE RESOURCE UTILIZATION TECHNIQUES FOR WIRELESS COMMUNICATION NETWORKS			PCT	APP-Pending	US	15/756516		US-2018-0262975-A1	
13838	DEVICES AND METHODS OF USING NETWORK FUNCTION VIRTUALIZATION AND VIRTUALIZED RESOURCES PERFORMANCE DATA TO IMPROVE PERFORMANCE			PCT	APP-Pending	US	15/764469		US-2018-0262410-A1	
13839	DEVICES AND METHODS OF USING NETWORK FUNCTION VIRTUALIZATION AND VIRTUALIZED RESOURCES PERFORMANCE DATA TO IMPROVE PERFORMANCE			ENT	APP-Pending	US	16/408234		US-2019-0334796-A1	
13840	ENHANCED PAGING MECHANISM FOR CELLULAR INTERNET OF THINGS			PCT	PAT-Active	US	15/758246	#####	US-2018-0263013-A1	
13841	DETERMINING THE RECEIVED DATA RATE IN A VARIABLE RATE COMMUNICATIONS SYSTEM			NP	PAT-Active	US	08/430994	6370672		
13842	METHOD AND APPARATUS FOR CONTROLLING FORWARD LINK POWER DURING AN INTERGENERATIONAL SOFT HANDOFF IN A CDMA COMMUNICATION SYSTEM			NP	PAT-Active	US	03/783729	6937583		
13843	FREQUENCY DIVISION MULTIPLE ACCESS SYSTEM SEARCHING			NP	PAT-Active	US	08/586840	6775261		
13844	FORWARD PACKET DATA CHANNEL WITH PARALLEL SUB-PACKETS			NP	PAT-Active	US	10/099815	7379416	US-2003-0174642-A1	
13845	FAST FEEDBACK CHANNEL WITH FLEXIBLE BIT RELIABILITY FOR WIRELESS COMMUNICATIONS			NP	PAT-Active	US	03/834317	6876641	US-2001-0048694-A1	
13846	ADAPTIVE ANTENNA METHOD AND APPARATUS			NP	PAT-Active	US	09/632081	6952455		
13847	METHOD AND APPARATUS FOR GENERATING TRANSMIT ADAPTIVE ANTENNA WEIGHTS WITH INQ USING BINARY GRADIENT FEEDBACK			CIP	PAT-Active	US	10/080751	7433416		
13848	SYNCHRONIZATION OF MOBILE STATION LOCATION MEASUREMENT WITH CDMA SERVICE			NP	PAT-Active	US	10/264021	7035648	US-2003-0100314-a1	
13849	FRAME MATCHING METHOD			NP	PAT-Active	US	03/687780	6891853		
13850	METHOD AND APPARATUS FOR PROCESSING INTERRUPTS AT DYNAMICALLY SELECTABLE PRIORITIZATION LEVELS			NP	PAT-Active	US	10/356130	6928502	US-2004-0153596-A1	
13851	METHOD AND APPARATUS ESTIMATING CELL INTERFERENCE AND NOISE FOR CDMA PACKET DATA CHANNELS			NP	PAT-Active	US	10/618079	7450556	US-2005-0007975-A1	
13852	PILOT SIGNAL ENHANCEMENTS FOR A WIRELESS COMMUNICATION SYSTEM			NP	PAT-Active	US	15/903029	7450549	US-2005-0030926-A1	
13853	PILOT SIGNAL ENHANCEMENTS FOR A WIRELESS COMMUNICATION SYSTEM			DIV	PAT-Active	US	12/151017	8208447	US-2008-0205374-A1	
13854	TRISTATE REQUESTS FOR FLEXIBLE PACKET RETRANSMISSION			NP	PAT-Active	US	10/947825	7590084	US-2005-0068908-A1	
13855	TRISTATE REQUESTS FOR FLEXIBLE PACKET RETRANSMISSION			DIV	PAT-Active	US	12/537086	8254363	US-2009-0310854-A1	
13856	LEGACY-COMPATIBLE SIGNALING EXTENSION METHOD FOR BROADCAST/MULTICAST SERVICE INDICATIONS			NP	PAT-Active	US	10/955241	7486643	US-2005-0258623-A1	
13857	MOBILE STATION CONNECTION MANAGEMENT UTILIZING SUITABLE PARAMETER INFORMATION			NP	PAT-Active	US	10/965080	7312917	US-2005-0136937-A1	
13858	METHOD AND/OR ARCHITECTURE IMPLEMENTED IN HARDWARE FOR THE ADJUSTMENT OF MESSAGES WITH INDETERMINISTIC LENGTH			NP	PAT-Active	US	10/812810	7378352	US-2005-0220151-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
13859	METHOD AND/OR APPARATUS IMPLEMENTED IN HARDWARE TO DISCARD BAD LOGICAL TRANSMISSION UNITS (LTUS)			NP	PAT-Active	US	10/842376	7340667	US-2005-0251717-A1	
13860	METHOD AND/OR APPARATUS FOR GENERATING A WHITE GATED CLOCK SIGNAL			NP	PAT-Active	US	10/867899	7048066	US-2005-0275441-A1	
13861	ACTIVE ACKNOWLEDGMENT SOURCE SELECTION			NP	PAT-Active	US	11/302959	7567936	US-2006-0034241-A1	
13862	ENHANCED SELF-CONTAINED TIME-DIVISION DUPLEX SUBFRAME STRUCTURE			PCT	APP-Pending	US	15/762534			
13863	DUAL RADIO OPERATION BETWEEN ACCESS SYSTEMS USING 3GPP RADIO ACCESS TECHNOLOGY			PCT	APP-Pending	US	15/766052		US-2018-0288657-A1	
13864	BEARER-LESS ARCHITECTURE FOR A WIRELESS CELLULAR NETWORK			PCT	APP-Pending	US	15/765998		US-2018-0288784-A1	
13865	RRM REQUIREMENT FOR DTD INTER-CARRIER DISCOVERY GAP			PCT	PAT-Active	US	15/756943	#####	US-2018-0279109-A1	
13866	SIGNALING METHODS FOR FLEXIBLE RADIO RESOURCE MANAGEMENT			PCT	APP-Pending	US	15/761390		US-2018-0279398-A1	
13867	NETWORK INITIATED PACKET DATA NETWORK CONNECTION			PCT	APP-Pending	US	15/765542		US-2018-0310350-A1	
13868	NETWORK UTILITY MAXIMIZATION WITH MULTI-RAT AGGREGATION			PCT	APP-Pending	US	15/765594		US-2018-0352477-A1	
13869	WALSH MASK TEST IN CDMA CELLULAR WIRELESS COMMUNICATION SYSTEMS WITH PACKET DATA SERVICE			NP	PAT-Active	US	11/142773	7303892	US-2006-0274639-A1	
13870	MEMORY EFFICIENT STREAMLINED TRANSMITTER WITH A MULTIPLE INSTANCE HYBRID ARQ			NP	PAT-Active	US	11/078751	7340669	US-2006-0206777-A1	
13871	MOBILE PHONE HAVING A DIRECTED BEAM ANTENNA			DIV	PAT-Active	US	11/703426	7576699	US-2007-0159404-A1	
13872	SYSTEM AND METHOD FOR DIGITAL MULTIMEDIA BROADCASTING			NP	PAT-Active	US	11/280999	7529221	US-2006-0114857-A1	
13873	METHOD AND SYSTEM FOR A LOCK DETECTOR FOR A PHASE-LOCKED LOOP			NP	PAT-Active	US	11/101985	7157978	US-2006-0226914-A1	
13874	POWER-EFFICIENT SIGNALING FOR ASYMMETRIC MULTI-CARRIER COMMUNICATIONS			EXP	PAT-Active	US	11/488909	7564828	US-2007-0060360-A1	
13875	INTER-LAYER COMMUNICATION OF RECEIPT CONFIRMATION FOR RELEASING RETRANSMISSION BUFFER CONTENTS			NP	PAT-Active	US	11/266913	7567915	US-2007-0113823-A1	
13876	DYNAMICALLY BEAMFORMED CONTROL CHANNEL FOR BEAMFORMED CELLS			PCT	APP-Pending	US	15/766561		US-2018-0294859-A1	
13877	COMMUNICATION DEVICE AND METHOD FOR PERFORMING RADIO COMMUNICATION			NP	PAT-Active	US	15/356787	9867133	US-2017-0181996-A1	
13878	JOINT NONCOHERENT DEMODULATION AND CARRIER FREQUENCY OFFSET CORRECTION BASED ON NON-LINEAR FILTERING			PCT	PAT-Active	US	15/777570	#####	US-2019-0028322-A1	
13879	DEVICE AND METHOD FOR USER ORIGINATED MULTIPLE CONNECTION MANAGEMENT TRANSACTIONS VIA CIRCUIT SWITCHED FALLBACK			NP	PAT-Active	US	14/975884	9788241	US-2017-0181042-A1	
13880	METHOD AND MIGRATION MANAGER COMPONENT FOR TRANSFERRING AN APPLICATION AND SYSTEM FOR MANAGING TERMINAL DEVICE COMMUNICATION CONNECTIONS			PCT	APP-Pending	US	15/777246		US-2018-0332654-A1	
13881	COMMUNICATION TERMINAL AND METHOD FOR PERFORMING A CELL SELECTION OR RESELECTION			PCT	APP-Pending	US	15/776807		US-2018-0332521-A1	
13882	A Successive Joint Channel Estimation based Interference Cancellation Scheme against Colliding Interferences			PCT	APP-Pending	US	15/775161		US-2018-0275689-A1	
13883	VARIABLE BANDWIDTH AUTOMATIC GAIN CONTROL			NP	PAT-Active	US	11/369311	7596193	US-2007-0147956-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
13884	VARIABLE BANDWIDTH AUTOMATIC GAIN CONTROL			CNT	PAT-Active	US	12/398740	8160186	US-2010-0172451-A1	
13885	SAS INTERFERENCE MITIGATION OPTIONS			PCT	APP-Pending	US	15/761016		US-2018-0279316-A1	
13886	APPARATUSES FOR DMRS DESIGN OR PROCESSING FOR GUARD INTERVAL OR ZERO TAIL OFT SPREAD OFDM SYSTEMS			PCT	APP-Pending	US	15/747089		US-2018-0219709-A1	
13887	FLEXIBLE UNIVERSAL EXTENDED FRAME STRUCTURE			PCT	APP-Pending	US	15/765240		US-2018-0254851-A1	
13888	ENHANCED RESOURCE MAPPING SCHEME			PCT	APP-Pending	US	15/764294		US-2019-0068352-A1	
13889	FREQUENCY RECONFIGURABLE ANTENNA DECOUPLING FOR WIRELESS COMMUNICATION			NP	APP-Pending	US	15/193958		US-2017-0373393-A1	
13890	NAX MESSAGE TRANSMISSION WITH QUICKNAX INDICATION			NP	PAT-Active	US	11/622086	8051190	US-2008-0170565-A1	
13891	ACCESS TERMINAL PAGING IMPROVEMENTS			NP	PAT-Active	US	12/152835	8081591	US-2008-0293440-A1	
13892	SYSTEMS AND METHODS FOR DETERMINING SLOTTED MODE OPERATION TIMING IN A HYBRID ACCESS TERMINAL			NP	PAT-Active	US	11/862029	7994393	US-2008-0075039-A1	
13893	ACCESS TERMINAL WHICH HANDLES MULTIPLE USER CONNECTIONS			NP	PAT-Active	US	11/748042	8058592	US-2008-0285508-A1	
13894	FEMTOCELL BASE STATION WITH MOBILE STATION CAPABILITY			NP	PAT-Active	US	11/861772	8193267	US-2009-0082010-A1	
13895	DEVICES AND METHODS FOR ROBUST MEASUREMENT AND DATA RECEIVING			PCT	APP-Pending	US	15/770948		US-2018-0309526-A1	
13896	CONTENTION WINDOW SIZE ADAPTATION			PCT	APP-Pending	US	15/760010		US-2018-0254858-A1	
13897	METHOD APPARATUS AND SYSTEM FOR REPORTING BEAM REFERENCE SIGNAL RECEIVING POWER			PCT	APP-Pending	US	15/752553		US-2019-0028167-A1	
13898	FAMILY OF LINEAR MULTI-USER DETECTORS (MUDS)			NP	PAT-Active	US	09/633131	6618433		
13899	CHANNEL ESTIMATION METHODS AND APPARATUS UTILIZING THE SAME			NP	PAT-Active	US	12/400169	8391427	US-2009-0296836-A1	
13900	APPARATUS AND METHOD FOR HANDLING RETRANSMISSION FAILURE ACCORDING TO ACTIVATION STATUS OF SECURITY MODE			NP	PAT-Active	US	12/269204	8737294	US-2010-0035599-A1	
13901	APPARATUS AND METHOD FOR ALLEVIATING BARRED ACCESS IN MOBILE COMMUNICATION SYSTEM			NP	PAT-Active	US	12/409748	8121088	US-2010-0074170-A1	
13902	WIRELESS HIGH-RATE RATE COMMUNICATIONS			NP	PAT-Active	US	12/626767	8295251	US-2010-0135258-A1	
13903	SYNCHRONIZATION METHOD AND APPARATUS FOR ORTHOGONAL FREQUENCY DIVISION MULTIPLEXING SYSTEM			NP	PAT-Active	US	12/468073	8320481	US-2010-0246698-A1	
13904	APPARATUS AND METHOD FOR REVERSE LINK TRANSMISSION IN AN ACCESS TERMINAL			NP	PAT-Active	US	12/420554	8265490	US-2010-0262881-A1	
13905	WIRELESS COMMUNICATION BETWEEN A BASE STATION AND A MOBILE DEVICE			NP	PAT-Active	US	12/434003	8213933	US-2010-0279683-A1	
13906	APPARATUS METHOD AND SYSTEM FOR REDUCED ACTIVE SET MANAGEMENT			NP	PAT-Active	US	12/704794	8472921	US-2010-0210246-A1	
13907	APPARATUS FOR REDUCING AN AMPLITUDE IMBALANCE AND A PHASE IMBALANCE BETWEEN AN IN-PHASE SIGNAL AND A QUADRATURE SIGNAL			NP	PAT-Active	US	15/349008	#####	US-2017-0170915-A1	
13908	MIMO OFDMA WITH ANTENNA SELECTION AND SUBBAND HANDOFF			NP	PAT-Active	US	12/730426	8274943	US-2010-0246489-A1	
13909	CIRCUIT SERVICE TUNNELING SYSTEMS METHODS AND INTERWORKING SYSTEMS AND MOBILITY MANAGEMENT ENTITIES THEREOF			NP	PAT-Active	US	12/775521	8473434	US-2010-0290436-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
13910	CIRCUIT SERVICE TUNNELING METHODS AND USER EQUIPMENT THEREOF			NP	PAT-Active	US	12/775535	8432901	US-2010-0296437-A1	
13911	DISCOVERY REFERENCE SIGNAL TRANSMISSION FOR LTE IN UNLICENSED BAND			PCT	APP-Pending	US	15/745424		US-2018-0213561-A1	
13912	USER PLANE RESOURCE ALLOCATION			PCT	APP-Pending	US	15/766331		US-2018-0295659-A1	
13913	DOWNLINK DATA HANDLING FOR IDLE MODE UE WHEN THE SGW IS SPLIT INTO CONTROL PLANE NODE AND USER PLANE NODE			PCT	APP-Pending	US	15/767562		US-2018-0302857-A1	
13914	DESIGN AND TRANSMISSION OF (E)PDCCH WITHIN PARTIAL SUBFRAME IN LICENSED ASSISTED ACCESS (LAA)			PCT	APP-Pending	US	15/765764		US-2018-0295649-A1	
13915	APPARATUS SYSTEMS AND METHODS FOR PRIORITIZED LOAD BALANCING			NP	PAT-Active	US	12/792917	8428612	US-2011-0006126-A1	
13916	REVERSE LINK MOBILE TRANSMIT DIVERSITY			NP	PAT-Active	US	12/840473	8472892	US-2011-0026141-A1	
13917	REVERSE LINK MOBILE TRANSMIT DIVERSITY			ENT	PAT-Active	US	13/905903	8699909	US-2013-0259147-A1	
13918	PERSONAL AREA NETWORK COMMUNICATION FOR WEARABLE DEVICES			PCT	APP-Pending	US	15/771192		US-2018-0317070-A1	
13919	QUALITY OF SERVICE PROVISIONING FRAMEWORK FOR A SDN-BASED CELLULAR NETWORK ARCHITECTURE			PCT	APP-Pending	US	15/768945		US-2018-0317121-A1	
13920	DISCOVERY REFERENCE SIGNALING FOR DYNAMICALLY-TIMED TRANSMISSIONS			PCT	APP-Pending	US	15/770853		US-2018-0331774-A1	
13921	REFERENCE SIGNAL FOR RECEIVE BEAM REFINEMENT IN CELLULAR SYSTEMS			PCT	APP-Pending	US	15/752764		US-2019-0007116-A1	
13922	DISTINGUISHING SUBFRAMES IN A DOWNLINK TRANSMISSION BURST			PCT	APP-Pending	US	15/764301		US-2018-0288715-A1	
13923	SHORT TRANSMISSION TIME INTERVAL (TTI)			PCT	APP-Pending	US	15/767983		US-2018-0302800-A1	
13924	ANTENNA PORT MULTIPLEXING			PCT	APP-Pending	US	15/765692		US-2018-0278437-A1	
13925	RESTORING VIRTUAL NETWORK FUNCTION (VNF) PERFORMANCE VIA VNF RESET OF LIFECYCLE MANAGEMENT			PCT	APP-Pending	US	15/767203		US-2019-0073269-A1	
13926	LISTEN BEFORE TALK FOR DISCOVERY REFERENCE SIGNAL TRANSMISSION IN UNLICENSED SPECTRUM			PCT	APP-Pending	US	15/767219		US-2019-0075596-A1	
13927	Apparatuses Systems and Methods for Managing Operation Status of Wireless Transmissions and Reception			NP	PAT-Active	US	12/851764	8743859	US-2011-0092924-A1	
13928	CHANNEL STATE INFORMATION (CSI) MEASUREMENTS AND CSI REPORTING IN LICENSED ASSISTED ACCESS (LAA)			PCT	APP-Pending	US	15/767861		US-2018-0310193-A1	
13929	SYNCHRONIZATION SIGNAL DESIGN FOR NARROWBAND INTERNET OF THINGS COMMUNICATIONS			PCT	APP-Pending	US	15/766772		US-2018-0295037-A1	
13930	METHOD AND SYSTEM FOR DOUBLE-END TALK DETECTION AND METHOD AND SYSTEM FOR ECHO ELIMINATION			NP	PAT-Active	US	12/792884	8271051	US-2011-0124380-A1	
13931	FULL DIMENSION MULTIPLE INPUT MULTIPLE OUTPUT COMMUNICATION SYSTEMS AND METHODS			PCT	APP-Pending	US	15/765595		US-2019-0085423-A1	
13932	APPARATUS SYSTEM AND METHOD FOR ACCESS PROCEDURE ENHANCEMENTS			INV	PAT-Active	US	14/675950	9699808	US-2015-0208437-A1	
13933	Distributed Scheduling Method for Fronthaul-Based C-RAN Wireless Network Architecture			PCT	APP-Pending	US	15/777430		US-2018-0339770-A1	
13934	USER EQUIPMENT AND METHOD FOR MEASUREMENT OF SIDE-LINK REFERENCE SIGNAL RECEIVED POWER (S-RSRP)			NP	PAT-Active	US	14/977463	8974039	US-2017-0181011-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
13935	MULTIBAND DATA DELIVERY DEVICE AND METHOD			PCT	APP-Pending	US	16/064056		US-2018-037637A-1	
13936	METHODS AND DEVICES FOR MANAGING PACKET DATA NETWORK CONNECTIONS			PCT	APP-Pending	US	16/071977			
13937	TIME GRID WITH TIME DIVISION DUPLEX SWITCHING INTERVALS			PCT	APP-Pending	US	15/759745		US-2019-005235A-1	
13938	COMMUNICATION TRANSMISSION SYSTEM AND METHOD FOR XHRPD			NP	PAT-Active	US	14/790545	9930686	US-2016-0312726-A1	
13939	METHOD FOR UPDATING PREFERRED ROAMING LIST OF UIM CARD			NP	PAT-Active	US	15/183907	9930521	US-2017-001344A-1	
13940	AFC/UXAGC PDMA INL			NP	PAT-Active	US	15/194672	#####	US-2017-001908A-1	
13941	BATCH NOTIFICATION IN ONE2M2M ENVIRONMENTS			NP	PAT-Active	US	14/789445	#####	US-2016-036663-A1	
13942	METHODS FOR CONTROLLING MOBILE PHONES AND INSTRUMENTS AND SYSTEMS USING THE SAME			NP	APP-Pending	US	15/183980		US-2017-001951A-1	
13943	MOBILE DEVICE RADIO TRANSCEIVER CIRCUIT AND IMPEDANCE ADJUSTMENT DEVICE			NP	PAT-Active	US	15/184096	#####	US-2017-031913A-1	
13944	M2M DEVICES AND COMMUNICATION METHODS THEREOF			NP	PAT-Active	US	14/472580	9510281	US-2015-006512A-1	
13945	PHASE LOCKED LOOP CIRCUIT WITH IMPROVED PERFORMANCE			NP	PAT-Active	US	14/332614	9294104	US-2016-0020773-A1	
13946	AMPLIFIER APPARATUS AND SOFT-START METHOD THEREOF			NP	PAT-Active	US	14/449163	9438379	US-2015-0244330-A1	
13947	LTECDMA 1X HYBRID			NP	PAT-Active	US	14/168679	9773646	US-2014-0219247-A1	
13948	APPARATUS AND METHOD FOR TUNNELED GPM			NP	PAT-Active	US	13/948485	9451466	US-2014-0022992-A1	
13949	DEEP SLEEP IN 1X M2M DEVICES			NP	PAT-Active	US	13/909529	9344967	US-2013-0324122-A1	
13950	MOBILE COMMUNICATION DEVICES CELLULAR ACCESS STATIONS AND OPERATION MANAGEMENT METHODS FOR MACHINE-TO-MACHINE (M2M) COMMUNICATIONS			NP	PAT-Active	US	13/849053	9049538	US-2013-0265952-A1	
13951	MECHANISMS FOR SINGLE FREQUENCY NETWORKS IN HIGH-SPEED MOBILE SCENARIOS			PCT	APP-Pending	US	15/772473		US-2018-0316409-A1	
13952	INTRA-FREQUENCY AND INTER-FREQUENCY MEASUREMENT FOR NARROW BAND MACHINE-TYPE COMMUNICATION			PCT	APP-Pending	US	15/767123		US-2019-0074918-A1	
13953	QUANTITY OF SERVICE CONTROL OF REVERSE TRAFFIC CHANNEL FOR A MOBILE COMMUNICATION DEVICE			NP	PAT-Active	US	12/754684	8228817	US-2011-0242998-A1	
13954	FAST RESELECTION TO OTHER RADIO ACCESS TECHNOLOGY AFTER CIRCUIT SWITCHED FALLBACK			NP	PAT-Active	US	12/973344	8565187	US-2011-0222509-A1	
13955	METHODS AND DEVICES FOR REDUCING SIGNALING OVERHEAD			NP	PAT-Active	US	13/159271	9497662	US-2011-0360889-A1	
13956	BUFFER STATUS REPORTING METHODS FOR MACHINE TYPE COMMUNICATION DATA TRANSMISSION AND RELATED MOBILE COMMUNICATION DEVICES			NP	PAT-Active	US	13/153160	8547836	US-2011-0300858-A1	
13957	MOBILE COMMUNICATIONS DEVICES AND TRANSMISSION METHODS FOR TRANSMITTING MACHINE TYPE COMMUNICATION DATA THEREOF			NP	PAT-Active	US	13/153210	8681701	US-2011-0298492-A1	
13958	APPARATUSES AND METHODS FOR SAVING POWER IN PAGING OPERATIONS			NP	PAT-Active	US	13/215867	8797933	US-2012-0163259-A1	
13959	CLASS IDENTIFICATION METHODS FOR MACHINE-TO-MACHINE (M2M) APPLICATIONS AND APPARATUSES AND SYSTEMS USING THE SAME			NP	PAT-Active	US	13/291256	9628940	US-2012-0117140-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
13960	MOBILE-TERMINATED PACKET TRANSMISSION			PCT	PAT-Pending	US	15/775094		US-2018-0376373-A1	
13961	COMMUNICATION METHOD ACCESS NETWORK DEVICE AND COMMUNICATION DEVICE USING THE SAME AND COMMUNICATION SYSTEM			NP	PAT-Active	US	13/344517	9894597	US-2012-0178444-A1	
13962	1X MESSAGE PROCESSING			NP	PAT-Active	US	12/986331	8565223	US-2011-0164629-A1	
13963	POWER CONTROL DEVICE FOR MOBILE COMMUNICATION AND METHOD THEREOF			NP	PAT-Active	US	13/564277	9072048	US-2013-0034034-A1	
13964	ANALOG-TO-DIGITAL CONVERTER WITH DELTA-SIGMA MODULATION AND MODULATION UNIT THEREOF			NP	PAT-Active	US	13/418232	8497793	US-2013-0169459-A1	
13965	ELECTRONIC CHIPS WITH SLEW-RATE CONTROL AT OUTPUT SIGNALS			NP	PAT-Active	US	13/397087	8648638	US-2013-0176064-A1	
13966	METHOD FOR DETECTING DOUBLE-TALK CONDITION AND SYSTEM USING THE SAME			NP	PAT-Active	US	13/632163	8934622	US-2014-0093066-A1	
13967	SIGNAL AMPLIFYING CIRCUIT AND SIGNAL AMPLIFYING METHOD			NP	PAT-Active	US	12/837754	8547173	US-2011-0283376-A1	
13968	COMMUNICATION TRANSMISSION METHODS AND SYSTEMS			NP	PAT-Active	US	13/739121	9001834	US-2013-0182642-A1	
13969	APPARATUS SYSTEMS AND METHODS FOR ACCESS CONFIGURATIONS			NP	PAT-Active	US	14/025364	9253800	US-2014-0078984-A1	
13970	APPARATUS SYSTEMS AND METHODS FOR ACCESS CONFIGURATIONS			ENT	PAT-Active	US	14/980143	9820306	US-2016-0135228-A1	
13971	METHODS FOR ACCESSING TO BASE STATION THAT USES SACK MECHANISM AND APPARATUSES USING THE SAME			NP	PAT-Active	US	14/028730	9301204	US-2014-0078962-A1	
13972	METHODS FOR ACCESSING TO BASE STATION THAT USES SACK MECHANISM AND APPARATUSES USING THE SAME			ENT	PAT-Active	US	15/079902	9699687	US-2017-0026875-A1	
13973	REFERENCE VOLTAGE GENERATING DEVICE AND METHOD			NP	PAT-Active	US	14/631852	9304526	US-2015-0241889-A1	
13974	REFERENCE VOLTAGE GENERATING DEVICE AND METHOD			ENT	PAT-Active	US	15/090546	9787308	US-2016-0358485-A1	
13975	METHODS FOR ACCESSING TO BASE STATION THAT USES SACK MECHANISM AND APPARATUSES USING THE SAME			NP	PAT-Active	US	14/028743	9789704	US-2014-0078963-A1	
13976	APPARATUS AND METHOD FOR ACCESS PROBE HANDOFF			NP	PAT-Active	US	14/079345	9642061	US-2014-0146793-A1	
13977	METHODS FOR RETRANSMITTING REVERSE LINK DATA AND APPARATUSES USING THE SAME			NP	PAT-Active	US	14/029835	9584384	US-2014-0078883-A1	
13978	COMMUNICATION SYSTEM AND METHOD OF DATA TRANSMISSION FOR A MEDIUM ACCESS CONTROL LAYER			NP	PAT-Active	US	14/054362	9295085	US-2014-0105137-A1	
13979	LTE-1X HYBRID DEVICE AND SYSTEM			NP	PAT-Active	US	13/853119	###	US-2014-0095912-A1	
13980	FREQUENCY CALIBRATION METHOD FOR A VOLTAGE-CONTROLLED OSCILLATOR			NP	PAT-Active	US	14/709712	9621174	US-2016-0336945-A1	
13981	CALL CONTROL METHOD BASED ON APPLICATION PRIORITY			NP	PAT-Active	US	14/802214	9955020	US-2016-0021257-A1	
13982	ADAPTABLE MULTIMODE LOCATION PROTOCOL MANAGER			NP	PAT-Active	US	14/620675	###	US-2015-0304808-A1	
13983	MULTI-PHASE SIGNAL GENERATOR AND MULTI-PHASE SIGNAL GENERATING METHOD THEREOF			NP	PAT-Active	US	14/449161	9331674	US-2015-0244350-A1	
13984	RADIO FREQUENCY RECEIVER CIRCUIT AND THE INDUCTOR-COUPLED SINGLE-ENDED INPUT DIFFERENTIAL-OUTPUT LOW-NOISE AMPLIFIER THEREOF			NP	PAT-Active	US	14/849584	9397714		

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
13985	Apparatuses and Methods for Coordinating Operations of Multiple Wireless Communications Modules with Multiple Subscriber Numbers			NP	PAT-Active	US	13/075045	9932417	US-2011-0235587-A1	
13986	MOBILE DEVICE AND METHOD OF INFORMATION TRANSMISSION			NP	PAT-Active	US	14/641594	9918182	US-2015-0264633-A1	
13987	MOBILE DEVICE AND METHOD OF INFORMATION TRANSMISSION			NP	PAT-Active	US	14/656333	9936379	US-2015-0264561-A1	
13988	SYSTEMS METHODS AND DEVICES FOR ADDING NON-PROVISIONED CELLULAR DEVICES TO A SUBSCRIPTION			PCT	APP-Pending	US	16/074389			
13989	PARTIAL SUBFRAME TRANSMISSION IN LICENSED ASSISTED ACCESS			PCT	APP-Pending	US	15/767812		US-2018-0302926-A1	
13990	SYNCHRONIZATION SIGNALS FOR LICENSE ASSISTED ACCESS			PCT	PAT-Active	US	15/771868	#####	US-2018-0316453-A1	
13991	MULTI-SUBFRAME UPLINK SCHEDULING IN UNLICENSED SPECTRUM			PCT	APP-Pending	US	15/775745		US-2018-0352564-A1	
13992	Digital Pre-Emphasis Quadrature Imbalance Compensating Filter			NP	APP-Pending	US	15/168552		US-2017-0345809-A1	
13993	TRANSMIT AMPLITUDE AND PHASE MODULATION BASED ON TWO CONSTANT-AMPLITUDE PHASORS			NP	PAT-Active	US	15/064020	9614713		
13994	TRANSMISSION POWER CONTROL METHODS AND DEVICES			NP	PAT-Active	US	15/088496	#####	US-2017-0285929-A1	
13995	APPARATUSES AND METHODS FOR COMPENSATING PHASE FLUCTUATIONS			PCT	APP-Pending	US	16/076710		US-2019-0052452-A1	
13996	COMMUNICATION TERMINAL AND METHOD FOR USING A SHARED RADIO COMMUNICATION COMPONENT			NP	PAT-Active	US	15/602184	#####	US-2017-0374544-A1	
13997	METHODS AND DEVICES FOR CIRCUIT-SWITCHED FALLBACK PROCEDURES			NP	PAT-Active	US	15/480430	#####	US-2017-0332267-A1	
13998	APPARATUS OF A USER EQUIPMENT ADAPTED FOR RECEIVING EMERGENCY NOTIFICATION INFORMATION USED IN MOBILE COMMUNICATION AND METHOD FOR RECEIVING EMERGENCY NOTIFICATION INFORMATION			NP	APP-Pending	US	15/607769		US-2018-0007525-A1	
13999	METHODS AND DEVICES FOR PERFORMING CIRCUIT-SWITCHED FALLBACK			NP	PAT-Active	US	15/145829	#####	US-2017-0325130-A1	
14000	DEVICES AND METHOD FOR CELL SEARCH AND DETECTION			NP	PAT-Active	US	13/084521	9609585		
14001	BEAMFORMING ARCHITECTURE FOR MULTI-BEAM MULTIPLE-INPUT-MULTIPLE-OUTPUT (MIMO)			PCT	APP-Pending	US	15/081470		US-2019-0260457-A1	
14002	METHODS AND COMMUNICATION DEVICES FOR PERFORMING CELL SEARCH AND DETECTION			NP	PAT-Active	US	15/079135	9877270	US-2017-0285374-A1	
14003	METHOD APPARATUS AND SYSTEM FOR BEAM ACQUISITION IN A WIRELESS SYSTEM			PCT	APP-Pending	US	16/068110		US-2019-0028173-A1	
14004	ARRANGEMENT FOR CONCURRENT DETECTION OF SIGNALS IN A RECEIVER			NP	PAT-Active	US	15/252707	#####	US-2018-0063873-A1	
14005	Transceiver transmitter receiver and method for determining a minimum supply voltage for receivers and transmitters			PCT	APP-Pending	US	16/078567		US-2019-0090196-A1	
14006	DETERMINATION OF AN ADVANCED PHYSICAL UPLINK CHANNEL RESOURCE			PCT	APP-Pending	US	15/781462			
14007	TECHNIQUES FOR INSTANTIATION AND TERMINATION OF VIRTUALIZED NETWORK FUNCTIONS			PCT	APP-Pending	US	16/060910		US-2018-0367372-A1	
14008	SECTOR SWEEPS FOR ESTABLISHING TWO-WAY DATA COMMUNICATIONS WITH DIRECTIONAL ANTENNAS			PCT	APP-Pending	US	16/078549		US-2019-0052326-A1	
14009	APPARATUS AND METHOD FOR RDT CONTROL CHANNEL			PCT	APP-Pending	US	15/068882		US-2019-0029005-A1	
14010	APPARATUS AND METHOD FOR RDT CONTROL CHANNEL			ONY	APP-Pending	US	16/407159		US-2019-0335428-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
14011	NB-IOT SYNCHRONIZATION SIGNALS WITH OFFSET INFORMATION			PCT	APP-Pending	US	15/777641		US-2018-0376405-A1	
14012	PERFORMANCE MONITORING TECHNIQUES FOR VIRTUALIZED RESOURCES			PCT	APP-Pending	US	16/060912		US-2018-0367373-A1	
14013	DYNAMIC HARQ CONFIGURATION AND BITMAP BASED ACK/NACK			PCT	APP-Pending	US	15/766466		US-2018-0294924-A1	
14014	CELLULAR INTERNET OF THINGS (CIOT) OPTIMIZATIONS FOR NARROWBAND (NB) AND NON-NB IOT NETWORKS			PCT	APP-Pending	US	16/064181		US-2018-0376531-A1	
14015	5G FDD LOW LATENCY TRANSMISSION SUBFRAME STRUCTURE SYSTEM AND METHOD OF USE			PCT	APP-Pending	US	16/060819		US-2019-0037640-A1	
14016	A MULTIPLE BEAM MULTIPLE-INPUT-MULTIPLE-OUTPUT SYSTEM			PCT	APP-Pending	US	15/082365		US-2019-0081672-A1	
14017	CORE NETWORK DESIGN FOR MISSION-CRITICAL IOT			PCT	APP-Pending	US	16/305380			
14018	NETWORK SLICE SELECTION IN NETWORK SYSTEMS			PCT	APP-Pending	US	16/063048		US-2018-0368060-A1	
14019	SAS CONTROLLED INTERFERENCE MANAGEMENT			PCT	APP-Pending	US	16/308172		US-2019-0222339-A1	
14020	SYSTEM AND METHOD FOR SYSTEM INFORMATION TRANSMISSION IN STAND-ALONE 5MWAVE SYSTEMS			PCT	APP-Pending	US	16/065968		US-2019-0013842-A1	
14021	METHOD AND DEVICE FOR MITIGATING INTERFERENCE DUE TO A WIRELESS CHARGING SIGNAL			NP	PAT-Active	US	15/491123	9998238	US-2017-0324464-A1	
14022	LOW POWER RADAR DETECTION SYSTEM			NP	APP-Pending	US	15/198527		US-2018-0003797-A1	
14023	METHODS AND DEVICES FOR SPUR CANCELLATION IN DIGITAL PHASE LOCKED LOOPS			NP	PAT-Active	US	15/088386	9780945	US-2017-0286853-A1	
14024	WIRELESS POWER TRANSMISSION			NP	APP-Pending	US	15/088319		US-2017-0286446-A1	
14025	METHODS AND MOBILE COMMUNICATION DEVICES FOR PERFORMING SPUR RELOCATION FOR PHASE-LOCKED LOOPS			NP	APP-Pending	US	15/087398		US-2017-0286850-A1	
14026	IMPEDANCE MATCHING MULTIPLE COILS IN AN ELECTRONIC DEVICE			NP	APP-Pending	US	15/086837		US-2017-0286444-A1	
14027	COMMUNICATION DEVICE AND A METHOD FOR OPERATING A COMMUNICATION DEVICE			NP	PAT-Active	US	15/088179	#####	US-2017-0289958-A1	
14028	COMMUNICATION DEVICE AND METHOD FOR TRANSMITTING DATA			PCT	APP-Pending	US	16/080597		US-2019-0085573-A1	
14029	COMMUNICATION DEVICE AND A METHOD FOR DETERMINING AN INFORMATION FROM ANOTHER APPARATUS			PCT	APP-Pending	US	16/080027		US-2019-0020393-A1	
14030	COMMUNICATION DEVICE AND METHOD FOR REDUCING INTERFERENCE			PCT	APP-Pending	US	16/080025		US-2019-0052340-A1	
14031	METHOD AND DEVICE FOR MITIGATING INTERFERENCE IN COLLOCATED TRANSMITTERS			NP	PAT-Active	US	15/611021	#####	US-2018-0007697-A1	
14032	NAVIGATION DEVICE AND METHOD FOR DETERMINING NAVIGATION INFORMATION			NP	APP-Pending	US	15/088115		US-2017-0285175-A1	
14033	METHOD AND DEVICE FOR GAIN ADJUSTMENT IN MOBILITY MEASUREMENTS			NP	APP-Pending	US	15/496531		US-2017-0323116-A1	
14034	SPREADING OPTIONS FOR NON-ORTHOGONAL MULTIPLE ACCESS			PCT	APP-Pending	US	16/068754		US-2019-0029031-A1	
14035	SYSTEM AND METHOD FOR CONTROL CHANNEL BEAM ASSUMPTION			PCT	APP-Pending	US	16/067806		US-2019-0028176-A1	
14036	RATE MATCHING USING LOW-DENSITY PARITY-CHECK CODES			PCT	APP-Pending	US	16/066555		US-2019-0013903-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
14037	CROSS TRANSMISSION OPPORTUNITY (XTOPI) SCHEDULING			PCT	APP-Pending	US	16/068833		US-2019-0921105-A1	
14038	DYNAMIC RESOURCE ALLOCATIONS AND TRANSMISSION SCHEMES FOR XPUCCH (5G PUCCH)			PCT	APP-Pending	US	16/067577		US-2019-0913908-A1	
14039	TECHNIQUES FOR CHANNEL STATE DETERMINATION			PCT	APP-Pending	US	16/488334			
14040	TIMER CONFIGURATION TECHNIQUES FOR COVERAGE ENHANCEMENT			PCT	APP-Pending	US	16/074040		US-2019-0945581-A1	
14041	SYSTEMS METHODS AND DEVICES FOR REDUCED HANDOVER DATA INTERRUPTION			PCT	APP-Pending	US	16/077455		US-2019-0975498-A1	
14042	DEVICE AND METHOD FOR CSI FEEDBACK TO ENABLE JOINT DL-UL SCHEDULING IN FULL DUPLEX SYSTEMS			PCT	APP-Pending	US	16/086390		US-2019-0349945-A1	
14043	SYSTEMS AND METHODS FOR UPLINK DMRS ENHANCEMENT IN FD-RMIMO			PCT	APP-Pending	US	16/067680		US-2019-0926451-A1	
14044	IN-BAND FULL DUPLEX RELAY TO ENHANCE UPLINK PERFORMANCE IN HETEROGENEOUS NETWORK			PCT	APP-Pending	US	16/094830		US-2019-0173806-A1	
14045	AMPLIFICATION CIRCUIT APPARATUS FOR AMPLIFYING LOW NOISE AMPLIFIER RADIO RECEIVER MOBILE TERMINAL BASE STATION AND METHOD FOR AMPLIFYING			NP	PAT-Active	US	15/593347	#####	US-2017-0359040-A1	
14046	AMPLIFICATION CIRCUIT APPARATUS FOR AMPLIFYING LOW NOISE AMPLIFIER RADIO RECEIVER MOBILE TERMINAL BASE STATION AND METHOD FOR AMPLIFYING			NP	APP-Pending	US	16/538887			
14047	SUPPORTING SEMI-PERSISTENT SCHEDULING FOR VARIED TRANSMISSION TIME INTERVALS			PCT	APP-Pending	US	15/754476		US-2018-0242389-A1	
14048	SCHEDULING REQUEST FOR STANDALONE DEPLOYMENT OF A SYSTEM USING BEAMFORMING			PCT	APP-Pending	US	16/071439			
14049	SIGNALING FOR PER CARRIER-COMPONENT BASED ENHANCED MEASUREMENT GAP CONFIGURATION			PCT	PAT-Active	US	15/553071	#####	US-2018-0334598-A1	
14050	PHYSICAL LAYER PROTOCOL AND SUBFRAME STRUCTURE FOR WEARABLE USER EQUIPMENT DEVICES			PCT	APP-Pending	US	16/067669		US-2019-0921053-A1	
14051	INTERFERENCE DETECTION DEVICE INTERFERENCE DETECTION APPARATUS INTERFERENCE DETECTION METHOD COMPUTER PROGRAM RECEIVER MOBILE TERMINAL AND BASE STATION			NP	PAT-Active	US	15/590073	#####	US-2017-0358087-A1	
14052	INTERLEAVERS ALLOCATION AND INDICATION			PCT	APP-Pending	US	16/072112		US-2019-0968347-A1	
14053	CIRCUIT ARRANGEMENT FOR CLOCK SYNCHRONIZATION			NP	PAT-Active	US	15/000862	#####	US-2017-0367060-A1	
14054	FRAME STRUCTURE FOR UPLINK SCHEDULING			PCT	APP-Pending	US	15/758853		US-2019-0945541-A1	
14055	COORDINATED BLUETOOTH - WIFI SCHEDULING WITH BLUETOOTH SLOT AVAILABILITY MASK			NP	PAT-Active	US	15/280187	#####	US-2018-0391929-A1	
14056	DECODING DEVICE AND METHOD USING CONTEXT REDUNDANCY			NP	PAT-Active	US	15/611525	#####	US-2018-0918243-A1	
14057	DEVICE AND METHOD FOR CANCELING INTERFERENCE CAUSED BY NON-LINEAR DEVICE			NP	APP-Pending	US	15/171641		US-2017-0353286-A1	
14058	COMMUNICATION DEVICE AND A METHOD FOR LOCALIZATION			PCT	APP-Pending	US	16/394148		US-2019-0346554-A1	
14059	CONTROL SIGNALING FOR FIFTH GENERATION CHANNEL STATE INFORMATION REFERENCE SIGNALS (XCSI-RS)			PCT	APP-Pending	US	16/070916		US-2019-0928071-A1	
14060	CHANNEL CODING AND INTERLEAVING FOR CONTROL AND USER DATA IN THE PHYSICAL UPLINK SHARED CHANNEL			PCT	PAT-Active	US	15/072981	#####	US-2019-0936586-A1	
14061	ENABLING A SECONDARY CELL IN A MASSIVE MIMO SYSTEM			PCT	APP-Pending	US	16/080580		US-2019-0922150-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
14062	ANTENNA			NP	APP-Pending	US	15/198782		US-2018-0906360-A1	
14063	FREQUENCY BASED BIAS VOLTAGE SCALING FOR PHASE LOCKED LOOPS			NP	APP-Pending	US	15/194998		US-2017-0373684-A1	
14064	TRANSMITTING AND RECEIVING RADIO SIGNALS WITH TUNABLE ANTENNAS TUNED BASED ON THROUGHPUT PERFORMANCE			NP	APP-Pending	US	15/195859		US-2017-0173898-A1	
14065	DEVICE AND METHOD FOR SYNCHRONOUS BEAM SWITCHING			PCT	APP-Pending	US	16/079805		US-2019-0052331-A1	
14066	DEVICE AND METHOD OF USING BRRS CONFIGURATION			PCT	APP-Pending	US	16/079034		US-2019-0044691-A1	
14067	SYSTEM AND METHOD FOR BEAM INFORMATION AND CSI REPORT			PCT	APP-Pending	US	16/076666		US-2019-0052220-A1	
14068	SYSTEM AND METHOD FOR CHANNEL QUALITY REPORTING			PCT	APP-Pending	US	16/077018		US-2019-0036564-A1	
14069	PHYSICAL UPLINK CONTROL CHANNEL PROCEDURES			PCT	APP-Pending	US	16/071838			
14070	SLICING ARCHITECTURE FOR WIRELESS COMMUNICATION			NP	PAT-Active	US	15/056965	9775045	US-2017-0079059-A1	
14071	SLICING ARCHITECTURE FOR WIRELESS COMMUNICATION			ENT	PAT-Active	US	15/670923	#####	US-2017-0339567-A1	
14072	BEAMFORMED PHYSICAL DOWNLINK CONTROL CHANNEL			PCT	APP-Pending	US	16/083141			
14073	TRANSMISSION CIRCUIT			NP	PAT-Active	US	11/041360	7383027	US-2005-0164660-A1	
14074	TRANSMISSION CIRCUIT			CIP	PAT-Active	US	12/000982	7925226	US-2008-0139138-A1	
14075	UPLINK POWER CONTROL FOR 5G SYSTEMS			PCT	APP-Pending	US	16/079494			
14076	CHIP-ENHANCED BATTERY			PCT	APP-Pending	US	16/327398		US-2019-0280198-A1	
14077	RADIO LINK FAILURE HANDLING IN HIGH-FREQUENCY BAND NETWORKS			PCT	APP-Pending	US	16/078792		US-2019-0053315-A1	
14078	DRIVING CIRCUITS FOR SWITCH MODE RF POWER AMPLIFIERS			NP	PAT-Closed	US	09/362880	6198347		
14079	HIGH-EFFICIENCY MODULATING RF AMPLIFIER			CIP	PAT-Closed	US	09/637269	6636112		
14080	HIGH-EFFICIENCY MODULATING RF AMPLIFIER			ENT	PAT-Active	US	10/688444	6816036	US-2004-0080364-A1	
14081	RF POWER AMPLIFIER HAVING HIGH POWER-ADDED EFFICIENCY			NP	PAT-Active	US	09/564546	7263618		
14082	HIGH-EFFICIENCY MODULATING RF AMPLIFIER			ENT	PAT-Closed	US	10/094104	7098635	US-2002-0090920-A1	
14083	METHOD AND SYSTEM OF AMPLITUDE MODULATION USING DUAL/SPLIT CHANNEL UNEQUAL AMPLIFICATION			NP	PAT-Active	US	09/661167	6751265		
14084	SCHEDULING ACKNOWLEDGEMENTS TO RECEIVED SUB-FRAMES IN A MULTI-SIM USER EQUIPMENT USING A SHARED TRANSMIT CHAIN WHEN RECEIVING DATA CONTINUOUSLY ON EACH SIM			NP	APP-Pending	US	15/688912		US-2018-0097585-A1	
14085	POWER ESTIMATION SYSTEM AND METHOD			NP	PAT-Active	US	15/274394	#####	US-2018-0091984-A1	
14086	WAKE UP RADIO DEVICE CIRCUIT CONFIGURATION AND METHOD			NP	PAT-Active	US	15/196070	8967820	US-2018-0007629-A1	
14087	COMMUNICATION DEVICE AND METHOD FOR SELECTING A BEAM DIRECTION			PCT	APP-Pending	US	16/305916			
14088	METHODS AND DEVICES FOR USER DETECTION IN SPECTRUM SHARING			NP	APP-Pending	US	15/190223		US-2017-0374557-A1	
14089	SHORT RANGE RADIO COMMUNICATION DEVICE AND A METHOD OF CONTROLLING A SHORT RANGE RADIO COMMUNICATION DEVICE			NP	PAT-Active	US	15/200159	8948351	US-2018-0006681-A1	
14090	METHODS AND DEVICES FOR PERFORMING DUPLEX MODE DETECTION			NP	PAT-Active	US	15/183866	9825273		

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
14091	APPARATUS SYSTEM AND METHOD OF INTERNET CONNECTIVITY VIA A RELAY STATION			PCT	APP-Pending	US	15/305190			
14092	COMMUNICATION DEVICE AND A METHOD FOR OPERATING A COMMUNICATION DEVICE			PCT	APP-Pending	US	16/305067		US-2019-0357376-A1	
14093	APPARATUS ADAPTED FOR MAINTAINING RECEIVING DATA QUALITY AND METHOD FOR RECEIVING DATA			NP	APP-Pending	US	15/607556		US-2018-0097113-A1	
14094	COMMUNICATION DEVICE AND A METHOD FOR OPERATING A COMMUNICATION DEVICE			NP	PAT-Active	US	15/187863	9716558		
14095	COMMUNICATION DEVICE AND METHOD FOR DECODING DATA FROM A NETWORK			NP	APP-Pending	US	15/191564		US-2017-0374653-A1	
14096	CHANNEL ESTIMATION AND COMPENSATION IN HIGH SPEED SCENARIOS			NP	APP-Pending	US	15/170712		US-2017-0096175-A1	
14097	REDUCTION OF AVERAGE-TO-MINIMUM POWER RATIO IN COMMUNICATIONS SIGNALS			NP	PAT-Active	US	10/037870	7054385	US-2008-0281360-A1	
14098	METHODS AND APPARATUS FOR CONDITIONING COMMUNICATIONS SIGNALS BASED ON DETECTION OF HIGH-FREQUENCY EVENTS IN POLAR DOMAIN			ClP	PAT-Active	US	12/395981	8333480	US-2009-0257526-A1	
14099	HYBRID POLAR MODULATOR DIFFERENTIAL PHASE CARTESIAN FEEDBACK CORRECTION CIRCUIT FOR POWER AMPLIFIER LINEARIZATION			NP	PAT-Active	US	09/885811	7403004	US-2002-0196864-A1	
14100	SELECTIVE ENVELOPE MODULATION ENABLING REDUCED CURRENT CONSUMPTION			NP	PAT-Active	US	12/079353	7688157	US-2008-0246550-A1	
14101	VSWR NORMALIZING ENVELOPE MODULATOR			NP	PAT-Active	US	11/821301	8331862		
14102	REAL TIME VCO GAIN NON LINEARITY CALIBRATION			NP	PAT-Active	US	11/704883	7557671	US-2008-0193631-A1	
14103	FULL DUPLEX SUPPORT IN FIFTH GENERATION (5G) SYSTEMS			PCT	APP-Pending	US	16/079854		US-2019-0055039-A1	
14104	HIGH-EFFICIENCY ENVELOPE TRACKING SYSTEMS AND METHODS FOR RADIO FREQUENCY POWER AMPLIFIERS			NP	PAT-Active	US	12/027141	7949316	US-2009-0191826-A1	
14105	ADAPTIVE IMPEDANCE CONVERTER ADAPTIVELY CONTROLS LOAD IMPEDANCE			NP	PAT-Active	US	12/209981	8140030	US-2010-0069025-A1	
14106	MULTI-MODE TRANSMITTER HAVING ADAPTIVE OPERATING MODE CONTROL			NP	PAT-Active	US	12/203361	8095093	US-2010-0056068-A1	
14107	METHODS AND APPARATUS FOR REDUCING AVERAGE-TO-MINIMUM POWER RATIO IN COMMUNICATIONS SIGNALS			NP	PAT-Active	US	12/482913	8385464	US-2010-0316164-A1	
14108	TRANSMITTER UTILIZING A DUTY CYCLE ENVELOPE REDUCTION AND RESTORATION MODULATOR			NP	PAT-Active	US	12/508464	8131284	US-2011-0018640-A1	
14109	METHODS AND APPARATUS FOR REDUCING THE AVERAGE-TO-MINIMUM MAGNITUDE RATIO OF COMMUNICATIONS SIGNALS IN COMMUNICATIONS TRANSMITTERS			NP	PAT-Active	US	12/551929	8363752	US-2011-0051836-A1	
14110	METHODS AND APPARATUS FOR REDUCING THE AVERAGE-TO-MINIMUM MAGNITUDE RATIO OF COMMUNICATIONS SIGNALS IN COMMUNICATIONS TRANSMITTERS			ClP	PAT-Active	US	12/850847	8483312	US-2011-0116535-A1	
14111	FRAME STRUCTURES FOR BEAM SWITCHING AND REFINEMENT IN CELLULAR SYSTEMS			PCT	APP-Pending	US	16/084505		US-2019-0089446-A1	
14112	SYSTEMS METHODS AND DEVICES FOR UPLINK BEARER SPLIT USING WIRELESS LOCAL AREA NETWORK AGGREGATION			PCT	APP-Pending	US	16/067685		US-2019-0021026-A1	
14113	AUTONOMOUS RESOURCE SELECTION FOR VEHICLE-TO-VEHICLE SIDELINK COMMUNICATIONS			PCT	APP-Pending	US	16/080559		US-2019-0059071-A1	
14114	DUPLEXER STRUCTURE FOR COUPLING A TRANSMITTER AND A RECEIVER TO A COMMON ANTENNA			NP	PAT-Active	US	09/711344	6721544		
14115	ELECTRICALLY TUNED INTEGRATED AMPLIFIER FOR WIRELESS COMMUNICATIONS			NP	PAT-Active	US	09/711332	6509799		
14116	ELECTRICALLY TUNED INTEGRATED AMPLIFIER FOR WIRELESS COMMUNICATIONS			Div	PAT-Active	US	10/277935	6653904	US-2003-0036495-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
14117	USER-PLANE PATH SELECTION FOR THE EDGE SERVICE			PCT	APP-Pending	US	16/084674		US-2019-0975046-A1	
14118	CSI FEEDBACK FOR OPEN LOOP FD-MIMO TRANSMISSION			PCT	APP-Pending	US	16/073298		US-2019-0936574-A1	
14119	DUAL BEAM OPERATION FOR MOBILITY			PCT	APP-Pending	US	16/073363		US-2019-0952317-A1	
14120	REFERENCE SIGNAL PATH FOR CLOCK GENERATION WITH AN INJECTION LOCKED MULTIPLIER (ILM)			NP	PAT-Active	US	15/171373	#####	US-2017-0953159-A1	
14121	Performance Indicator for Phase Locked Loops			NP	PAT-Active	US	15/198175	9832011		
14122	DIGITAL-CENTRIC FULL-DUPLEX ARCHITECTURE			NP	APP-Pending	US	15/197528		US-2018-0986795-A1	
14123	MULTIPLE MODULATED SPUR CANCELLATION APPARATUS			NP	APP-Pending	US	15/179211		US-2017-0956136-A1	
14124	METHODS AND TRANSCEIVERS FOR REDUCING A DISTORTION COMPONENT WITHIN A BASEBAND RECEIVE SIGNAL			PCT	APP-Pending	US	16/095761			
14125	DIGITAL TIME CONVERTER SYSTEMS AND METHOD			NP	PAT-Active	US	15/199217	9641185		
14126	DIGITAL TIME CONVERTER SYSTEMS AND METHODS			ENT	PAT-Active	US	15/583063	#####	US-2018-0908658-A1	
14127	DPLL WITH ADJUSTABLE DELAY IN INTEGER OPERATION MODE			PCT	APP-Pending	US	16/465315			
14128	HARMONIC SUPPRESSING LOCAL OSCILLATOR SIGNAL GENERATION			NP	PAT-Active	US	15/188267	9935722	US-2017-0966290-A1	
14129	FREQUENCY DIFFERENCE DETERMINATION			NP	PAT-Active	US	15/295073	972734		
14130	EVOLVED NODE-B (ENB) RADIO ACCESS NETWORK (RAN) CENTRAL UNIT (RUC) AND METHODS FOR RADIO RESOURCE CONTROL (RRC)			PCT	APP-Pending	US	16/088233			
14131	DOWNLINK HYBRID AUTOMATIC REPEAT REQUEST FEEDBACK FOR NARROWBAND INTERNET OF THINGS DEVICES			PCT	APP-Pending	US	16/060916		US-2018-0967278-A1	
14132	MULTIPLEXING TRANSMISSION TIME INTERVALS (TTIs) WITH PHYSICAL DOWNLINK SHARED CHANNEL (PDSCH) PUNCTURING DETECTION			PCT	APP-Pending	US	15/765778		US-2018-0988745-A1	
14133	FWP ENHANCEMENTS FOR RELIABLE DRB SWITCHING			PCT	APP-Pending	US	16/096141			
14134	LOW LATENCY PHYSICAL RANDOM ACCESS CHANNEL DESIGN			PCT	APP-Pending	US	16/085532			
14135	DEVICE AND METHOD FOR RECOVERING SERVICES FROM NETWORK REJECTIONS TO WIRELESS COMMUNICATION DEVICES			NP	PAT-Active	US	15/584103	#####	US-2017-0953939-A1	
14136	METHODS AND DEVICES FOR SELF-INTERFERENCE CANCELLATION			NP	PAT-Active	US	15/214531	#####	US-2018-0926775-A1	
14137	COMMUNICATION DEVICE AND A METHOD FOR HYBRID BEAMFORMING			PCT	APP-Pending	US	16/323777			
14138	COMMUNICATION DEVICE AND METHOD FOR WIRELESS COMMUNICATIONS			NP	APP-Pending	US	15/252242		US-2018-0963817-A1	
14139	COMMUNICATION SYSTEM AND METHOD			NP	PAT-Active	US	15/385086	#####	US-2018-0176887-A1	
14140	PUSHING BACK PACKET NOT ACKNOWLEDGED BY BASE STATION			NP	PAT-Active	US	15/390211	#####	US-2018-0184322-A1	
14141	BEAM MANAGEMENT FOR DUAL TRANSMISSION POINT HYBRID BEAMFORMING SYSTEMS IN 5G			PCT	APP-Pending	US	16/081787		US-2019-0989435-A1	
14142	METHOD AND APPARATUS FOR DECODING DATA			NP	PAT-Active	US	10/002405	6928599	US-2003-0106037-A1	
14143	INCREASE OF SPECTRAL CAPACITY OF EMBMS-CELL WHEN DEPLOYED AS A SUPPLEMENTARY DOWNLINK CARRIER			PCT	APP-Pending	US	16/093242		US-2019-0990103-A1	
14144	CELLULAR IOT CONTROL AND USER PLANE SWITCHING			PCT	APP-Pending	US	16/073997		US-2019-0945561-A1	
14145	SAS P4L GAA co-channel interference mitigation			NP	APP-Pending	US	15/499953		US-2017-0815470-A1	

	A	B	C	D	E	F	G	H	I	J
2	TITLE	FAMILY	FAMILY-MEMBER	TYPE	STATUS	COUNTRY	Filing Number	Grant Number	Publication Number	
14146	ANTENNA PANEL SWITCHING AND BEAM INDICATION			PCT	APP-Pending	US	16/098792		US-2019-0132851-A1	
14147	DISCRETE LEVELS ENVELOPE TRACKING			NP	PAT-Active	US	15/371768	9991913	US-2018-0159566-A1	
14148	DETERMINATION CIRCUIT AND APPARATUS MOBILE TRANSCIVER COMMUNICATION DEVICE METHOD FOR DETERMINING COMPUTER PROGRAM AND STORAGE TO DETERMINE A SPATIAL TRANSMISSION MODE			PCT	APP-Pending	US	16/066343		US-2019-0115657-A1	
14149	TRANSMITTER PERFORMANCE CALIBRATION SYSTEMS AND METHODS			NP	PAT-Active	US	15/275608	8988888	US-2018-0091243-A1	
14150	PRE-DISTORTION CIRCUIT APPARATUS METHOD AND COMPUTER PROGRAM FOR PRE-DISTORTING TRANSMITTER RADIO TRANSCIVER MOBILE TRANSCIVER BASE STATION TRANSCIVER COMMUNICATION DEVICE STORAGE			PCT	APP-Pending	US	16/095977			
14151	EXTENDED PHYSICAL BROADCAST CHANNEL DESIGN FOR 5G STANDALONE SYSTEM			PCT	APP-Pending	US	16/089628		US-2019-0148276-A1	
14152	APPARATUS OF A USER EQUIPMENT (UE) TO SELECT RESOURCES IN A VEHICLE TO VEHICLE (V2V) COMMUNICATION SYSTEM			PCT	APP-Pending	US	16/094853		US-2019-0150157-A1	
14153	CELLULAR TELEPHONE NETWORK TO NARROW BAND - INTERNET OF THINGS NETWORK SWITCHING METHOD AND APPARATUS			NP	PAT-Active	US	15/279634	8908901		
14154	SYSTEMS METHODS AND DEVICES FOR NON-ADAPTIVE RETRANSMISSION USING SEMI-PERSISTENT SCHEDULING RESOURCES			PCT	APP-Pending	US	16/093093		US-2019-0215907-A1	
14155										
14156										
14157										
14158										
14159										
14160										
14161										
14162										
14163										
14164										
14165										
14166										
14167										
14168										
14169										
14170										
14171										
14172										
14173										
14174										