

<b>PATENT ASSIGNMENT COVER SHEET</b>
--------------------------------------

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT4609926

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT

**CONVEYING PARTY DATA**

Name	Execution Date
NOKIA TECHNOLOGIES OY	07/22/2017

**RECEIVING PARTY DATA**

<b>Name:</b>	WSOU INVESTMENTS, LLC
<b>Street Address:</b>	11150 SANTA MONICA BLVD.
<b>Internal Address:</b>	SUITE 1400
<b>City:</b>	LOS ANGELES
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	90025

**PROPERTY NUMBERS Total: 656**

Property Type	Number
Application Number:	08888906
Application Number:	08905557
Application Number:	08906371
Application Number:	08920045
Application Number:	08931531
Application Number:	08940677
Application Number:	08940926
Application Number:	08942074
Application Number:	08955508
Application Number:	08968678
Application Number:	08991133
Application Number:	08991136
Application Number:	08992499
Application Number:	08995133
Application Number:	08995795
Application Number:	09004008
Application Number:	09010606
Application Number:	09015572
Application Number:	09016028

PATENT

<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	09117976
<b>Application Number:</b>	09242955
<b>Application Number:</b>	09249862
<b>Application Number:</b>	09308110
<b>Application Number:</b>	09308890
<b>Application Number:</b>	09341736
<b>Application Number:</b>	09602374
<b>Application Number:</b>	09827761
<b>Application Number:</b>	09934796
<b>Application Number:</b>	09017642
<b>Application Number:</b>	09023277
<b>Application Number:</b>	09355086
<b>Application Number:</b>	09390526
<b>Application Number:</b>	09180034
<b>Application Number:</b>	09037445
<b>Application Number:</b>	09037449
<b>Application Number:</b>	09044267
<b>Application Number:</b>	09458933
<b>Application Number:</b>	09047149
<b>Application Number:</b>	09418387
<b>Application Number:</b>	09401888
<b>Application Number:</b>	09057820
<b>Application Number:</b>	09062490
<b>Application Number:</b>	10410673
<b>Application Number:</b>	09078298
<b>Application Number:</b>	09095150
<b>Application Number:</b>	09097140
<b>Application Number:</b>	09242383
<b>Application Number:</b>	09097339
<b>Application Number:</b>	09445808
<b>Application Number:</b>	09114807
<b>Application Number:</b>	09119535
<b>Application Number:</b>	09136128
<b>Application Number:</b>	09269978
<b>Application Number:</b>	09153720
<b>Application Number:</b>	09172510
<b>Application Number:</b>	09548316
<b>Application Number:</b>	09174989

<b>Property Type</b>	<b>Number</b>
Application Number:	09179787
Application Number:	09839978
Application Number:	09187638
Application Number:	09188507
Application Number:	09189614
Application Number:	09572344
Application Number:	09199686
Application Number:	09600951
Application Number:	09209106
Application Number:	09599315
Application Number:	09620163
Application Number:	10625099
Application Number:	09234433
Application Number:	09625202
Application Number:	09401019
Application Number:	09920362
Application Number:	09402164
Application Number:	09601827
Application Number:	09249475
Application Number:	09643096
Application Number:	09947677
Application Number:	09265273
Application Number:	09265165
Application Number:	09270454
Application Number:	09439805
Application Number:	09657219
Application Number:	09663574
Application Number:	09446622
Application Number:	09679476
Application Number:	09708103
Application Number:	10045323
Application Number:	09307642
Application Number:	09316357
Application Number:	09700951
Application Number:	09317386
Application Number:	09320768
Application Number:	09336076
Application Number:	09342480

<b>Property Type</b>	<b>Number</b>
Application Number:	09719413
Application Number:	09345819
Application Number:	09343829
Application Number:	09345742
Application Number:	09350607
Application Number:	09753535
Application Number:	08359904
Application Number:	09370661
Application Number:	09762922
Application Number:	09571138
Application Number:	10018161
Application Number:	10018171
Application Number:	09399288
Application Number:	09817855
Application Number:	09412897
Application Number:	09817886
Application Number:	09807825
Application Number:	09857488
Application Number:	09427130
Application Number:	09432069
Application Number:	09435731
Application Number:	09874823
Application Number:	09864534
Application Number:	09452084
Application Number:	09451456
Application Number:	09454326
Application Number:	09879831
Application Number:	09464247
Application Number:	09466713
Application Number:	09882949
Application Number:	09483143
Application Number:	09498643
Application Number:	09502513
Application Number:	09504995
Application Number:	09913457
Application Number:	09943736
Application Number:	09518922
Application Number:	09523241

<b>Property Type</b>	<b>Number</b>
Application Number:	09975499
Application Number:	09537501
Application Number:	09937047
Application Number:	10240628
Application Number:	09558008
Application Number:	09566509
Application Number:	09585202
Application Number:	10012048
Application Number:	09604733
Application Number:	10070410
Application Number:	11073702
Application Number:	10091344
Application Number:	09669643
Application Number:	09866577
Application Number:	10398440
Application Number:	10120484
Application Number:	10634471
Application Number:	09704086
Application Number:	10129712
Application Number:	09707061
Application Number:	09739231
Application Number:	10179007
Application Number:	09742055
Application Number:	09771814
Application Number:	09780392
Application Number:	11955100
Application Number:	09974828
Application Number:	10268099
Application Number:	09847140
Application Number:	10476666
Application Number:	09849803
Application Number:	09851239
Application Number:	10296964
Application Number:	10362397
Application Number:	09892265
Application Number:	10014217
Application Number:	09894382
Application Number:	09896647

<b>Property Type</b>	<b>Number</b>
Application Number:	10480450
Application Number:	09893420
Application Number:	09895724
Application Number:	09895729
Application Number:	10343635
Application Number:	09924582
Application Number:	09943514
Application Number:	09945772
Application Number:	09966868
Application Number:	10476457
Application Number:	10148373
Application Number:	10226883
Application Number:	10007088
Application Number:	10344159
Application Number:	10012524
Application Number:	10020897
Application Number:	10027501
Application Number:	10027303
Application Number:	10477321
Application Number:	10042647
Application Number:	09909039
Application Number:	10062622
Application Number:	11646857
Application Number:	10099842
Application Number:	10108661
Application Number:	09625201
Application Number:	10475028
Application Number:	09732961
Application Number:	10220659
Application Number:	10518329
Application Number:	10160213
Application Number:	10159809
Application Number:	10240780
Application Number:	10480124
Application Number:	09734885
Application Number:	11984048
Application Number:	10279953
Application Number:	10486621

<b>Property Type</b>	<b>Number</b>
Application Number:	10281290
Application Number:	10287800
Application Number:	10101070
Application Number:	10303383
Application Number:	10318811
Application Number:	10537689
Application Number:	11065241
Application Number:	10087538
Application Number:	10439068
Application Number:	10384911
Application Number:	10019705
Application Number:	09954602
Application Number:	10390538
Application Number:	10470902
Application Number:	10394455
Application Number:	10168632
Application Number:	10526400
Application Number:	10847409
Application Number:	11550555
Application Number:	10027302
Application Number:	11013968
Application Number:	10601766
Application Number:	10481784
Application Number:	10311894
Application Number:	10632359
Application Number:	10090422
Application Number:	10135954
Application Number:	10493918
Application Number:	10689601
Application Number:	10701072
Application Number:	09975491
Application Number:	10719371
Application Number:	10528080
Application Number:	12221964
Application Number:	10989512
Application Number:	10762531
Application Number:	10451219
Application Number:	10512061

<b>Property Type</b>	<b>Number</b>
Application Number:	10733819
Application Number:	10168051
Application Number:	10646779
Application Number:	10874886
Application Number:	10408629
Application Number:	10561987
Application Number:	11631356
Application Number:	10123878
Application Number:	10751922
Application Number:	10335253
Application Number:	10956104
Application Number:	12005314
Application Number:	10084003
Application Number:	10595549
Application Number:	11779608
Application Number:	10137700
Application Number:	10705973
Application Number:	10296976
Application Number:	10835597
Application Number:	10729422
Application Number:	09713524
Application Number:	10720012
Application Number:	10417423
Application Number:	11105401
Application Number:	11143720
Application Number:	11150835
Application Number:	10496029
Application Number:	11137505
Application Number:	10487252
Application Number:	11230068
Application Number:	10149797
Application Number:	12313831
Application Number:	10854717
Application Number:	10744351
Application Number:	10693033
Application Number:	10591762
Application Number:	10529257
Application Number:	10611679



<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	10684339
<b>Application Number:</b>	11227992
<b>Application Number:</b>	10432528
<b>Application Number:</b>	10818542
<b>Application Number:</b>	10534007
<b>Application Number:</b>	10839717
<b>Application Number:</b>	11386148
<b>Application Number:</b>	10797951
<b>Application Number:</b>	10572806
<b>Application Number:</b>	11193455
<b>Application Number:</b>	11920264
<b>Application Number:</b>	10402371
<b>Application Number:</b>	10887214
<b>Application Number:</b>	11474228
<b>Application Number:</b>	10584748
<b>Application Number:</b>	11477765
<b>Application Number:</b>	11200267
<b>Application Number:</b>	11509301
<b>Application Number:</b>	10574193
<b>Application Number:</b>	10923506
<b>Application Number:</b>	11519426
<b>Application Number:</b>	10803103
<b>Application Number:</b>	11475119
<b>Application Number:</b>	10484586
<b>Application Number:</b>	11477512
<b>Application Number:</b>	10576899
<b>Application Number:</b>	10879585
<b>Application Number:</b>	10998226
<b>Application Number:</b>	10584973
<b>Application Number:</b>	11025374
<b>Application Number:</b>	11170099
<b>Application Number:</b>	11274869
<b>Application Number:</b>	11054434
<b>Application Number:</b>	12086952
<b>Application Number:</b>	11172222
<b>Application Number:</b>	11262741
<b>Application Number:</b>	11463609
<b>Application Number:</b>	10993486

<b>Property Type</b>	<b>Number</b>
Application Number:	11884305
Application Number:	10442487
Application Number:	10793191
Application Number:	11337935
Application Number:	11132372
Application Number:	10748981
Application Number:	11028460
Application Number:	10570889
Application Number:	10569298
Application Number:	11350866
Application Number:	10578424
Application Number:	11244858
Application Number:	11179607
Application Number:	11289993
Application Number:	12308337
Application Number:	13275110
Application Number:	11921701
Application Number:	11596099
Application Number:	11065169
Application Number:	12087207
Application Number:	11320568
Application Number:	11322124
Application Number:	11994030
Application Number:	11794504
Application Number:	11147372
Application Number:	12312124
Application Number:	10871594
Application Number:	11221786
Application Number:	11252906
Application Number:	11324224
Application Number:	11229606
Application Number:	11493566
Application Number:	12073325
Application Number:	13599850
Application Number:	12600128
Application Number:	11808902
Application Number:	12103975
Application Number:	10920349

<b>Property Type</b>	<b>Number</b>
Application Number:	11591483
Application Number:	11819921
Application Number:	11707021
Application Number:	10736632
Application Number:	12602591
Application Number:	12147153
Application Number:	12438666
Application Number:	11111802
Application Number:	12519904
Application Number:	12293369
Application Number:	11692156
Application Number:	11817386
Application Number:	12524051
Application Number:	10984853
Application Number:	11401246
Application Number:	11483403
Application Number:	12922515
Application Number:	11606093
Application Number:	11482083
Application Number:	12740204
Application Number:	11428159
Application Number:	12527331
Application Number:	10548741
Application Number:	11583002
Application Number:	11410102
Application Number:	11985611
Application Number:	12682925
Application Number:	12184030
Application Number:	11471964
Application Number:	11714727
Application Number:	11817381
Application Number:	11629012
Application Number:	13130774
Application Number:	12119947
Application Number:	11737287
Application Number:	11420062
Application Number:	12936314
Application Number:	10627962

<b>Property Type</b>	<b>Number</b>
Application Number:	13146251
Application Number:	13750114
Application Number:	12920658
Application Number:	12919245
Application Number:	11384206
Application Number:	10366404
Application Number:	13859835
Application Number:	12291504
Application Number:	11711681
Application Number:	13265921
Application Number:	12028319
Application Number:	12156637
Application Number:	11170730
Application Number:	11649814
Application Number:	11957765
Application Number:	11554911
Application Number:	11707865
Application Number:	11724235
Application Number:	11707011
Application Number:	11285590
Application Number:	13378506
Application Number:	12156211
Application Number:	13002921
Application Number:	13382576
Application Number:	11527326
Application Number:	13054553
Application Number:	12434245
Application Number:	13254490
Application Number:	13390827
Application Number:	11788263
Application Number:	14198267
Application Number:	14319439
Application Number:	14744949
Application Number:	13604174
Application Number:	11526012
Application Number:	11615150
Application Number:	11892963
Application Number:	13127183

<b>Property Type</b>	<b>Number</b>
Application Number:	13499139
Application Number:	13499125
Application Number:	12600270
Application Number:	12681687
Application Number:	11904740
Application Number:	12622014
Application Number:	13516554
Application Number:	13122404
Application Number:	12744952
Application Number:	12842846
Application Number:	13520816
Application Number:	13574882
Application Number:	12315177
Application Number:	10574728
Application Number:	13147352
Application Number:	13127369
Application Number:	13634348
Application Number:	11634944
Application Number:	11473497
Application Number:	11462152
Application Number:	12999598
Application Number:	13638811
Application Number:	12755101
Application Number:	11592102
Application Number:	12996563
Application Number:	12664050
Application Number:	13643574
Application Number:	11071771
Application Number:	13321135
Application Number:	13060039
Application Number:	13510615
Application Number:	12679350
Application Number:	13257576
Application Number:	11984619
Application Number:	11635762
Application Number:	13580614
Application Number:	12074728
Application Number:	12073226

<b>Property Type</b>	<b>Number</b>
Application Number:	12081549
Application Number:	12784388
Application Number:	11982991
Application Number:	13388988
Application Number:	12665452
Application Number:	13519875
Application Number:	13511773
Application Number:	14628811
Application Number:	12159581
Application Number:	13819824
Application Number:	12567057
Application Number:	13318107
Application Number:	13129772
Application Number:	13574350
Application Number:	11017492
Application Number:	12890145
Application Number:	11655119
Application Number:	11775622
Application Number:	12716099
Application Number:	13876501
Application Number:	13808531
Application Number:	11978208
Application Number:	11616474
Application Number:	13977357
Application Number:	13121105
Application Number:	11960206
Application Number:	13581881
Application Number:	13990074
Application Number:	12292613
Application Number:	13502858
Application Number:	13978304
Application Number:	13814046
Application Number:	12321371
Application Number:	11697584
Application Number:	13131832
Application Number:	12894275
Application Number:	13983586
Application Number:	13146064

<b>Property Type</b>	<b>Number</b>
Application Number:	13984676
Application Number:	13582304
Application Number:	13807728
Application Number:	13880526
Application Number:	12075508
Application Number:	13029527
Application Number:	12222646
Application Number:	12518105
Application Number:	13980737
Application Number:	12109724
Application Number:	11964440
Application Number:	13001429
Application Number:	12548337
Application Number:	12866031
Application Number:	12557678
Application Number:	14114277
Application Number:	13098724
Application Number:	13994189
Application Number:	13880038
Application Number:	11260228
Application Number:	14119665
Application Number:	12819768
Application Number:	12315060
Application Number:	12071378
Application Number:	12696382
Application Number:	13047027
Application Number:	13884657
Application Number:	12402921
Application Number:	12716252
Application Number:	13072386
Application Number:	13172391
Application Number:	14129314
Application Number:	13381621
Application Number:	12561542
Application Number:	12277747
Application Number:	14131603
Application Number:	12486291
Application Number:	13988887

<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	13637900
<b>Application Number:</b>	13514290
<b>Application Number:</b>	13979900
<b>Application Number:</b>	12799348
<b>Application Number:</b>	14241477
<b>Application Number:</b>	13161428
<b>Application Number:</b>	14942520
<b>Application Number:</b>	13242807
<b>Application Number:</b>	13107150
<b>Application Number:</b>	12494799
<b>Application Number:</b>	13500625
<b>Application Number:</b>	12322255
<b>Application Number:</b>	14351080
<b>Application Number:</b>	11617310
<b>Application Number:</b>	12075318
<b>Application Number:</b>	13990178
<b>Application Number:</b>	14351326
<b>Application Number:</b>	13700093
<b>Application Number:</b>	12624042
<b>Application Number:</b>	14362978
<b>Application Number:</b>	14125503
<b>Application Number:</b>	12328558
<b>Application Number:</b>	14369230
<b>Application Number:</b>	14352714
<b>Application Number:</b>	13577645
<b>Application Number:</b>	13212692
<b>Application Number:</b>	13876347
<b>Application Number:</b>	12343832
<b>Application Number:</b>	13277375
<b>Application Number:</b>	12694457
<b>Application Number:</b>	13378355
<b>Application Number:</b>	13167969
<b>Application Number:</b>	13224922
<b>Application Number:</b>	14130278
<b>Application Number:</b>	14379319
<b>Application Number:</b>	14375415
<b>Application Number:</b>	12459379
<b>Application Number:</b>	13170737



<b>Property Type</b>	<b>Number</b>
Application Number:	14375934
Application Number:	13638809
Application Number:	13193697
Application Number:	12062926
Application Number:	13811517
Application Number:	13062847
Application Number:	15255481
Application Number:	13622033
Application Number:	12939314
Application Number:	14407673
Application Number:	13197938
Application Number:	13558854
Application Number:	13458677
Application Number:	13074823
Application Number:	13612336
Application Number:	13299698
Application Number:	13279704
Application Number:	13420228
Application Number:	12958911
Application Number:	13117950
Application Number:	14432116
Application Number:	13422377
Application Number:	13300008
Application Number:	13401986
Application Number:	13652820
Application Number:	12775424
Application Number:	13664957
Application Number:	13669905
Application Number:	13595411
Application Number:	13622524
Application Number:	10770868
Application Number:	13099158
Application Number:	13508538
Application Number:	13536363
Application Number:	13460980
Application Number:	12708786
Application Number:	12973212
Application Number:	14386146

Property Type	Number
Application Number:	12911075
Application Number:	13025916
Application Number:	13486460
Application Number:	14889033
Application Number:	13779223
Application Number:	13670552
Application Number:	12072638
Application Number:	14364667
Application Number:	13590478
Application Number:	13537287
Application Number:	14897865
Application Number:	14900598
Application Number:	13739682
Application Number:	14926268
Application Number:	13949810
Application Number:	14012006
Application Number:	14916958
Application Number:	13209757
Application Number:	14651604
Application Number:	13672887
Application Number:	13720439
Application Number:	15103442
Application Number:	14064699
Application Number:	13758611
Application Number:	15022555
Application Number:	14519052
Application Number:	12977734
Application Number:	14514614
Application Number:	14747470

**CORRESPONDENCE DATA**

**Fax Number:**

*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:** 9493656722

**Email:** DOCKETING@BURDICKPATENTS.COM

**Correspondent Name:** BURDICK PATENTS

**Address Line 1:** 2526 W. STATE STREET

**Address Line 4:** BOISE, IDAHO 83702

<b>ATTORNEY DOCKET NUMBER:</b>	TECH
<b>NAME OF SUBMITTER:</b>	KRIS PANGAN
<b>SIGNATURE:</b>	/Kris Pangan/
<b>DATE SIGNED:</b>	09/25/2017

**Total Attachments: 65**

source=TECH Assignment Package#page1.tif  
source=TECH Assignment Package#page2.tif  
source=TECH Assignment Package#page3.tif  
source=TECH Assignment Package#page4.tif  
source=TECH Assignment Package#page5.tif  
source=TECH Assignment Package#page6.tif  
source=TECH Assignment Package#page7.tif  
source=TECH Assignment Package#page8.tif  
source=TECH Assignment Package#page9.tif  
source=TECH Assignment Package#page10.tif  
source=TECH Assignment Package#page11.tif  
source=TECH Assignment Package#page12.tif  
source=TECH Assignment Package#page13.tif  
source=TECH Assignment Package#page14.tif  
source=TECH Assignment Package#page15.tif  
source=TECH Assignment Package#page16.tif  
source=TECH Assignment Package#page17.tif  
source=TECH Assignment Package#page18.tif  
source=TECH Assignment Package#page19.tif  
source=TECH Assignment Package#page20.tif  
source=TECH Assignment Package#page21.tif  
source=TECH Assignment Package#page22.tif  
source=TECH Assignment Package#page23.tif  
source=TECH Assignment Package#page24.tif  
source=TECH Assignment Package#page25.tif  
source=TECH Assignment Package#page26.tif  
source=TECH Assignment Package#page27.tif  
source=TECH Assignment Package#page28.tif  
source=TECH Assignment Package#page29.tif  
source=TECH Assignment Package#page30.tif  
source=TECH Assignment Package#page31.tif  
source=TECH Assignment Package#page32.tif  
source=TECH Assignment Package#page33.tif  
source=TECH Assignment Package#page34.tif  
source=TECH Assignment Package#page35.tif  
source=TECH Assignment Package#page36.tif  
source=TECH Assignment Package#page37.tif  
source=TECH Assignment Package#page38.tif  
source=TECH Assignment Package#page39.tif  
source=TECH Assignment Package#page40.tif  
source=TECH Assignment Package#page41.tif  
source=TECH Assignment Package#page42.tif

source=TECH Assignment Package#page43.tif  
source=TECH Assignment Package#page44.tif  
source=TECH Assignment Package#page45.tif  
source=TECH Assignment Package#page46.tif  
source=TECH Assignment Package#page47.tif  
source=TECH Assignment Package#page48.tif  
source=TECH Assignment Package#page49.tif  
source=TECH Assignment Package#page50.tif  
source=TECH Assignment Package#page51.tif  
source=TECH Assignment Package#page52.tif  
source=TECH Assignment Package#page53.tif  
source=TECH Assignment Package#page54.tif  
source=TECH Assignment Package#page55.tif  
source=TECH Assignment Package#page56.tif  
source=TECH Assignment Package#page57.tif  
source=TECH Assignment Package#page58.tif  
source=TECH Assignment Package#page59.tif  
source=TECH Assignment Package#page60.tif  
source=TECH Assignment Package#page61.tif  
source=TECH Assignment Package#page62.tif  
source=TECH Assignment Package#page63.tif  
source=TECH Assignment Package#page64.tif  
source=TECH Assignment Package#page65.tif

## ASSIGNEE RECORDATION COVER SHEET

The following four documents attached hereto present evidence of legal transfer of title to the patent properties listed in “Exhibit A of Amended Schedule B3” from

**Nokia Technologies Oy**

(“Assignor”)

to

**WSOU Investments, LLC**

(“Assignee”):

1. “PATENT ASSIGNMENT” as set forth in “AMENDED SCHEDULE B3: ASSIGNMENT OF PATENT RIGHTS BY NOKIA TECHNOLOGIES OY” (3 pp) of that certain “Patent Purchase Agreement” effective July 22, 2017 between (a) Alcatel Lucent, (b) Nokia Solutions and Networks BV, and (c) Nokia Technologies Oy (“SELLERS”), and (d) Wade and Company (“PURCHASER”), as amended by “Amendment to Patent Purchase Agreement” between SELLERS and PURCHASER effective August 2, 2017.
2. “ASSIGNMENT OF PATENT PURCHASE AGREEMENT” between (d) Wade and Company (“ASSIGNEE”) and WSOU Investments, LLC (“ASSIGNOR”) effective August 21, 2017 (1 page).
3. “RELEASE AND RELINQUISHMENT OF INTEREST IN WSOU INVESTMENTS, LLC” by WCFT Cayman, Ltd. effective August 21, 2017 (1 page).
4. “Exhibit A of AMENDED SCHEDULE B3 – Assigned Patents (Tech Only Assets) of PPA” (59 pp).

**AMENDED SCHEDULE B3: ASSIGNMENT OF PATENT RIGHTS**

**BY NOKIA TECHNOLOGIES OY**

**PATENT ASSIGNMENT**

This **PATENT ASSIGNMENT**, including without limitation Exhibit A of Amended Schedule B3 hereto, ("**Assignment**") is made by:

- (1) **Nokia Technologies Oy**, a company validly organized and existing under the laws of Finland and having its principal address at Karaportti 3, 02610 Espoo, Finland ("**Assignor**"); to
- (2) **Wade and Company**, a company validly organized and existing under the laws of Ontario, Canada, having its principal address at 17 Prince Arthur, Toronto, ON M5R 1G4 CANADA, (the "**Assignee**").

All references to the plural herein also mean the singular, and vice versa, unless the context otherwise requires.

**WHEREAS**, Assignor is the owner of certain patents and patent applications, as specified in Exhibit A hereto.

**DEFINITIONS**

"**Assigned Patents**" means (a) patent applications listed in Exhibit A of Amended Schedule B3 hereto; (b) all reissues, reexaminations, continuations, continuations-in-part, divisionals, renewals and extensions of such patents and patent applications (whether pending, issued, abandoned or filed prior to, on or after the Effective Date); (c) all patents and patent applications (i) to which any or all of the foregoing directly or indirectly claims priority to, or the benefit of, the filing date, or (ii) for which any or all of the foregoing directly or indirectly forms a basis for priority or otherwise provides the benefit of an earlier filing date; and (d) all foreign counterparts to any or all of the foregoing, and all utility models, certificates of invention, patent registrations and equivalent rights worldwide.

"**Assignment Date**" means August 2, 2017.

**PATENT ASSIGNMENT**

Assignor hereby assigns, transfers, and conveys unto Assignee, all of Assignor's right, title, and interest in and to each of the Assigned Patents.

The assignment, transfer, and conveyance to Assignee set forth above will become effective on the Assignment Date and is made subject to certain encumbrances and retained rights for the Assigned Patents in favor of Assignor and/or its assignees and licensees.

IN WITNESS WHEREOF, the Assignor has caused this Assignment to be signed by its duly authorized officers.

ASSIGNOR:

NOKIA TECHNOLOGIES OY

By: [Signature]

Name: Aura Mättönen  
Senior Manager, Patent Licensing

Title: \_\_\_\_\_

Date: 3 August 2017

ASSIGNOR:

NOKIA TECHNOLOGIES OY

By: [Signature]

Name: Susanna Martikainen  
Director, Strategic Licensing

Title: \_\_\_\_\_

Date: 3 August 2017

ACKNOWLEDGED BY ASSIGNEE

ASSIGNEE:

WADE AND COMPANY

By: [Signature]

Name: [Signature]

Title: Meropis Dink

Date: Aug 2, 2017

**EXHIBIT A of AMENDED SCHEDULE B3 – ASSIGNED PATENTS**

Embedded Electronic File (59 Pages):



Exhibit A of  
AMENDED SCHEDULE

"Exhibit A of Amended Schedule B3 – Assigned Patents (Tech Only Assets) of PPA"



## ASSIGNMENT OF PATENT PURCHASE AGREEMENT

WHEREAS, Wade and Company, on the one hand, and Alcatel Lucent, Nokia Solutions and Networks BV and Nokia Technologies Oy ("Nokia Parties"), on the other hand, entered into a Patent Purchase Agreement with an effective date as of July 22, 2017 ("Patent Purchase Agreement");

WHEREAS, Wade and Company and the Nokia Parties entered into an Amendment to the Patent Purchase Agreement with an effective date as of August 21, 2017 ("Amendment to Patent Purchase Agreement");

WHEREAS, the Amendment to the Patent Purchase Agreement permits Wade and Company to assign the whole of its interest in the Patent Purchase Agreement to WSOU Investments LLC, a company organized under the laws of Delaware;

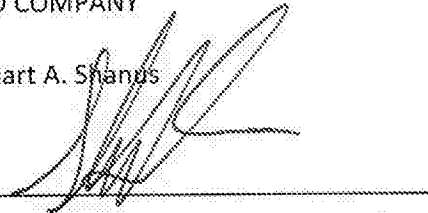
NOW, THEREFORE, Wade and Company wishes to assign the whole of its interest in the Patent Purchase Agreement to WSOU Investments LLC

Wade and Company hereby assigns to WSOU Investments LLC and WSOU Investments LLC hereby accepts the whole of the interest of Wade and Company in the Patent Purchase Agreement.

IN WITNESS WHEREOF, Wade and Company and WSOU Investments LLC, on behalf of themselves and their Affiliates, have caused this Agreement to be executed by their duly authorized representatives to become effective as of August 21, 2017.

WADE AND COMPANY

Name: Stuart A. Shands

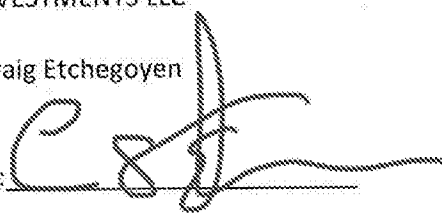
Signature: 

Title: General Counsel, Managing Partner

Date: August 21, 2017

WSOU INVESTMENTS LLC

Name: Craig Etchegoyen

Signature: 

Title: Member

Date: August 21, 2017

RELEASE AND RELINQUISHMENT OF INTEREST IN WSOU INVESTMENTS, LLC

WHEREAS, WCFT Cayman, a Cayman Islands company ("WCFT Cayman"), on the one hand and Orange Holdings, a Nevada corporation, on the other hand, had preliminary discussions concerning forming and operating WSOU Investments, LLC, a to be formed Delaware limited liability company;

WHEREAS, WSOU Investments, LLC was subsequently formed to purchase intellectual property from Alcatel Lucent, Nokia Solutions and Networks BV, Nokia Technologies Oy; and

WHEREAS, WCFT Cayman and Orange Holding never agreed to form WSOU Investments, LLC;

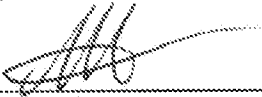
NOW, THEREFORE, to avoid any controversy or dispute concerning the fact that WCFT Cayman does not own and has never owned an interest in WSOU Investments, LLC:

WCFT Cayman hereby unequivocally avers that it owns no interest in WSOU Investments, LLC and to the extent it ever had any ownership stake, it hereby releases, relinquishes and disavows any ownership interest in WSOU Investments LLC it may have had.

IN WITNESS WHEREOF, WCFT Cayman itself and its Affiliates have caused this Release and Relinquishment of Interest to be executed by its duly authorized representative made effective as of August 21, 2017.

WCFT Cayman Ltd.

Name: Marc Wade

Signature:  \_\_\_\_\_

Title: Director

Date: August 21, 2017

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
04145	04145-US-NP	6125124	08/931531		US	26-Sep-2000	16-Sep-2017	16-Sep-1997	SYNCHRONIZATION AND SAMPLING FREQUENCY IN AN APPARATUS RECEIVING OFDM MODULATED TRANSMISSIONS
04156	04156-US-NP	6094722	09/010606		US	25-Jul-2000	22-Jan-2018	22-Jan-1998	HIDING AN AUTHENTICATION CODE IN AN ELECTRIC SIGNAL
04158	04158-US-NP	6213615	09/187638		US	10-Apr-2001	6-Nov-2018	6-Nov-1998	
04163	04163-US-NP	6639989	09/400770		US	28-Oct-2003	22-Sep-2019	22-Sep-1999	Menetelmä äänitason kalibroimiseksi monikanavaisessa äänentoistojärjestelmässä ja monikanavainen äänentoistojärjestelmä
04166	04166-US-NP	6421401	09/307642		US	16-Jul-2002	7-May-2019	7-May-1999	OFDM SYMBOL SYNCHRONISATION
04172	04172-US-CPA[2]	6628731	09/345819	20020181623	US	30-Sep-2003	30-Jun-2019	19-Aug-2002	SIGNAL LEVEL CONTROL FOR DIG. RECEIVER
04209	04209-US-PCT	7779154	10/496029	20050043020	US	17-Aug-2010	25-Aug-2025	18-Nov-2002	4G PORTAL AND IP DATACAST
04313	04313-US-NP	6404423	09/350607		US	11-Jun-2002	9-Jul-2019	9-Jul-1999	METHOD FOR DISPLAY POWER MANAGEMENT AND MONITOR EQUIPPED WITH A POWER MANAGEMENT SYSTEM
04528	04528-US-PCT	7353461	10/311894	20030169302	US	1-Apr-2008	30-Jun-2023	26-Jun-2001	NAVIBARS UI FOR TOUCH SCREEN DEVICE
06899	06899-US-CPA	6285889	08/905557		US	4-Sep-2001	4-Aug-2017	4-Apr-2000	TRANSIENT FORMAT BASED GENERIC PRINTING
07246	07246-US-NP	5872700	08/888906		US	16-Feb-1999	7-Jul-2017	7-Jul-1997	PACKAGE STRUCTURE FOR MULTICHIP MODULE
07295	07295-US-CPA	6415034	08/906371		US	2-Jul-2002	4-Aug-2017	5-Jun-2001	AN EARPHONE UNIT AND A TERMINAL DEVICE
07325	07325-US-PCT	7088699	09/445808		US	8-Aug-2006	23-Jun-2018	23-Jun-1998	RECEPTION METHOD AND RECEIVER
07388	07388-US-NP	6094573	08/968678		US	25-Jul-2000	12-Nov-2017	12-Nov-1997	DATABASE CONTROL BY A SUBSCRIBER NUMBER
07389	07389-US-PCT	6418308	09/242955		US	9-Jul-2002	26-Aug-2017	26-Aug-1997	AN OPINION POLL UTILIZING A WIRELESS DATA TRANSMISSION CONNECTION
07447	07447-US-NP	6275592	09/136128		US	14-Aug-2001	18-Aug-2018	18-Aug-1998	METHOD AND AN ARRANGEMENT FOR ATTENUATING NOISE IN A SPACE BY GENERATING ANTINOISE
07536	07536-US-NP	6104996	08/940677		US	15-Aug-2000	30-Sep-2017	30-Sep-1997	AN IMPROVED MPEG-1 AUDIO CODING ALGORITHM USING BACKWARD ADAPTIVE LINEAR PREDICTION
07575	07575-US-NP	5880829	08/920045		US	9-Mar-1999	28-Aug-2017	28-Aug-1997	AN APPARATUS FOR TAKING AND ANALYSING LIQUID SAMPLES, SUCH AS BLOOD SAMPLES
07686	07686-US-CPA	6159424	09/097339		US	12-Dec-2000	15-Jun-2018	15-Jun-1998	AN APPARATUS FOR TAKING SAMPLES
07758	07758-US-CPA	6327474	09/188507		US	4-Dec-2001	9-Nov-2018	2-Jul-2001	METHOD FOR LOCATING MOBILE STATION IN DISTRIBUTED MANNER
07884	07884-US-NP	7324645	09/399288		US	29-Jan-2008	17-Sep-2019	17-Sep-1999	MENETELMÄ MATKAVIESTIMEN TODENTAMISEKSI, TIETOLIIKENNEJÄRJESTELMÄ JA MATKAVIESTIN
07928	07928-US-NP	6343131	09/174989		US	29-Jan-2002	19-Oct-2018	19-Oct-1998	A METHOD AND A SYSTEM FOR PROCESSING A VIRTUAL ACOUSTIC ENVIRONMENT
07949	07949-US-NP	6052032	09/265273		US	18-Apr-2000	9-Mar-2019	9-Mar-1999	FEEDBACK BIAS CIRCUIT FOR POWER AMPLIFIERS
10165	10165-US-PCT	6751247	09/341736		US	15-Jun-2004	28-Jan-2018	28-Jan-1998	AN IDEA OF USING DIFFERENT CODE LENGTH IN CDMA
10280	10280-US-PCT	6173301	09/117976		US	9-Jan-2001	17-Dec-2017	17-Dec-1997	A METHOD FOR PHASE TO AMPLITUDE CONVERSION OF SINE FUNCTION
10303	10303-US-PCT	6434392	09/355086		US	13-Aug-2002	25-Feb-2018	25-Feb-1998	DCA IN GSM/DCS
10345	10345-US-PCT	6532257	09/269978		US	11-Mar-2003	18-Aug-2018	18-Aug-1998	A DIGITAL PHASE COMPARATOR
10390	10390-US-PCT	6373949	09/418387		US	16-Apr-2002	1-Apr-2018	1-Apr-1998	NEW SECRET KEY AUTHENTICATION PROTOCOL FOR MOBILE NETWORK(JAETTU 7587)
10653	10653-US-PCT	6341220	09/180034		US	22-Jun-2002	6-Mar-2018	6-Mar-1998	KLOONATTUJEN SIM-KORTTUIEN ETSINTÄ
10690	10690-US-PCT	6366777	09/308890		US	2-Apr-2002	24-Nov-2017	24-Nov-1997	YHTEINEN MSISDN-NUMERO KAHDELLA ERI SIM-KORTILLA
10862	10862-US-CPA[2]	6353913	09/439805	20020010896	US	5-Mar-2002	22-Mar-2019	12-Nov-1999	KOHINASIEIOINEN KOHERENTTI-ILMAISIA
10863	10863-US-PCT	6438185	09/657219		US	20-Aug-2002	22-Mar-2019	22-Mar-1999	SELF-OPTIMIZING CHANNEL EQUALIZATION AND DETECTION
10875	10875-US-PCT	7016434	09/700951		US	21-Mar-2006	24-May-2019	24-May-1999	DETECTION OF INTERFERING SIGNAL IN RADIO RECEIVER
10877	10877-US-PCT	6456825	09/446622		US	24-Sep-2002	31-Mar-2019	31-Mar-1999	CHANNEL ALLOCATION IN RADIO TELEPHONE SYSTEMS
10960	10960-US-PCT	7647062	09/909039	20020045460	US	12-Jan-2010	18-Jan-2022	18-Jan-2000	AUTOMATIC TRANSMITTER POWER CONTROL METHOD
10980	10980-US-CNT	7190963	11/073702	20050164743	US	13-Mar-2007	6-Sep-2020	8-Mar-2005	PROVIDING A REFERENCE CLOCK TO BASE STATIONS CONNECTED TO ANIP NETWORK

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
10980	10980-US-PCT	6983161	10/091344	20020132631	US	3-Jan-2006	6-Sep-2020	6-Sep-2000	PROVIDING A REFERENCE CLOCK TO BASE STATIONS CONNECTED TO ANIP NETWORK
11280	11280-US-PCT	6694141	09/458933		US	17-Feb-2004	20-Mar-2018	20-Mar-1998	POINT-TO-POINT RADIO LINK SYSTEM WITH AUTOMATIC CHANNEL SELECTION
11292	11292-US-PCT	6954439	09/817886	20010014083	US	11-Oct-2005	11-Oct-2019	11-Oct-1999	SYNCHRONIZATION OF THE TRANSMIT PERIODS OF TDD RADIO LINK TERMINALS
11372	11372-US-PCT	6430267	09/753535	20010017911	US	6-Aug-2002	15-Jul-2019	15-Jul-1999	SALAINEN HÄLYTYSOITTO
11387	11387-US-PCT	6668052	10/076385	20020131576	US	23-Dec-2003	17-Aug-2020	17-Aug-2000	USING THE VPN-ISUP APP PARAMETER CONTENT FOR QSIG (DSS+ , PSS1) TO CENTREX AND CENTREX TO QSIG INTERWORKING
11417	11417-US-PCT	6334053	09/663574		US	25-Dec-2001	24-Mar-2019	24-Mar-1999	PROCEDURE AND SYSTEM FOR PROVIDING AN ANSWERING SERVICE
11518	11518-US-PCT	6499032	09/390526		US	24-Dec-2002	4-Mar-2018	4-Mar-1998	ULOTTEISUUSRIIPPUMATON, JÄRJESTYKSEN SÄILYTTÄVÄ DYNAAMINEN HAJAUTUSMENETELMÄ KESKUSMUISTITTIETOKANNOILLE. TIETOKANTA
11527	11527-US-PCT	6064950	09/249862		US	16-May-2000	29-Aug-2017	29-Aug-1997	MENETELMÄ LASKURIARVON PERUSTEELLA SUURIMPIEN MITTAUSKOHEIDEN LÖYTÄMISEKSI. ÄLYVERKKO, SCP
11558	11558-US-PCT	6553107	09/401888	20020034285	US	22-Apr-2003	1-Apr-2018	1-Apr-1998	TIETOVIRRAN DYNAAMINEN, LOMAKEPOHJAINEN TULKINTA, FORMATOINTI JA LÄHETYS SEKÄ LÄHETTÄVÄN JA VASTAANOTTAVAN PÄÄN TOISISTAAN RIIPPUMATON MUUTOSTEN HALLINTA
11595	11595-US-PCT	7072456	09/599315		US	4-Jul-2006	14-Dec-2018	14-Dec-1998	PROCEDURE FOR INTERPROCESS DATA TRANSFER
11651	11651-US-PCT	6442260	09/817855	20020128966	US	27-Aug-2002	22-Sep-2019	22-Sep-1999	MENETELMÄ MAKSUNOSIUSTIEDON GENEROIMISESTA PÄÄTELAITTEELLE
11697	11697-US-PCT	6813356	09/975499	20020067830	US	2-Nov-2004	27-Mar-2020	27-Mar-2000	KÄYTTÄJÄN SALASANAN PÄIVITTÄMINEN SALAUSAVAIMEN MUUTTUMISENJÄLKEEN
12325	12325-US-NP	6060193	09/095150		US	9-May-2000	10-Jun-2018	10-Jun-1998	BATTERY FOR A MOBILE PHONE
12395	12395-US-NP	6088746	08/991136		US	11-Jul-2000	16-Dec-2017	16-Dec-1997	EXPANSION CARD, CARD INTERFACE AND ELECTRONIC DEVICE
12409	12409-US-NP	6094587	08/995795	6094587	US	25-Jul-2000	22-Dec-2017	22-Dec-1997	USER-DEFINED RINGING TONES IN SMS
12455	12455-US-NP	5926071	09/004008		US	20-Jul-1999	7-Jan-2018	7-Jan-1998	MINIMIZATION OF THE POWER CONSUMPTION IN AN OSCILLATOR
12462	12462-US-CNT	6480724	09/827761		US	12-Nov-2002	1-Oct-2017	6-Apr-2001	MODULAR MOBILE COMMUNICATION SYSTEM
12462	12462-US-NP	6219560	08/942074		US	17-Apr-2001	1-Oct-2017	1-Oct-1997	MODULAR MOBILE COMMUNICATION SYSTEM
12507	12507-US-NP	6185302	09/189614		US	6-Feb-2001	9-Nov-2018	9-Nov-1998	TELEPHONE HOLDER
12536	12536-US-NP	6018277	09/044267		US	25-Jan-2000	19-Mar-2018	19-Mar-1998	PHASING AND BALANCING MEMBER
12544	12544-US-CPA	6311076	09/023277		US	30-Oct-2001	13-Feb-2018	13-Feb-1998	MOBILE COMMUNICATION DEVICES
12550	12550-US-NP	6201876	09/015572		US	13-Mar-2001	30-Jan-2018	30-Jan-1998	MENETELMÄ MIKROFONIN SUOJAAMISEKSI ULKOISILTA HÄIRIÖTEKUJILTÄ JA MIKROFONIN HÄIRIÖSUOJUS
12552	12552-US-NP	6138091	08/992499		US	24-Oct-2000	17-Dec-2017	17-Dec-1997	MENETELMÄ JA JÄRJESTELMÄ PUHELUN TALLENTAMISEKSI MUISTIVÄLINEELLE
12574	12574-US-NP	6316996	09/427130		US	13-Nov-2001	25-Oct-2019	25-Oct-1999	ADJUSTABLE PNP OR PMOS AC-LOAD
12581	12581-US-NP	6164547	08/991133		US	26-Dec-2000	16-Dec-2017	16-Dec-1997	MENETELMÄ MATKAVIESTIMEN JA TOIMINTAYKSIKÖN YHTEENSOPIVUUDENTARKASTAMISEKSI, MATKAVIESTIN JA TOIMINTAYKSIKÖ
12597	12597-US-NP	6631183	09/270454		US	7-Dec-2003	17-Mar-2019	17-Mar-1999	OPERATING MODE DEPENDENT GREETING MESSAGE
12637	12637-US-NP	6005525	09/057820		US	21-Dec-1999	9-Apr-2018	9-Apr-1998	AN ANTENNA ARRANGEMENT FOR DIGITAL WRIST-PHONE
12691	12691-US-NP	6085081	09/016028		US	4-Jul-2000	30-Jan-2018	30-Jan-1998	MENETELMÄ KÄYTTÄJÄTUNNUKSEN VARAAMISEKSI
12696	12696-US-NP	6256611	09/119535		US	3-Jul-2001	20-Jul-2018	20-Jul-1998	METHOD FOR CONTROLLING A TELECOMMUNICATION SERVICE AND A TERMINAL
12719	12719-US-NP	6584510	09/062490		US	24-Jun-2003	17-Apr-2018	17-Apr-1998	A COMPUTER AND A METHOD OF OPERATING A COMPUTER
12750	12750-US-NP	6008764	09/047149		US	28-Dec-1999	24-Mar-2018	24-Mar-1998	BROADBAND ANTENNA REALIZED WITH SHORTED MICROSTRIPS
12773	12773-US-CPA	6484211	09/209106	20020143990	US	19-Nov-2002	10-Dec-2018	21-Jun-2002	MOBILE INTERNET PROTOCOL
12833	12833-US-CPA	6583770	09/078298		US	24-Jun-2003	13-May-2018	12-Nov-2002	A DUAL DISPLAY ARRANGEMENT AND A TERMINAL DEVICE
12833C1	12833C1-US-CNT	6747609	10/410673	20030189528	US	8-Jun-2004	13-May-2018	9-Apr-2003	A DUAL DISPLAY ARRANGEMENT AND A TERMINAL DEVICE
12854	12854-US-CPA	7113028	09/172510	20010045864	US	26-Sep-2006	14-Oct-2018	20-Aug-2001	METHOD AND ARRANGEMENT FOR CALIBRATING AN ACTIVE FILTER

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
12869	12869-US-NP	6591090	09/317386		US	8-Jul-2003	24-May-2019	24-May-1999	PREDISTORATION CONTROL FOR POWER REDUCTION
12879	12879-US-CPA	6370591	08/940926	20010039595	US	9-Apr-2002	30-Sep-2017	30-Jan-2001	METHOD AND APPARATUS FOR RUNNING SIMULTANEOUS APPLICATIONS THROUGH THE SAME PORT USING SUPPLEMENTARY DRIVERS THROUGH A MAIN DRIVER
12895	12895-US-NP	6631268	09/342480		US	7-Oct-2003	29-Jun-2019	29-Jun-1999	DATA TRANSMISSION METHOD AND RADIO SYSTEM
12896	12896-US-NP	6563883	09/320768		US	13-May-2003	27-May-2019	27-May-1999	A TRANSMITTER
12977	12977-US-NP	6438393	09/336076		US	20-Aug-2002	18-Jun-2019	18-Jun-1999	INTEGRATED MOTION DETECTOR IN A MOBILE COMMUNICATIONS DEVICE
12998	12998-US-NP	6209050	09/199686		US	27-Mar-2001	25-Nov-2018	25-Nov-1998	EXPANSION CARD
13070	13070-DE-EPA	60021000.6	00301071.7	1028538	DE	29-Jun-2005	11-Feb-2020	11-Feb-2000	MECHANISM FOR HOLDING AN INTEGRATED CIRCUIT CARD
13070	13070-FR-EPA	1028538	00301071.7	1028538	FR	29-Jun-2005	11-Feb-2020	11-Feb-2000	MECHANISM FOR HOLDING AN INTEGRATED CIRCUIT CARD
13070	13070-US-NP	6397081	09/502513		US	28-May-2002	11-Feb-2020	11-Feb-2000	MECHANISM FOR HOLDING AN INTEGRATED CIRCUIT CARD
13226	13226-US-CPA	6314287	09/017642		US	6-Nov-2001	2-Feb-2018	2-Feb-1998	AUTOMATICALLY PHONE NUMBER CONVERTING
13245	13245-US-NP	6381474	09/097140		US	30-Apr-2002	12-Jun-2018	12-Jun-1998	AN IMPROVED METHOD OF HANDLING PHONE OPERATIONS AND A PHONEUSING THE METHOD
13375	13375-US-NP	6014113	08/995133		US	11-Jan-2000	19-Dec-2017	19-Dec-1997	ANTENNA SHIELD
13417	13417-US-CPA	6487421	09/153720	20020065104	US	26-Nov-2002	15-Sep-2018	15-Sep-1998	BALL POINT DIALLING
13492	13492-US-NP	5943628	08/955508	5943628	US	24-Aug-1999	22-Oct-2017	22-Oct-1997	MOBILE PHONE/BELTCLIP PROXIMITY ALARM
13500	13500-US-NP	6377820	09/114807		US	23-Apr-2002	13-Jul-2018	13-Jul-1998	ONE BUTTON DIALING VIA SPEECH RECOGNITION AND VOICE SCROLLING
13526	13526-US-NP	6145076	09/037445		US	7-Nov-2000	10-Mar-2018	10-Mar-1998	DATA PROCESSING CIRCUIT
13527	13527-US-NP	6038675	09/037449		US	14-Mar-2000	10-Mar-2018	10-Mar-1998	DATA PROCESSING CIRCUIT
13558	13558-US-NP	6421538	08/359904		US	16-Jul-2002	16-Jul-2019	20-Dec-1994	DETECTION OF HIGH USER VELOCITY
13568	13568-US-CPA	6463262	09/345742		US	8-Oct-2002	1-Jul-2019	1-Jul-1999	CONSTANT-FRACTION PHONE SLIDE
13584	13584-US-CPA	6681124	09/179787	20010044317	US	20-Jan-2004	27-Oct-2018	27-Oct-1998	BACK TOUCH SCREEN
14003	14003-US-PCT	6563825	09/308110		US	13-May-2003	13-Nov-2017	13-Nov-1997	JUOKSEVA KEHYSNUMEROINTI
14020	14020-US-CPA	6445924	09/435731		US	3-Sep-2002	8-Nov-2019	26-Jul-2001	SPONTANEOUS TRAFFIC REASON HANDOVER
14093	14093-US-PCT	6380863	09/548316		US	23-Oct-2001	16-Oct-2018	16-Oct-1998	MOBILE COMMUNICATIONS SYSTEM AND A TRANSCODER UNIT
14143	14143-US-PCT	6442386	09/643096		US	27-Aug-2002	19-Feb-2019	19-Feb-1999	METHOD FOR DISCONNECTING A CONNECTION OF A SUBSCRIBER STATION
14163	14163-US-CNT	8514710	11/105401	20050286418	US	20-Aug-2013	31-May-2025	14-Apr-2005	DATA COMPRESSION NEGOTIATION IN A TELECOMMUNICATION SYSTEM
14169	14169-US-PCT	7020614	09/882949	20020040294	US	28-Mar-2006	22-Dec-2019	22-Dec-1999	MENETELMÄ TRANSMISSION TEHOSTAMISEKSI GSM-JÄRJESTELMÄSSÄ
14213	14213-US-PCT	6505047	09/402164		US	7-Jan-2003	8-Feb-2019	8-Feb-1999	MENETELMÄ SGSN:N SKAALATTAVUUDEKSI
14252	14252-US-PCT	7826823	09/762922		US	2-Nov-2010	16-Aug-2019	16-Aug-1999	SIGNALLING TRACING BASED ON SUBSCRIBER IDENTITY
14267	14267-US-PCT	6944426	09/719413		US	13-Sep-2005	29-Jun-2019	29-Jun-1999	A METHOD AND A MOBILE STATION FOR CONFIGURING A BASE STATION
14305	14305-US-PCT	7024203	09/913457		US	4-Apr-2006	16-Feb-2020	16-Feb-2000	ENHANCED ADMISSION CONTROL (EAC) IN 3RD WCDMA SYSTEM
14308	14308-US-PCT	7164916	10/070410		US	16-Jan-2007	5-Sep-2020	5-Sep-2000	SYSTEM AND METHOD FOR INCREASING THE CAPACITY OF BANDWIDTH-LIMITED TDMA CELLULAR NETWORKS
14429	14429-US-PCT	6760417	09/807825		US	6-Jul-2004	18-Oct-2019	18-Oct-1999	A METHOD FOR IN BASED PREPAYMENT IN GPRS
14501	14501-US-PCT	7221662	09/920362	20020049860	US	22-May-2007	4-Feb-2019	4-Feb-1999	tone detection elimination
14610	14610-US-PCT	6658090	10/120484		US	2-Dec-2003	12-Oct-2020	12-Oct-2000	TESTING AND DEPLOYMENT OF NEW SOFTWARE VERSION IN TELECOMMUNICATIONS NETWORK ELEMENT BY UTILIZING REDUNDANT COMPUTER UNITS
14929	14929-US-PCT	7508758	10/297470		US	24-Mar-2009	20-Sep-2022	9-Jun-2000	INTELLIGENT BUFFER MANAGEMENT
14959	14959-US-PCT	7821928	10/432528	20040066804	US	26-Oct-2010	26-Jan-2026	26-Nov-2001	METHODS FOR PEAK RATE CAC ESPECIALLY IN AAL2 MULTIPLEXERS

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
15044	15044-DE-EPT	60036225.6	00987504.8	1238559	DE	29-Aug-2007	12-Dec-2020	12-Dec-2000	METHOD OF HOW TO LOCATE DUPLICATED SIM CARDS IN THE GSM SYSTEM - BASED ON THE SUBSCRIBER LOCATION INFORMATION CHANGES IN VLR AND/OR HLR, TRIGGERED BY PERIODIC LOCATION UPDATE
15044	15044-US-PCT	8442487	10/168051	20040038666	US	14-May-2013	13-Apr-2024	12-Dec-2000	METHOD OF HOW TO LOCATE DUPLICATED SIM CARDS IN THE GSM SYSTEM - BASED ON THE SUBSCRIBER LOCATION INFORMATION CHANGES IN VLR AND/OR HLR, TRIGGERED BY PERIODIC LOCATION UPDATE
15755	15755-US-PCT	7937459	10/854717	20040228462	US	3-May-2011	17-Oct-2025	25-Sep-2002	DYNAAMISET LASKURIT DX:SSA
15758	15758-US-PCT	7844261	10/451219	20040053604	US	30-Nov-2010	5-Mar-2024	21-Dec-2001	TARIFF INTERWORKING WITH IN SERVICES AFTER NUMBER PORTABILITY (NP) INTRODUCTION
15767	15767-US-PCT	7313388	10/475028	20040157605	US	25-Dec-2007	10-Apr-2022	10-Apr-2002	METHOD FOR HANDLING LARGE NUMBER RANGES EASILY IN THE IN SERVICES
15822	15822-US-PCT	7827142	10/477321	20040236783	US	2-Nov-2010	22-Dec-2021	11-May-2001	TWO-WAY DB/DIRECTORY REPLICATION WITHOUT CONFLICTS
15873	15873-US-PCT	7480278	10/476666	20040136342	US	20-Jan-2009	4-May-2021	4-May-2001	DIRECTIONAL POWER BASED RADIO RESOURCE MANAGEMENT FOR BASE STATIONS WITH SMART ANTENNAS
15877	15877-US-PCT	7343282	10/481784	20040254786	US	11-Mar-2008	29-Jun-2023	26-Jun-2001	TRANSCODER DEVICE FOR NARROWBAND AND WIDEBAND SPEECH INTER-OPERATION
16099	16099-US-PCT	7554906	10/751922	20040136403	US	30-Jun-2009	7-Jul-2024	22-Apr-2002	APPLICATION OF THE TRANSPORT BEARER MODIFICATION CAPABILITY IN CELLULAR ACCESS NETWORKS
16484	16484-US-PCT	7539164	10/989512	20050088994	US	26-May-2009	11-Feb-2024	20-May-2003	L3 ROUTER ADVERTISEMENTS IN PROXY LMM CONCEPT
16490	16490-US-PCT	7440394	11/013968	20050099940	US	21-Oct-2008	27-May-2023	27-May-2003	REDUNDANT IP FORWARDING
16560	16560-US-CNT	7860512	11/984048	20080070587	US	28-Dec-2010	18-Sep-2022	13-Nov-2007	TRANSPORT LOAD AWARE HANDOVER IN AN IP BASED MOBILE NETWORK
16560	16560-US-PCT	7305241	10/528080	20060111118	US	4-Dec-2007	30-Nov-2023	18-Sep-2002	TRANSPORT LOAD AWARE HANDOVER IN AN IP BASED MOBILE NETWORK
16587	16587-US-PCT	7423962	10/487252	20040198372	US	9-Sep-2008	10-Sep-2025	19-Jun-2003	LOAD BALANCING IN GGSN
16916	16916-US-CIP	8817803	10/736632	20040180663	US	26-Aug-2014	29-May-2028	17-Dec-2003	SYNCHRONIZATION BETWEEN GLOBAL AND REGIONAL RAC SYSTEMS
17082	17082-US-NP	6535564	09/343829		US	18-Mar-2003	30-Jun-2019	30-Jun-1999	ADAPTIVE QUANTIZATION IN A PULSE-AMPLITUDE MODULATED SYSTEM
17102	17102-US-NP	6510174	09/452084		US	21-Jan-2003	30-Nov-2019	30-Nov-1999	UPLINK CHANNEL SOUNDING FOR GPRS
17123	17123-US-NP	6931256	09/771814	20010029189	US	16-Aug-2005	29-Jan-2021	29-Jan-2001	PACKET SCHEDULING BASED ON POWER CONTROL FEEDBACK IN CDMA SYSTEMS
17173	17173-US-NP	6999503	09/704086		US	14-Feb-2006	1-Nov-2020	1-Nov-2000	PARTIAL RESPONSE MODULATION SCHEME TO ENHANCE THE BANDWIDTH AND RELIABILITY OF OFDM SYSTEMS
17318	17318-US-CNT	7342888	10/014217	20020054596	US	11-Mar-2008	28-Jun-2021	22-Oct-2001	USE OF MULTICAST SCOPE FOR RESOURCE DISCOVERY
17549	17549-US-NP	6624769	10/007088	20030038738	US	23-Sep-2003	6-Dec-2021	6-Dec-2001	METHOD FOR COMPRESSION OF ANIMATED VECTOR GRAPHICS
17602	17602-US-NP	7096019	10/160213	20040203857	US	22-Aug-2006	31-May-2022	31-May-2002	MOBILE LOCATION ASSISTED CODE REUSE IN A CELL
17679	17679-US-CIP	7333575	10/729422	20040176051	US	19-Feb-2008	11-Feb-2025	5-Dec-2003	METHOD FOR RECEIVING A CDMA SIGNAL IN THE PRESENCE OF ANTENNA DIVERSITY
17880	17880-US-NP	7720140	11/482083	20070253514	US	18-May-2010	10-Sep-2028	7-Jul-2006	A METHOD FOR INVERTING CIRCULANT HERMITIAN MATRICES BASED ON TYPE 1 DISCRETE COSINE AND SINE TRANSFORMS AND ITS USAGE FOR HSDPA EQUALIZER TAP SOLVER IMPLEMENTATION.
18011	18011-US-NP	6813355	09/249475		US	2-Nov-2004	12-Feb-2019	12-Feb-1999	METHOD AND ARRANGEMENT FOR CIPHERING INFORMATION TRANSFER
18056	18056-US-NP	6947420	09/412897		US	20-Sep-2005	5-Oct-2019	5-Oct-1999	APPLICATIONS OF USER-TO-USER INFORMATION TRANSFER BETWEEN TELECOMMUNICATIONS DEVICES
18192	18192-US-NP	6704281	09/483143		US	9-Mar-2004	13-Jan-2020	13-Jan-2000	BITTINOPEUDEN OHJAUS MULTIMEDIA LAITTEESSA

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
18204	18204-US-PCT	7433334	09/947677	20020071480	US	7-Oct-2008	8-Mar-2019	8-Mar-1999	MS CLASSMARK INFORMATION IN INITIAL RANDOM ACCESS MESSAGE
18228	18228-US-NP	7236537	09/879831	20020012380	US	26-Jun-2007	15-Dec-2019	15-Dec-1999	METHOD AND RADIO SYSTEM FOR DIGITAL SIGNAL TRANSMISSION
18313	18313-US-PCT	8396482	10/019705		US	12-Mar-2013	7-Mar-2023	30-Jun-2000	CELLULAR NETWORK BASED TERMINAL LOCATION CALCULATION IN NON-LINE-OF-SIGHT ENVIRONMENT
18363	18363-US-CNT	7289667	10/956104	20050058343	US	30-Oct-2007	4-Oct-2024	4-Oct-2004	INVERSE HISTOGRAM BASED IMAGE SHARPENING METHOD
18363	18363-US-NP	7020332	09/742055	20010046320	US	28-Mar-2006	22-Dec-2020	22-Dec-2000	INVERSE HISTOGRAM BASED IMAGE SHARPENING METHOD
18365	18365-CN-PCT	ZL00814037.5	00814037.5	1378750	CN	22-Jun-2005	10-Aug-2020	10-Aug-2000	APPARATUS, AND ASSOCIATED METHOD, FOR FOAMING A COMPRESSED MOTION VECTOR FIELD UTILIZING PREDICTIVE MOTION CODING
18365	18365-DE-EPT	60015566.8	00957359.3	1206881	DE	3-Nov-2004	10-Aug-2020	10-Aug-2000	APPARATUS, AND ASSOCIATED METHOD, FOR FOAMING A COMPRESSED MOTION VECTOR FIELD UTILIZING PREDICTIVE MOTION CODING
18365	18365-FI-EPT	1206881	00957359.3	1206881	FI	3-Nov-2004	10-Aug-2020	10-Aug-2000	APPARATUS, AND ASSOCIATED METHOD, FOR FOAMING A COMPRESSED MOTION VECTOR FIELD UTILIZING PREDICTIVE MOTION CODING
18365	18365-FR-EPT	1206881	00957359.3	1206881	FR	3-Nov-2004	10-Aug-2020	10-Aug-2000	APPARATUS, AND ASSOCIATED METHOD, FOR FOAMING A COMPRESSED MOTION VECTOR FIELD UTILIZING PREDICTIVE MOTION CODING
18365	18365-GB-EPT	1206881	00957359.3	1206881	GB	3-Nov-2004	10-Aug-2020	10-Aug-2000	APPARATUS, AND ASSOCIATED METHOD, FOR FOAMING A COMPRESSED MOTION VECTOR FIELD UTILIZING PREDICTIVE MOTION CODING
18365	18365-IT-EPT	502005901282176	00957359.3	1206881	IT	3-Nov-2004	10-Aug-2020	10-Aug-2000	APPARATUS, AND ASSOCIATED METHOD, FOR FOAMING A COMPRESSED MOTION VECTOR FIELD UTILIZING PREDICTIVE MOTION CODING
18365	18365-NL-EPT	1206881	00957359.3	1206881	NL	3-Nov-2004	10-Aug-2020	10-Aug-2000	APPARATUS, AND ASSOCIATED METHOD, FOR FOAMING A COMPRESSED MOTION VECTOR FIELD UTILIZING PREDICTIVE MOTION CODING
18365	18365-US-CNT	7149251	10/778449	20040165664	US	12-Dec-2006	11-Aug-2019	13-Feb-2004	APPARATUS, AND ASSOCIATED METHOD, FOR FOAMING A COMPRESSED MOTION VECTOR FIELD UTILIZING PREDICTIVE MOTION CODING
18365	18365-US-CNT[2]	8411757	11/609873	20070140342	US	2-Apr-2013	11-Aug-2019	12-Dec-2006	APPARATUS, AND ASSOCIATED METHOD, FOR FOAMING A COMPRESSED MOTION VECTOR FIELD UTILIZING PREDICTIVE MOTION CODING
18407	18407-US-PCT	6996190	10/179007	20030016759	US	7-Feb-2006	21-Dec-2020	21-Dec-2000	METHOD OF ENCODING A SIGNAL, TRANSMITTER AND RECEIVER
18463	18463-US-NP	7889874	09/713524		US	15-Feb-2011	7-Mar-2025	15-Nov-2000	A NOISE SUPPRESSOR
18545	18545-US-NP	6983016	09/849803	20020021755	US	3-Jan-2006	4-May-2021	4-May-2001	DETECTION OF CORRUPTED PREDICTION ERROR BLOCKS IN VIDEO DECODING
18680	18680-US-PCT	6940361	10/398440		US	6-Sep-2005	6-Oct-2020	6-Oct-2000	SELF-ALIGNED WAVEGUIDE-TO-MICROSTRIP TRANSITION
18711	18711-US-NP	6559872	09/566509		US	6-May-2003	8-May-2020	8-May-2000	1D SELECTION OF 2D OBJECTS IN HEAD-WORN DISPLAYS
18788	18788-US-NP	7280515	09/975491	20020044564	US	9-Oct-2007	13-Nov-2023	10-Oct-2001	METHOD AND ARRANGEMENT FOR IMPLEMENTING FAST SIGNALLING IN A N ASYMMETRIC COMMUNICATION CONNECTION
18805	18805-US-PCT	7039433	10/362397	20030162505	US	2-May-2006	27-Jun-2021	27-Jun-2001	METHOD FOR SELECTING AND PROCESSING MEASUREMENTS RELATED TOTIMING DIFFERENCES BETWEEN RADIO TRANSMITTERS
18852	18852-US-NP	6782053	09/637773		US	24-Aug-2004	28-Aug-2022	11-Aug-2000	SELECTIVE MOTION VECTOR PREDICTION
18923	18923-US-PCT(2)	7715849	10/470902	20040067759	US	11-May-2010	21-Mar-2023	28-Feb-2001	INTEGRATIONG CELL IDENTITY AND TIMING ADVANCE WITH RADIO COVERAGE INFORMATION TO LOCATE MOBILE STATIONS
19055	19055-US-NP	7139697	10/108661	20020184003	US	21-Nov-2006	27-Mar-2022	27-Mar-2002	LANGUAGE IDENTIFICATION FROM SHORT SEGMENTS OF TEXT USING DECISION-TREES
19096	19096-US-DIV	8103123	12/221964	20080303926	US	24-Jan-2012	10-Feb-2024	7-Aug-2008	IMAGE REBUILDING SYSTEM FOR MOBILE IMAGING PHONE
19096	19096-US-NP	7426316	10/135954	20030002749	US	16-Sep-2008	23-Aug-2023	29-Apr-2002	IMAGE REBUILDING SYSTEM FOR MOBILE IMAGING PHONE

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
19251	19251-US-PCT	7269166	10/493918	20040246939	US	11-Sep-2007	8-Oct-2023	27-Nov-2001	MULTIHOMED MOBILE IPV6 WITH UNIDIRECTIONAL LINKS
19511	19511-US-PCT	7751827	10/526400	20050267677	US	6-Jul-2010	14-May-2023	6-Sep-2002	SIMPLE LOCATION CALCULATION PROCESS UTILIZING CELL IDENTITY(CI), TIMING ADVANCE (TA) AND RECEIVED SIGNAL STRENGTH (RX) MEASUREMENTS
19546	19546-US-PCT	8023435	10/512061	20050254448	US	20-Sep-2011	21-Mar-2024	8-May-2002	SPANNING TREE BASED NETWORK PARAMETER DISTRIBUTION SCHEME FOR SUPPORTING THE SELECTION OF MACRODIVERSITY COMBINING POINT IN IP RAN
19611	19611-US-NP	7912715	10/402371	20040039573	US	22-Mar-2011	28-Apr-2026	27-Mar-2003	A METHOD FOR EFFICIENT APPROXIMATE COMPUTATION OF DISTORTION MEASURES
19770	19770-US-PCT	9280607	10/548741	20070033275	US	8-Mar-2016	2-Oct-2028	7-Mar-2003	MOBILE BROWSER RECOMMENDATION ENGINE
19927	19927-US-CIP	7231217	10/733819	20040166876	US	12-Jun-2007	22-Mar-2024	12-Dec-2003	A METHOD FOR AUTOMATIC LMU NBOR LIST CONFIGURATION
19969	19969-US-NP	7366264	10/693033	20040085891	US	29-Apr-2008	16-Nov-2025	24-Oct-2003	METHOD AND SYSTEM FOR ALLEVIATING IMPULSE NOISE USING BLANKING
22053	22053-US-NP	6904034	09/896647	20030002455	US	7-Jun-2005	29-Jun-2021	29-Jun-2001	A LOAD SHARING TECHNIQUE FOR MIXED MODE OPERATION AT THE GB/IP INTERFACE
23023	23023-US-PCT	6385254	09/401019		US	7-May-2002	29-Jan-2019	29-Jan-1999	A FAST MODULATION RATE ADAPTION METHOD
23030	23030-US-PCT	6834078	09/600951		US	21-Dec-2004	30-Nov-2018	30-Nov-1998	TEST LOOP FACILITY FOR CDMA BTS
23079	23079-US-PCT	6985732	09/937047		US	10-Jan-2006	30-Mar-2020	30-Mar-2000	HANDOVER FOR A MOBILE H.323 END-SYSTEM USING EXISTING MULTIPOINT CONFERENCE FACILITIES SUCH AS CONFERENCE CALL INVITE AND JOIN
23121	23121-US-CNT	7778218	11/955100	20080090602	US	17-Aug-2010	8-Mar-2021	12-Dec-2007	DOWNLINK POWER CONTROL IN WCDMA
23121	23121-US-PCT	7333450	10/012048	20020136192	US	19-Feb-2008	7-Jun-2020	7-Jun-2000	DOWNLINK POWER CONTROL IN WCDMA
23128	23128-US-PCT	6865396	09/864534	20020009981	US	8-Mar-2005	25-Nov-2019	25-Nov-1999	POWER CONTROL METHOD FOR LINEAR MODULATION
23135	23135-US-PCT	6215814	09/571138		US	10-Apr-2001	14-Sep-2019	14-Sep-1999	SPACE-TIME RECEIVER FOR WCDMA
23171	23171-DE-EPT	69932951.5	99946170.0	1175802	DE	23-Aug-2006	14-Sep-2019	14-Sep-1999	BEAM HOPPING METHOD FOR DOWNLINK TRANSMISSION
23171	23171-FR-EPT	1175802	99946170.0	1175802	FR	23-Aug-2006	14-Sep-2019	14-Sep-1999	BEAM HOPPING METHOD FOR DOWNLINK TRANSMISSION
23171	23171-GB-EPT	1175802	99946170.0	1175802	GB	23-Aug-2006	14-Sep-2019	14-Sep-1999	BEAM HOPPING METHOD FOR DOWNLINK TRANSMISSION
23171	23171-IT-EPT	502006901466828	99946170.0	1175802	IT	23-Aug-2006	14-Sep-2019	14-Sep-1999	BEAM HOPPING METHOD FOR DOWNLINK TRANSMISSION
23171	23171-US-PCT	7072692	10/018161		US	4-Jul-2006	14-Sep-2019	14-Sep-1999	BEAM HOPPING METHOD FOR DOWNLINK TRANSMISSION
23176	23176-US-CNT	7248876	11/386148	20060234640	US	24-Jul-2007	21-Mar-2026	21-Mar-2006	MENETELMÄ JA LAITE SOLUKKOVERKON TUKIASEMAN PEITTOALUEEN JALÄHETYSTAAJUUDEN MÄÄRITTÄMISEKSI JA OPTIMOIMISEKSI ENNEN KÄYTTÖNOTTOA.
23176	23176-US-PCT	7076252	10/148373		US	11-Jul-2006	20-Oct-2021	27-Nov-2000	MENETELMÄ JA LAITE SOLUKKOVERKON TUKIASEMAN PEITTOALUEEN JALÄHETYSTAAJUUDEN MÄÄRITTÄMISEKSI JA OPTIMOIMISEKSI ENNEN KÄYTTÖNOTTOA.
23180	23180-US-PCT	7260162	10/168632	20030058974	US	21-Aug-2007	18-Apr-2023	15-Dec-2000	ADAPTIVE EQUALIZER TYPE
23187	23187-US-PCT	6980832	10/129712		US	27-Dec-2005	6-Nov-2020	6-Nov-2000	A METHOD FOR REDUCING TX-POWER IN HANDOVER
23203	23203-US-PCT	6584318	09/943736	20020042276	US	24-Jun-2003	3-Mar-2020	3-Mar-2000	Dynamic Handover margin
23210	23210-US-PCT	6763237	10/018171		US	13-Jul-2004	14-Sep-2019	14-Sep-1999	A method for load balancing of power amplifiers in CDMA basestations exploiting Time Switching Transmit Diversity Schemes
23256	23256-US-PCT	6959048	09/857488		US	25-Oct-2005	19-Oct-2019	19-Oct-1999	Adaptive spatial and temporal multisensor interleaving scheme



Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
23277	23277-US-PCT	7193988	09/866577	20020003783	US	20-Mar-2007	27-Sep-2020	27-Sep-2000	Inband signalling for transmission resource allocation
23311	23311-US-PCT	7626953	10/149797	20030181217	US	1-Dec-2009	24-Sep-2025	15-Dec-2000	A Novel Interference Resolving Algorithm for UTRA-TDD
23334	23334-US-PCT	7403748	10/240628		US	22-Jul-2008	7-Apr-2020	7-Apr-2000	A METHOD FOR EFFICIENT DL TRANSMISSION
23339	23339-US-PCT	7230928	10/268099	20030076787	US	12-Jun-2007	9-Apr-2021	9-Apr-2001	A METHOD BASED ON FINITE CHANNEL STATE CLASSIFICATION FOR EFFICIENT DOWNLINK PERFORMANCE IN CELLULAR SYSTEMS
23354	23354-US-PCT	7738880	10/240780	20030157939	US	15-Jun-2010	20-Jun-2022	23-Jan-2001	AUTOMATIC LMU SITE SELECTION PROCESS FOR LCS IN GSM NETWORK
23596	23596-US-PCT	7116990	10/480450	20040185865	US	3-Oct-2006	29-Jun-2021	29-Jun-2001	LCS LOAD SHARING
23602	23602-US-NP	7313114	10/137700	20020176438	US	25-Dec-2007	20-Nov-2024	3-May-2002	A METHOD FOR SELECTING SPREADING CODES
23661	23661-US-NP	6756941	10/601766	20040051663	US	29-Jun-2004	24-Jun-2023	24-Jun-2003	DIFFERENTIAL CORRECTION FOR GSM&WCDMA LOCATING SYSTEM (E-OTD&IPDLTDOA) ABSOLUTE TIME (AT)
23672	23672-US-NP	6861923	10/390538	20030227352	US	1-Mar-2005	18-Mar-2023	18-Mar-2003	MINIATURIZED WILKINSON DIVIDER WITH MULTILAYER STRUCTURE
23693	23693-US-CNT	8005046	12/005314	20080107074	US	23-Aug-2011	12-Oct-2024	27-Dec-2007	DYNAMIC FREQUENCY ALLOCATION FOR PACKET SWITCHED SERVICES
23694	23694-US-NP	7031694	10/287800	20030104801	US	18-Apr-2006	5-Nov-2022	5-Nov-2002	MBMS CHARGING INFORMATION EXCHANGE AND CONFIGURATION INCLUDING MOBILITY ASPECTS IN BOTH UE AND NW.
23713	23713-US-NP	7136638	10/279953	20040198234	US	14-Nov-2006	25-Oct-2022	25-Oct-2002	WCDMA SITE PLANNING BASED ON GSM UE MEASUREMENTS
23724	23724-US-NP	7047018	10/701072	20040141473	US	16-May-2006	5-Nov-2023	5-Nov-2003	CENTRALIZED POWER ALLOCATION FOR WCDMA DOWNLINK RADIO RESOURCE MANAGEMENT
23851	23851-US-NP	7889798	10/627962	20040240574	US	15-Feb-2011	30-Jan-2029	28-Jul-2003	MULTICARRIER EDGE CLIPPER
24017	24017-US-CPA	6259312	09/265165	2001002113	US	10-Jul-2001	9-Mar-2019	9-Feb-2001	CIRCUIT ARRANGEMENT FOR ADJUSTING THE IMPEDANCE OF A DIFFERENTIAL ACTIVE COMPONENT
24052	24052-US-CNT	7062766	10/625099	20040088710	US	13-Jun-2006	20-Jan-2019	22-Jul-2003	EMBEDDED SYSTEM
24052	24052-US-NP	6631394	09/234433		US	7-Oct-2003	20-Jan-2019	20-Jan-1999	EMBEDDED SYSTEM
24149A	24149A-DE-EPT	69944640.6	99909130.9	1064805	DE	27-Feb-2013	18-Mar-2019	18-Mar-1999	A SYSTEM FOR TRANSFERRING A CALL AND A MOBILE STATION
24149A	24149A-ES-EPT	1064805	99909130.9	1064805	ES	27-Feb-2013	18-Mar-2019	18-Mar-1999	A SYSTEM FOR TRANSFERRING A CALL AND A MOBILE STATION
24149A	24149A-FR-EPT	1064805	99909130.9	1064805	FR	27-Feb-2013	18-Mar-2019	18-Mar-1999	A SYSTEM FOR TRANSFERRING A CALL AND A MOBILE STATION
24149A	24149A-GB-EPT	1064805	99909130.9	1064805	GB	27-Feb-2013	18-Mar-2019	18-Mar-1999	A SYSTEM FOR TRANSFERRING A CALL AND A MOBILE STATION
24149A	24149A-IT-EPT	502013902132121	99909130.9	1064805	IT	27-Feb-2013	18-Mar-2019	18-Mar-1999	A SYSTEM FOR TRANSFERRING A CALL AND A MOBILE STATION
24149A	24149A-NL-EPT	1064805	99909130.9	1064805	NL	27-Feb-2013	18-Mar-2019	18-Mar-1999	A SYSTEM FOR TRANSFERRING A CALL AND A MOBILE STATION
24149A	24149A-US-CNT	7319874	10/941915	20050064896	US	15-Jan-2008	18-Mar-2019	16-Sep-2004	A SYSTEM FOR TRANSFERRING A CALL AND A MOBILE STATION
24149A	24149A-US-PCT	6853851	09/646419		US	8-Feb-2005	18-Mar-2019	18-Mar-1999	A SYSTEM FOR TRANSFERRING A CALL AND A MOBILE STATION
24175	24175-US-CPA	6438366	09/316357	20020098823	US	20-Aug-2002	21-May-2019	21-May-1999	METHOD AND CIRCUIT FOR SAMPLING A SIGNAL AT HIGH SAMPLING FREQUENCY
24294	24294-US-PCT	7502626	09/662891		US	10-Mar-2009	27-Feb-2021	18-Mar-1999	HANDSETLESS GSM ACCESS USING WIRELESS HEADSET AND WRIST UI
24302	24302-US-CNT[2]	7764927	11/471964	20070120950	US	27-Jul-2010	5-Nov-2028	21-Jun-2006	UTILIZATION OF RADIO CHANNEL MEASUREMENTS IN VIDEO CODING
24302	24302-US-NP	6611674	09/370661		US	26-Aug-2003	6-Aug-2019	6-Aug-1999	UTILIZATION OF RADIO CHANNEL MEASUREMENTS IN VIDEO CODING
24374	24374-US-NP	6628296	09/451456		US	30-Sep-2003	30-Nov-2019	30-Nov-1999	A METHOD AND A DEVICE FOR PROCESSING DIGITIZED IMAGE
24475	24475-US-NP	6714990	09/523241		US	30-Mar-2004	10-Mar-2020	10-Mar-2000	TIEDONSIIRTOJÄRJESTELMÄ JA DATASOVITIN
24479	24479-US-NP	6813490	09/466713		US	2-Nov-2004	17-Dec-2019	17-Dec-1999	MOBILE STATION WITH AUDIO SIGNAL ADAPTATION TO HEARING CHARACTERISTICS OF THE USER
24512	24512-US-NP	6785352	09/504995		US	31-Aug-2004	15-Feb-2020	15-Feb-2000	METHOD AND CIRCUIT ARRANGEMENT FOR IMPLEMENTING INTER-SYSTEMSYNCHRONIZATION IN A MULTIMODE DEVICE
24619	24619-US-CIP	6658047	09/518922		US	2-Dec-2003	3-Mar-2020	6-Mar-2000	ADAPTIVE CHANNEL EQUALIZER

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
24784	24784-US-NP	7257153	09/732961	20010004381	US	14-Aug-2007	16-Apr-2022	8-Dec-2000	FAST CDMA ACQUISITION ENGINE
24793	24793-US-PCT	6438356	09/974828	20020037701	US	20-Aug-2002	8-Mar-2021	8-Mar-2001	ADAPTIVE DESENSITIZATION FOR MICROCELL WCDMA BASE STATION RECEIVER
24949	24949-US-NP	7835771	10/087538	20030166405	US	16-Nov-2010	17-Feb-2023	1-Mar-2002	SPECIAL FLASHING ALERT
24985	24985-DE-EPA	60134692.0	01660076.9	1152443	DE	9-Jul-2008	26-Apr-2021	26-Apr-2001	SERIAL BUS CONTROLLED SMART KEYPAD ILLUMINATION
24985	24985-FR-EPA	1152443	01660076.9	1152443	FR	9-Jul-2008	26-Apr-2021	26-Apr-2001	SERIAL BUS CONTROLLED SMART KEYPAD ILLUMINATION
24985	24985-GB-EPA	1152443	01660076.9	1152443	GB	9-Jul-2008	26-Apr-2021	26-Apr-2001	SERIAL BUS CONTROLLED SMART KEYPAD ILLUMINATION
24985	24985-HK-FPR	1038827	01108827.1	1038827	HK	23-Jan-2009	26-Apr-2021	17-Dec-2001	SERIAL BUS CONTROLLED SMART KEYPAD ILLUMINATION
25052	25052-US-PCT	7054658	09/625202		US	30-May-2006	21-Jan-2019	21-Jan-1999	RADIO TELEPHONE
25074	25074-US-PCT	7274747	09/625201		US	25-Sep-2007	8-Apr-2022	21-Jan-1999	A RADIO TELEPHONE
25095	25095-US-NP	7245652	09/734885	20010004379	US	17-Jul-2007	16-Jul-2022	13-Dec-2000	RAKE COMBINER
25104	25104-US-NP	6628266	09/604733		US	30-Sep-2003	28-Jun-2020	28-Jun-2000	JOYSTICK-ELASTO RESISTIVE
25210	25210-CN-NP	01122555.6	01122555.6	1331539	CN	25-Mar-2009	2-Jul-2021	2-Jul-2001	3 WAY SCROLL KEY (THIN)
25210	25210-DE-EPA	60144266.0	01305465.5	1168393	DE	23-Mar-2011	22-Jun-2021	22-Jun-2001	3 WAY SCROLL KEY (THIN)
25210	25210-FR-EPA	1168393	01305465.5	1168393	FR	23-Mar-2011	22-Jun-2021	22-Jun-2001	3 WAY SCROLL KEY (THIN)
25210	25210-US-NP	6634816	09/893420	20020041784	US	21-Oct-2003	29-Jun-2021	29-Jun-2001	3 WAY SCROLL KEY (THIN)
25310	25310-US-NP	6222416	09/464247		US	24-Apr-2001	16-Dec-2019	16-Dec-1999	SIGNAL AMPLIFIER CIRCUIT WITH SYMMETRICAL INPUTS AND OUTPUTS
25460	25460-HK-FPR	1035465	01106147.8	1035465	HK	17-Dec-2004	15-Sep-2019	30-Aug-2001	SMART PINYIN INPUT
25473	25473-US-NP	7085568	09/894382	20020049056	US	1-Aug-2006	28-Jun-2021	28-Jun-2001	LPRF BASED GUIDING DEVICE FOR VISUALLY CHALLENGED PERSONS
25534	25534-US-NP	6738476	09/895724	20030002661	US	18-May-2004	29-Jun-2021	29-Jun-2001	METHOD AND SYSTEM FOR ENHANCED COLOR TRANSMISSION
25634	25634-US-PCT	7003055	10/486621	20040240591	US	21-Feb-2006	25-Oct-2022	25-Oct-2002	SYSTOLIC EQUALIZER ARCHITECTURE
25702	25702-US-PCT	7400686	10/744351	20050018598	US	15-Jul-2008	27-Oct-2025	24-Jul-2003	CHANNEL ESTIMATION AND SIGNAL DETECTION FOR MULTI-CARRIER CDMA SYSTEMS WITH PULSE-SHAPING FILTER
25873	25873-US-PCT	7903610	10/296976	20030224774	US	8-Mar-2011	20-Jan-2025	2-Apr-2002	REVERSE LINK HANDOFF MECHANISM WITH HYBRID-ARQ AND CELL SITESELECTION IN CDMA2000-1X EV-DV SYSTEM
25900	25900-US-NP	7130364	10/062622	20030142768	US	31-Oct-2006	31-Jan-2022	31-Jan-2002	INTERFERENCE DEPENDENT adc HEADROOM ADJUSTMENT
26090	26090-US-NP	6693886	09/498643		US	17-Feb-2004	7-Feb-2020	7-Feb-2000	USING SEPARATE Q931 CONNECTIONS PER GSM TRANSACTION
26508	26508-US-NP	6850778	09/558008		US	1-Feb-2005	24-Apr-2020	24-Apr-2000	A METHOD TO FORM AN IP BASED TELECOMMUNICATION GATEWAY
27395	27395-US-NP	6947404	09/707061		US	20-Sep-2005	6-Nov-2020	6-Nov-2000	WAP AUTOLOGIN
28047	28047-US-NP	6886036	09/432069		US	26-Apr-2005	2-Nov-2019	2-Nov-1999	TO PRINT THE DOCUMENT TO E-SERVICE
28314	28314-US-NP	7082316	10/027501	20020128030	US	25-Jul-2006	20-Dec-2021	20-Dec-2001	GROUP CREATION BY USING PAN TRANSCEIVER
28333	28333-US-NP	7640350	10/027302	20020141405	US	29-Dec-2009	26-May-2023	20-Dec-2001	ADVERTISEMENT MATERIAL ON SMART CARDS IN PRELOADED FORM AND/OR DOWNLOADED FORM FOR ADS DISPLAYING DURING DOWNLOAD OPERATION
28336	28336-US-NP	7043548	10/027303	20020093923	US	9-May-2006	20-Dec-2021	20-Dec-2001	DOWNLOAD INDICATOR PROCESSED BY BLUETOOTH KIOSK AND SENT INGRAPHICAL FORM
28411	28411-US-NP	7200627	10/101070	20030088593	US	3-Apr-2007	11-Nov-2022	20-Mar-2002	PORTABLE MEDIA ARCHIVE FILESYSTEM ORGANIZATION
28448	28448-US-NP	7366905	10/090422	20030163700	US	29-Apr-2008	10-Aug-2023	28-Feb-2002	TEMPORARY KEY CERTIFICATION
28476	28476-US-NP	8595283	10/770868	20040210628	US	26-Nov-2013	17-Dec-2032	3-Feb-2004	SIMPLE HOME APPLICATIONS BASED ON MOBILE DEVICE & DIGITAL TELEVISION INTERACTION
28570	28570-US-CNT	7924827	10/818542	20040190513	US	12-Apr-2011	2-Mar-2026	5-Apr-2004	BOOLEAN PROTOCOL FILTERING

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
28615	28615-US-NP	7733909	10/366404	20030200328	US	8-Jun-2010	9-Mar-2029	14-Feb-2003	IDENTIFICATION METHOD FOR SERIE OF IP PACKETS THAT FORM A BURST
28628	28628-US-PCT	7986687	10/529257	20070053358	US	26-Jul-2011	2-Dec-2025	27-Sep-2002	METHOD TO FORM DYNAMICALLY FILE DELIVERY MULTICAST GROUPS USING SET QUEUES
28795	28795-US-NP	7681149	10/442487	20040233238	US	16-Mar-2010	15-Jan-2027	21-May-2003	NAVIBARS 2 PC/DIGITAL RECEIVER USER INTERFACE - NAVIGATION
28814	28814-US-PCT	7697478	10/569298	20060262751	US	13-Apr-2010	17-Apr-2027	29-Sep-2004	SIMILAR SERVICE HANDOVER
28867	28867-US-PCT	7751515	10/572806	20070053448	US	6-Jul-2010	25-Mar-2026	22-Sep-2003	FAST SCATTERED PILOT SYNCHRONIZATION
28873	28873-US-PCT	8125945	10/576899	20070072579	US	28-Feb-2012	27-Oct-2026	10-Nov-2004	VARIABLE LEVEL SERVICE SUPPORT WITH TIME SLICING
28884	28884-US-PCT	8774059	10/570889	20070008910	US	8-Jul-2014	15-Apr-2027	16-Sep-2004	IP ENCAPSULATOR AS A MULTICAST PROXY IN A BROADCAST NETWORK
28892	28892-US-PCT	7711315	10/574193	20060294205	US	4-May-2010	30-Aug-2026	26-Oct-2004	IPDC SERVICE LINKS EMBEDDED INTO MOBILE OPERATORS SERVICE PORTALS
28951	28951-US-PCT	7877663	10/578424	20070266294	US	25-Jan-2011	16-May-2027	26-Oct-2004	ERASURE DECODING FOR THE MPE-FEC WITH UNKNOWN LOCATION OF THE ZERO PADDING
29164	29164-US-NP	6631170	09/454326		US	7-Oct-2003	3-Dec-2019	3-Dec-1999	RADIO FREQUENCY RECEIVER
29413	29413-US-NP	6646841	09/739231	20010004308	US	11-Nov-2003	19-Dec-2020	19-Dec-2000	ESD-PROTECTION OF BALANCED RF-CIRCUIT
29470	29470-US-NP	6577204	10/012524	20020093389	US	10-Jun-2003	12-Dec-2021	12-Dec-2001	RF-VCXO CIRCUIT TOPOLOGY
29568	29568-CN-PCT	ZL01817460.4	01817460.4		CN	16-Dec-2005	27-Jun-2021	27-Jun-2001	WAP BUTTON FOR BOOKMARKS
29568	29568-DE-EPT	60110243.6	01954270.3	1314292	DE	20-Apr-2005	27-Jun-2021	27-Jun-2001	WAP BUTTON FOR BOOKMARKS
29568	29568-FR-EPT	1314292	01954270.3	1314292	FR	20-Apr-2005	27-Jun-2021	27-Jun-2001	WAP BUTTON FOR BOOKMARKS
29568	29568-GB-EPT	1314292	01954270.3	1314292	GB	20-Apr-2005	27-Jun-2021	27-Jun-2001	WAP BUTTON FOR BOOKMARKS
29568	29568-NL-EPT	1314292	01954270.3	1314292	NL	20-Apr-2005	27-Jun-2021	27-Jun-2001	WAP BUTTON FOR BOOKMARKS
29568	29568-US-PCT	7184758	10/362587	20040048603	US	27-Feb-2007	27-Jun-2021	27-Jun-2001	WAP BUTTON FOR BOOKMARKS
29571	29571-US-PCT	7274927	10/344159	20040092266	US	25-Sep-2007	7-Dec-2021	25-Jul-2001	PHONE SERVER
29582	29582-US-NP	6597319	09/943514	20020024470	US	22-Jul-2003	31-Aug-2021	31-Aug-2001	INTERNAL ANTENNA
29591	29591-US-PCT	7129790	10/518329	20060114068	US	31-Oct-2006	24-May-2022	24-May-2002	DUAL FEEDBACK TRANSMITTER
29592	29592-US-NP	7062236	10/020897	20020090921	US	13-Jun-2006	19-Dec-2021	19-Dec-2001	OUTPUT ENVELOPE CONTROL THROUGH AMPLIFIER BIAS CONTROL
29634	29634-US-NP	6806815	09/847140		US	19-Oct-2004	2-May-2021	2-May-2001	KEYPAD DESIGN FOR LOW POWER KEY ILLUMINATION
29699	29699-US-NP	6433733	09/851239	20010045905	US	13-Aug-2002	8-May-2021	8-May-2001	PSEUDO DGPS METHOD FOR RELATIVE POSITIONING
29806	29806-DE-EPA	60132650.4	01660126.2	1168394	DE	30-Jan-2008	28-Jun-2021	28-Jun-2001	QWERTY KEYBOARD
29806	29806-US-NP	6483051	09/895729	20020080008	US	19-Nov-2002	29-Jun-2021	29-Jun-2001	QWERTY KEYBOARD
29931	29931-US-NP	6611675	09/669643		US	26-Aug-2003	26-Sep-2020	26-Sep-2000	ANTENNA VERIFICATION METHOD FOR 3GPP CLOSED LOOP MODE 1 TRANSMITTER ANTENNA DIVERSITY
29948	29948-US-NP	7401022	09/954602	20020055837	US	15-Jul-2008	7-Mar-2023	17-Sep-2001	CORRUPTED SPEECH RECOGNITION IN TETRA
30560	30560-US-NP	7206935	10/123878	20020188724	US	17-Apr-2007	3-Jul-2024	15-Apr-2002	PRODUCT WATCHDOG
30569	30569-US-NP	7099326	10/084003	20020150085	US	29-Aug-2006	16-Oct-2024	25-Feb-2002	FAST GPRS FOR IPV6
31691	31691-TW-NP	1325115	94102557		TW	21-May-2010	28-Jan-2025	28-Jan-2005	TWIN-BOX INPUT METHOD
32170	32170-US-PCT	7689638	10/534007	20060117228	US	30-Mar-2010	19-Mar-2026	28-Nov-2002	ROBUST PATTERN RECOGNITION FOR FAULT-TOLERANT STRING SEARCHAPPLICATION
32303	32303-GB-EPA	1174732	01305615.5	1174732	GB	10-Jan-2007	28-Jun-2021	28-Jun-2001	ACOUSTICAL PROXIMITY DETECTION
32363	32363-DE-EPA	60114540.2	01307314.3	1202308	DE	2-Nov-2005	29-Aug-2021	29-Aug-2001	DOUBLE-SIDED KEYBOARD UTILIZING A SINGLE DOME SHEET
32363	32363-GB-EPA	1202308	01307314.3	1202308	GB	2-Nov-2005	29-Aug-2021	29-Aug-2001	DOUBLE-SIDED KEYBOARD UTILIZING A SINGLE DOME SHEET
32375	32375-US-NP	7116714	09/924582	20020054641	US	3-Oct-2006	9-Aug-2021	9-Aug-2001	PROTECTION OF INTRA PICTURES IN VIDEO STREAMING

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
32723	32723-US-NP	7031718	10/099842	20020177413	US	18-Apr-2006	13-Mar-2022	13-Mar-2002	QOS REQUEST CHECKING AND QOS PROFILES IN MS
32885	32885-KR-PCD	0954821	2009-7003612	09-34997	KR	19-Apr-2010	21-Oct-2022	20-Feb-2009	PERSONALISATION OF KEYBOARD BY MEANS OF APPLICATION SPECIFICKEYMAT ON TOP OF EXISTING KEYBOARD CIRCUITY
32885	32885-KR-PCT	0954764	2004-7005637	2004-45850	KR	19-Apr-2010	21-Oct-2022	21-Oct-2002	PERSONALISATION OF KEYBOARD BY MEANS OF APPLICATION SPECIFICKEYMAT ON TOP OF EXISTING KEYBOARD CIRCUITY
32923	32923-US-NP	7027784	09/945772	20030045250	US	11-Apr-2006	4-Sep-2021	4-Sep-2001	POWER DETECTION METHOD FOR VARYING ENVELOPE SIGNALS
32966	32966-US-NP	7033959	10/159809	20030224621	US	25-Apr-2006	31-May-2022	31-May-2002	CONCEPT OF ORGANIC SEMICONDUCTOR APPLICATION PLATFORM IN ROLL-TO-ROLL MANUFACTURING
33104	33104-US-NP	7076328	10/303383	20030104802	US	11-Jul-2006	25-Nov-2022	25-Nov-2002	AT-COMMAND CONTROLLED DATABASE IN MOBILE TERMINAL
33200	33200-CN-NP	ZL02125289.6	02128589.6	1407506	CN	24-May-2006	13-Aug-2022	13-Aug-2002	HALIOS TOUCH PAD IN A WIRELESS TELECOMMUNICATION TERMINALL
33200	33200-DE-EPA	60231365.1	02016636.9	1288848	DE	4-Mar-2009	25-Jul-2022	25-Jul-2002	HALIOS TOUCH PAD IN A WIRELESS TELECOMMUNICATION TERMINALL
33200	33200-FR-EPA	1288848	02016636.9	1288848	FR	4-Mar-2009	25-Jul-2022	25-Jul-2002	HALIOS TOUCH PAD IN A WIRELESS TELECOMMUNICATION TERMINALL
33200	33200-GB-EPA	1288848	02016636.9	1288848	GB	4-Mar-2009	25-Jul-2022	25-Jul-2002	HALIOS TOUCH PAD IN A WIRELESS TELECOMMUNICATION TERMINALL
33201	33201-CN-NP	02128593.4	02128593.4	1405728	CN	18-Jul-2007	13-Aug-2022	13-Aug-2002	TOUCH SCREEN LOCK TO DISABLE ACCIDENTAL INPUT
33399	33399-US-PCT		10/537689	20070042815	US		20-Dec-2022	20-Dec-2002	APPLICATION DEPENDENT PRESENCE SETTING.
33634	33634-US-PCT	7181178	10/480124	20040185808	US	20-Feb-2007	27-Jun-2022	27-Jun-2002	AUTOMATIC GAIN CONTROL
33837	33837-CN-NP	200310123955.8	200310123955.8	1508750	CN	23-Dec-2009	19-Dec-2023	19-Dec-2003	ENCODER
33837	33837-DE-EPA	60327684.9	03027986.3	1431713	DE	20-May-2009	5-Dec-2023	5-Dec-2003	ENCODER
33837	33837-FR-EPA	1431713	03027986.3	1431713	FR	20-May-2009	5-Dec-2023	5-Dec-2003	ENCODER
33837	33837-US-NP	7183536	10/632359	20040118998	US	27-Feb-2007	1-Aug-2023	1-Aug-2003	REFLECTIVE OPTICAL ENCODER FOR INPUT DEVICE
33846	33846-US-PCT	8314883	10/584748	20070238493	US	20-Nov-2012	13-Jul-2026	13-Dec-2004	GRIP STABILISING FEATURE TO ENHANCE VIDEO TAKING ON A MOBLEPHONE DEVICE
33867	33867-KR-PCT	845564	2006-7012967	2006-103276	KR	4-Jul-2008	23-Dec-2024	23-Dec-2004	INTEGRATING ROTATOR TECHNOLOGY WITH A KEYMAT
33873	33873-US-PCT	8680963	11/629012	20090015370	US	25-Mar-2014	25-Nov-2028	27-Jun-2005	API
34124	34124-CN-PCT	ZL02812989.X	02812989.X	1520683	CN	22-Mar-2006	7-Jun-2022	7-Jun-2002	EPG WITH REMINDER FUNCTION
34570	34570-US-NP	7177604	10/335253	20040127268	US	13-Feb-2007	21-Jul-2024	31-Dec-2002	JOYSTICK FOR GAMING AND PDA PHONES
34813	34813-CN-PCT	200580039579.1	200580039579.1	101061697	CN	18-Jul-2012	17-Nov-2025	17-Nov-2005	MOBILE STATION BODY COMPRISED OF STACKED ELEMENTS
34813	34813-KR-PCT	0919158	2007-7013862	2007-89175	KR	21-Sep-2009	17-Nov-2025	17-Nov-2005	MOBILE STATION BODY COMPRISED OF STACKED ELEMENTS
34916	34916-US-NP	7751818	10/705973	20040137902	US	6-Jul-2010	10-Jan-2025	13-Nov-2003	SMART DETECTION OF HOT SPOT BORDER CROSSING IN TECHNOLOGY HANDOFFS
34963	34963-US-NP	7386630	10/719371	20040221051	US	10-Jun-2008	21-Nov-2023	21-Nov-2003	METHODS FOR SUPPORTING DIFFSERV OVER MPLS POLICY BASED MANAGEMENT
35052	35052-CN-PCT	03808267.5	03808267.5	1647379	CN	18-Apr-2007	8-Apr-2023	8-Apr-2003	MECHANIC -OPTICAL SWITCH
35052	35052-DE-EPT	60332451.7	03712187.8	1497920	DE	5-May-2010	8-Apr-2023	8-Apr-2003	MECHANIC -OPTICAL SWITCH
35052	35052-KR-PCT	0997213	2004-7016251	2004-99432	KR	23-Nov-2010	8-Apr-2023	8-Apr-2003	MECHANIC -OPTICAL SWITCH
35052	35052-US-NP	7271743	10/408629	20030193421	US	18-Sep-2007	28-Jun-2024	7-Apr-2003	MECHANIC -OPTICAL SWITCH
35089	35089-DE-EPT	60314840.9	03729516.9	1466462	DE	11-Jul-2007	9-Jan-2023	9-Jan-2003	DEVICE WITH A TWO-SIDED KEYBOARD INSERT
35089	35089-NL-EPT	1466462	03729516.9	1466462	NL	11-Jul-2007	9-Jan-2023	9-Jan-2003	DEVICE WITH A TWO-SIDED KEYBOARD INSERT
35089	35089-US-DIV	7176894	10/634471	20040061685	US	13-Feb-2007	31-Oct-2020	4-Aug-2003	DEVICE WITH A TWO-SIDED KEYBOARD INSERT
35158	35158-US-NP	6812973	10/318811	20030112390	US	2-Nov-2004	13-Dec-2022	13-Dec-2002	DUAL DISPLAY IN ONE LCD-MODULE

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
35253	35253-US-NP	7028230	10/281290	20030091098	US	11-Apr-2006	25-Oct-2022	25-Oct-2002	PARTIALLY FILLED BLOCK INTERLEAVER FOR SYSTEMS USING FORWARD ERROR CORRECTION AND HIGHER ORDER MODULATION
35740	35740-US-DIV	7596392	11/065241	20050143147	US	29-Sep-2009	23-Jan-2023	23-Feb-2005	USING FILE ACCESS FREQUENCY TO MINIMIZE POWER CONSUMPTION BY OPTIMIZING LOCATION ON A ROTATING STORAGE MEDIUM
36166	36166-AU-PCT	2002351015	2002351015		AU	11-Jun-2009	21-Nov-2022	21-Nov-2002	IMPLEMENTATION OF MANAGEMENT TREE RUN-TIME NODES
36166	36166-CN-PCT	02829944.2	02829944.2	1695139	CN	29-Jul-2009	21-Nov-2022	21-Nov-2002	IMPLEMENTATION OF MANAGEMENT TREE RUN-TIME NODES
36166	36166-KR-PCT	0731272	2005-7009190	2005-85093	KR	15-Jun-2007	21-Nov-2022	21-Nov-2002	IMPLEMENTATION OF MANAGEMENT TREE RUN-TIME NODES
36166	36166-US-NP	7269602	10/720012	20040158583	US	11-Sep-2007	21-Apr-2025	21-Nov-2003	IMPLEMENTATION OF MANAGEMENT TREE RUN-TIME NODES
36166	36166-ZA-PCT	2005/3954	2005/03954		ZA	30-Aug-2006	21-Nov-2022	21-Nov-2002	IMPLEMENTATION OF MANAGEMENT TREE RUN-TIME NODES
36187	36187-US-CIP	7223681	10/847409	20040251544	US	29-May-2007	16-May-2023	17-May-2004	PRINCIPLE OF OPTIMUM CSP (BGA) COMPONENT BALLOUT DESIGN FOR IMPROVED RELIABILITY UNDER DROP AND THERMAL CYCLING LOADS
36252	36252-US-CNT	7474884	11/519426	20070129042	US	6-Jan-2009	16-Sep-2026	11-Sep-2006	A RECEIVER
36252	36252-US-PCT	7107031	10/296964	20040014424	US	12-Sep-2006	30-May-2021	30-May-2001	A RECEIVER
36253	36253-US-NP	7321911	10/797951	20040249874	US	22-Jan-2008	21-Mar-2026	11-Mar-2004	SIMPLE DIGITAL SINUSOIDAL GENERATOR
36259	36259-US-NP	7002417	10/394455	20040183602	US	21-Feb-2006	21-Mar-2023	21-Mar-2003	LOOP FILTER COMPENSATION IN POLAR TRANSMITTER
36264	36264-US-NP	7720029	10/793191	20040218562	US	18-May-2010	31-Jan-2027	4-Mar-2004	AVOIDANCE OF CELLULAR TRANSMITTER HARMONICS IN WLAN TERMINAL
36349	36349-US-NP	7178725	10/874886	20050017064	US	20-Feb-2007	23-Jun-2024	23-Jun-2004	METHOD FOR INCREASING KEYPAD LEGIBILITY IN LOW AMBIENT LIGHT CONDITIONS
36886	36886-US-NP	7835742	10/748981	20040266436	US	16-Nov-2010	11-Feb-2027	30-Dec-2003	USING CURRENT TARGET NETWORK IN ROAMING DECISIONS
37102	37102-US-NP	7613607	10/803103	20050137864	US	3-Nov-2009	19-Sep-2026	18-Mar-2004	CODED DOMAIN LEVEL CONTROL OF COMPRESSED SPEECH
37128	37128-US-CIP	7200172	10/439068	20040170234	US	3-Apr-2007	27-Feb-2023	15-May-2003	CHANNEL ESTIMATOR SUPPRESSING CONSTANT MODULUS INTERFERENCE
37142	37142-US-NP	7574411	10/835597	20040267785	US	11-Aug-2009	21-Jan-2025	29-Apr-2004	LOW MEMORY DECISION TREE METHOD FOR TEXT-TO-PHONEME MAPPING
37170	37170-US-NP	9213779	11/017492	20050193089	US	15-Dec-2015	23-Sep-2030	20-Dec-2004	AUTOMATED PRELOADING OF DIGITAL CONTENT TO MOBILE TERMINALS
37219	37219-US-NP	7274967	10/684339	20050080498	US	25-Sep-2007	19-Jan-2026	10-Oct-2003	METHOD OF DATA STREAMING BETWEEN TWO PROCESSORS FOR THE PURPOSE OF WAVETABLE SOUND SYNTHESIS
37317	37317-US-NP	7620616	11/025374	20050207656	US	17-Nov-2009	9-Nov-2026	29-Dec-2004	HIERARCHICAL AUTOCOMPLETE METHOD
37401	37401-US-NP	7489736	10/993486	20060078063	US	10-Feb-2009	6-Jan-2027	22-Nov-2004	BLOCK-INTERLEAVED BLOCK MODULATION
37498	37498-US-NP	7523491	11/028460	20080010676	US	21-Apr-2009	6-Mar-2027	3-Jan-2005	ACCESSING MOBILE SERVER FROM OUTSIDE OPERATOR FIREWALLS
37751	37751-US-NP	8069219	11/071771	20060200541	US	29-Nov-2011	30-Apr-2030	3-Mar-2005	AUTOMATIC PORTAL FOR MOBILE WEB-SERVERS
39094	39094-US-NP	7283665	10/417423	20040208362	US	16-Oct-2007	1-May-2025	15-Apr-2003	IMAGE FORMAT AND ITS ENCODING AND DECODING METHOD FOR 3D DISPLAY DEVICES
39160	39160-US-PCT	7800664	11/474228	20070002152	US	21-Sep-2010	12-Jul-2026	25-Dec-2003	CAMERA SYSTEM HAVING AUTO FOCUS AND PROCESSING BASED SHARPENING FOR MOBILE PHONES
39199	39199-US-PCT	7903622	11/596099	20070242788	US	8-Mar-2011	4-Jul-2027	28-May-2004	WLAN POWER SAVING ARCHITECTURE WITH DYNAMIC VDD HOPPING
39680	39680-US-NP	7649865	10/689601	20040127243	US	19-Jan-2010	22-Oct-2023	22-Oct-2003	SUPPORTING THE RRC STATE SWITCHING FROM CELL_PCH TO CELL_DCH CAUSED BY MBMS DATA ACTIVATION
39779	39779-US-NP	7340250	10/646779	20040235473	US	4-Mar-2008	17-Apr-2024	25-Aug-2003	ITF RELIABLE SERVER POOLING USAGE WITHIN IP RAN AND DISTRIBUTED RAN
40119	40119-US-NP	7574193	10/762531	20050101288	US	11-Aug-2009	17-Feb-2024	23-Jan-2004	EMERGENCY CALL HANDLING IN SHARED NETWORKS

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
40240	40240-US-NP	7948952	11/147372	20050286540	US	24-May-2011	18-Oct-2027	8-Jun-2005	OOB IN INTELLIGENT EDGE
40256	40256-US-NP	8023456	11/054434	20060140133	US	20-Sep-2011	17-Nov-2026	10-Feb-2005	ENHANCED AAL2 RESERVATION FOR COMMON AND SHARED CHANNELS INIUB
40301	40301-US-NP	8060094	10/871594	20050208972	US	15-Nov-2011	19-Nov-2027	21-Jun-2004	EXTENSION OF BSSAP MESSAGE LENGTH
40347	40347-US-NP	7633443	11/475119	20060290568	US	15-Dec-2009	13-Oct-2026	27-Jun-2006	IMPROVED ANGULAR LOCATION ESTIMATION METHOD FOR CIRTT
40407	40407-US-NP	7680213	10/920349	20050232374	US	16-Mar-2010	1-May-2028	18-Aug-2004	ENABLING 16QAM MODULATION BY QPSK MODULATORS
40423	40423-US-NP	7596167	11/324224	20070019536	US	29-Sep-2009	9-Dec-2027	4-Jan-2006	RESOURCE ALLOCATION FOR MULTI-ANTENNA SYSTEMS BASED ON FEEDBACK ANALYSIS
40458	40458-DE-EPT	602006050603.1	06700271.7	1834444	DE	19-Oct-2016	4-Jan-2026	4-Jan-2006	(BINARY) STATE BASED CONTROL AND MONITORING MODEL FOR WIREDAND WIRELESS NETWORKS AND SERVICES
40458	40458-FR-EPT	1834444	06700271.7	1834444	FR	19-Oct-2016	4-Jan-2026	4-Jan-2006	(BINARY) STATE BASED CONTROL AND MONITORING MODEL FOR WIREDAND WIRELESS NETWORKS AND SERVICES
40458	40458-GB-EPT	1834444	06700271.7	1834444	GB	19-Oct-2016	4-Jan-2026	4-Jan-2006	(BINARY) STATE BASED CONTROL AND MONITORING MODEL FOR WIREDAND WIRELESS NETWORKS AND SERVICES
40458	40458-NL-EPT	1834444	06700271.7	1834444	NL	19-Oct-2016	4-Jan-2026	4-Jan-2006	(BINARY) STATE BASED CONTROL AND MONITORING MODEL FOR WIREDAND WIRELESS NETWORKS AND SERVICES
40458	40458-US-NP	8144599	11/111802	20060153083	US	27-Mar-2012	28-Jul-2028	22-Apr-2005	(BINARY) STATE BASED CONTROL AND MONITORING MODEL FOR WIREDAND WIRELESS NETWORKS AND SERVICES
40490	40490-US-NP	7486671	10/923506	20050281256	US	3-Feb-2009	31-Aug-2026	23-Aug-2004	A METHOD TO CARRY MANAGEMENT SESSIONS OF MULTIPLE TERMINALSOVER SINGLE TCP/IP CONNECTION
40520	40520-US-NP	8149783	10/998226	20060068780	US	3-Apr-2012	4-Nov-2026	29-Nov-2004	PACKET NSI DISTRIBUTION
40621	40621-US-NP	7751423	11/221786	20060056340	US	6-Jul-2010	23-Nov-2027	9-Sep-2005	DELAY-DIFFERENTIATED SCHEDULING
40759	40759-US-NP	7505445	11/262741	20060092897	US	17-Mar-2009	8-Dec-2026	1-Nov-2005	MISUSE DETECTOR FOR FLIGHT SAFE MODE
40943	40943-CN-PCT	938590	200680028055.7	101233720	CN	25-Apr-2012	29-Jun-2026	29-Jun-2006	Resource Allocation Method, Communication System, Network Element, Module, Computer Program Product and Computer Program Distribution Medium
40943	40943-DE-EPT	60 2006 033 853.8	06764538.2	1900146	DE	26-Dec-2012	29-Jun-2026	29-Jun-2006	Resource Allocation Method, Communication System, Network Element, Module, Computer Program Product and Computer Program Distribution Medium
40943	40943-FR-EPT	1900146	06764538.2	1900146	FR	26-Dec-2012	29-Jun-2026	29-Jun-2006	Resource Allocation Method, Communication System, Network Element, Module, Computer Program Product and Computer Program Distribution Medium
40943	40943-GB-EPT	1900146	06764538.2	1900146	GB	26-Dec-2012	29-Jun-2026	29-Jun-2006	Resource Allocation Method, Communication System, Network Element, Module, Computer Program Product and Computer Program Distribution Medium
40943	40943-RU-PCT	2392755	2007148805		RU	20-Jun-2010	29-Jun-2026	29-Jun-2006	Resource Allocation Method, Communication System, Network Element, Module, Computer Program Product and Computer Program Distribution Medium
40943	40943-ZA-PCT	2008/0067	2008/00067		ZA	31-Dec-2008	29-Jun-2026	29-Jun-2006	RESOURCE ALLOCATION METHOD, COMMUNICATION SYSTEM, NETWORK ELEMENT, MODULE, COMPUTER PROGRAM PRODUCT AND COMPUTER PROGRAM DISTRIBUTION MEDIUM
40989	40989-US-NP	7653857	11/350866	20060236190	US	26-Jan-2010	2-May-2027	10-Feb-2006	POWER CONTROL FOR B3G CELLULAR NETWORKS WITH HARQ
41186	41186-US-NP	7545768	11/179607	20060251257	US	9-Jun-2009	26-Jun-2027	13-Jul-2005	USE OF GENERIC AUTHENTICATION ARCHITECTURE FOR MOBILE IPV4
41194	41194-US-NP	8032133	11/143720	20060229068	US	4-Oct-2011	3-Jun-2025	3-Jun-2005	UNC-PS SELECTION
41231	41231-US-NP	8538451	11/260228	20070015522	US	17-Sep-2013	26-May-2031	28-Oct-2005	PASSIVE LOCATION DATA ARCHITECTURE
41318	41318-US-NP	7684323	11/229606	20070005712	US	23-Mar-2010	26-Dec-2027	20-Sep-2005	ENHANCEMENT OF ISC DEFAULT HANDLING
41324	41324-US-NP	7280057	11/230068	20060273934	US	9-Oct-2007	19-Sep-2025	19-Sep-2005	SEEKABLE SEARCH WINDOW BASED (DE)COMPRESSION

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
41335	41335-US-NP	7933211	11/737287	20080144488	US	26-Apr-2011	8-Dec-2028	19-Apr-2007	PRIORIZATION ATTRIBUTE FOR ALARMS, THAT HELPS RANKING THE ALARMS AND REPAIR URGENCY ORDER.
41712	41712-US-NP	7587684	11/337935	20070174785	US	8-Sep-2009	5-Feb-2027	23-Jan-2006	LIFT - MOVEMENT
42220	42220-US-PCT	7990905	10/584973	20080075178	US	2-Aug-2011	5-Nov-2026	30-Dec-2003	EFFECTIVE CO-EXISTING OF CELLULAR AND RELAY LINKS
42241	42241-US-NP	7848236	10/984853	20060034331	US	7-Dec-2010	15-Aug-2028	10-Nov-2004	DIFFERENTIATION OF QUALITY CLASSES TO DIFFERENT PDUS WITH SUPPORT FOR MULTIPLE TERMINALS
43226	43226-CN-PCT	ZL200580013087.5	200580013087.5	1947088	CN	25-Jun-2008	17-Feb-2025	17-Feb-2005	USING INVENTION NC19490 FOR HAPTICS PURPOSES E.G. AS A ROLLER BRAKE
43226	43226-DE-EPT	602005048884.7	05702512.4	1743235	DE	6-Apr-2016	17-Feb-2025	17-Feb-2005	USING INVENTION NC19490 FOR HAPTICS PURPOSES E.G. AS A ROLLER BRAKE
43226	43226-KR-PCT	864950	2006-7024773	07-11539	KR	16-Oct-2008	17-Feb-2025	17-Feb-2005	USING INVENTION NC19490 FOR HAPTICS PURPOSES E.G. AS A ROLLER BRAKE
43290	43290-US-NP	7644267	10/879585	20050228985	US	5-Jan-2010	30-Oct-2026	30-Jun-2004	NSM PROXY
43375	43375-US-PCT	7912424	10/591762	20070205874	US	22-Mar-2011	19-Nov-2025	9-Mar-2004	RFID IN DECIVE MANUALS
43387	43387-US-NP	7362731	10/839717	20040208144	US	22-Apr-2008	19-Mar-2026	6-May-2004	A MOVEMENT DETECTION ALGORITHM FOR FAST AND SMOOTH HANDOVER HETEROGENEOUS ACCESS TECHNOLOGY
44030	44030-US-NP	7677817	11/227992	20060056837	US	16-Mar-2010	20-Jan-2026	14-Sep-2005	SLIDE AS A CAMERA SELECTOR IN A PHONE WITH TWO CAMERAS
44278	44278-US-NP	7342573	10/887214	20060022952	US	11-Mar-2008	17-May-2026	7-Jul-2004	COMBINED SEAL AND ACTUATOR MADE FROM ELECTRO STRICTIVE POLYMER, THE SEAL-ACTUATOR
44303	44303-US-NP	7199503	11/150835	20050285477	US	3-Apr-2007	10-Jun-2025	10-Jun-2005	ENERGY SAVING DRIVING CIRCUIT FOR PIEZOELECTRIC MOTOR
44336	44336-US-NP	7460869	11/132372	20060205406	US	2-Dec-2008	10-Feb-2027	19-May-2005	ADAPTIVE DVB-H HANDOVER ALGORITHM MEASUREMENT INTERVAL
44945	44945-US-NP	8407593	11/172222	20060005156	US	26-Mar-2013	29-Nov-2026	29-Jun-2005	AN APPLICATION PERSONALISATION TOOL WITH A MODEL-BASED DYNAMIC UI
45283	45283-US-NP	7385947	11/170099	20060251008	US	10-Jun-2008	9-Nov-2026	30-Jun-2005	HOT SPOT GSM NETWORK
45402	45402-US-PCT	7970369	11/921701	20090122204	US	28-Jun-2011	30-Jun-2027	7-Jun-2005	METHOD FOR EFFICIENT CHANNEL SEARCH
45416	45416-US-DIV	7640022	11/779608	20080013510	US	29-Dec-2009	5-Nov-2024	18-Jul-2007	MODIFICATIONS FOR MBOA MAC DRP PROTOCOL
45434	45434-US-CIP	7808966	11/137505	20050249167	US	5-Oct-2010	29-Aug-2025	26-May-2005	MODIFICATIONS TO ADAPTIVE BEACON PERIOD IN MBOA MAC
45521	45521-US-NP	7614068	11/252906	20060242091	US	3-Nov-2009	6-Dec-2027	18-Oct-2005	ESG TRANSPORT - ESG FRAGMENTS DISTRIBUTION AND FLUTE DELIVERY SESSION MANAGEMENT IN DVB-H NETWORKS
45579	45579-CN-PCT	200680044143.6	200680044143.6	101317128	CN	28-Mar-2012	2-Oct-2026	2-Oct-2006	LOW-COST AUTONOMOUS DISPLAY
45579	45579-JP-PCT	5334580	2008-535111	2009-519472	JP	9-Aug-2013	2-Oct-2026	2-Oct-2006	LOW-COST AUTONOMOUS DISPLAY
45612	45612-US-NP	7738863	11/410102	20070050820	US	15-Jun-2010	9-Oct-2028	25-Apr-2006	MOBILE TV CLIENT MIDDLEWARE
45621	45621-US-NP	7756101	11/322124	20070153717	US	13-Jul-2010	11-Aug-2027	30-Dec-2005	RAPID RESOLUTION OF RELINQUISH REQUEST FOR UNSAFE RESERVATION
46147	46147-US-NP	7839940	11/285590	20060193391	US	23-Nov-2010	17-Jun-2029	21-Nov-2005	ORDERED ARQ FOR MULTICARRIER SYSTEMS
46165	46165-US-NP	7965726	11/401246	20060227796	US	21-Jun-2011	16-Aug-2028	11-Apr-2006	METHODS AND APPARATUS TO FACILITATE REAL-TIME PACKET SCHEDULING IN A WIRELESS COMMUNICATION SYSTEM
46407	46407-US-NP	7946491	11/462152	20080029602	US	24-May-2011	24-Mar-2030	3-Aug-2006	CAMERA BARCODE READER WITH AUTOMATIC LOCALIZATION, DETECTION OF ORIENTATION, AND TYPE CLASSIFICATION
46541	46541-US-NP	7707474	11/193455	20060026490	US	27-Apr-2010	3-Apr-2026	1-Aug-2005	OUTER LOOP POWER CONTROL WITH TRANSPORT BLOCK DIVERSITY TRANSMISSION
46649	46649-US-NP	7489734	11/320568	20070104282	US	10-Feb-2009	9-Aug-2027	30-Dec-2005	A HYBRID 2F/FDE EQUALIZER
46663	46663-US-NP	8059582	11/714727	20080161013	US	15-Nov-2011	8-Nov-2028	7-Mar-2007	IMPROVING UMA CELL ACCESS
46678	46678-US-NP	7907672	11/526012	20070071123	US	15-Mar-2011	12-Oct-2029	25-Sep-2006	FINE TIME AND FREQUENCY SYNCHRONISATION FOR 3.9G
46717	46717-US-NP	7764705	11/808902	20080025200	US	27-Jul-2010	11-Apr-2028	13-Jun-2007	IRC RECEIVER FOR DISTRIBUTED FDMA

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
46726	46726-US-NP	8027304	11/483403	20070060127	US	27-Sep-2011	17-Aug-2028	6-Jul-2006	PRE-EXCHANGED NONCES FOR FASTER INTER-BS HANDOVERS
46731	46731-US-NP	8208963	11/711681	20080150514	US	26-Jun-2012	17-Apr-2029	28-Feb-2007	FEEDBACK ASSISTED CARRIER PHASE SYNCHRONIZATION FOR DISTRIBUTED ANTENNAS SYSTEMS
46779	46779-US-PCT	8266487	12/438666	20090254789	US	11-Sep-2012	14-Jul-2028	24-Aug-2006	UNEQUAL ERROR PROTECTION FOR COORDINATED POWER SEQUENCE FORINTERFERENCE CONTROL IN BEYOND-3G RADIO SYSTEM
46791	46791-US-NP	8059577	11/592102	20070098102	US	15-Nov-2011	7-Apr-2030	1-Nov-2006	SUBCHANNEL ASSIGNMENT METHOD FOR RELAY NODES
46829	46829-US-NP	7769117	11/724235	20080014876	US	3-Aug-2010	2-Jun-2029	15-Mar-2007	3.9G RECEIVER WHICH BY-PASSES MOTOROLA'S IRC PATENT
46858	46858-US-NP	8649365	11/649814	20070202902	US	11-Feb-2014	8-May-2029	5-Jan-2007	DEDICATED SYNCHRONIZATION SIGNAL FOR OFDM SYSTEM
47100	47100-DE-EPT	602005050115.0	05702172.7	1834424	DE	31-Aug-2016	3-Jan-2025	3-Jan-2005	COMPACT FRAME NUMBER REPRESENTATION METHOD
47100	47100-US-PCT	8144701	11/794504	20100034189	US	27-Mar-2012	29-Aug-2027	3-Jan-2005	COMPACT FRAME NUMBER REPRESENTATION METHOD
47555	47555-US-CNT	8855548	11/646857	20070157257	US	7-Oct-2014	6-Mar-2022	28-Dec-2006	WIRELESS COMMUNICATIONS SYSTEMS AND METHOD
47555	47555-US-PCT	7158753	10/220659	20040127199	US	2-Jan-2007	6-May-2022	1-Mar-2001	WIRELESS COMMUNICATIONS SYSTEMS AND METHOD
47576	47576-US-PCT	7952639	11/884305	20090046194	US	31-May-2011	10-Jan-2027	15-Feb-2005	PIEZO ZOOM LENS
47780	47780-CN-PCT	200680053955.7	200680053955.7	101405682	CN	15-Jan-2014	23-Mar-2026	23-Mar-2006	COMMON TOUCHSCREEN FOR MULTIPLE DISPLAYS
48303	48303-US-NP	8285785	11/274869	20060148512	US	9-Oct-2012	13-Nov-2026	14-Nov-2005	WORKSPACE VIEW
48382	48382-US-NP	7779336	11/244858	20060107189	US	17-Aug-2010	24-Jun-2027	5-Oct-2005	ALIGNING FEC AND MEDIA STRUCTURES TO MINIMIZE DELAY AND BUFFERING REQUIREMENTS
48601	48601-US-NP	7643008	11/065169	20060187211	US	5-Jan-2010	18-Jul-2027	23-Feb-2005	CHANGEABLE KEYPAD LAYOUT WITH CAPACITIVE SENSOR
48775	48775-US-NP	7412158	11/200267	20070031136	US	12-Aug-2008	11-Aug-2026	8-Aug-2005	DEEPER DOF FOR VIDEO
49038	49038-US-DIV	7772826	12/313831	20090179628	US	10-Aug-2010	14-Oct-2025	24-Nov-2008	LIGHTNING DETECTION WITH (MODIFIED) STEREO FM RECEIVER
49527	49527-US-PCT	8230293	11/994030	20090300468	US	24-Jul-2012	25-Aug-2027	29-Jun-2005	TIME SLICING BURST RECEPTION OPTIMIZATION
49538	49538-CA-PCT	2631696	2631696		CA	13-Sep-2016	27-Nov-2026	27-Nov-2006	SYSTEM FOR CUSTOMIZING AND CONFIGURING DYNAMICALLY TERMINALS' APPLICATIONS
49538	49538-RU-PCT	2422882	2008121764		RU	27-Jun-2011	27-Nov-2026	27-Nov-2006	SYSTEM FOR CUSTOMIZING AND CONFIGURING DYNAMICALLY TERMINALS' APPLICATIONS
49538	49538-TW-NP	1434596	95142874	200746847	TW	11-Apr-2014	20-Nov-2026	20-Nov-2006	SYSTEM FOR CUSTOMIZING AND CONFIGURING DYNAMICALLY TERMINALS' APPLICATIONS
49804	49804-US-PCT	8089515	12/087207	20100045800	US	3-Jan-2012	5-Aug-2027	30-Dec-2005	REGION OF INTEREST TRACKING FOR AUTOFOCUS IN VIDEO CAPTURING
49994	49994-US-NP	8699824	11/617310	20080163087	US	15-Apr-2014	28-Oct-2031	28-Dec-2006	MULTI-FEATURE BASED SAMPLING FOR RELEVANCE FEEDBACK IN IMAGERETRIEVAL
50071	50071-US-NP	8559928	11/170730	20070004390	US	15-Oct-2013	6-May-2029	29-Jun-2005	FAMILY CARDS IN PHONE BOOK
50263	50263-US-PCT	8571530	12/086952	20100216440	US	29-Oct-2013	24-Nov-2026	19-Dec-2005	PRIVACY STAMP FOR COVER UI
50458	50458-US-NP	7777728	11/384206	20070216658	US	17-Aug-2010	3-Mar-2029	17-Mar-2006	USING HAND MOVEMENT PATTERNS AND LANGUAGE FREQUENCIES TO ASSIST TOUCH SCREEN TEXT INPUT ERROR CORRECTION
50474	50474-US-NP	8265633	11/463609	20080039100	US	11-Sep-2012	12-Dec-2026	10-Aug-2006	USER DEFINABLE INTERNATIONAL CALL OPERATOR ID
50575	50575-US-NP	7508244	11/477765	20070279110	US	24-Mar-2009	9-Aug-2026	30-Jun-2006	VIRTUALLY FRACTIONAL PLL
51140	51140-US-NP	7796806	11/527326	20080075354	US	14-Sep-2010	11-Jul-2029	25-Sep-2006	COMBINED SINGLET/COUPLET DEFECT REMOVER
51206	51206-US-NP	9277060	11/473497	20070297582	US	1-Mar-2016	22-Mar-2030	23-Jun-2006	SHOWING CONTEXTUAL INFORMATION ABOUT AN INCOMING PHONE CALLBY ANALYZING THE CLID AGAINST THE RECENT CALLS LOG
51454	51454-US-PCT	8792588	12/293369	20090074112	US	29-Jul-2014	3-Aug-2028	17-Mar-2006	CHANNEL DECODING FOR DYNAMIC POWER CONSUMPTION REGULATION



Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
51695	51695-US-NP	7764938	11/707865	20080070530	US	27-Jul-2010	28-May-2029	20-Feb-2007	SYNCHRONOUS SIGNAL SWITCHING USING PHASED CLOCK GATING
51712	51712-US-NP	8103869	11/655119	20070174608	US	24-Jan-2012	24-Oct-2030	19-Jan-2007	DISCOBUS: LATENCY INDEPENDENT TUNNELING OF I2C OVER A FAST BUS
51952	51952-US-NP	7920635	11/892963	20080089439	US	5-Apr-2011	19-Oct-2029	28-Aug-2007	A CLIPPING ALGORITHM FOR WIRELESS TRANSMITTERS
52018	52018-US-NP	7764977	11/420062	20070275759	US	27-Jul-2010	12-Jan-2029	24-May-2006	SIM REMOVAL GUARD
52174	52174-US-PCT	8135031	12/308337	20100242075	US	13-Mar-2012	27-Jun-2027	14-Jun-2006	IP-TV WLAN RELAY
52187	52187-EP-EPT		07713059.9	2005690	EP		23-Feb-2027	23-Feb-2007	SYSTEM AND METHODS FOR SEAMLESS CONTENT SHARING
52187	52187-KR-PCT	1089596	2008-7019675	09-5290	KR	29-Nov-2011	23-Feb-2027	23-Feb-2007	SYSTEM AND METHODS FOR SEAMLESS CONTENT SHARING
52187	52187-RU-PCT	2411682	2008143455		RU	10-Feb-2011	23-Feb-2027	23-Feb-2007	SYSTEM AND METHODS FOR SEAMLESS CONTENT SHARING
52339	52339-US-NP	8838775	12/075318	20080225843	US	16-Sep-2014	29-Oct-2031	10-Mar-2008	TRAFFIC FLOW TERMINATION DETECTION AT LAYER 2
52493	52493-US-NP	7725566	11/692156	20070244578	US	25-May-2010	3-Aug-2028	27-Mar-2007	FRAMEWORK FOR ENABLING SERVICE TUNING FOR UPNP REMOTE ACCESS
52497	52497-US-NP	8284204	11/428159	20080007559	US	9-Oct-2012	18-Sep-2028	30-Jun-2006	A UNIFIED GRAPHICS PIPELINE FOR STEREOSCOPIC RENDERING
52650	52650-US-NP	8166156	11/606093	20080129464	US	24-Apr-2012	9-Sep-2028	30-Nov-2006	FAILURE DIFFERENTIATION AND RECOVERY IN DISTRIBUTED SYSTEMS
52661	52661-US-NP	7933606	11/583002	20080004030	US	26-Apr-2011	6-Oct-2028	19-Oct-2006	MULTI-LEVEL OUTER LOOP ALGORITHM TO HANDLE TREE-BASED CQI MEASUREMENT REPORTS
52892	52892-US-NP	7606043	11/477512	20080002376	US	20-Oct-2009	20-Oct-2026	28-Jun-2006	TWO SELECTABLE PORTIONS + PUSH UP DETAIL IN ONE KEY
52914	52914-US-NP	7630700	11/493566	20080003971	US	8-Dec-2009	9-Jan-2028	27-Jul-2006	PASSIIVINEN MIKSERI MULTIRADIOTA VARTEN
53037	53037-US-NP	7817858	11/554911	20080101701	US	19-Oct-2010	25-May-2029	31-Oct-2006	INSERTING SMILEYS INTO INPUT AREAS WITH DRAWING AND RECOGNITION
53349	53349-US-NP	7813505	11/591483	20080002594	US	12-Oct-2010	21-May-2028	2-Nov-2006	USER PLANE SEQUENCE NUMBER FOR CIPHERING
53420	53420-US-PCT	8063806	12/519904	20100097258	US	22-Nov-2011	2-Aug-2028	19-Dec-2007	FREQUENCY TRANSLATING DELTA-SIGMA MODULATOR WITH TRANSFERREDIMPEDANCE RESONATOR
53657	53657-US-NP	8054796	11/635762	20080137605	US	8-Nov-2011	23-Jun-2030	8-Dec-2006	UPLINK ACK CHANNEL USING CODE MULTIPLEXING IN OFDM AND OFDMA
53766	53766-US-NP	7688709	11/819921	20080058975	US	30-Mar-2010	21-May-2028	29-Jun-2007	CAPACITY-BASED METRIC FOR UPLINK MULTI-USER SCHEDULING
54291	54291-US-NP	7844233	11/707011	20080001659	US	30-Nov-2010	8-Jun-2029	16-Feb-2007	PASSIIVINEN VAHVISTIN MULTIRADIOTA VARTEN
54421	54421-US-NP	8095134	11/978208	20080146231	US	10-Jan-2012	9-Nov-2030	26-Oct-2007	A PILOT MEASUREMENT METHOD DEPENDING ON CELL STATUS UNDER STATIC IC
54586	54586-US-NP	8654735	12/071378	20090207806	US	18-Feb-2014	6-Jun-2031	20-Feb-2008	USING MULTIPLE MOBILITY PROTOCOL INSTANCES SIMULTANEOUSLY IN IP BASED DATA COMMUNICATIONS
54606	54606-US-NP	7668527	11/707021	20080003973	US	23-Feb-2010	23-May-2028	16-Feb-2007	PASSIIVINEN MIKSERI, AGC-VAHVISTIN JA ALIPÄÄSTÖSUODATIN MULTIRADIOTA VARTEN/Passive mixer, AGC-amplifier and low pass filter for multiradio
54610	54610-US-NP	8243631	11/616474	20080159178	US	14-Aug-2012	11-Nov-2030	27-Dec-2006	AUTOMATIC ROOM DETECTION FOR A MULTI-MOBILE PHONE TELECONFERENCE IN A VIRTUAL MEETING SESSION
54785	54785-US-NP	8908611	12/072638	20080268887	US	9-Dec-2014	17-May-2033	26-Feb-2008	SEMI SFN TRANSMISSION METHOD
54903	54903-US-PCT		12/602591	20100281501	US		29-May-2028	29-May-2008	SERVICE GUIDE DELIVERY USING SLIDING WINDOW
54939	54939-US-NP	8027355	12/073226	20080225787	US	27-Sep-2011	30-Jun-2030	3-Mar-2008	MAPPING OF SHARED SIGNALLING CHANNEL TO THE PHYSICAL RESOURCES OF AN OFDM TRANSMISSION SYSTEM
55049	55049-US-NP	7663522	12/073325	20080278360	US	16-Feb-2010	4-Mar-2028	4-Mar-2008	DELTA-SIGMA MODULATOR WITH EMBEDDED FILTERING
55152	55152-US-NP	7986980	11/904740	20090088199	US	26-Jul-2011	2-Dec-2029	28-Sep-2007	MULTIRADIO CONTROLLER ENHANCED POWER MANAGEMENT

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
55251	55251-US-NP	8023438	11/982991	20080107046	US	20-Sep-2011	17-Jul-2030	6-Nov-2007	ANALOGUE SIGNAL PATH MODELING IN SELF-INTERFERENCE CANCELLATION
55453	55453-US-NP	7860000	11/985611	20080212468	US	28-Dec-2010	9-Oct-2028	15-Nov-2007	ESTIMATION OF THE ACTIVITY FACTOR OF HSDPA APPLICATIONS AND RELATED QOS-AWARE RRM CONCEPT
55472	55472-US-NP	8112085	11/615150	20080153493	US	7-Feb-2012	17-Oct-2029	22-Dec-2006	RULES FOR HIBERNATION ANCHOR SELECTION IN WINET (UWB)
55478	55478-US-PCT	8432363	12/527331	20100295792	US	30-Apr-2013	20-Sep-2028	23-Feb-2007	KEYPAD BACKLIGHT USING DIFFUSE LIGHT SCATTERERS
55512	55512-US-NP	8077799	12/081549	20090213972	US	13-Dec-2011	5-Jul-2030	17-Apr-2008	COMMON PHASE ROTATION FOR TRANSMITTER DIGITAL FRONT END
55831	55831-US-NP	8255908	11/960206	20090164995	US	28-Aug-2012	25-Nov-2030	19-Dec-2007	METHOD FOR COMPOSITING AND MANAGING A TASK PROVIDED TO AN APPLICATION BY A SET OF INDEPENDENT SERVICE MODULES
55996	55996-US-NP	8085863	11/775622	20080232498	US	27-Dec-2011	25-Oct-2030	10-Jul-2007	EFFICIENT BALANCE ERROR CORRECTION
55997	55997-US-NP	8831599	12/159581	20120178450	US	9-Sep-2014	4-Sep-2030	27-Jun-2008	AVOIDING PING-PONG HANDOVERS IN MOBILE NETWORKS
56188	56188-US-NP	7667905	11/509301	20080106811	US	23-Feb-2010	23-Aug-2026	23-Aug-2006	Ultra compact zoom camera concept
56224	56224-US-NP	8144607	11/634944	20080137547	US	27-Mar-2012	18-Mar-2030	7-Dec-2006	LOCATION-BASED ADDRESS RESOLUTION
56306	56306-US-NP	6867776	10/042647	20020135590	US	15-Mar-2005	8-Jan-2022	8-Jan-2002	STANDARD FOR PERLIN NOISE
56497	56497-EP-EPT		08736830.4	2135420	EP		11-Apr-2028	11-Apr-2008	MAC LAYER GROUP KEY HANDSHAKE
56505	56505-CN-PCT	200880008576.5	200880008576.5	101647312	CN	4-Jul-2012	16-Jan-2028	16-Jan-2008	APPARATUS AND METHOD TO EXTEND DMR COVERAGE WITH POC
56690	56690-US-NP	8543228	11/697584	20080249976	US	24-Sep-2013	13-Jan-2031	6-Apr-2007	Coded domain audio analysis
56815	56815-US-NP	7848924	11/788263	20080262838	US	7-Dec-2010	16-Sep-2029	17-Apr-2007	ENHANCED VOICE CONVERSION USING TEMPORAL DYNAMIC FEATURES
56909	56909-US-NP	8805369	12/075508	20080227456	US	12-Aug-2014	1-Mar-2031	12-Mar-2008	A CQI REPORTING AND SIMULTANEOUS TRANSMISSION MECHANISM TO IMPROVE RELIABILITY OF HO SIGNALING
57041	57041-US-CNT	8285846	13/275110	20120036223	US	9-Oct-2012	28-Jun-2027	17-Oct-2011	SYSTEM AND METHOD FOR SUCCESS RATE IN SERVICES SELF OPTIMIZATION FOR SOFT FREQUENCY REUSE TO IMPROVE RELIABILITY OF HO SIGNALING
57132	57132-US-DIV	8812046	13/599850	20120329460	US	19-Aug-2014	28-Mar-2028	30-Aug-2012	GO-WHITE DESIGN EFFECT FOR ELECTRONIC PRODUCTS
57242	57242-US-PCT	8792069	12/679350	20100220280	US	29-Jul-2014	14-Jun-2030	27-Sep-2007	NEIGHBOR DISCOVERY, HANDOVER PROCEDURE AND RELAY ZONE CONFIGURATION FOR RELAYS IN MULTI-HOP NETWORK
57345	57345-US-NP	8009630	12/074728	20080219275	US	30-Aug-2011	27-Jun-2030	5-Mar-2008	OPTIMISED EMERGENCY ALERT MESSAGE DELIVERY ON GERAN CELL BROADCAST
57399	57399-US-PCT	9307381	12/600270	20100159870	US	5-Apr-2016	18-Nov-2029	16-May-2008	ENERGY EFFICIENT NETWORK SELECTION METHOD FOR MULTI RADIO DEVICE
57445	57445-US-NP	8060125	11/984619	20090088108	US	15-Nov-2011	22-Jun-2030	20-Nov-2007	Distributed Iterative Decoding for Co-operative Diversity
60051	60051-US-NP	8139512	12/156211	20080298474	US	20-Mar-2012	25-Jun-2029	30-May-2008	Timing-Advance for UL Relay Synchronisation
60052	60052-US-PCT	8594562	12/665452	20100317284	US	26-Nov-2013	14-Aug-2030	20-Jun-2008	Key Update for Network Application Function service Keys (e.g. Mobile TV)
60086	60086-US-PCT	12/600128	12/600128	20100303242	US		2-Apr-2028	2-Apr-2008	Visually managing video file storage
60286	60286-US-NP	12/103975	12/103975	20080256087	US		16-Apr-2028	16-Apr-2008	Novel Precoding Scheme for Bi-directional Relaying System
60343	60343-US-PCT	8526355	12/936314	20110026427	US	3-Sep-2013	19-Jan-2029	2-Apr-2008	Method, Devices and System for Local Collision Avoidance for Random Access in Relay Networks
60465	60465-US-PCT	9320060	12/922515	2011-0026409	US	19-Apr-2016	28-Aug-2028	14-Mar-2008	Noise and RSSI estimation methods for WiMAX
60654	60654-US-NP	8185073	12/292613	20090258621	US	22-May-2012	2-Dec-2030	21-Nov-2008	Digital broadcasting and cellular communications system interoperability
61097	61097-US-PCT	8897380	12/664050	20100297948	US	25-Nov-2014	21-Apr-2030	15-Jun-2007	Multiradio scheduling concept
61202	61202-US-NP	8340706	12/222646	20090291701	US	25-Dec-2012	5-Mar-2031	13-Aug-2008	EMAIL DISTRIBUTION INDICATOR
61209	61209-CN-PCT	200880104706.5	200880104706.5	101790881	CN	10-Dec-2014	25-Jun-2028	25-Jun-2008	METHOD AND APPARATUS FOR DATA TRANSMISSION PROTOCOLS FOR MULTI-HOP RELAY SYSTEM WITH CENTRALIZED SCHEDULING
61333	61333-CN-PCT	102106105	200980115952.5	102106105	CN	1-Apr-2015	24-Feb-2029	24-Feb-2009	PROTOCOLS FOR MULTI-HOP RELAY SYSTEM WITH CENTRALIZED SCHEDULING
61333	61333-EP-EPT		09717347.0	2255474	EP		24-Feb-2029	24-Feb-2009	PROTOCOLS FOR MULTI-HOP RELAY SYSTEM WITH CENTRALIZED SCHEDULING
61333	61333-US-CNT	8984361	13/859835	2014-0036692	US	17-Mar-2015	26-Mar-2029	10-Apr-2013	PROTOCOLS FOR MULTI-HOP RELAY SYSTEM WITH CENTRALIZED SCHEDULING
61333	61333-US-PCT	8458550	12/920658	2011-0022917	US	4-Jun-2013	24-Feb-2029	24-Feb-2009	PROTOCOLS FOR MULTI-HOP RELAY SYSTEM WITH CENTRALIZED SCHEDULING
61772	61772-US-NP	8120762	12/315177	20090141285	US	21-Feb-2012	31-Jan-2030	26-Nov-2008	Image Pad
61790	61790-US-NP	8005654	11/957765	20090157378	US	23-Aug-2011	9-May-2029	17-Dec-2007	Method and system for intelligent workload control of distributed storage
61917	61917-DE-EPT	602007029251.4	07866571.8	2227735	DE	20-Mar-2013	20-Dec-2027	20-Dec-2007	Device concept for drawing and scanning input
61917	61917-US-PCT	8629855	12/744952	20110032123	US	14-Jan-2014	28-Dec-2029	27-May-2010	User Specific Load Balancing among HARQ Processes for Semi-persistent Scheduling in LTE DDD UL
61924	61924-US-PCT	8429480	12/681687	20110010598	US	23-Apr-2013	23-Nov-2029	30-Sep-2008	

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
62543	62543-US-NP	8621191	11/964440	20090172376	US	31-Dec-2013	1-Apr-2031	26-Dec-2007	Predefined boot sequence
62704	62704-US-NP	7798699	12/291504	20100118403	US	21-Sep-2010	11-Apr-2029	10-Nov-2008	Three layer light guide structure with diffractive slanted gratings
63120	63120-CN-PCT	200980106130.0	200980106130.0	101960452	CN	22-Apr-2015	15-Jan-2029	15-Jan-2009	A method and approach of adding new mobile search verticals using customizable mobile search forms
63157	63157-US-NP	8025434	12/156637	20090294266	US	27-Sep-2011	1-May-2029	3-Jun-2008	Interconnection Method for LEDs to 2 Stacked Lightguides
63335	63335-US-NP	8799239	12/062926	20090254513	US	5-Aug-2014	22-May-2032	4-Apr-2008	A method for increasing the effectiveness of transferring the result set of a query over an information store such as RDF store
63456	63456-US-NP	8335474	12/322255	20090197550	US	18-Dec-2012	19-Oct-2031	30-Jan-2009	Nonparametric cyclic correlation based detection for cognitive radio systems
63581	63581-US-PCD	8711727	13/750114	20130136024	US	29-Apr-2014	4-Feb-2029	25-Jan-2013	PC Arrangement for LTE TDD System
63651	63651-US-PCT	8848821	12/866031	20100322324	US	30-Sep-2014	26-Apr-2031	3-Feb-2009	Mapping rules for PHICH resources for UL transmission in 3GPP LTE
63787	63787-US-NP	8516602	12/109724	20090271870	US	20-Aug-2013	28-Mar-2031	25-Apr-2008	Distributed Access Rights Management using Access Right Filters
63955	63955-US-NP	8775543	12/119947	20090287813	US	8-Jul-2014	28-Nov-2028	13-May-2008	A Method for Analyzing the Communication Relationships between the Mobile Phone User and His Contacting People
64308	64308-US-PCT	8855658	12/996563	20110092200	US	7-Oct-2014	13-Apr-2030	1-Jun-2009	Interference avoidance on common channels in uncoordinated network deployments with flexible spectrum use
64323	64323-US-NP	8514818	12/343832	20090270095	US	20-Aug-2013	20-Jan-2032	24-Dec-2008	Optimized UE specific mask generation for HS-SCCH
64501	64501-US-NP	8111656	12/434245	20090303896	US	7-Feb-2012	20-Jul-2029	1-May-2009	A random access window configuration method to save processing power at eNB in LTE TDD
64510	64510-US-NP	8964115	12/494799	20100328528	US	24-Feb-2015	9-Oct-2031	30-Jun-2009	Congestion and Rate Control for Internet Media Transmissions Using Adaptive Redundancy Encoding
64978	64978-US-PCT	8559867	13/060039	20110151774	US	15-Oct-2013	14-May-2030	19-Aug-2009	A load status indicator in multihop relay systems with distributed scheduling mode
65017	65017-US-NP	8644757	12/328558	20100144283	US	4-Feb-2014	16-Dec-2031	4-Dec-2008	Method for creation and control of virtual rendering devices
65130	65130-US-PCT	8737346	13/001429	20110268053	US	27-May-2014	16-Apr-2031	25-Jun-2009	Principle for PUCCH AckNack Indexing in supporting AN-bundling for LTE TDD
65166	65166-US-NP	7792013	12/184030	20100027408	US	7-Sep-2010	24-Oct-2028	31-Jul-2008	Construction of Capacity-Approaching Low Density Lattice Code Generator Matrices By Using the Mutually Orthogonal Latin Squares
65252	65252-US-NP	8238681	12/315060	20100129002	US	7-Aug-2012	5-Jun-2031	25-Nov-2008	Adaptive configuration of windows-of-interest for accurate and robust focusing in multisport autofocus cameras
65440	65440-US-NP	8264587	12/321371	20100177246	US	11-Sep-2012	11-Jan-2031	15-Jan-2009	High video recorder and viewfinder frame rate with SW imaging pipe
65444	65444-US-PCD	9107155	14/319439	20140341208	US	11-Aug-2015	17-Sep-2029	30-Jun-2014	Synchronisation procedures for Device to Device Communications
65444	65444-US-PCT	8811374	13/121105	20110182280	US	19-Aug-2014	18-Nov-2030	17-Sep-2009	Synchronisation procedures for Device to Device Communications
65445	65445-US-PCT	8818861	13/122404	20110191187	US	26-Aug-2014	24-Dec-2029	30-Sep-2009	Location procedure for Device to Device Communications
65467	65467-US-NP	8280427	12/622014	20100151793	US	2-Oct-2012	10-Dec-2029	19-Nov-2009	A gain factor/matrix design method to ensure the whole link channel reciprocity in TDD MIMO relay systems
65579	65579-US-PCT	8953467	13/062847	20120093061	US	10-Feb-2015	31-May-2032	26-Aug-2009	Dedicated Reference Signal for LTE TDD transparent Relay
66079	66079-US-NP	8581698	12/277747	20100127887	US	12-Nov-2013	4-Jul-2031	25-Nov-2008	Organic Indoor Location Discovery
66328	66328-EP-EPT		10764159.9	2419816	EP		14-Apr-2030	14-Apr-2010	Efficient and intuitive way of handling many items with direct touch UI
66407	66407-US-PCT	9247331	13/381621	20120269363	US	26-Jan-2016	3-Jul-2031	29-Jun-2009	Temperature Compensated Sensitivity Microphone
66411	66411-CN-PCT	201080013320.0	201080013320.0	102388541	CN	6-Aug-2014	21-Jan-2030	21-Jan-2010	A novel pre-coding procedure to suppress interference towards device-to-device communication
66411	66411-EP-EPT		10733289.2	2389733	EP		21-Jan-2030	21-Jan-2010	A novel pre-coding procedure to suppress interference towards device-to-device communication
66411	66411-US-PCT	8780830	13/146064	20120099540	US	15-Jul-2014	7-Feb-2031	21-Jan-2010	A novel pre-coding procedure to suppress interference towards device-to-device communication
66750	66750-EP-EPT		09786328.6	2404476	EP		5-Mar-2029	5-Mar-2009	SYSTEMS, METHODS, APPARATUSES, AND COMPUTER PROGRAM PRODUCTS FOR COORDINATING COMMUNICATIONS BETWEEN NETWORK NODES
66750	66750-US-PCT	9320034	13/254,490	2011-0317611	US	19-Apr-2016	28-Jul-2029	5-Mar-2009	SYSTEMS, METHODS, APPARATUSES, AND COMPUTER PROGRAM PRODUCTS FOR COORDINATING COMMUNICATIONS BETWEEN NETWORK NODES
66777	66777-US-PCT	8855023	13/129772	20110228707	US	7-Oct-2014	20-Sep-2030	16-Nov-2009	srvc emergency call support, HSS based solution
66867	66867-AU-PCT	2010209628	2010209628		AU	23-Jul-2015	13-Jan-2030	13-Jan-2010	Method to Link Electronic Business Cards to (Historical) Contextual Information on Mobile Devices
66867	66867-CA-PCT	2750999	2750999		CA	4-Aug-2015	13-Jan-2030	13-Jan-2010	Method to Link Electronic Business Cards to (Historical) Contextual Information on Mobile Devices
66867	66867-EP-EPT		10735503.4	2392125	EP		13-Jan-2030	13-Jan-2010	Method to Link Electronic Business Cards to (Historical) Contextual Information on Mobile Devices

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
67094	67094-US-NP	8818024	12/402921	20100232643	US	26-Aug-2014	10-Jun-2031	12-Mar-2009	SURFTrac: Efficient Tracking and Continuous Object Recognition using Local Feature Descriptors
67361	67361-US-PCT	8625632	13/147352	20120113794	US	7-Jan-2014	27-Feb-2030	28-Jan-2010	Signaling of the precoding information for downlink multi-user MIMO
67431	67431-US-PCT	8577861	13/054553	20110270874	US	5-Nov-2013	17-Jul-2029	17-Jul-2009	Metadata Search Solution
67436	67436-US-PCT	8856449	13/131832	20120185666	US	7-Oct-2014	29-Jan-2031	27-Nov-2009	Intelligent Multi-purpose Partitioned Cache
67521	67521-US-PCT	8306046	12/524051	20100278104	US	6-Nov-2012	13-Aug-2028	23-Jan-2008	Decision Point Plugins
67536	67536-US-PCT	9166802	12/999598	20110264749	US	20-Oct-2015	27-Mar-2030	22-Jun-2009	Dynamic Browser Behaviour
67575	67575-US-NP	7587458	11/289993	20070005807	US	8-Sep-2009	26-Jun-2027	30-Nov-2005	Delta Code Messaging
67593	67593-US-PCT	8135938	11/817386		US	13-Mar-2012	3-Aug-2028	1-Mar-2006	Enabling Paging in a Real-Time OS
67595	67595-US-PCT	8918787	12/518105	20110265089	US	23-Dec-2014	13-Mar-2031	7-Dec-2007	Profile Driven Resources
67597	67597-US-PCT	8332856	11/817381	20090100429	US	11-Dec-2012	22-Nov-2028	1-Mar-2006	Dual mode Real-Time and Paged Operating System
67628	67628-US-PCT	7690007	10/595549	20070220508	US	30-Mar-2010	28-Oct-2024	28-Oct-2004	Extension DLL
67641	67641-US-PCT	8695018	10/574728	20070006068	US	8-Apr-2014	3-Feb-2030	7-Oct-2004	Generic Parser
67642	67642-US-CNT	8391892	11/550555	20070087762	US	5-Mar-2013	23-May-2023	18-Oct-2006	Footprints
67698	67698-US-PCT	6836879	09/242383		US	28-Dec-2004	12-Jun-2018	12-Jun-1998	Descriptors
67726	67726-US-PCT	9081727	13/378355	20120185686	US	14-Jul-2015	1-Feb-2032	25-May-2010	Access List
68386	68386-US-PCT	8862141	13/321135	20120196609	US	14-Oct-2014	10-May-2030	10-May-2010	UE category signaling for Enhanced Uplink in CELL_FACH state
68634	68634-US-PCT	8891448	13/257576	20120099444	US	18-Nov-2014	18-Jun-2030	16-Mar-2010	On interference control in mixed deployment of Node Bs supporting either single or dual carrier HSUPA transmission.
68942	68942-US-PCT	9294060	13/700093	20130144614	US	22-Mar-2016	3-Dec-2031	25-May-2010	An artificial bandwidth extension method for telephone speech based on the mel spectrum and time-domain processing
69111	69111-US-NP	8750803	12/486291	20100323622	US	10-Jun-2014	26-Jul-2031	17-Jun-2009	Interference cancelation for beacon signals
69211	69211-US-PCT	8724572	13/318107	20120113851	US	13-May-2014	11-Sep-2030	22-Apr-2010	A method for improved channel state information feedback
69296	69296-US-NP	8317084	12/561542	20110062227	US	27-Nov-2012	3-Jul-2031	17-Sep-2009	Package with Display and RFID - Active labels and marketing
69412	69412-US-PCT	9055381	13/500625	20120207310	US	9-Jun-2015	14-Oct-2031	12-Oct-2010	A 3D Positional Audio Algorithm based on Multi-way analysis
69452	69452-US-PCT	9215538	13/388988	20130103398	US	15-Dec-2015	23-Jul-2030	4-Aug-2009	Automatic downlink speech/music discrimination algorithm
69531	69531-US-CNT	9088493	14/198267	20140189111	US	21-Jul-2015	16-Sep-2029	5-Mar-2014	A method for time zone adaptation of internet services
69634	69634-US-NP	8913738	12/459379	20100331058	US	16-Dec-2014	28-Mar-2032	30-Jun-2009	3GPP wideband required earpiece design using speaker in a back-firing way with an extra side-wise extended dedicate resonator tuned at the high frequency region of the bandwidth using an additional dedicate cavity or using a IHF back cavity forming an earpiece and IHF combined acoustic coupled design concept
69811	69811-US-NP	8201094	12/567057	20110078590	US	12-Jun-2012	10-Sep-2030	25-Sep-2009	Cross-layer Collaborative Protocol for Multi-User Co-creation
69838	69838-EP-EPT		10818460.7	2481223	EP		19-Aug-2030	19-Aug-2010	iLoc: A Computational Framework for Incremental Location-State Acquisition and Prediction based on Mobile Sensors
69838	69838-US-CNT	9313322	14/744949		US	12-Apr-2016	23-Sep-2029	19-Jun-2015	iLoc: A Computational Framework for Incremental Location-State Acquisition and Prediction based on Mobile Sensors
69839	69839-US-NP	8321228	12/548337	20110054907	US	27-Nov-2012	20-Apr-2031	26-Aug-2009	Hardware
70195	70195-US-CNT	8401572	13/604174	20120329482	US	19-Mar-2013	1-Oct-2029	5-Sep-2012	Using Cell Broadcast Service and Crowd sourcing for constructing location connectivity graphs
70320	70320-US-PCT	9191987	13/511773	20120287879	US	17-Nov-2015	17-Aug-2030	25-Nov-2009	Determining "fair share" of radio resources in radio access system with contention-based spectrum sharing
70438	70438-CA-PCD[1]		2915213		CA		17-Aug-2030	17-Aug-2010	A METHOD OF CONTROLLING UPLINK TRANSMISSION POWER IN A COMMUNICATIONS NETWORK
70438	70438-CA-PCT[1]		2805514		CA		17-Aug-2030	17-Aug-2010	A METHOD OF CONTROLLING UPLINK TRANSMISSION POWER IN A COMMUNICATIONS NETWORK
70627	70627-US-NP	8490075	12/624042	20110126185	US	16-Jul-2013	6-Dec-2031	23-Nov-2009	Method for optimizing the exchange of service updates between device peers and groups
70664	70664-US-PCT	9560648	13/508538	20120275357	US	31-Jan-2017	12-Jan-2033	7-May-2012	Reduced HARQ feedback delay for TDD system
70813	70813-US-PCT	8811516	13/502858	20120201321	US	19-Aug-2014	18-Dec-2030	29-Oct-2010	Channel feedback to support efficient rank override
70822	70822-US-NP	9400550	12/775424	20110273436	US	26-Jul-2016	20-Oct-2032	6-May-2010	Indicating audience's facial feedback to realtime content creator on mobile device's viewfinder screen
70865	70865-US-PCT	9288305	13/577645	20120323522	US	15-Mar-2016	3-Jan-2032	9-Feb-2010	Inverse haptic feedback
70941	70941-BR-PCT		112012014047.7		BR		15-Oct-2030	15-Oct-2010	Collaborative distributed network discovery mechanism in AwareNet with WLAN based ad hoc radio
70941	70941-CN-PCT	201080055645.5	201080055645.5	102668649	CN	22-Apr-2015	15-Oct-2030	15-Oct-2010	Collaborative distributed network discovery mechanism in AwareNet with WLAN based ad hoc radio
70941	70941-RU-PCT	2523968	2012128164		RU	30-May-2014	15-Oct-2030	15-Oct-2010	Collaborative distributed network discovery mechanism in AwareNet with WLAN based ad hoc radio
70983	70983-US-PCT	8948772	13/574350	20120295652	US	3-Feb-2015	21-Sep-2030	2-Feb-2010	Improved Scheduling Request for Eutran

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
71063	71063-US-NP	8904016	12/716099	20110219127	US	2-Dec-2014	30-Oct-2030	2-Mar-2010	Client-side Enhancement for Global Server Load Balancing in Internet Services
71067	71067-US-NP	8547440	12/696382	2011087877	US	1-Oct-2013	7-Jun-2031	29-Jan-2010	Lens shading correction of OIS module by run time calibration
71180	71180-US-NP	8547901	12/716252	20110216693	US	1-Oct-2013	27-Jun-2031	2-Mar-2010	Apparatus and methodology for ordered partial detection with MIMO cooperation
71282	71282-CN-PCT	201080057077.2	201080057077.2	102687481	CN	15-Feb-2017	15-Dec-2030	15-Dec-2010	Reliable network and service discovery in WIFI networks
71282	71282-EP-EPT		10837106.3	2514169	EP		15-Dec-2030	15-Dec-2010	Reliable network and service discovery in WIFI networks
71282	71282-US-PCT	9548977	13/514290	20120246468	US	17-Jan-2017	21-Aug-2031	15-Dec-2010	Reliable network and service discovery in WIFI networks
71313	71313-US-PCT	9031952	13/519875	20120290599	US	12-May-2015	14-Aug-2030	31-Dec-2009	An efficient and novel algorithm for use interest modeling
71320	71320-EP-EPT		11758872.3	2550588	EP		28-Jan-2031	28-Jan-2011	Online sharing via physical transformation of dual display device
71322	71322-US-CIP	8725706	12/784388	20110238690	US	13-May-2014	8-Jul-2030	20-May-2010	Multi-item search on top of map
71362	71362-EP-EPT		10841888.0	2522089	EP		8-Jan-2030	8-Jan-2010	DOWNLINK CONTROL SIGNALING FOR A BACKHAUL LINK
71362	71362-US-PCT		13/520,816	2014-0254468	US		8-Jan-2030	8-Jan-2010	DOWNLINK CONTROL SIGNALING FOR A BACKHAUL LINK
71371	71371-US-PCT	9025433	13/510615	20120230180	US	5-May-2015	26-May-2030	21-Dec-2009	How to handle valid RLC PDUs whose data field elements cannot belong to a full RLC SDU
71397	71397-US-CIP		12/842846	20110161863	US		29-Dec-2029	23-Jul-2010	Method for notifications for a long scrollable canvas
71563	71563-US-NP	8290029	13/072386	20110235690	US	16-Oct-2012	27-Jun-2031	25-Mar-2011	a method and apparatus for configuration and calibration of super-regenerative transceiver, antenna network and proximity/distance estimation
71568	71568-US-NP	9336320	12/708786	20110209073	US	10-May-2016	22-Jan-2033	19-Feb-2010	Ovi Bridge
71676	71676-US-PCT	9240066	13/581881	20120327090	US	19-Jan-2016	28-Nov-2030	2-Mar-2010	Free-Style Skeletal Animation on Touch Interfaces
71693	71693-US-PCT	9398279	13/637900	20130070130	US	19-Jul-2016	10-Aug-2031	29-Mar-2010	Image sensor local saturation signal optimization
71709	71709-US-PCT	9224398	13/807728	20130204631	US	29-Dec-2015	19-Feb-2031	1-Jul-2010	Method for generating sampling pattern for compressed audio sensing
71900	71900-US-PCT	9218381	13/638809	20140222824	US	22-Dec-2015	12-May-2032	4-Mar-2011	Improvised harvesting technique by decoupling of larger index from mounted removable drives and avoiding reindexing of the data to improve search experience
72018	72018-US-PCT	9455843	13/580614	20120309338	US	27-Sep-2016	24-Jun-2030	19-Mar-2010	E-UTRAN improvement on emergency call establishment, release and handling during RRC connection re-establishment.
72194	72194-US-PCT		13/582304	20140297876	US		16-Feb-2031	16-Feb-2011	Chat Bubble Concept
72328	72328-US-NP	8588537	13/170737	20130004091	US	19-Nov-2013	6-Apr-2032	28-Jun-2011	Wireless link concept with compressed sampling
72396	72396-US-PCT	9230551	13/880038	20130226598	US	5-Jan-2016	19-May-2031	18-Oct-2010	Zero-bit coding of subband index for very low bit rate SWB extension of speech and audio
72629	72629-US-PCT	9084185	13/811517	20130195014	US	14-Jul-2015	26-May-2032	26-Jul-2011	Cubic Metric for Dual Cell HSPA
72688	72688-US-PCT	9203937	13/814046	20130170120	US	1-Dec-2015	10-Jan-2031	5-Aug-2010	Means of Minimising Device Length / Maximising Display Area
72744	72744-US-NP	9350573	12/977734	20120166119	US	24-May-2016	3-Nov-2034	23-Dec-2010	Suppression of unwanted OFDM emissions using selective mapping
72841	72841-US-NP	8781835	13/099158	20120109654	US	15-Jul-2014	25-Dec-2032	2-May-2011	Efficient hybrid synthesis using inter and intra frame combinations
72858	72858-US-PCT	9100681	13/808531	20130106815	US	4-Aug-2015	3-Nov-2030	8-Jul-2010	Pico Projector Data Sharing on Public Displays
72884	72884-US-CNT		14/628811		US		20-Aug-2030	23-Feb-2015	Endless Mobile Desktop
73310	73310-US-NP	9098109	13/277375	20120185420	US	4-Aug-2015	28-Jan-2032	20-Oct-2011	Adaptative SW logic based on user frustration and expected behavior of use case
73317	73317-US-NP		12/890145	20120077546	US		24-Sep-2030	24-Sep-2010	A method and apparatus to customize a mobile client protocol over the air.
73348	73348-US-NP	8718324	13/161428	20110311100	US	6-May-2014	2-Sep-2031	15-Jun-2011	Robust Object Tracking Using Online Template Switching and Feature Adaptation
73412	73412-US-PCT	9318115	13/988887	20130246076	US	19-Apr-2016	27-Jul-2031	26-Nov-2010	Efficient coding of binary strings for low bit rate entropy encoding
73449	73449-US-NP	9524353	12/028319	20080201452	US	20-Dec-2016	26-Apr-2029	8-Feb-2008	Method and System for Providing Portions of Information Content to a Client Device
73455	73455-US-NP		12/755101	20100306344	US		6-Apr-2030	6-Apr-2010	Methods and Systems for Using Multipart Messaging with Preset Constraints
73605	73605-US-NP	9031619	12/894275	20120083318	US	12-May-2015	30-Jan-2031	30-Sep-2010	Method for a visual notification of active speech reception in a mobile telephone during voice calls
73613	73613-US-NP	8638719	12/958911	20120140706	US	28-Jan-2014	25-Sep-2032	2-Dec-2010	Inter-cell interference coordination by avoiding multi-stream transmissions
73645	73645-US-NP	9313670	13/209757	20120149429	US	12-Apr-2016	29-Oct-2033	15-Aug-2011	Method for management of inter-frequency neighbour list based on UE measurements of detected cells
73695	73695-EP-EPT		10857439.3	2619999	EP		21-Sep-2030	21-Sep-2010	Collaborative Context Recognition
73702	73702-US-NP	8831248	13/197938	20120033834	US	9-Sep-2014	15-Jul-2032	4-Aug-2011	A dipole loudspeaker with a balanced directivity pattern
73724	73724-US-PCT	9247521	13/819824	20130288703	US	26-Jan-2016	8-Sep-2030	1-Sep-2010	Personalized Multi-Modal Localization Based on Individual Location Patterns
73753	73753-US-PCT	9059883	13/980737	20130297738	US	16-Jun-2015	13-Mar-2031	20-Jan-2011	Content Flow Token for Stateless Content Subscription Servers
73862	73862-EP-EPT		11824632.1	2617170	EP		24-Aug-2031	24-Aug-2011	Social Experience Privacy Rules
73871	73871-US-PCT	9392416	13/990178	20140073358	US	12-Jul-2016	22-Nov-2031	28-Sep-2011	Method And Apparatus For Prediction and Prefetch Of Reverse Geo Location Address And Heirarchical Location Display
73962	73962-US-PCT	9277447	13/880526	20130286907	US	1-Mar-2016	26-Feb-2031	20-Oct-2010	Shortened downlink and uplink subframe format for FDD UE
73974	73974-US-PCT	9253678	13/876347	20130183978	US	2-Feb-2016	13-Jan-2032	29-Sep-2011	PLMN handling with MDT reporting

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
73978	73978-US-NP	8712708	12/911075	20120101754	US	29-Apr-2014	9-Feb-2033	25-Oct-2010	Method of estimating remaining CCCVcharging time
73983	73983-US-PCT	9301217	13/876501	20130183982	US	29-Mar-2016	2-Nov-2030	1-Oct-2010	Method of another PLMN neighbor relation reporting in PCH states
74131	74131-DE-NP	102011056336	102011056336.9	102011056336	DE	11-Jan-2017	13-Dec-2031	13-Dec-2011	Method to automatically adapt the keypad color contrast depending on the ambient light level
74158	74158-US-NP	8730905	12/939314	20120113952	US	20-May-2014	19-Jun-2032	4-Nov-2010	Using Reserving STA to Increase Bandwidth during TXOP
74161	74161-US-PCT	9195740	13/979900	20130297054	US	24-Nov-2015	23-Aug-2031	18-Jan-2011	Sound source direction and sensor assisted method for multi-user recorded signal selection
74209	74209-US-NP	8810626	12/973212	20120154520	US	19-Aug-2014	1-Feb-2033	20-Dec-2010	Method for memory efficient one dimensional panorama generation
74340	74340-EP-EPT		12704738.9	2676518	EP		8-Feb-2032	8-Feb-2012	REAL-TIME GAMING AND OTHER APPLICATIONS SUPPORT FOR D2D COMMUNICATIONS
74419	74419-EP-EPT		11844664.0	2647225	EP		22-Sep-2031	22-Sep-2011	Creating a trusted group based on longer term proximity using sensors (audio).
74457	74457-US-NP	8810368	13/074823	20120249298	US	19-Aug-2014	8-Sep-2032	29-Mar-2011	Intuitive binding of voice and context in smart spaces
74622	74622-US-NP	8644699	13/029527	20120213504	US	4-Feb-2014	4-Mar-2031	17-Feb-2011	LED controller
74726	74726-US-PCT		14/114277	20140122507	US		29-Apr-2031	29-Apr-2011	Context-aware Role Modeling and Recommendation
74784	74784-US-NP	9298362	13/025916	20120206319	US	29-Mar-2016	22-Mar-2033	11-Feb-2011	Interface, interactions and methods for displaying and sharing media files in a multi-device environment
74841	74841-US-NP	8948794	13/047027	20120238250	US	3-Feb-2015	7-Jun-2031	14-Mar-2011	Methods and System for Enhancing Performance in Maps Software
75037	75037-US-NP	8549010	13/107150	20120290582	US	1-Oct-2013	30-Sep-2031	13-May-2011	Distributed key range management for databases
75150	75150-US-NP		13/098724	20120254186	US		2-May-2031	2-May-2011	Neighbors near by places ready to explore
75318	75318-US-PCT	9270672	14/119665	20140075509	US	23-Feb-2016	26-May-2031	26-May-2011	Method of group authentication in Machine Type Communication
75322	75322-US-NP	8947420	13/117950	20120300123	US	3-Feb-2015	26-Sep-2032	27-May-2011	Method for reducing the displacement of display content for touch inputs
75378	75378-US-PCT	9288599	14/125503	20140105406	US	15-Mar-2016	11-Dec-2031	17-Jun-2011	Audio based map-of-shooters method for multi-user captured content
75393	75393-US-NP	8897317	13/422377	20120236806	US	25-Nov-2014	5-Oct-2032	16-Mar-2012	Method for distributed capacity based channel assignment
75483	75483-US-NP	8824392	13/167969	20120327865	US	2-Sep-2014	13-Feb-2032	24-Jun-2011	Fair channel allocation using markers
75580	75580-US-NP	9122532	13/458677	20130036149	US	1-Sep-2015	19-Aug-2032	27-Apr-2012	InNode Map Reduce for Key Value Store
75597	75597-EP-EPT		12712647.2	2695452	EP		30-Mar-2032	30-Mar-2012	POWER DIFFERENCE BETWEEN SCCELL AND PCELL IN A CARRIER AGGREGATION SYSTEM
75615	75615-US-NP	8565114	13/193697	20130028346	US	22-Oct-2013	17-May-2032	29-Jul-2011	Using zero-padding to create new channels
75693	75693-US-NP		13/242807	20130080435	US		23-Sep-2031	23-Sep-2011	Location Aware Collections
75743	75743-US-PCT	9432564	14/130278	20140226035	US	30-Aug-2016	21-Feb-2032	30-Jun-2011	Semiautomatic Image Tagging in mobile with set criteria
75863	75863-US-NP	8861348	13/460980	20120294145	US	14-Oct-2014	17-Jan-2033	1-May-2012	RACH improvement
75938	75938-US-NP	8799228	13/172391	20130007007	US	5-Aug-2014	29-Jun-2031	29-Jun-2011	List library as another layer on top of a key-value store to provide a list interface
75964	75964-US-NP	9071815	13/590478	20130216202	US	30-Jun-2015	5-Jun-2033	21-Aug-2012	Subtitle synchronization with audio in movie playback, using summarization
75988	75988-US-PCT	8970738	14/129314	20140125846	US	3-Mar-2015	30-Jun-2031	30-Jun-2011	Automatic zooming for macro photography
76112	76112-US-NP	8826182	13/224922	20130061181	US	2-Sep-2014	17-Feb-2032	2-Sep-2011	Dynamic 3D search engine interface
76128	76128-US-CNT		14/942520		US		21-Sep-2031	16-Nov-2015	Recommendation Service Framework for Dual-SIM/Multi-SIM devices
76140	76140-US-NP	8977616	13/300008	20130132397	US	10-Mar-2015	5-Oct-2032	18-Nov-2011	Distributed index using journal in key value database
76215	76215-US-PCT	9392363	14/351326	20150043756	US	12-Jul-2016	27-Nov-2031	14-Oct-2011	Audio scene recording method for multi-user environment
76398	76398-US-NP	8718374	13/212692	20130044954	US	6-May-2014	7-Jan-2032	18-Aug-2011	Drawable 2D barcodes
76510	76510-US-NP	8949664	13/299698	20130132771	US	3-Feb-2015	18-Sep-2032	18-Nov-2011	Achieving eventual consistency for update operation in a distributed env with a finite state machine
76586	76586-US-NP	8817685	13/279704	20130100864	US	26-Aug-2014	20-Sep-2032	24-Oct-2011	Energy-efficient underlay device-to-multidevice communications with interference suppression
76601	76601-US-NP	9369959	13/486460	20130109323	US	14-Jun-2016	19-Apr-2033	1-Jun-2012	Wireless Flashing and File Transfer for Devices in Sales Box
76601	76601-US-REI		15/255481		US		1-Jun-2032	2-Sep-2016	Wireless Flashing and File Transfer for Devices in Sales Box
76694	76694-US-PCT	9124480	14/351080	2014024147	US	1-Sep-2015	19-Oct-2031	19-Oct-2011	Dual-lag cyclostationarity test utilizing cyclic phase correction for improved detection of OFDM signals in cognitive radio applications
76876	76876-US-NP	9338171	13/720439	20130174277	US	10-May-2016	5-Dec-2033	19-Dec-2012	Utilizing detected radio environment to grant, deny or alter the access rights to a radio network and to control the quality of service
77082	77082-US-NP	9226305	13/670552	20130336234	US	29-Dec-2015	16-May-2033	7-Nov-2012	PP-MAC Mechanism for Resource Allocation of STAs
77192	77192-US-NP	8965045	13/401986	20130216092	US	24-Feb-2015	5-Oct-2032	22-Feb-2012	Automatic border indicator mechanism for multiple objects video recording
77525	77525-US-PCT	9414183	14/375415	20150004958	US	9-Aug-2016	20-Mar-2032	20-Mar-2012	User Group Context
77677	77677-US-PCT	9485709	14/364667	20140307720	US	1-Nov-2016	22-May-2033	18-Dec-2012	Deterministic barring mechanism
77763	77763-EP-EPT		12869001.3	2817994	EP		21-Feb-2032	21-Feb-2012	Local Networks
77763	77763-US-PCT		14/379.319	2015-0036659	US		21-Feb-2032	21-Feb-2012	Local Networks
77773	77773-US-NP	9064170	13/739682	20130195377	US	23-Jun-2015	16-Jul-2033	11-Jan-2013	Method for image alignment using integral projections
77783	77783-US-PCT		14/375934	20150058128	US		28-Apr-2032	28-Apr-2012	Method and Apparatus for Neighborhood-Based Ringtone Advertisement
78129	78129-EP-EPT		12872073.7	2829105	EP		19-Mar-2032	19-Mar-2012	Data offloading related measurement reporting
78311	78311-US-PCT	9622063	14/407673	20150195698	US	11-Apr-2017	21-Jun-2032	21-Jun-2012	Method for Automating Subscription Monitoring
78476	78476-US-NP	8909150	13/420228	20130244578	US	9-Dec-2014	21-Sep-2032	14-Mar-2012	Usage of NFC in mobile phones to implement eco-friendly wireless chargers
78521	78521-US-NP	9378207	13/537287	20140006397	US	28-Jun-2016	8-Jun-2033	29-Jun-2012	Social Platform for Crowdsourced Media Services

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
78553	78553-EP-EPT		13730922.5	2853103	EP		7-May-2033	7-May-2013	Wave to Share: Seamless Content Sharing and Transfer Through Proximity Sensing and Gesturing
78648	78648-US-NP	9141277	13/536363	20140002372	US	22-Sep-2015	15-Jan-2033	28-Jun-2012	Ejecting card with gesture
78981	78981-US-NP	9147226	14/012006	20140072231	US	29-Sep-2015	28-Aug-2033	28-Aug-2013	A Novel Method of Estimating Stretch Correcting Warp Function For High Quality Panorama Creation
79057	79057-US-NP		13/612336	20140071349	US		12-Sep-2032	12-Sep-2012	Media Zooming
79073	79073-US-CIP	9307347	13/622033	20130326495	US	5-Apr-2016	1-Jun-2032	18-Sep-2012	Enhancement for Wireless Programming
79220	79220-US-NP	8909661	13/622524	20140081987	US	9-Dec-2014	12-Dec-2032	19-Sep-2012	Method for time-stamping media for multi-user content rendering
79224	79224-US-NP	9122702	13/652820	20140108361	US	1-Sep-2015	16-Oct-2032	16-Oct-2012	Location Data Logs Compression and Anonymization
79252	79252-US-NP	9247191	13/595411	20140056570	US	26-Jan-2016	20-Nov-2032	27-Aug-2012	Wireless External Multi-Microphone System for Mobile Phone Environmen
79753	79753-US-PCT		14/651604	20150317649	US		30-Oct-2033	30-Oct-2013	System and Method of using Passphrase enabled POIs for creating, retaining and measuring Brand Awareness
79761	79761-US-NP		13/669905	20140129860	US		6-Nov-2032	6-Nov-2012	Background processing
80020	80020-US-NP		13/664957	20140121794	US		31-Oct-2032	31-Oct-2012	Ranking audio tracks in crowdsourced media scenarios - revised
80105	80105-US-NP	9477690	13/758611	20140222855	US	25-Oct-2016	31-Jul-2034	4-Feb-2013	Information Thermometer
80693	80693-US-NP	9107089	13/672887	20140135048	US	11-Aug-2015	23-Nov-2033	9-Nov-2012	Location based query method for interferer discovery in coexistence management system
80939	80939-US-NP	8914007	13/779223	20140242959	US	16-Dec-2014	15-May-2033	27-Feb-2013	Advanced distributed voice conferencing
81505	81505-CN-PCT		201380077616.2	105308939	CN		7-May-2033	7-May-2013	Acoustical coupling reduction with designed Helmholtz resonator
81505	81505-EP-EPT		13884039.2	2997720	EP		7-May-2033	7-May-2013	Acoustical coupling reduction with designed Helmholtz resonator
81505	81505-US-PCT		14/889033	20160119460	US		7-May-2033	7-May-2013	Acoustical coupling reduction with designed Helmholtz resonator
81785	81785-US-NP	9462172	14/514614	20150110400	US	4-Oct-2016	30-Dec-2034	15-Oct-2014	Pure Imaging
82377	82377-US-PCT		14/900598	20160148167	US		28-Jun-2033	28-Jun-2013	Automatic indication of the location/estimated arrival time of the other parties scheduled to attend the meeting/appointment
82996	82996-US-PCT		14/916958	20160224221	US		11-Sep-2033	11-Sep-2013	Extendable Arrow for the Icon selection
84036	84036-US-NP	9204065	14/064699	20150116519	US	1-Dec-2015	21-Dec-2033	28-Oct-2013	Noise Removal
84047	84047-EP-EPT		14859915.2	3066845	EP		23-Oct-2034	23-Oct-2014	Microphone calibration and finger blockage detection with directional sound v2
84047	84047-US-NP		14/519052	20150124980	US		20-Oct-2034	20-Oct-2014	Microphone calibration and finger blockage detection with directional sound v2
84134	84134-US-PCT		15/103442	20160315980	US		13-Dec-2033	13-Dec-2013	Extending protocol to support faster session establishment with less resource usage in user equipment and server
85904	85904-US-NP		14/747470	20150371365	US		23-Jun-2035	23-Jun-2015	Deep and totally live images - Lifies
87150	87150-GB-NP		1507356.2	2537886	GB		30-Apr-2035	30-Apr-2015	Improved viewfinder for augmented reality utilizing slow-shutter effect
88111	88111-FR-EPA	0993158	98118930.1	0993158	FR	18-Feb-2004	7-Oct-2018	7-Oct-1998	Apparatus and method for data rate conversion
88111	88111-GB-EPA	0993158	98118930.1	0993158	GB	18-Feb-2004	7-Oct-2018	7-Oct-1998	Apparatus and method for data rate conversion
88113	88113-CN-NP	99962	99103493.7	1244091	CN	8-Jan-2003	25-Mar-2019	25-Mar-1999	Verfahren und Anordnung zur Kanalzuweisung in einem Funk-Kommunikationssystem
88117	88117-CN-PCT	191379	00806058.4	1346550	CN	19-Jan-2005	3-Apr-2020	3-Apr-2000	VERFAHREN UND FUNK-KOMMUNIKATIONSSYSTEM ZUR SYNCHRONISATION VON TEILNEHMERSTATIONEN
88131	88131-US-PCT	6990329	10/343635	2003-0176180	US	24-Jan-2006	27-Jul-2021	27-Jul-2001	Verfahren zur Übermittlung von Notrufmeldungen in einem Funk-Kommunikationssystem
88134	88134-CN-PCT	211925	00819368.1	1451251	CN	8-Jun-2005	23-Mar-2020	23-Mar-2000	Access channel scheduling in a radio communication system
88158	88158-DE-NP	10321957	10321957.9	10321957	DE	24-Nov-2005	15-May-2023	15-May-2003	Verfahren zur Steuerung der teilnehmerseitigen Überwachung verschiedener Funkkommunikationssysteme
88178	88178-CN-PCT	866340	200680015813.1	101204107	CN	16-Nov-2011	27-Apr-2026	27-Apr-2006	Beam-Hopping in einem Funkkommunikationssystem
88178	88178-IN-PCT	252638	4381/KOLNP/2007		IN	25-May-2012	27-Apr-2026	27-Apr-2006	Beam-Hopping in einem Funkkommunikationssystem
88178	88178-TW-NP	1429303	95116309	200706033	TW	1-Mar-2014	9-May-2026	9-May-2006	Beam-Hopping in einem Funkkommunikationssystem
88178	88178-US-PCT	8532589	11/920264	2009-0221314	US	10-Sep-2013	27-Apr-2026	27-Apr-2006	Beam-Hopping in einem Funkkommunikationssystem
88180	88180-CN-PCT	1094466	200680016282.8	101176304	CN	5-Dec-2012	3-May-2026	3-May-2006	A method of controlling interference between communication terminals
88180	88180-DE-EPT	602006031723.9	06726999.3	1882335	DE	29-Aug-2012	3-May-2026	3-May-2006	A method of controlling interference between communication terminals
88180	88180-GB-EPT	1882335	06726999.3	1882335	GB	29-Aug-2012	3-May-2026	3-May-2006	A method of controlling interference between communication terminals
88180	88180-KR-PCT	10-0958227	2007-7029092	2008-0021020	KR	7-May-2010	3-May-2026	3-May-2006	A method of controlling interference between communication terminals
88180	88180-NL-EPT	1882335	06726999.3	1882335	NL	29-Aug-2012	3-May-2026	3-May-2006	A method of controlling interference between communication terminals
88196	88196-CN-PCT	101491048	200780026501.5	101491048	CN	17-Jun-2015	5-Jul-2027	5-Jul-2007	Verfahren und Vorrichtungen zur Vermeidung von Interferenzen in einem zellulären Funkkommunikationssystem

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
88199	88199-US-PCT	8897696	12/312124	2010-0130193	US	25-Nov-2014	25-Oct-2027	25-Oct-2007	METHOD AND APPARATUS OF USING A RELAY STATION TO ASSIST PROCESSING OF REQUESTS FROM USER ENDS
88219	88219-CN-PCT	1185807	200880112102.5	101828364	CN	24-Apr-2013	15-Oct-2028	15-Oct-2008	Method and device for data communication and communication system comprising such device
88219	88219-DE-EPT	602008032884.8	08839301.2	2204015	DE	18-Jun-2014	15-Oct-2028	15-Oct-2008	Method and device for data communication and communication system comprising such device
88219	88219-GB-EPT	2204015	08839301.2	2204015	GB	18-Jun-2014	15-Oct-2028	15-Oct-2008	Method and device for data communication and communication system comprising such device
88219	88219-US-PCT	8331291	12/682925	2011-0090793	US	11-Dec-2012	15-Oct-2028	15-Oct-2008	Method and device for data communication and communication system comprising such device
88220	88220-RU-PCT	2493679	2010117373		RU	20-Sep-2013	1-Oct-2028	1-Oct-2008	Method, Computer Program, Apparatus and System
88223	88223-CN-PCT	101843162	200880114819.3	101843162	CN	20-Aug-2014	27-Oct-2028	27-Oct-2008	ALLOCATION OF USER EQUIPMENT TEMPORARY IDENTIFIER BY A RELAY NODE CONTROLLED BY A BASE STATION
88223	88223-RU-PCT	2451429	2010121231		RU	20-May-2012	27-Oct-2028	27-Oct-2008	ALLOCATION OF USER EQUIPMENT TEMPORARY IDENTIFIER BY A RELAY NODE CONTROLLED BY A BASE STATION
88223	88223-US-NP	8243615	12/147153	2009-0111476	US	14-Aug-2012	26-Jun-2028	26-Jun-2008	Allocation of user equipment identifier
88225	88225-CN-PCT	101911533	200880124122.4	101911533	CN	23-Jul-2014	15-Sep-2028	15-Sep-2008	METHOD FOR SPECTRUM SHARING IN A MULTI-MODE SYSTEM AND RELATIVE APPARATUS
88225	88225-US-PCT	8654719	12/740204	2010-0272038	US	18-Feb-2014	15-Sep-2028	15-Sep-2008	METHOD FOR SPECTRUM SHARING IN A MULTI-MODE SYSTEM AND RELATIVE APPARATUS
88234	88234-EP-EPT		09709683.8	2245900	EP		13-Feb-2029	13-Feb-2009	SYMMETRICAL COOPERATIVE DIVERSITY IN THE RELAY-ENABLED WIRELESS SYSTEMS
88234	88234-IL-PCT	206747	206747		IL	1-May-2014	13-Feb-2029	13-Feb-2009	SYMMETRICAL COOPERATIVE DIVERSITY IN THE RELAY-ENABLED WIRELESS SYSTEMS
88236	88236-CN-PCT	101933296	200980103766.X	101933296	CN	29-Jan-2014	20-Jan-2029	20-Jan-2009	METHOD, APPARATUS AND COMPUTER PROGRAM FOR UPLINK SCHEDULING IN A NETWORK THAT EMPLOYS RELAY NODES
88236	88236-RU-PCT	2454813	2010135832		RU	27-Jun-2012	20-Jan-2029	20-Jan-2009	METHOD, APPARATUS AND COMPUTER PROGRAM FOR UPLINK SCHEDULING IN A NETWORK THAT EMPLOYS RELAY NODES
88237	88237-RU-PCT	2476012	2010139422		RU	20-Feb-2013	27-Feb-2029	27-Feb-2009	Method and Apparatus for Handover Procedure in Communication Network with Relay Extension
88237	88237-US-PCT	8897790	12/919245	2011-0086639	US	25-Nov-2014	27-Feb-2029	27-Feb-2009	Method and Apparatus for Handover Procedure in Communication Network with Relay Extension
88245	88245-US-PCT	8385930	13/002921	2011-0171965	US	26-Feb-2013	9-Jul-2029	9-Jul-2009	REDUCED RESOURCE ALLOCATION PARAMETER SIGNALLING
88257	88257-DE-EPA	602008019102.8	08104988.4	2152032	DE	3-Oct-2012	7-Aug-2028	7-Aug-2008	Providing lawful intercept information at a network element being assigned to a cell of a mobile telecommunication network
88257	88257-FR-EPA	2152032	08104988.4	2152032	FR	3-Oct-2012	7-Aug-2028	7-Aug-2008	Providing lawful intercept information at a network element being assigned to a cell of a mobile telecommunication network
88257	88257-GB-EPA	2152032	08104988.4	2152032	GB	3-Oct-2012	7-Aug-2028	7-Aug-2008	Providing lawful intercept information at a network element being assigned to a cell of a mobile telecommunication network
88258	88258-CN-PCT	102204119	200980143972.3	102204119	CN	10-Dec-2014	4-Sep-2029	4-Sep-2009	METHOD AND DEVICE FOR FRAME SYNCHRONIZATION USING BIDIRECTIONAL TRANSMIT AND RECEIVE ZONES
88272	88272-US-PCT	8989007	13/146251	2011-0280127	US	24-Mar-2015	30-Jan-2029	30-Jan-2009	Load balancing in relay-enhanced access networks
88279	88279-US-PCT	8811887	13/130774	2011-0223854	US	19-Aug-2014	26-Nov-2028	26-Nov-2008	Data load redistribution within a relay enhanced telecommunication network
88282	88282-CN-PCT	102356668	201080012124.1	102356668	CN	3-Dec-2014	4-Mar-2030	4-Mar-2010	Method and Apparatus for Distribution of Topology Information in Communication Networks
88282	88282-DE-EPA	60 2009 005 706.5	09100193.3	2230868	DE	7-Mar-2012	18-Mar-2029	18-Mar-2009	Method and Apparatus for Distribution of Topology Information in Communication Networks
88282	88282-GB-EPA	2230868	09100193.3	2230868	GB	7-Mar-2012	18-Mar-2029	18-Mar-2009	Method and Apparatus for Distribution of Topology Information in Communication Networks
88282	88282-US-PCT	9094903	13/127369	2011-0317589	US	28-Jul-2015	4-Mar-2030	4-Mar-2010	Method and Apparatus for Distribution of Topology Information in Communication Networks
88283	88283-EP-EPT		09779030.7	2394454	EP		9-Feb-2029	9-Feb-2009	APPARATUS FOR CONTROLLING SPECTRUM EXPLOITATION UTILISING OVERLAPPING CHANNEL BANDWIDTHS
88292	88292-US-PCT	9155012	13/265921	2012-0063417	US	6-Oct-2015	24-Apr-2029	24-Apr-2009	METHOD, APPARATUS, AND RELATED COMPUTER PROGRAM PRODUCT FOR LOAD BALANCING IN A RELAY NETWORK
88300	88300-DE-EPT	602009021023.8	09781394.3	2462756	DE	25-Dec-2013	3-Aug-2029	3-Aug-2009	REDUCING INTERFERENCE FROM DOMINANT INTERFERING NEIGHBORING BASE STATIONS
88300	88300-GB-EPT	2462756	09781394.3	2462756	GB	25-Dec-2013	3-Aug-2029	3-Aug-2009	REDUCING INTERFERENCE FROM DOMINANT INTERFERING NEIGHBORING BASE STATIONS
88302	88302-US-PCT	8989135	13/382576	2012-0099558	US	24-Mar-2015	9-Jul-2029	9-Jul-2009	Spectral arrangement for radio resources
88304	88304-DE-EPT	602009023153.7	09779843.3	2443860	DE	9-Apr-2014	18-Jun-2029	18-Jun-2009	A METHOD AND APPARATUS FOR TRANSMITTING LOAD INFORMATION AMONG NODES IN A RADIO SYSTEM N MAC CONTROL ELEMENTS
88304	88304-GB-EPT	2443860	09779843.3	2443860	GB	9-Apr-2014	18-Jun-2029	18-Jun-2009	A METHOD AND APPARATUS FOR TRANSMITTING LOAD INFORMATION AMONG NODES IN A RADIO SYSTEM N MAC CONTROL ELEMENTS
88304	88304-US-PCT	8761104	13/378506	2012-0087276	US	24-Jun-2014	18-Jun-2029	18-Jun-2009	A METHOD AND APPARATUS FOR TRANSMITTING LOAD INFORMATION AMONG NODES IN A RADIO SYSTEM



Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
88317	88317-EP-EPT		09781910.6	2468041	EP		17-Aug-2029	17-Aug-2009	Method for handing over a user equipment connected to a base station from the base station to a femto access point
88317	88317-US-PCT	8971890	13/390827	2012-0231792	US	3-Mar-2015	17-Aug-2029	17-Aug-2009	Method for handing over a user equipment connected to a base station from the base station to a femto access point
88318	88318-EP-EPT		09752149.6	2484151	EP		30-Oct-2029	30-Oct-2009	A METHOD AND APPARATUS
88318	88318-US-PCT		13/499139	2012-0231797	US		30-Oct-2029	30-Oct-2009	A METHOD AND APPARATUS
88319	88319-EP-EPT		09751865.8	2484144	EP		30-Oct-2029	30-Oct-2009	A METHOD AND APPARATUS
88319	88319-US-PCT		13/499125	2012-0218886	US		30-Oct-2029	30-Oct-2009	A METHOD AND APPARATUS
88321	88321-DE-EPT	602010033243.8	10709486.4	2545744	DE	11-May-2016	12-Mar-2030	12-Mar-2010	Relaying in a communication system
88321	88321-GB-EPT	2545744	10709486.4	2545744	GB	11-May-2016	12-Mar-2030	12-Mar-2010	Relaying in a communication system
88321	88321-US-PCT	8897262	13/634348	2013-0051309	US	25-Nov-2014	12-Mar-2030	12-Mar-2010	Relaying in a communication system
88322	88322-EP-EPT		09748755.7	2494797	EP		29-Oct-2029	29-Oct-2009	Apparatus and method with server including data replicated from the mobile device
88324	88324-DE-EPT	602010020692.0	10710818.5	2543219	DE	3-Dec-2014	5-Mar-2030	5-Mar-2010	A METHOD AND APPARATUS FOR USE IN A MOBILE COMMUNICATIONS SYSTEM COMPRISING A RELAY NODE
88324	88324-GB-EPT	2543219	10710818.5	2543219	GB	3-Dec-2014	5-Mar-2030	5-Mar-2010	A METHOD AND APPARATUS FOR USE IN A MOBILE COMMUNICATIONS SYSTEM COMPRISING A RELAY NODE
88335	88335-DE-EPT	60 2010 030 269.5	10701664.4	2529580	DE	20-Jan-2016	25-Jan-2030	25-Jan-2010	HYBRID HOME NODE B
88335	88335-EP-EPT	2529580	10701664.4	2529580	EP	20-Jan-2016	25-Jan-2030	25-Jan-2010	HYBRID HOME NODE B
88335	88335-GB-EPT	2529580	10701664.4	2529580	GB	20-Jan-2016	25-Jan-2030	25-Jan-2010	HYBRID HOME NODE B
88335	88335-US-PCT	9113405	13/574882	2013-0053048	US	18-Aug-2015	25-Jan-2030	25-Jan-2010	METHODS AND APPARATUS FOR SUPPORTING MULTIPLE TYPES OF CONNECTIONS TO A CORE NETWORK
88336	88336-US-PCT	8767614	13/516554	2012-0250605	US	1-Jul-2014	17-Dec-2029	17-Dec-2009	Reporting Buffering Information
88345	88345-DE-EPT	602010031674.2	10712061.0	2553994	DE	30-Mar-2016	30-Mar-2030	30-Mar-2010	Enhanced admission control in relay-enhanced access networks
88345	88345-GB-EPT	2553994	10712061.0	2553994	GB	30-Mar-2016	30-Mar-2030	30-Mar-2010	Enhanced admission control in relay-enhanced access networks
88345	88345-US-PCT	9131495	13/638811	2013-0143574	US	8-Sep-2015	30-Mar-2030	30-Mar-2010	Enhanced admission control in relay-enhanced access networks
88354	88354-DE-EPT	602010023034.1	10716530.0	2564658	DE	11-Mar-2015	26-Apr-2030	26-Apr-2010	Connection Arrangement in Relayed Wireless Communications
88354	88354-GB-EPT	2564658	10716530.0	2564658	GB	11-Mar-2015	26-Apr-2030	26-Apr-2010	Connection Arrangement in Relayed Wireless Communications
88354	88354-US-PCT	9031596	13/643574	2013-0084795	US	12-May-2015	26-Apr-2030	26-Apr-2010	Connection Arrangement in Relayed Wireless Communications
88367	88367-EP-EPT		10747040.3	2609775	EP		27-Aug-2030	27-Aug-2010	HANDOVER OF CONNECTION OF USER EQUIPMENT
88374	88374-EP-EPT		11748319.8	2620035	EP		26-Jul-2031	26-Jul-2011	DISCONTINUOUS RECEPTION ACROSS TRANSMISSIONS ON DIFFERENT RADIO ACCESS TECHNOLOGIES
88375	88375-EP-EPT		10790742.0	2643986	EP		24-Nov-2030	24-Nov-2010	Secondary Spectrum Use
88380	88380-US-PCT	9603126	13/994,189		US	21-Mar-2017	2-May-2031	16-Dec-2010	Common control deactivation in carrier aggregation
88383	88383-EP-EPT		10859599.2	2638713	EP		11-Nov-2030	11-Nov-2010	METHOD AND APPARATUS FOR HANDLING CLOSED SUBSCRIBER GROUPS IN RELAY-ENHANCED SYSTEM
88383	88383-US-PCT	9392455	13/884657	2013-0273890	US	12-Jul-2016	7-Jun-2031	11-Nov-2010	METHOD AND APPARATUS FOR HANDLING CLOSED SUBSCRIBER GROUPS IN RELAY-ENHANCED SYSTEM
88384	88384-EP-EPT		10763682.1	2625881	EP		6-Oct-2030	6-Oct-2010	Coordinating communications in radio service areas
88385	88385-DE-EPT	602011019980.3	11700235.2	2661942	DE	23-Sep-2015	5-Jan-2031	5-Jan-2011	Intra IP communication within a relay node for a radio telecommunication network
88385	88385-GB-EPT	2661942	11700235.2	2661942	GB	23-Sep-2015	5-Jan-2031	5-Jan-2011	Intra IP communication within a relay node for a radio telecommunication network
88385	88385-US-PCT		13/978,304	2013-0315134	US		5-Jan-2031	5-Jan-2011	Intra IP communication within a relay node for a radio telecommunication network
88387	88387-EP-EPT		11701007.4	2666270	EP		18-Jan-2031	18-Jan-2011	Matched Filtered Data Samples Processing
88389	88389-US-PCT	9565691	13/990,074	20130250900	US	7-Feb-2017	29-Nov-2030	29-Nov-2010	CARRIER SELECTION IN RELAY SYSTEMS
88397	88397-US-PCT	9042328	13/983586	2013-0315188	US	26-May-2015	4-Feb-2031	4-Feb-2011	CHANNEL QUALITY INDICATOR REPORTING IN COMMUNICATIONS SYSTEM
88398	88398-US-PCT	9338655	13/977357	20140220934	US	10-May-2016	11-Nov-2030	28-Dec-2010	Access control of relay node with closed subscriber group
88399	88399-DE-EPT	602011026392.7	11704760.5	2674005	DE	11-May-2016	11-Feb-2031	11-Feb-2011	SIGNALLING A MUTING PATTERN TO A USER EQUIPMENT FOR TIME DOMAIN ENHANCED INTER-CELL INTERFERENCE COORDINATION
88399	88399-GB-EPT	2674005	11704760.5	2674005	GB	11-May-2016	11-Feb-2031	11-Feb-2011	SIGNALLING A MUTING PATTERN TO A USER EQUIPMENT FOR TIME DOMAIN ENHANCED INTER-CELL INTERFERENCE COORDINATION
88399	88399-US-PCT		13/984,676	2013-0343315	US		11-Feb-2031	11-Feb-2011	SIGNALLING A MUTING PATTERN TO A USER EQUIPMENT FOR TIME DOMAIN ENHANCED INTER-CELL INTERFERENCE COORDINATION
88414	88414-EP-EPT		11864751.0	2705686	EP		3-May-2031	3-May-2011	Control signalling in carrier aggregation systems
88416	88416-EP-EPT		11713778.6	2698007	EP		11-Apr-2031	11-Apr-2011	A method and Apparatus
88425	88425-US-PCT		14/241,477	2014-0233378	US		30-Aug-2031	30-Aug-2011	METHOD AND APPARATUS TO LOWER CAPACITY REQUIREMENTS ON BACKHAUL INTERFACE BETWEEN BASE STATIONS
88440	88440-EP-EPT		11743080.1	2742753	EP		12-Aug-2031	12-Aug-2011	Resource Reconfiguration for Uplink Transmission Latency
88443	88443-EP-EPT		11725924.2	2721755	EP		15-Jun-2031	15-Jun-2011	Latency
88468	88468-EP-EPT		11879092.2	2798903	EP		29-Dec-2031	29-Dec-2011	OPERATING BROADBAND PUBLIC SAFETY MOBILE COMMUNICATION
88468	88468-US-PCT	9473907	14/369230	20140329517	US	18-Oct-2016	29-Dec-2031	29-Dec-2011	OPERATING BROADBAND PUBLIC SAFETY MOBILE COMMUNICATION
88485	88485-EP-EPT		11773722.1	2769590	EP		20-Oct-2031	20-Oct-2011	Timeslot Allocation in Uplink CDMA

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
88485	88485-US-PCT	9414366	14/352,714	2014-0254536	US	9-Aug-2016	1-Jan-2032	20-Oct-2011	Timeslot Allocation in Uplink CDMA
88486	88486-EP-EPT		11796669.7	2789171	EP		8-Dec-2031	8-Dec-2011	Network Synchronisation of Devices in a D2D Cluster
88486	88486-US-PCT		14/362,978	2014-0314057	US		8-Dec-2031	8-Dec-2011	Network Synchronisation of Devices in a D2D Cluster
88491	88491-EP-EPT		12769392.7	2901778	EP		28-Sep-2032	28-Sep-2012	LOCATION REGISTRATION FOR A DEVICE-TO-DEVICE (D2D COMMUNICATION USER EQUIPMENT BEING IN IDLE MODE
88491	88491-US-PCT		14/432116	20150281940	US		28-Sep-2032	28-Sep-2012	LOCATION REGISTRATION FOR A DEVICE-TO-DEVICE D2D COMMUNICATION USER EQUIPMENT BEING IN IDLE MODE MOBILITY MANAGEMENT
88492	88492-EP-EPT		12708845.8	2826191	EP		15-Mar-2032	15-Mar-2012	Wireless Multi-flow communications in the uplink
88501	88501-EP-EPT[1]		13704070.5	2829117	EP		8-Feb-2033	8-Feb-2013	DATA TRANSMISSION MECHANISM WITH IMPROVED ROBUSTNESS USING MULTIFLOW CONNECTION
88501	88501-US-PCT[1]	9426073	14/386,146	2015-0085657	US	23-Aug-2016	8-Feb-2033	8-Feb-2013	DATA TRANSMISSION MECHANISM WITH IMPROVED ROBUSTNESS USING MULTIFLOW CONNECTION
88513	88513-EP-EPT		13727141.7	2856740	EP		4-Jun-2033	4-Jun-2013	Data Loading Control
88592	88592-US-CNT	9408097	14/926,268	2016-0050578	US	2-Aug-2016	24-Jul-2033	24-Jul-2013	INTERFERENCE MEASUREMENT RESOURCE (IMR) SIGNALING AND USE TO SUPPORT INTERFERENCE COORDINATION BETWEEN CELLS
88592	88592-US-NP	9210602	13/949810	2014-0036706	US	8-Dec-2015	24-Jul-2033	24-Jul-2013	INTERFERENCE MEASUREMENT RESOURCE (IMR) SIGNALING AND USE TO SUPPORT INTERFERENCE COORDINATION BETWEEN CELLS
88652	88652-EP-EPT		13714311.1	2982182	EP		5-Apr-2033	5-Apr-2013	CELL RESELECTIONS WITHOUT NOTIFICATIONS TO NETWORK
88664	88664-EP-EPT		13730507.4	3008961	EP		11-Jun-2033	11-Jun-2013	Interference mitigation in strong imbalance zone
88664	88664-US-PCT		14/897,865		US		11-Jun-2033	11-Jun-2013	Interference mitigation in strong imbalance zone
88677	88677-EP-EPT		13740241.8	3022965	EP		18-Jul-2033	18-Jul-2013	Capability handling after inter radio access technology handover
88700	88700-US-PCT		15/022555	20160234853	US		29-Sep-2034	29-Sep-2014	Signaling Designs for Network Assisted Interference Cancellation and Suppression
07749	07749-US-PCT	6876674	09/602374		US	5-Apr-2005	23-Dec-2017	23-Dec-1997	A METHOD FOR RECOVERING CLOCK SYNCHRONIZATION BETWEEN BSS DEVICES CONNECTED BY AN ATM CONNECTION
07981	07981-US-PCT	6850883	09/601827		US	1-Feb-2005	9-Feb-2019	9-Feb-1999	A DECODING METHOD, SPEECH CODING PROCESSING UNIT AND A NETWORK ELEMENT
11454	11454-US-PCT	6839420	09/620163		US	4-Jan-2005	14-Jan-2019	14-Jan-1999	METHOD FOR TRANSFERRING THE SERVICE PROFILE OF A DIGITAL SUBSCRIPTION TO A DIGITAL TERMINAL DEVICE
14163	14163-US-PCT	6898181	09/572344		US	24-May-2005	23-Nov-2018	23-Nov-1998	DATA COMPRESSION NEGOTIATION IN A TELECOMMUNICATION SYSTEM
14320	14320-US-PCT	6847826	09/708103		US	25-Jan-2005	3-May-2019	3-May-1999	METHOD OF SYNCHRONISATION OF A BASE STATION NETWORK
14694	14694-US-PCT	6898416	10/045323	20020115413	US	24-May-2005	4-May-2019	4-May-1999	DEVICE MEASURING THE USAGE OF INTERWORKING HARDWARE IN MSC AND USAGE OF RADIO RESOURCES IN HSCSD DATA CELLS
15903	15903-US-PCT[2]	7532892	10/476457	20040152422	US	12-May-2009	19-Oct-2021	19-Oct-2001	QUALITY BASED AUTOTUNING OF THRESHOLD POWER LEVELS IN POWERBASED ADMISSION CONTROL
17116	17116-US-NP	6865236	09/585202		US	8-Mar-2005	1-Jun-2020	1-Jun-2000	EFFICIENT REALIZATION OF BIORTHOGONAL SPHERICAL SPACE-TIME CODES
17550	17550-US-NP	6907261	09/966868	20030064742	US	14-Jun-2005	28-Sep-2021	28-Sep-2001	POWER ALLOCATION FOR MIXED-QoS CDMA SYSTEMS USING PREDICTIVECHANNEL MODELING
18023	18023-US-PCT	6882624	09/679476		US	19-Apr-2005	9-Apr-2019	9-Apr-1999	CONGESTION CONTROL ALGORITHM IN ACCESS NODE OF IPOR IP/ATM NETWORKS
23417	23417-US-PCT	6850765	09/874823	20020019217	US	1-Feb-2005	24-Nov-2019	24-Nov-1999	NOVEL FREQUENCY HOPPING TRANSMITTER ARCHITECTURE WITHOUT PING-PONG SYNTHESIZER
23757	23757-US-NP	7512111	10/611679	20040258042	US	31-Mar-2009	26-Dec-2025	2-Jul-2003	TX TIMESTAMPING WITH IPDL
24277	24277-US-NP	6895225	09/537501		US	17-May-2005	29-Mar-2020	29-Mar-2000	ANTENNA ADJUSTMENT
28037	28037-US-NP	6882853	09/892265	20020019224	US	19-Apr-2005	27-Jun-2021	27-Jun-2001	A HIERARCHIAL SUBDIVISION SYSTEM FOR STORING, DISPLAYING ANDSEARCHING GEOGRAPHICALLY ORGANIZED DATASETS
28563	28563-US-CIP	7512084	10/226883	20050120378	US	31-Mar-2009	28-Nov-2021	23-Aug-2002	DVB-T FILTER DETECTION BY UDP LISTENER TABLE
28745	28745-US-PCT	7551683	10/561987	20060211436	US	23-Jun-2009	29-Jun-2024	29-Jun-2004	METHOD FOR ADJUSTING BURST-FORM TRANSMISSION BETWEEN TWO CHANNELS HAVING DIFFERENT BIT RATES

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
29436	29436-US-NP	6889039	09/780392	20010014600	US	3-May-2005	12-Feb-2021	12-Feb-2001	MEMORY MANAGEMENT TERMINAL AND METHOD FOR HANDLING ACOUSTICSAMPLES
33876	33876-US-PCT	7535417	11/631356	20070285309	US	19-May-2009	30-Jun-2024	30-Jun-2004	ENHANCING TIME KEEPING ACCURACY FOR LOW POWER GPS RECEIVERSUSED IN CELLULAR TELEPHONES
34876	34876-US-CIP	6898788	09/839978	20020100028	US	24-May-2005	30-Oct-2018	20-Apr-2001	SYSTEM FOR MODIFYING THE FUNCTIONALITY OF COMPILED COMPUTERCODE AT RUN-TIME
36026	36026-US-NP	6914472	10/384911	20040174222	US	5-Jul-2005	6-Mar-2023	6-Mar-2003	PHASE SHIFTER SOLUTIONS FOR PHASE MODULATION
36150	36150-US-PCT	7493291	10/484586	20050071278	US	17-Feb-2009	20-Oct-2026	23-Jan-2004	LOCALLY SHARED SUBSCRIPTION OF MULTIMEDIA CONTENT
66207	66207-US-PCT	8467793	13/127183	20120122460	US	18-Jun-2013	30-Oct-2029	30-Oct-2009	Improved mobility for non-CSG UE <sub>s</sub> in a CSG environment
66953	66953-US-CNT	6919920	09/934796	20020030745	US	19-Jul-2005	24-Nov-2017	22-Aug-2001	Photographic system involving data collection from a communicating scene
69494	69494-US-NP	8457155	12/557678	20110063409	US	4-Jun-2013	26-Apr-2031	11-Sep-2009	Reduction of subjectively redundant disparity in stereoscopic video coding
71305	71305-US-NP	8463229	12/694457	20110183632	US	11-Jun-2013	29-Jan-2032	27-Jan-2010	Co-located Coexistence for Cognitive Radio
71525	71525-US-NP	8446484	12/799348	20110261217	US	21-May-2013	25-Aug-2031	21-Apr-2010	Scaling method how to reduce amount of data in imaging application
72274	72274-US-NP	8488455	12/819768	20110310783	US	16-Jul-2013	1-Jun-2031	21-Jun-2010	Enabling identical proportionally fair scheduling of broadcast services in base stations
75828	75828-US-NP		13/558854	20130031497	US		26-Jul-2032	26-Jul-2012	Method and interface for search services
75981	75981-US-PCT		14/131603	20140171029	US		8-Jul-2031	8-Jul-2011	SIM card conversion function for LTE
78129	78129-CN-PCT		201280071582.1	104205918	CN		19-Mar-2032	19-Mar-2012	Data offloading related measurement reporting
04145	04145-DE-EPA	69738249.4	97115777.1	0829988	DE	31-Oct-2007		11-Sep-1997	SYNCHRONIZATION AND SAMPLING FREQUENCY IN AN APPARATUS RECEIVING OFDM MODULATED TRANSMISSION
04166	04166-DE-EPA	69933409.8	99108493.0	0955754	DE	4-Oct-2006	30-Apr-2019	30-Apr-1999	METHOD A. APPARATUS F. ACHIEVING A. MAINTAINING SYMBOL SYNCHRONIZATION (IN OFDM)
04166	04166-GB-EPA	0955754	99108493.0	0955754	GB	4-Oct-2006	30-Apr-2019	30-Apr-1999	METHOD A. APPARATUS F. ACHIEVING A. MAINTAINING SYMBOL SYNCHRONIZATION (IN OFDM)
04209	04209-CN-PCT	02823055.8	02823055.8	1589574	CN	26-May-2010		18-Nov-2002	4G PORTAL AND IP DATACAST
04216	04216-KR-PCT	0913975	2004-7007300		KR	19-Aug-2009		12-Nov-2002	ACTIVATING SW MODULES ON SELECTED RECEIVERS IN DVB BROADCASTENVIRONMENT
06712	06712-CN-PCT	97193672.2	97193672.2	1215535	CN	25-Dec-2002		6-Mar-1997	SILMUKKAMITTAUSMENETELMÄ
06712	06712-DE-EPT	69730204.0	97906203.1	0883967	DE	11-Aug-2004		6-Mar-1997	SILMUKKAMITTAUSMENETELMÄ
06712	06712-GB-EPT	0883967	97906203.1	0883967	GB	11-Aug-2004		6-Mar-1997	SILMUKKAMITTAUSMENETELMÄ
07246	07246-DE-EPA	69711772.3	97660080.9	0818822	DE	10-Apr-2002		8-Jul-1997	PACKAGE STRUCTURE FOR MULTICHIP MODULE
07325	07325-DE-EPT	69835816.3	98929455.8	0988706	DE	6-Sep-2006	23-Jun-2018	23-Jun-1998	RECEPTION METHOD AND RECEIVER
07337	07337-CH-EPT	0883371	97904470.8	0883371	CH	10-Oct-2001	11-Feb-2017	11-Feb-1997	A MONITORING METHOD AND A MONITORING EQUIPMENT
07337	07337-DE-EPT	69707266.5	97904470.8	0883371	DE	10-Oct-2001	11-Feb-2017	11-Feb-1997	A MONITORING METHOD AND A MONITORING EQUIPMENT
07337	07337-DK-EPT	0883371	97904470.8	0883371	DK	10-Oct-2001	11-Feb-2017	11-Feb-1997	A MONITORING METHOD AND A MONITORING EQUIPMENT
07337	07337-ES-EPT	0883371	97904470.8	0883371	ES	10-Oct-2001	11-Feb-2017	11-Feb-1997	A MONITORING METHOD AND A MONITORING EQUIPMENT
07337	07337-FR-EPT	0883371	97904470.8	0883371	FR	10-Oct-2001	11-Feb-2017	11-Feb-1997	A MONITORING METHOD AND A MONITORING EQUIPMENT
07337	07337-GB-EPT	0883371	97904470.8	0883371	GB	10-Oct-2001		11-Feb-1997	A MONITORING METHOD AND A MONITORING EQUIPMENT
07337	07337-JP-PCT	3735660	9518419	2000503556	JP	4-Nov-2005	11-Feb-2017	11-Feb-1997	A MONITORING METHOD AND A MONITORING EQUIPMENT
07337	07337-KR-PCT	434823	98-705722	99-82004	KR	27-May-2004	11-Feb-2017	11-Feb-1997	A MONITORING METHOD AND A MONITORING EQUIPMENT
07337	07337-NL-EPT	0883371	97904470.8	0883371	NL	10-Oct-2001	11-Feb-2017	11-Feb-1997	A MONITORING METHOD AND A MONITORING EQUIPMENT
07388	07388-DE-EPA	69720912.1	97660108.8	0841828	DE	16-Apr-2003		16-Oct-1997	DATABASE CONTROL BY A SUBSCRIBER NUMBER
07388	07388-NL-EPA	0841828	97660108.8	0841828	NL	16-Apr-2003	16-Oct-2017	16-Oct-1997	DATABASE CONTROL BY A SUBSCRIBER NUMBER
07389	07389-DE-EPT	69725760.6	97936714.1	0976265	DE	22-Oct-2003	26-Aug-2017	26-Aug-1997	AN OPINION POLL UTILIZING A WIRELESS TRANSMISSION CONNECTION

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
07389	07389-FR-EPT	0976265	97936714.1	0976265	FR	22-Oct-2003	26-Aug-2017	26-Aug-1997	AN OPINION POLL UTILIZING A WIRELESS TRANSMISSION CONNECTION
07389	07389-GB-EPT	0976265	97936714.1	0976265	GB	22-Oct-2003	26-Aug-2017	26-Aug-1997	AN OPINION POLL UTILIZING A WIRELESS TRANSMISSION CONNECTION
07389	07389-JP-PCT	4054864	10-511310	2000-517115	JP	21-Dec-2007		26-Aug-1997	AN OPINION POLL UTILIZING A WIRELESS TRANSMISSION CONNECTION
07390	07390-CH-EPA	0813855	97660059.3	0813855	CH	3-Jul-2002	6-Jun-2017	6-Jun-1997	A PATIENT'S NURSING APPARATUS AND NURSING SYSTEM
07390	07390-DE-EPA	69713686.8	97660059.3	0813855	DE	3-Jul-2002		6-Jun-1997	A PATIENT'S NURSING APPARATUS AND NURSING SYSTEM
07442	07442-DE-EPT	69721579.2	97923124.8	0976272	DE	2-May-2003	26-May-2017	26-May-1997	EMC PROTECTION
07465	07465-DE-EPA	69724319.2	97660046.0	0804030	DE	27-Aug-2003		22-Apr-1997	HOME TERMINAL EQUIPMENT
07465	07465-JP-NP	3939810	9-109196	10-84537	JP	6-Apr-2007		25-Apr-1997	HOME TERMINAL EQUIPMENT
07540	07540-CA-PCT	2271779	2271779		CA	1-May-2007		11-Nov-1997	CENTRALIZED BILLING OF MULTIMEDIA SERVICES
07540	07540-CN-PCT	97180604.7	97180604.7	1240523	CN	15-Aug-2007		11-Nov-1997	CENTRALIZED BILLING OF MULTIMEDIA SERVICES
07540	07540-RU-PCT	2212057	99112114		RU	10-Sep-2003		11-Nov-1997	CENTRALIZED BILLING OF MULTIMEDIA SERVICES
07575	07575-DE-EPA	69716543.4	97660091.6	0826963	DE	23-Oct-2002		22-Aug-1997	AN APPARATUS FOR TAKING AND ANALYSING LIQUID SAMPLES, SUCH AS BLOOD SAMPLES
07575	07575-FR-EPA	0826963	97660091.6	0826963	FR	23-Oct-2002	22-Aug-2017	22-Aug-1997	AN APPARATUS FOR TAKING AND ANALYSING LIQUID SAMPLES, SUCH AS BLOOD SAMPLES
07575	07575-GB-EPA	0826963	97660091.6	0826963	GB	23-Oct-2002	22-Aug-2017	22-Aug-1997	AN APPARATUS FOR TAKING AND ANALYSING LIQUID SAMPLES, SUCH AS BLOOD SAMPLES
07758	07758-AU-PCT	754839	10363/99		AU	13-Mar-2003		11-Nov-1998	METHOD FOR LOCATING MOBILE STATION IN DISTRIBUTED MANNER
07758	07758-BR-PCT		PI9814119.8	1552	BR			11-Nov-1998	METHOD FOR LOCATING MOBILE STATION IN DISTRIBUTED MANNER
07758	07758-CA-PCT	2308409	2308409	2308409	CA	10-Nov-2009		11-Nov-1998	METHOD FOR LOCATING MOBILE STATION IN DISTRIBUTED MANNER
07758	07758-CN-PCT	ZL98813032.7	98813032.7	1286007	CN	21-Jul-2004	11-Nov-2018	11-Nov-1998	METHOD FOR LOCATING MOBILE STATION IN DISTRIBUTED MANNER
07758	07758-DE-EPA	69842441.7	98309100.0	0917385	DE	12-Oct-2011		6-Nov-1998	METHOD FOR LOCATING MOBILE STATION IN DISTRIBUTED MANNER
07758	07758-JP-PCT	4286450	2000-520610	4286450	JP	3-Apr-2009		11-Nov-1998	METHOD FOR LOCATING MOBILE STATION IN DISTRIBUTED MANNER
07758	07758-MX-PCT	218842	4519		MX	27-Jan-2004	11-Nov-2018	11-Nov-1998	METHOD FOR LOCATING MOBILE STATION IN DISTRIBUTED MANNER
07928	07928-BR-PCT	PI9815208.4	PI9815208.4	1569	BR	29-Nov-2011		19-Oct-1998	A METHOD AND A SYSTEM FOR PROCESSING A VIRTUAL ACOUSTIC ENVIRONMENT
07928	07928-CN-PCT	ZL98812451.3	98812451.3	1282444	CN	1-Oct-2003	19-Oct-2018	19-Oct-1998	A METHOD AND A SYSTEM FOR PROCESSING A VIRTUAL ACOUSTIC ENVIRONMENT
07928	07928-DE-EPT	69841162.5	98949020.6	1023716	DE	16-Sep-2009		19-Oct-1998	A METHOD AND A SYSTEM FOR PROCESSING A VIRTUAL ACOUSTIC ENVIRONMENT
07928	07928-FR-EPT	1023716	98949020.6	1023716	FR	16-Sep-2009		19-Oct-1998	A METHOD AND A SYSTEM FOR PROCESSING A VIRTUAL ACOUSTIC ENVIRONMENT
07928	07928-GB-EPT	1023716	98949020.6	1023716	GB	16-Sep-2009		19-Oct-1998	A METHOD AND A SYSTEM FOR PROCESSING A VIRTUAL ACOUSTIC ENVIRONMENT
07928	07928-JP-PCT	4684415	2000-517404	2001521191	JP	18-Feb-2011		19-Oct-1998	A METHOD AND A SYSTEM FOR PROCESSING A VIRTUAL ACOUSTIC ENVIRONMENT
07928	07928-KR-PCT	10-440454	2000-7004231	2001-31248	KR	5-Jul-2004	19-Oct-2018	19-Oct-1998	A METHOD AND A SYSTEM FOR PROCESSING A VIRTUAL ACOUSTIC ENVIRONMENT
07928	07928-RU-PCT	2234819	2000112549		RU	20-Aug-2004		19-Oct-1998	A METHOD AND A SYSTEM FOR PROCESSING A VIRTUAL ACOUSTIC ENVIRONMENT
07949	07949-DE-EPA	69933160.9	99660036.7	0942524	DE	13-Sep-2006		25-Feb-1999	FEEDBACK BIAS CIRCUIT FOR POWER AMPLIFIERS
07949	07949-DE-EPD	69942880.7	06015328.5	1744448	DE	20-Oct-2010		24-Jul-2006	FEEDBACK BIAS CIRCUIT FOR POWER AMPLIFIERS
07981	07981-CA-PCT	2320465	2320465		CA	6-Jun-2006		9-Feb-1999	A DECODING METHOD, SPEECH CODING PROCESSING UNIT AND A NETWORK ELEMENT
07981	07981-CN-PCT	ZL99802829.0	99802829.0	1290389	CN	26-May-2004		9-Feb-1999	A DECODING METHOD, SPEECH CODING PROCESSING UNIT AND A NETWORK ELEMENT

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
07981	07981-DE-EPT	69904440.5	99902584.4	1055225	DE	11-Dec-2002	9-Feb-2019	9-Feb-1999	A DECODING METHOD, SPEECH CODING PROCESSING UNIT AND A NETWORK ELEMENT
07981	07981-FR-EPT	1055225	99902584.4	1055225	FR	11-Dec-2002		9-Feb-1999	A DECODING METHOD, SPEECH CODING PROCESSING UNIT AND A NETWORK ELEMENT
07981	07981-GB-EPT	1055225	99902584.4	1055225	GB	11-Dec-2002		9-Feb-1999	A DECODING METHOD, SPEECH CODING PROCESSING UNIT AND A NETWORK ELEMENT
07981	07981-JP-PCT	4309576	2000-530901	2002-503045	JP	15-May-2009		9-Feb-1999	A DECODING METHOD, SPEECH CODING PROCESSING UNIT AND A NETWORK ELEMENT
10165	10165-CN-PCT	ZL98802166.8	98802166.8	1246222	CN	18-Jan-2006	28-Jan-2018	28-Jan-1998	METHOD OF REDUCING INTERFERENCE, AND RADIO SYSTEM
10280	10280-DE-EPT	69721779.5	97947748.6	0912921	DE	7-May-2003		17-Dec-1997	A METHOD FOR PHASE TO AMPLITUDE CONVERSION OF SINE FUNCTION
10280	10280-FR-EPT	0912921	97947748.6	0912921	FR	7-May-2003		17-Dec-1997	A METHOD FOR PHASE TO AMPLITUDE CONVERSION OF SINE FUNCTION
10280	10280-GB-EPT	0912921	97947748.6	0912921	GB	7-May-2003		17-Dec-1997	A METHOD FOR PHASE TO AMPLITUDE CONVERSION OF SINE FUNCTION
10280	10280-IT-EPT	502003901130054	97947748.6	0912921	IT	7-May-2003		17-Dec-1997	A METHOD FOR PHASE TO AMPLITUDE CONVERSION OF SINE FUNCTION
10345	10345-AU-PCT	745305	88095/98		AU	4-Jul-2002	18-Aug-2018	18-Aug-1998	A DIGITAL PHASE COMPARATOR
10345	10345-CN-PCT	ZL98801190.5	98801190.5	1237289	CN	29-Sep-2004	18-Aug-2018	18-Aug-1998	A DIGITAL PHASE COMPARATOR
10345	10345-DE-EPT	69810748.9	98939667.6	0938779	DE	15-Jan-2003	18-Aug-2018	18-Aug-1998	A DIGITAL PHASE COMPARATOR
10345	10345-ES-EPT	0938779	98939667.6	0938779	ES	15-Jan-2003	18-Aug-2018	18-Aug-1998	A DIGITAL PHASE COMPARATOR
10345	10345-FR-EPT	0938779	98939667.6	0938779	FR	15-Jan-2003	18-Aug-2018	18-Aug-1998	A DIGITAL PHASE COMPARATOR
10345	10345-GB-EPT	0938779	98939667.6	0938779	GB	15-Jan-2003	18-Aug-2018	18-Aug-1998	A DIGITAL PHASE COMPARATOR
10345	10345-IT-EPT	0938779	98939667.6	0938779	IT	15-Jan-2003	18-Aug-2018	18-Aug-1998	A DIGITAL PHASE COMPARATOR
10345	10345-JP-PCT	4166841	11-512852		JP	8-Aug-2008		18-Aug-1998	A DIGITAL PHASE COMPARATOR
10345	10345-NO-PCT		19991859		NO			18-Aug-1998	A DIGITAL PHASE COMPARATOR
10345	10345-SE-EPT	0938779	98939667.6	0938779	SE	15-Jan-2003	18-Aug-2018	18-Aug-1998	A DIGITAL PHASE COMPARATOR
10653	10653-CN-PCT	ZL98800255.8	98800255.8	1219337	CN	17-Mar-2004	6-Mar-2018	6-Mar-1998	KLOONATTUJEN SIM-KORTTIJEN ETSINTÄ
10690	10690-CN-PCT	ZL87180090.1	97180090.1		CN	8-Oct-2003	24-Nov-2017	24-Nov-1997	YHTEINEN MSISDN-NUMERO KAHDELLA ERI SIM-KORTILLA
10690	10690-DE-EPT	69734322.7	97945888.2	0945035	DE	5-Oct-2005	24-Nov-2017	24-Nov-1997	YHTEINEN MSISDN-NUMERO KAHDELLA ERI SIM-KORTILLA
10690	10690-NL-EPT	0945035	97945888.2	0945035	NL	5-Oct-2005	24-Nov-2017	24-Nov-1997	YHTEINEN MSISDN-NUMERO KAHDELLA ERI SIM-KORTILLA
10863	10863-DE-EPT	69937553.3	99908995.6	1072133	DE	14-Nov-2007		22-Mar-1999	SELF-OPTIMIZING CHANNEL EQUALIZATION AND DETECTION
10960	10960-CN-PCT	ZL00802905.9	00802905.9	1337100	CN	7-Jan-2004	18-Jan-2020	18-Jan-2000	AUTOMATIC TRANSMITTER POWER CONTROL METHOD
10960	10960-DE-EPT	60044425.2	00901636.1	1142152	DE	19-May-2010		18-Jan-2000	AUTOMATIC TRANSMITTER POWER CONTROL METHOD
10960	10960-GB-EPT	1142152	00901636.1	1142152	GB	19-May-2010		18-Jan-2000	AUTOMATIC TRANSMITTER POWER CONTROL METHOD
10960	10960-JP-PCD		2006-108258	2006-211719	JP			18-Jan-2000	AUTOMATIC TRANSMITTER POWER CONTROL METHOD
10960	10960-JP-PCT		2000-595437		JP			18-Jan-2000	AUTOMATIC TRANSMITTER POWER CONTROL METHOD
11280	11280-CN-PCT	ZL98806590.8	98806590.8	1261508	CN	16-Jul-2003	20-Mar-2018	20-Mar-1998	CHANNEL SELECTION IN A RADIO LINK SYSTEM
11280	11280-DE-EPT	69820437.9	98910760.2	0983704	DE	10-Dec-2003		20-Mar-1998	POINT-TO-POINT RADIO LINK SYSTEM WITH AUTOMATIC CHANNEL SELECTION
11387	11387-GB-EPT	1205079	00953211.0	1205079	GB	30-Jul-2008		17-Aug-2000	USING THE VPN-ISUP APP PARAMETER CONTENT FOR QSIG (DSS+, PSS1) TO CENTREX AND CENTREX TO QSIG INTERWORKING
11518	11518-DE-EPT	69831246.5	98908121.1	1008063	DE	17-Aug-2005	4-Mar-2018	4-Mar-1998	ULOTTEISUUSRIIPPUMATON, JÄRJESTYKSEN SÄILYTTÄVÄ DYNAMINEN HAJAUTUSMENETELMÄ KESKUSMUISTITIETOKANNOILLE. TIETOKANTA

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
11518	11518-IN-NP	217280	IN/523/MAS/98		IN	26-Mar-2008		13-Mar-1998	ULOTTEIUSRIIPPUMATON, JÄRJESTYKSEN SÄILYTTÄVÄ DYNAAMINEN HAJAUTUSMENETELMÄ KESKUSMUISTITITETOKANNOILLE. TIETOKANTA
11558	11558-DE-EPT	69834634.3	98912531.5	0976239	DE	24-May-2006	1-Apr-2018	1-Apr-1998	TIETOVIRRAN DYNAAMINEN, LOMAKEPOHJAINEN TULKINTA, FORMATOINTI JA LÄHETYS SEKÄ LÄHETTÄVÄN JA VASTAANOTTAVAN PÄÄN TOISISTAAN RIIPPUMATON MUUTOSTEN HALLINTA Extraction of desired data from data flow
11558	11558-IN-NP	213973	IN 808/MAS/98		IN	23-Jan-2008		16-Apr-1998	TIETOVIRRAN DYNAAMINEN, LOMAKEPOHJAINEN TULKINTA, FORMATOINTI JA LÄHETYS SEKÄ LÄHETTÄVÄN JA VASTAANOTTAVAN PÄÄN TOISISTAAN RIIPPUMATON MUUTOSTEN HALLINTA
12325	12325-DE-EPA	069800377.2	98660059.1	0892447	DE	2-Nov-2000	16-Jun-2018	16-Jun-1998	BATTERY FOR A MOBILE PHONE
12325	12325-FR-EPA	0892447	98660059.1	0892447	FR	2-Nov-2000	16-Jun-2018	16-Jun-1998	BATTERY FOR A MOBILE PHONE
12325	12325-GB-EPA	0892447	98660059.1	0892447	GB	2-Nov-2000	16-Jun-2018	16-Jun-1998	BATTERY FOR A MOBILE PHONE
12344	12344-DE-EPA	69737521.8	97303901.9	0817447	DE	28-Mar-2007		6-Jun-1997	MULTI-FUNCTION SOFTKEY
12344	12344-FR-EPA	0817447	97303901.9	0817447	FR	28-Mar-2007		6-Jun-1997	MULTI-FUNCTION SOFTKEY
12344	12344-GB-EPA	0817447	97303901.9	0817447	GB	28-Mar-2007		6-Jun-1997	MULTI-FUNCTION SOFTKEY
12344	12344-SE-EPA	0817447	97303901.9	0817447	SE	28-Mar-2007		6-Jun-1997	MULTI-FUNCTION SOFTKEY
12409	12409-DE-EPA	69731271.2	97660144.3	0851649	DE	20-Oct-2004	16-Dec-2017	16-Dec-1997	PROGRAMMING OF A TELEPHONE'S RINGING TONE
12409	12409-JP-DIV	4204598	2006-090923	2006-191693	JP	24-Oct-2008		8-Mar-2006	PROGRAMMING OF A TELEPHONE'S RINGING TONE
12409	12409-JP-NP	3832691	H10-454	10-215321	JP	28-Jul-2006	5-Jan-2018	5-Jan-1998	PROGRAMMING OF A TELEPHONE'S RINGING TONE
12409	12409-SE-EPA	0851649	97660144.3	0851649	SE	20-Oct-2004	16-Dec-2017	16-Dec-1997	PROGRAMMING OF A TELEPHONE'S RINGING TONE
12462	12462-DE-EPA	69733457.0	97660102.1	0835013	DE	8-Jun-2005	29-Sep-2017	29-Sep-1997	MODULAR MOBILE COMMUNICATION SYSTEM
12462	12462-NL-EPA	0835013	97660102.1	0835013	NL	8-Jun-2005		29-Sep-1997	MODULAR MOBILE COMMUNICATION SYSTEM
12544	12544-DE-EPA	69836772.3	98660011.2	0860969	DE	3-Jan-2007	6-Feb-2018	6-Feb-1998	MOBILE COMMUNICATION DEVICES
12544	12544-FR-EPA	0860969	98660011.2	0860969	FR	3-Jan-2007	6-Feb-2018	6-Feb-1998	MOBILE COMMUNICATION DEVICES
12544	12544-GB-EPA	0860969	98660011.2	0860969	GB	3-Jan-2007	6-Feb-2018	6-Feb-1998	MOBILE COMMUNICATION DEVICES
12544	12544-SE-EPA	0860969	98660011.2	0860969	SE	3-Jan-2007	6-Feb-2018	6-Feb-1998	MOBILE COMMUNICATION DEVICES
12552	12552-DE-EPA	69738476.4	97660147.6	0849924	DE	23-Jan-2008		18-Dec-1997	MENETELMÄ JA JÄRJESTELMÄ PUHELUN TALLENTAMISEKSI MUISTIVÄLINEELLE
12552	12552-FR-EPA	0849924	97660147.6	0849924	FR	23-Jan-2008		18-Dec-1997	MENETELMÄ JA JÄRJESTELMÄ PUHELUN TALLENTAMISEKSI MUISTIVÄLINEELLE
12552	12552-GB-EPA	0849924	97660147.6	0849924	GB	23-Jan-2008		18-Dec-1997	MENETELMÄ JA JÄRJESTELMÄ PUHELUN TALLENTAMISEKSI MUISTIVÄLINEELLE
12552	12552-JP-NP	3896400	9-351106	10-222199	JP	5-Jan-2007		19-Dec-1997	MENETELMÄ JA JÄRJESTELMÄ PUHELUN TALLENTAMISEKSI MUISTIVÄLINEELLE
12581	12581-DE-EPA	69733799.5	97660121.1	0851597	DE	27-Jul-2005	12-Nov-2017	12-Nov-1997	MENETELMÄ MATKAVIESTIMEN JA TOIMINTAYKSIKÖN YHTEENSOPIVUUDENTARKASTAMISEKSI, MATKAVIESTIN JA TOIMINTAYKSIKÖ
12581	12581-FR-EPA	0851597	97660121.1	0851597	FR	27-Jul-2005	12-Nov-2017	12-Nov-1997	MENETELMÄ MATKAVIESTIMEN JA TOIMINTAYKSIKÖN YHTEENSOPIVUUDENTARKASTAMISEKSI, MATKAVIESTIN JA TOIMINTAYKSIKÖ
12581	12581-GB-EPA	0851597	97660121.1	0851597	GB	27-Jul-2005	12-Nov-2017	12-Nov-1997	MENETELMÄ MATKAVIESTIMEN JA TOIMINTAYKSIKÖN YHTEENSOPIVUUDENTARKASTAMISEKSI, MATKAVIESTIN JA TOIMINTAYKSIKÖ
12696	12696-DE-EPA	69831536.7	98660072.4	0893901	DE	14-Sep-2005	22-Jul-2018	22-Jul-1998	METHOD FOR CONTROLLING A TELECOMMUNICATION SERVICE AND A TERMINAL
12696	12696-FR-EPA	0893901	98660072.4	0893901	FR	14-Sep-2005	22-Jul-2018	22-Jul-1998	METHOD FOR CONTROLLING A TELECOMMUNICATION SERVICE AND A TERMINAL
12696	12696-GB-EPA	0893901	98660072.4	0893901	GB	14-Sep-2005	22-Jul-2018	22-Jul-1998	METHOD FOR CONTROLLING A TELECOMMUNICATION SERVICE AND A TERMINAL
12719	12719-DE-EPA	69841288.5	98104250.0	0874509	DE	18-Nov-2009		10-Mar-1998	A COMPUTER AND A METHOD OF OPERATING A COMPUTER
12719	12719-FR-EPA	0874509	98104250.0	0874509	FR	18-Nov-2009		10-Mar-1998	A COMPUTER AND A METHOD OF OPERATING A COMPUTER
12719	12719-GB-EPA	0874509	98104250.0	0874509	GB	18-Nov-2009		10-Mar-1998	A COMPUTER AND A METHOD OF OPERATING A COMPUTER
12833	12833-CN-NP	ZL98108975.5	98108975.5	1200526	CN	22-Jun-2005	26-May-2018	26-May-1998	A DUAL DISPLAY ARRANGEMENT AND A TERMINAL DEVICE

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
12833	12833-DE-EPA	69804156.9	98660039.3	0881617	DE	13-Mar-2002	4-May-2018	4-May-1998	A DUAL DISPLAY ARRANGEMENT AND A TERMINAL DEVICE
12833	12833-KR-NP	639314	98-18813	98-87342	KR	20-Oct-2006	25-May-2018	25-May-1998	A DUAL DISPLAY ARRANGEMENT AND A TERMINAL DEVICE
12833	12833-NL-EPA	0881617	98660039.3	0881617	NL	13-Mar-2002	4-May-2018	4-May-1998	A DUAL DISPLAY ARRANGEMENT AND A TERMINAL DEVICE
12854	12854-DE-EPA	69820383.6	98660104.5	0910165	DE	10-Dec-2003	15-Oct-2018	15-Oct-1998	METHOD AND ARRANGEMENT FOR CALIBRATING AN ACTIVE FILTER
12854	12854-NL-EPA	0910165	98660104.5	0910165	NL	10-Dec-2003	15-Oct-2018	15-Oct-1998	METHOD AND ARRANGEMENT FOR CALIBRATING AN ACTIVE FILTER
12896	12896-CN-NP	ZL99109247.3	99109247.3	1241881	CN	24-Mar-2004	27-May-2019	27-May-1999	A TRANSMITTER
12896	12896-DE-EPA	69929938.1	99304059.1	0961402	DE	22-Feb-2006	26-May-2019	26-May-1999	A TRANSMITTER
13226	13226-CN-NP	ZL98106444.2	98106444.2	1202078	CN	18-Jun-2003		5-Feb-1998	AUTOMATICALLY PHONE NUMBER CONVERTING
13245	13245-DE-EPA	69843009.3	98304494.2	0886414	DE	17-Apr-2013		5-Jun-1998	AN IMPROVED METHOD OF HANDLING PHONE OPERATIONS AND A PHONE USING THE METHOD
13245	13245-FR-EPA	0886414	98304494.2	0886414	FR	17-Apr-2013		5-Jun-1998	AN IMPROVED METHOD OF HANDLING PHONE OPERATIONS AND A PHONE USING THE METHOD
13245	13245-NL-EPA	0886414	98304494.2	0886414	NL	17-Apr-2013		5-Jun-1998	AN IMPROVED METHOD OF HANDLING PHONE OPERATIONS AND A PHONE USING THE METHOD
13500	13500-DE-EPA	69836882.7	98305659.9	0892534	DE	17-Jan-2007	14-Jul-2018	14-Jul-1998	ONE BUTTON DIALING VIA SPEECH RECOGNITION AND VOICE SCROLLING
13500	13500-IT-EPA	502007901512739	98305659.9	0892534	IT	17-Jan-2007	14-Jul-2018	14-Jul-1998	ONE BUTTON DIALING VIA SPEECH RECOGNITION AND VOICE SCROLLING
13584	13584-DE-EPA	69826091.0	98308298.3	0913976	DE	8-Sep-2004	13-Oct-2018	13-Oct-1998	BACK TOUCH SCREEN
13584	13584-ES-EPA	0913976	98308298.3	0913976	ES	8-Sep-2004	13-Oct-2018	13-Oct-1998	BACK TOUCH SCREEN
13584	13584-FR-EPA	0913976	98308298.3	0913976	FR	8-Sep-2004	13-Oct-2018	13-Oct-1998	BACK TOUCH SCREEN
13584	13584-IT-EPA	502004901261500	98308298.3	0913976	IT	8-Sep-2004	13-Oct-2018	13-Oct-1998	BACK TOUCH SCREEN
13758	13758-CN-PCT	ZL99809369.6	99809369.6	1316129	CN	2-Jul-2003	4-Jun-2019	4-Jun-1999	VGA CONTROL WITH SIGMA-DELTA DAC
14003	14003-DE-EPT	69732528.8	97913193.5	0945039	DE	16-Feb-2005	13-Nov-2017	13-Nov-1997	JUOKSEVA KEHYSNUMEROINTI
14020	14020-CA-PCT	2288777	2288777		CA	21-Feb-2006	13-May-2018	13-May-1998	SPONTANEOUS TRAFFIC REASON HANDOVER
14020	14020-CN-PCT	ZL98805040.4	98805040.4	1256054	CN	28-May-2003	13-May-2018	13-May-1998	HANDOVER METHOD
14020	14020-DE-EPT	69836958.0	98921518.1	0981919	DE	24-Jan-2007	13-May-2018	13-May-1998	SPONTANEOUS TRAFFIC REASON HANDOVER
14020	14020-ES-EPT	0981919	98921518.1	0981919	ES	24-Jan-2007		13-May-1998	SPONTANEOUS TRAFFIC REASON HANDOVER
14020	14020-FR-EPT	0981919	98921518.1	0981919	FR	24-Jan-2007	13-May-2018	13-May-1998	SPONTANEOUS TRAFFIC REASON HANDOVER
14020	14020-GB-EPT	0981919	98921518.1	0981919	GB	24-Jan-2007	13-May-2018	13-May-1998	SPONTANEOUS TRAFFIC REASON HANDOVER
14020	14020-IT-EPT	0981919	98921518.1	0981919	IT	24-Jan-2007	13-May-2018	13-May-1998	SPONTANEOUS TRAFFIC REASON HANDOVER
14020	14020-JP-PCD		2008-272156	2009-060661	JP			22-Oct-2008	SPONTANEOUS TRAFFIC REASON HANDOVER
14020	14020-JP-PCT		1998-548845	2001525138	JP			13-May-1998	SPONTANEOUS TRAFFIC REASON HANDOVER
14020	14020-US-PCT		09/435731		US			13-May-1998	SPONTANEOUS TRAFFIC REASON HANDOVER
14093	14093-CN-PCT	ZL98810176.9	98810176.9	1276134	CN	12-Nov-2003	16-Oct-2018	16-Oct-1998	MOBILE COMMUNICATIONS SYSTEM AND A TRANSCODER UNIT
14093	14093-DE-EPT	69829199.9	98949015.6	1025729	DE	2-Mar-2005	16-Oct-2018	16-Oct-1998	MOBILE COMMUNICATIONS SYSTEM AND A TRANSCODER UNIT
14163	14163-CN-PCT	ZL98811493.3	98811493.3	1279857	CN	5-May-2004	23-Nov-2018	23-Nov-1998	DATA COMPRESSION NEGOTIATION IN A TELECOMMUNICATION SYSTEM
14163	14163-DE-EPT	69834743.9	98955622.0	1042892	DE	31-May-2006	23-Nov-2018	23-Nov-1998	DATA COMPRESSION NEGOTIATION IN A TELECOMMUNICATION SYSTEM
14169	14169-BR-PCT		PI9916519.8	9916519	BR			22-Dec-1999	MENETELMÄ TRANSMISSION TEHOSTAMISEKSI GSM-JÄRJESTELMÄSSÄ
14169	14169-CN-PCT	ZL99815046.0	99815046.0		CN	17-Mar-2004	22-Dec-2019	22-Dec-1999	MENETELMÄ TRANSMISSION TEHOSTAMISEKSI GSM-JÄRJESTELMÄSSÄ
14169	14169-DE-EPT	69941158.0	99964705.0	1142387	DE	22-Jul-2009		22-Dec-1999	MENETELMÄ TRANSMISSION TEHOSTAMISEKSI GSM-JÄRJESTELMÄSSÄ
14169	14169-FR-EPT	1142387	99964705.0	1142387	FR	22-Jul-2009		22-Dec-1999	MENETELMÄ TRANSMISSION TEHOSTAMISEKSI GSM-JÄRJESTELMÄSSÄ
14169	14169-GB-EPT	1142387	99964705.0	1142387	GB	22-Jul-2009		22-Dec-1999	MENETELMÄ TRANSMISSION TEHOSTAMISEKSI GSM-JÄRJESTELMÄSSÄ

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
14169	14169-JP-PCT		2000-591825		JP			22-Dec-1999	MENETELMÄ TRANSMISSION TEHOSTAMISEKSI GSM-JÄRJESTELMÄSSÄ
14213	14213-CN-PCT	ZL99800126.0	99800126.0	1256060	CN	8-Oct-2003	8-Feb-2019	8-Feb-1999	REDUCTION OF SIGNALLING LOAD IN PACKET RADIO NETWORK
14213	14213-DE-EPT	69924679.2	99903696.5	0980636	DE	13-Apr-2005	8-Feb-2019	8-Feb-1999	MENETELMÄ SGSN-N SKAALATTAVUUDEKSI
14305	14305-BR-PCT	PI0008264.3	PI0008264.3	0008264	BR	12-Aug-2014		16-Feb-2000	ENHANCED ADMISSION CONTROL (EAC) IN 3RD WCDMA SYSTEM
14305	14305-CN-PCT	ZL00803882.1	00803882.1	1340279	CN	24-Sep-2003		16-Feb-2000	ENHANCED ADMISSION CONTROL (EAC) IN 3RD WCDMA SYSTEM
14305	14305-DE-EPT	60046071.1	00905098.0	1153518	DE	15-Jun-2011		16-Feb-2000	ENHANCED ADMISSION CONTROL (EAC) IN 3RD WCDMA SYSTEM
14305	14305-FR-EPT	1153518	00905098.0	1153518	FR	15-Jun-2011		16-Feb-2000	ENHANCED ADMISSION CONTROL (EAC) IN 3RD WCDMA SYSTEM
14305	14305-GB-EPT	1153518	00905098.0	1153518	GB	15-Jun-2011		16-Feb-2000	ENHANCED ADMISSION CONTROL (EAC) IN 3RD WCDMA SYSTEM
14305	14305-JP-PCT	3850664	2000-600442	2002-542639	JP	8-Sep-2006	16-Feb-2020	16-Feb-2000	ENHANCED ADMISSION CONTROL (EAC) IN 3RD WCDMA SYSTEM
14320	14320-DE-EPT	69941256.0	99920839.0	1080555	DE	12-Aug-2009		3-May-1999	METHOD OF SYNCHRONISATION OF A BASE STATION NETWORK
14320	14320-GB-EPT	1080555	99920839.0	1080555	GB	12-Aug-2009		3-May-1999	METHOD OF SYNCHRONISATION OF A BASE STATION NETWORK
14610	14610-DE-EPT	60047236.1	00969579.2	1222507	DE	30-May-2012		12-Oct-2000	TESTING AND DEPLOYMENT OF NEW SOFTWARE VERSION IN TELECOMMUNICATIONS NETWORK ELEMENT BY UTILIZING REDUNDANT COMPUTER UNITS
14610	14610-DE-ETD	60049135.8	05012558.2	1585350	DE	18-Nov-2015		10-Jun-2005	TESTING AND DEPLOYMENT OF NEW SOFTWARE VERSION IN TELECOMMUNICATIONS NETWORK ELEMENT BY UTILIZING REDUNDANT COMPUTER UNITS
14610	14610-FR-ETD	1585350	05012558.2	1585350	FR	18-Nov-2015		10-Jun-2005	TESTING AND DEPLOYMENT OF NEW SOFTWARE VERSION IN TELECOMMUNICATIONS NETWORK ELEMENT BY UTILIZING REDUNDANT COMPUTER UNITS
14610	14610-GB-ETD	1585350	05012558.2	1585350	GB	18-Nov-2015		10-Jun-2005	TESTING AND DEPLOYMENT OF NEW SOFTWARE VERSION IN TELECOMMUNICATIONS NETWORK ELEMENT BY UTILIZING REDUNDANT COMPUTER UNITS
14610	14610-JP-PCT	4313971	2001-530660	2003-511781	JP	22-May-2009		12-Oct-2000	TESTING AND DEPLOYMENT OF NEW SOFTWARE VERSION IN TELECOMMUNICATIONS NETWORK ELEMENT BY UTILIZING REDUNDANT COMPUTER UNITS
14640	14640-US-PCT	6718169	09/673971		US	6-Apr-2004	24-Feb-2020	24-Feb-2000	PERCENTAGE'S INTERVAL ESTIMATION IN NETWORK MANAGEMENT
14694	14694-CN-PCT	ZL99816613.8	99816613.8	1359600	CN	18-Apr-2007		4-May-1999	DEVICE MEASURING THE USAGE OF INTERWORKING HARDWARE IN MSC AND USAGE OF RADIO RESOURCES IN HSCSD DATA CELLS
14694	14694-DE-EPT	69912324.0	99922173.2	1188333	DE	22-Oct-2003	4-May-2019	4-May-1999	DEVICE MEASURING THE USAGE OF INTERWORKING HARDWARE IN MSC AND USAGE OF RADIO RESOURCES IN HSCSD DATA CELLS
14827	14827-US-PCT	6742091	10/015134	20020116568	US	25-May-2004	3-May-2020	3-May-2000	MENETELMÄ KAKSISUUNTAISEN JONON TOTEUTTAMISEKSI AHNEESSA FUNKTIONAALISESSA OHJELMOINTIKIELESSÄ
14929	14929-DE-EPT	60016979.0	00940358.5	1293066	DE	22-Dec-2004	9-Jun-2020	9-Jun-2000	INTELLIGENT BUFFER MANAGEMENT
14959	14959-DE-EPT	60134568.1	01999127.2	1338171	DE	25-Jun-2008		26-Nov-2001	METHODS FOR PEAK RATE CAC ESPECIALLY IN AAL2 MULTIPLEXERS
14959	14959-FR-EPT	1338171	01999127.2	1338171	FR	25-Jun-2008		26-Nov-2001	METHODS FOR PEAK RATE CAC ESPECIALLY IN AAL2 MULTIPLEXERS
14959	14959-GB-EPT	1338171	01999127.2	1338171	GB	25-Jun-2008		26-Nov-2001	METHODS FOR PEAK RATE CAC ESPECIALLY IN AAL2 MULTIPLEXERS
15758	15758-CN-PCT	ZL01821453.3	01821453.3	1483291	CN	15-Nov-2006	21-Dec-2021	21-Dec-2001	TARIFF INTERWORKING WITH IN SERVICES AFTER NUMBER PORTABILITY (NP) INTRODUCTION



Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
15758	15758-DE-EPT	60145470.7	01994862.9	1348308	DE	5-Oct-2011		21-Dec-2001	TARIFF INTERWORKING WITH IN SERVICES AFTER NUMBER PORTABILITY (NP) INTRODUCTION
15767	15767-BR-PCT		PI0208825.8	0208825	BR			10-Apr-2002	METHOD FOR HANDLING LARGE NUMBER RANGES EASILY IN THE IN SERVICES
15767	15767-CN-PCT	02808659.7	02808659.7	1504043	CN	24-Jun-2009		10-Apr-2002	METHOD FOR HANDLING LARGE NUMBER RANGES EASILY IN THE IN SERVICES
15767	15767-DE-EPT	60206480.5	02735784.7	1378109	DE	5-Oct-2005	10-Apr-2022	10-Apr-2002	METHOD FOR HANDLING LARGE NUMBER RANGES EASILY IN THE IN SERVICES
15767	15767-IN-PCT	227034	1598/CHENP/2003		IN	6-Jan-2009		10-Apr-2002	METHOD FOR HANDLING LARGE NUMBER RANGES EASILY IN THE IN SERVICES
15767	15767-NL-EPT	1378109	02735784.7	1378109	NL	5-Oct-2005	10-Apr-2022	10-Apr-2002	METHOD FOR HANDLING LARGE NUMBER RANGES EASILY IN THE IN SERVICES
15822	15822-CN-PCT	ZL01823213.2	01823213.2	1505909	CN	1-Feb-2006		11-May-2001	TWO-WAY DB/DIRECTORY REPLICATION WITHOUT CONFLICTS
15873	15873-CN-PCT	01823212.4	01823212.4	1528099	CN	24-Dec-2008		4-May-2001	DIRECTIONAL POWER BASED RADIO RESOURCE MANAGEMENT FOR BASE STATIONS WITH SMART ANTENNAS
15903	15903-DE-EPT[2]	60143589.3	01274189.8	1386508	DE	1-Dec-2010		19-Oct-2001	QUALITY BASED AUTOTUNING OF THRESHOLD POWER LEVELS IN POWERBASED ADMISSION CONTROL
15903	15903-GB-EPT[2]	1386508	01274189.8	1386508	GB	1-Dec-2010		19-Oct-2001	QUALITY BASED AUTOTUNING OF THRESHOLD POWER LEVELS IN POWERBASED ADMISSION CONTROL
15921	15921-JP-PCT		2003-561036	2005-525007	JP			6-Jan-2003	A CIRCUIT TOPOLOGY FOR LOW LOSS ATTENUATOR AND SWITCH CIRCUITS OPERATING AT MICROWAVE AND MILLIMETER WAVE FREQUENCIES
15941	15941-BR-PCT		PI0207169.0		BR			25-Jan-2002	AUTOMATIC DETECTION AND MODIFICATION OF CHANNEL USAGE
15941	15941-CN-PCT		02807849.7	1500358	CN			25-Jan-2002	AUTOMATIC DETECTION AND MODIFICATION OF CHANNEL USAGE
15941	15941-IN-PCT	201899	1260/CHENP/2003		IN	17-Aug-2006	25-Jan-2022	25-Jan-2002	AUTOMATIC DETECTION AND MODIFICATION OF CHANNEL USAGE
15941	15941-JP-PCT	3732481	2002-565371	2004-524742	JP	21-Oct-2005	25-Jan-2022	25-Jan-2002	AUTOMATIC DETECTION AND MODIFICATION OF CHANNEL USAGE
15941	15941-KR-PCT	0488682	2003-7010494	2004-16839	KR	2-May-2005	25-Jan-2022	25-Jan-2002	AUTOMATIC DETECTION AND MODIFICATION OF CHANNEL USAGE
15941	15941-MX-PCT	238114	PA/a/2003/007239		MX	27-Jun-2006	25-Jan-2022	25-Jan-2002	AUTOMATIC DETECTION AND MODIFICATION OF CHANNEL USAGE
15941	15941-RU-PCT	2286029	2003127755		RU	20-Oct-2006	25-Jan-2022	25-Jan-2002	AUTOMATIC DETECTION AND MODIFICATION OF CHANNEL USAGE
15941	15941-US-CNT		10/827649	20040198368	US			19-Apr-2004	AUTOMATIC DETECTION AND MODIFICATION OF CHANNEL USAGE
15941	15941-ZA-PCT	2003/6060	2003/6060		ZA	28-Jul-2005	25-Jan-2022	25-Jan-2002	AUTOMATIC DETECTION AND MODIFICATION OF CHANNEL USAGE
16053	16053-CN-PCT		02829080.1	1628476	CN			5-Jun-2002	USER SPECIFIC HANDOVER SETTINGS
16099	16099-DE-EPT	60222419.5	02716862.4	1405469	DE	12-Sep-2007		22-Apr-2002	APPLICATION OF THE TRANSPORT BEARER MODIFICATION CAPABILITY IN CELLULAR ACCESS NETWORKS
16490	16490-DE-EPT	60312683T2	03727538.5	1516461	DE	21-Mar-2007		27-May-2003	REDUNDANT IP FORWARDING
16587	16587-DE-EPT	60315299.6	03732615.4	1518352	DE	1-Aug-2007		19-Jun-2003	LOAD BALANCING IN GGSN
16730	16730-CN-PCT	03823783.0	03823783.0	1689366	CN	5-Aug-2009		18-Aug-2003	A METHOD TO MANAGE TO TWO INSTANCES OF IU AND IUR INTERFACES IN IP RAN DISTRIBUTED ARCHITECTURE.
16730	16730-SE-EPT	1552717	03808747.4	1552717	SE	17-Jun-2009		18-Aug-2003	A METHOD TO MANAGE TO TWO INSTANCES OF IU AND IUR INTERFACES IN IP RAN DISTRIBUTED ARCHITECTURE.
16838	16838-DE-EPT	60236692.5	02740981.2	1516454	DE	9-Jun-2010		26-Jun-2002	WLAN ACCESS POINT LOAD BALANCING AND LOAD CONTROLLER
16838	16838-HK-FPR	1079632	05111510.3	1079632	HK	21-Sep-2007		14-Dec-2005	WLAN ACCESS POINT LOAD BALANCING AND LOAD CONTROLLER

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
16838	16838-TW-NP	I246347	92116608	09420807790	TW	21-Dec-2005	18-Jun-2023	19-Jun-2003	WLAN ACCESS POINT LOAD BALANCING AND LOAD CONTROLLER
17123	17123-CN-PCT		PCT/IB02/00172		CN			22-Jan-2002	PACKET SCHEDULING BASED ON POWER CONTROL FEEDBACK IN CDMA SYSTEMS
17123	17123-JP-PCT		PCT/IB02/00172		JP			22-Jan-2002	PACKET SCHEDULING BASED ON POWER CONTROL FEEDBACK IN CDMA SYSTEMS
17123	17123-KR-PCT		2003-7009875		KR			22-Jan-2002	PACKET SCHEDULING BASED ON POWER CONTROL FEEDBACK IN CDMA SYSTEMS
17314	17314-CN-PCT	ZL99816071.7	99816071.7	1134945	CN	14-Jan-2004	6-Oct-2019	6-Oct-1999	ENHANCED ACK PACING DEVICE FOR TCP CONNECTIONS
17314	17314-DE-EPT	69942071.7	99950178.6	1169826	DE	24-Feb-2010		6-Oct-1999	ENHANCED ACK PACING DEVICE FOR TCP CONNECTIONS
17313	17313-CN-PCT	ZL99812139.8	99812139.8	1323472	CN	4-Aug-2004	12-Oct-2019	12-Oct-1999	ECN-BASED APPROACH FOR CONGESTION MANAGEMENT IN HYBRID IP-ATM NETWORKS
17318	17318-DE-EPT	69911445.4	99951774.1	1119949	DE	17-Sep-2003		6-Oct-1999	METHOD AND APPARATUS FOR PROVIDING RESOURCE DISCOVERY USING MULTICAST SCOPE
17330	17330-US-NP	6771727	09/672193		US	3-Aug-2004	28-Sep-2020	28-Sep-2000	METHOD AND ARRANGEMENT FOR SYNCHRONIZING INTO A DIGITAL SIGNAL AND MAINTAINING SYNCHRONIZATION
17413	17413-CN-PCT	02822343.8	02822343.8	1586053	CN	28-Apr-2010		8-Nov-2002	PHYSICALLY SCOPED MULTICAST IN MULTI-ACCESS WIRELESS NETWORKS
17413	17413-DE-EPT	60245677.0	02779840.4	1444801	DE	23-Oct-2013		8-Nov-2002	PHYSICALLY SCOPED MULTICAST IN MULTI-ACCESS WIRELESS NETWORKS
17617	17617-BR-PCT		PI0318348.3	PI0318348.3	BR			23-Dec-2003	OVERLAPPING FREQUENCY DOMAIN MULTIPLEXING WITH INTERFERENCEREJECTION (NSOFDM)
17617	17617-CA-PCT		2530021		CA			23-Dec-2003	OVERLAPPING FREQUENCY DOMAIN MULTIPLEXING WITH INTERFERENCEREJECTION (NSOFDM)
17617	17617-CN-PCT	200380110402.7	200380110402.7	1922808	CN	13-Jan-2010		23-Dec-2003	OVERLAPPING FREQUENCY DOMAIN MULTIPLEXING WITH INTERFERENCEREJECTION (NSOFDM)
17617	17617-IN-PCT		3460/CHENP/2005	3460/CHENP/2005	IN			23-Dec-2003	OVERLAPPING FREQUENCY DOMAIN MULTIPLEXING WITH INTERFERENCEREJECTION (NSOFDM)
17617	17617-JP-PCT	4347848	2005-503968		JP	24-Jul-2009		23-Dec-2003	OVERLAPPING FREQUENCY DOMAIN MULTIPLEXING WITH INTERFERENCEREJECTION (NSOFDM)
17617	17617-KR-PCT		2005-7024500		KR			23-Dec-2003	OVERLAPPING FREQUENCY DOMAIN MULTIPLEXING WITH INTERFERENCEREJECTION (NSOFDM)
17617	17617-MX-PCT	259122	PA/A/2005/014185		MX	28-Jul-2008		23-Dec-2003	OVERLAPPING FREQUENCY DOMAIN MULTIPLEXING WITH INTERFERENCEREJECTION (NSOFDM)
17686	17686-CN-PCT	200580003904.9	200580003904.9	1914883	CN	17-Feb-2010		1-Feb-2005	ADDRESS MANAGEMENT IN A FLAT STRUCTURE MOBILE NETWORK
17686	17686-DE-EPT	602005002730.0	05702395.4	1712061	DE	3-Oct-2007		1-Feb-2005	ADDRESS MANAGEMENT IN A FLAT STRUCTURE MOBILE NETWORK
18056	18056-CN-PCT	ZL99814059.7	99814059.7	1329793	CN	20-Apr-2008		6-Oct-1999	AUTOMATED OR USER ACTIVATED ANNOUNCEMENT TO INCOMING CALL
18056	18056-DE-EPT	69941030.4	99947507.2	1127447	DE	24-Jun-2009		6-Oct-1999	AUTOMATED OR USER ACTIVATED ANNOUNCEMENT TO INCOMING CALL
18056	18056-FR-EPT	1127447	99947507.2	1127447	FR	24-Jun-2009		6-Oct-1999	AUTOMATED OR USER ACTIVATED ANNOUNCEMENT TO INCOMING CALL
18056	18056-GB-EPT	1127447	99947507.2	1127447	GB	24-Jun-2009		6-Oct-1999	AUTOMATED OR USER ACTIVATED ANNOUNCEMENT TO INCOMING CALL
18313	18313-BR-PCT		PI0012254.8	0012254	BR			30-Jun-2000	CELLULAR NETWORK BASED TERMINAL LOCATION CALCULATION IN NON-LINE-OF-SIGHT ENVIRONMENT
18313	18313-CA-PCT	2377996	2377996		CA	22-Feb-2005	30-Jun-2020	30-Jun-2000	CELLULAR NETWORK BASED TERMINAL LOCATION CALCULATION IN NON-LINE-OF-SIGHT ENVIRONMENT

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
18313	18313-CN-PCT	00809933.2	00809933.2	1360802	CN	19-May-2004	30-Jun-2020	30-Jun-2000	CELLULAR NETWORK BASED TERMINAL LOCATION CALCULATION IN NON-LINE-OF-SIGHT ENVIRONMENT
18313	18313-DE-EPT	60037425.4	00943967.0	1197111	DE	12-Dec-2007		30-Jun-2000	CELLULAR NETWORK BASED TERMINAL LOCATION CALCULATION IN NON-LINE-OF-SIGHT ENVIRONMENT
18313	18313-FR-EPT	1197111	00943967.0	1197111	FR	12-Dec-2007		30-Jun-2000	CELLULAR NETWORK BASED TERMINAL LOCATION CALCULATION IN NON-LINE-OF-SIGHT ENVIRONMENT
18313	18313-GB-EPT	1197111	00943967.0	1197111	GB	12-Dec-2007		30-Jun-2000	CELLULAR NETWORK BASED TERMINAL LOCATION CALCULATION IN NON-LINE-OF-SIGHT ENVIRONMENT
18313	18313-IN-PCT	202387	IN/PCT/02/00010/C HE		IN	8-Nov-2006	30-Jun-2020	30-Jun-2000	CELLULAR NETWORK BASED TERMINAL LOCATION CALCULATION IN NON-LINE-OF-SIGHT ENVIRONMENT
18313	18313-JP-PCT	3801505	2001-508192		JP	12-May-2006	30-Jun-2020	30-Jun-2000	CELLULAR NETWORK BASED TERMINAL LOCATION CALCULATION IN NON-LINE-OF-SIGHT ENVIRONMENT
18365	18365-JP-PCD		2008-101068	2008-178149	JP			9-Apr-2008	APPARATUS, AND ASSOCIATED METHOD, FOR FOAMING A COMPRESSED MOTION VECTOR FIELD UTILIZING PREDICTIVE MOTION CODING
18492	18492-US-CNT	7161983	10/795083	20040258155	US	9-Jan-2007	21-Jan-2020	5-Mar-2004	ADAPTIVE MOTION VECTOR FIELD CODING
18492	18492-US-NP	6711209	09/489327		US	23-Mar-2004		21-Jan-2000	ADAPTIVE MOTION VECTOR FIELD CODING
18463	18463-CN-PCT	ZL00815729.4	00815729.4	1390348	CN	11-Aug-2004	14-Nov-2020	14-Nov-2000	A NOISE SUPPRESSOR
18463	18463-DE-EPT	60026570.6	00977625.3	1242992	DE	8-Mar-2006	14-Nov-2020	14-Nov-2000	A NOISE SUPPRESSOR
18463	18463-FI-EPT	1242992	00977625.3	1242992	FI	8-Mar-2006	14-Nov-2020	14-Nov-2000	A NOISE SUPPRESSOR
18463	18463-FR-EPT	1242992	00977625.3	1242992	FR	8-Mar-2006	14-Nov-2020	14-Nov-2000	A NOISE SUPPRESSOR
18463	18463-GB-EPT	1242992	00977625.3	1242992	GB	8-Mar-2006	14-Nov-2020	14-Nov-2000	A NOISE SUPPRESSOR
18463	18463-JP-PCT		2001-537720	2003-514264	JP			14-Nov-2000	A NOISE SUPPRESSOR
18463	18463-NL-EPT	1242992	00977625.3	1242992	NL	8-Mar-2006	14-Nov-2020	14-Nov-2000	A NOISE SUPPRESSOR
18656	18656-US-CNT		11/124339	20050193339	US			6-May-2005	A CARD TO RESTORE NETWORK OBJECTS OF ARBITRARY SIZE
18680	18680-CN-PCT	ZL00819947.7	00819947.7	1454402	CN	12-Dec-2007		6-Oct-2000	SELF-ALIGNED WAVEGUIDE-TO-MICROSTRIP TRANSITION
18680	18680-DE-EPT	60024684.1	00969440.7	DE60024684T2	DE	7-Dec-2005	6-Oct-2020	6-Oct-2000	SELF-ALIGNED WAVEGUIDE-TO-MICROSTRIP TRANSITION
18817	18817-CN-NP	ZL01137428.4	01137428.4	1353413	CN	4-Jan-2006		6-Nov-2001	MUSICAL MODIFICATION OF JAPANESE SPEECH OUTPUT
18817	18817-JP-NP		2001-331053	2002/196779	JP			29-Oct-2001	MUSICAL MODIFICATION OF JAPANESE SPEECH OUTPUT
18972	18972-DE-EPA	60147829.0	01125836.5	1225789	DE	3-Apr-2013		30-Oct-2001	TRANSPARENT STEREO WIDENING ALGORITHM FOR LOUDSPEAKERS
19511	19511-CN-PCD	200810096568.2	200810096568.2	101277539	CN	21-Sep-2011		16-May-2008	SIMPLE LOCATION CALCULATION PROCESS UTILIZING CELL IDENTITY(CI), TIMING ADVANCE (TA) AND RECEIVED SIGNAL STRENGTH (RX) MEASUREMENTS
19511	19511-FR-EPT	1552321	02807757.6	1552321	FR	29-Jul-2009		6-Sep-2002	SIMPLE LOCATION CALCULATION PROCESS UTILIZING CELL IDENTITY(CI), TIMING ADVANCE (TA) AND RECEIVED SIGNAL STRENGTH (RX) MEASUREMENTS
19755	19755-CN-PCT	200380102169.8	200380102169.8	1708961	CN	26-Nov-2008		22-Oct-2003	DYNAMIC LOAD BALANCING USING LOCALIZED INFORMATION
19755	19755-DE-EPT	60347142.0	03758161.8	1561311	DE	24-Dec-2014		22-Oct-2003	DYNAMIC LOAD BALANCING USING LOCALIZED INFORMATION
19770	19770-CN-PCT	03826336.X	03826336.X	1764916	CN	18-Aug-2010		7-Mar-2003	MOBILE BROWSER RECOMMENDATION ENGINE
19770	19770-HK-FPR	1089253	06109450.8	1089253	HK	17-Dec-2010		25-Aug-2006	MOBILE BROWSER RECOMMENDATION ENGINE
19770	19770-KR-PCT	798008	2005-7016686	2005-117451	KR	18-Jan-2008		7-Mar-2003	MOBILE BROWSER RECOMMENDATION ENGINE

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
19969	19969-CN-NP	ZL200310119830.8	200310119830.8	1501587	CN	20-Feb-2008		30-Oct-2003	METHOD AND SYSTEM FOR ALLEVIATING IMPULSE NOISE USING BLANKING
19969	19969-DE-EPA	60316089.1	03256009.6	1416629	DE	5-Sep-2007		24-Sep-2003	METHOD AND SYSTEM FOR ALLEVIATING IMPULSE NOISE USING BLANKING
23023	23023-AU-PCT	751514	20573/99		AU	19-Dec-2002		29-Jan-1999	A FAST MODULATION RATE ADAPTION METHOD
23023	23023-CN-PCT	99800104.X	99800104.X	1256040	CN	2-Jul-2003		29-Jan-1999	TRANSMISSION METHOD AND RADIO SYSTEM
23023	23023-DE-EPT	69939412.0	99900908.7	0972384	DE	27-Aug-2008		29-Jan-1999	A FAST MODULATION RATE ADAPTION METHOD
23023	23023-IT-EPT	0972384	99900908.7	0972384	IT	27-Aug-2008		29-Jan-1999	A FAST MODULATION RATE ADAPTION METHOD
23023	23023-JP-PCT	4002306	11-538963	2001-518274	JP	24-Aug-2007		29-Jan-1999	A FAST MODULATION RATE ADAPTION METHOD
23023	23023-NL-EPT	0972384	99900908.7	0972384	NL	27-Aug-2008		29-Jan-1999	A FAST MODULATION RATE ADAPTION METHOD
23121	23121-DE-EPT	60033655.7	00935237.8	1186117	DE	28-Feb-2007	7-Jun-2020	7-Jun-2000	DOWNLINK POWER CONTROL IN WCDMA
23121	23121-FR-EPT	1186117	00935237.8	1186117	FR	28-Feb-2007	7-Jun-2020	7-Jun-2000	DOWNLINK POWER CONTROL IN WCDMA
23121	23121-GB-EPT	1186117	00935237.8	1186117	GB	28-Feb-2007	7-Jun-2020	7-Jun-2000	DOWNLINK POWER CONTROL IN WCDMA
23121	23121-IT-EPT	502007901525945	00935237.8	1186117	IT	28-Feb-2007	7-Jun-2020	7-Jun-2000	DOWNLINK POWER CONTROL IN WCDMA
23128	23128-AU-PCT		15629/00		AU			25-Nov-1999	POWER CONTROL METHOD FOR LINEAR MODULATION
23128	23128-CN-PCT		99813594.1	1328724	CN			25-Nov-1999	POWER CONTROL METHOD FOR LINEAR MODULATION
23128	23128-DE-EPT	69905283.1	99958212.5	1133838	DE	5-Feb-2003	25-Nov-2019	25-Nov-1999	POWER CONTROL METHOD FOR LINEAR MODULATION
23128	23128-FR-EPT	1133838	99958212.5	1133838	FR	5-Feb-2003	25-Nov-2019	25-Nov-1999	POWER CONTROL METHOD FOR LINEAR MODULATION
23128	23128-GB-EPT	1133838	99958212.5	1133838	GB	5-Feb-2003	25-Nov-2019	25-Nov-1999	POWER CONTROL METHOD FOR LINEAR MODULATION
23128	23128-IT-EPT	1133838	99958212.5	1133838	IT	5-Feb-2003	25-Nov-2019	25-Nov-1999	POWER CONTROL METHOD FOR LINEAR MODULATION
23135	23135-AU-PCT		57491/99		AU			14-Sep-1999	SPACE-TIME RECEIVER FOR WCDMA
23135	23135-BE-EPT	1040591	99944664.4	1040591	BE	22-Mar-2006	14-Sep-2019	14-Sep-1999	SPACE-TIME RECEIVER FOR WCDMA
23135	23135-CN-PCT	99801590.3	99801590.3	1277759	CN	17-Dec-2003	14-Sep-2019	14-Sep-1999	SPACE-TIME RECEIVER FOR WCDMA
23135	23135-DE-EPT	69930527.6	99944664.4	1040591	DE	22-Mar-2006	14-Sep-2019	14-Sep-1999	SPACE-TIME RECEIVER FOR WCDMA
23135	23135-ES-EPT	1040591	99944664.4	1040591	ES	22-Mar-2006	14-Sep-2019	14-Sep-1999	SPACE-TIME RECEIVER FOR WCDMA
23135	23135-FR-EPT	1040591	99944664.4	1040591	FR	22-Mar-2006	14-Sep-2019	14-Sep-1999	SPACE-TIME RECEIVER FOR WCDMA
23135	23135-GB-EPT	1040591	99944664.4	1040591	GB	22-Mar-2006	14-Sep-2019	14-Sep-1999	SPACE-TIME RECEIVER FOR WCDMA
23135	23135-IT-EPT	1040591	99944664.4	1040591	IT	22-Mar-2006	14-Sep-2019	14-Sep-1999	SPACE-TIME RECEIVER FOR WCDMA
23135	23135-JP-PCT		2000-570913		JP			14-Sep-1999	SPACE-TIME RECEIVER FOR WCDMA
23135	23135-NL-EPT	1040591	99944664.4	1040591	NL	22-Mar-2006	14-Sep-2019	14-Sep-1999	SPACE-TIME RECEIVER FOR WCDMA
23135	23135-NO-PCT		20002221		NO			14-Sep-1999	SPACE-TIME RECEIVER FOR WCDMA
23203	23203-DE-EPT	60036094.6	00909378.2	1161848	DE	22-Aug-2007		3-Mar-2000	Dynamic Handover margin
23203	23203-FR-EPT	1161848	00909378.2	1161848	FR	22-Aug-2007		3-Mar-2000	Dynamic Handover margin
23203	23203-GB-EPT	1161848	00909378.2	1161848	GB	22-Aug-2007		3-Mar-2000	Dynamic Handover margin
23203	23203-IT-EPT	1161848	00909378.2	1161848	IT	22-Aug-2007		3-Mar-2000	Dynamic Handover margin
23256	23256-AU-PCT		64786/99		AU			19-Oct-1999	Adaptive spatial and temporal multisensor interleaving scheme
23256	23256-CN-PCT		99814751.6	1331869	CN			19-Oct-1999	Adaptive spatial and temporal multisensor interleaving scheme
23256	23256-DE-EPT	69936001.3	99952666.8	1142158	DE	2-May-2007		19-Oct-1999	Adaptive spatial and temporal multisensor interleaving scheme
23256	23256-ES-EPT	1142158	99952666.8	1142158	ES	2-May-2007		19-Oct-1999	Adaptive spatial and temporal multisensor interleaving scheme
23256	23256-FR-EPT	1142158	99952666.8	1142158	FR	2-May-2007		19-Oct-1999	Adaptive spatial and temporal multisensor interleaving scheme

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
23256	23256-GB-EPT	1142158	99952666.8	1142158	GB	2-May-2007		19-Oct-1999	Adaptive spatial and temporal multisensor interleaving scheme
23256	23256-IT-EPT	1142158	99952666.8	1142158	IT	2-May-2007		19-Oct-1999	Adaptive spatial and temporal multisensor interleaving scheme
23256	23256-JP-PCT		2001-531224		JP			19-Oct-1999	Adaptive spatial and temporal multisensor interleaving scheme
23256	23256-NO-PCT		20013017		NO			19-Oct-1999	Adaptive spatial and temporal multisensor interleaving scheme
23277	23277-DE-EPT	60040266.5	00960751.6	1131966	DE	17-Sep-2008		27-Sep-2000	Inband signalling for transmission resource allocation
23277	23277-FR-EPT	1131966	00960751.6	1131966	FR	17-Sep-2008		27-Sep-2000	Inband signalling for transmission resource allocation
23277	23277-GB-EPT	1131966	00960751.6	1131966	GB	17-Sep-2008		27-Sep-2000	Inband signalling for transmission resource allocation
23311	23311-BR-PCT		PI0016579.4		BR			15-Dec-2000	A Novel Interference Resolving Algorithm for UTRA-TDD
23311	23311-CN-PCD		200510104022.3	1770904	CN			14-Sep-2005	A Novel Interference Resolving Algorithm for UTRA-TDD
23311	23311-CN-PCT	ZL00818535.2	00818535.2	1425260	CN	24-May-2006	15-Dec-2020	15-Dec-2000	A Novel Interference Resolving Algorithm for UTRA-TDD
23311	23311-DE-EPT	60044753.7	00985179.1	1243150	DE	28-Jul-2010		15-Dec-2000	A Novel Interference Resolving Algorithm for UTRA-TDD
23311	23311-GB-EPT	1243150	00985179.1	1243150	GB	28-Jul-2010		15-Dec-2000	A Novel Interference Resolving Algorithm for UTRA-TDD
23311	23311-JP-PCT	3805252	2001-547908		JP	19-May-2006	15-Dec-2020	15-Dec-2000	A Novel Interference Resolving Algorithm for UTRA-TDD
23334	23334-DE-EPT	60021772.8	00917061.4	1273108	DE	3-Aug-2005	7-Apr-2020	7-Apr-2000	A METHOD FOR EFFICIENT DL TRANSMISSION
23339	23339-DE-EPT	60131391.7	01927952.0	1285507	DE	14-Nov-2007		9-Apr-2001	A METHOD BASED ON FINITE CHANNEL STATE CLASSIFICATION FOR EFFICIENT DOWNLINK PERFORMANCE IN CELLULAR SYSTEMS
23339	23339-GB-EPT	1285507	01927952.0	1285507	GB	14-Nov-2007		9-Apr-2001	A METHOD BASED ON FINITE CHANNEL STATE CLASSIFICATION FOR EFFICIENT DOWNLINK PERFORMANCE IN CELLULAR SYSTEMS
23354	23354-CN-PCT		01808769.8	1451249	CN			23-Jan-2001	AUTOMATIC LMU SITE SELECTION PROCESS FOR LCS IN GSM NETWORK
23354	23354-JP-PCT		2001-575753	2003-530794	JP			23-Jan-2001	AUTOMATIC LMU SITE SELECTION PROCESS FOR LCS IN GSM NETWORK
23366	23366-GB-EPA	1187507	01305955.5	1187507	GB	1-Jun-2005		10-Jul-2001	METHOD TO REDUCE THE NEED OF MEASUREMENTS IN A DYNAMIC CHANNEL ALLOCATION SYSTEM.
23596	23596-DE-EPT	60121633.4	01951647.5	1405539	DE	19-Jul-2006	29-Jun-2021	29-Jun-2001	LCS LOAD SHARING
23596	23596-FI-EPT	1405539	01951647.5	1405539	FI	19-Jul-2006	29-Jun-2021	29-Jun-2001	LCS LOAD SHARING
23596	23596-FR-EPT	1405539	01951647.5	1405539	FR	19-Jul-2006	29-Jun-2021	29-Jun-2001	LCS LOAD SHARING
23596	23596-GB-EPT	1405539	01951647.5	1405539	GB	19-Jul-2006	29-Jun-2021	29-Jun-2001	LCS LOAD SHARING
23596	23596-NL-EPT	1405539	01951647.5	1405539	NL	19-Jul-2006		29-Jun-2001	LCS LOAD SHARING
23596	23596-RU-PCT	2255433	2004102512		RU	27-Jun-2005	29-Jun-2021	29-Jun-2001	LCS LOAD SHARING
23596	23596-US-CNT		11/452428		US			10-Jul-2006	LCS LOAD SHARING
23656	23656-CA-PCT	2468791	2468791		CA	9-Mar-2010		19-Dec-2001	IP RAN STRATEGIES FOR SSdT
23656	23656-CN-PCT	01823892.0	01823892.0	1643958	CN	20-Jan-2010		19-Dec-2001	IP RAN STRATEGIES FOR SSdT
23672	23672-CN-NP	ZL03120499.6	03120499.6	1445883	CN	11-Jan-2006		19-Mar-2003	MINIATURIZED WILKINSON DIVIDER WITH MULTILAYER STRUCTURE
23672	23672-DE-EPA	60305553.2	03100647.1	1347532	DE	31-May-2006		14-Mar-2003	MINIATURIZED WILKINSON DIVIDER WITH MULTILAYER STRUCTURE
23693	23693-BR-NP		PI0301321.9	0301321	BR			7-May-2003	DYNAMIC FREQUENCY ALLOCATION FOR PACKET SWITCHED SERVICES
23693	23693-CN-NP	ZL03140752.8	03140752.8	1471329	CN	26-Oct-2005	7-May-2023	7-May-2003	DYNAMIC FREQUENCY ALLOCATION FOR PACKET SWITCHED SERVICES

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
23693	23693-DE-EPA	60326408.5	03009243.1	1361769	DE	4-Mar-2009		23-Apr-2003	DYNAMIC FREQUENCY ALLOCATION FOR PACKET SWITCHED SERVICES
23693	23693-FR-EPA	1361769	03009243.1	1361769	FR	4-Mar-2009		23-Apr-2003	DYNAMIC FREQUENCY ALLOCATION FOR PACKET SWITCHED SERVICES
23693	23693-JP-NP	3929416	2003-128788	2004-007652	JP	16-Mar-2007		7-May-2003	DYNAMIC FREQUENCY ALLOCATION FOR PACKET SWITCHED SERVICES
23693	23693-KR-NP	10-0566652	2003-28953	2003-87567	KR	25-Mar-2006	7-May-2023	7-May-2003	DYNAMIC FREQUENCY ALLOCATION FOR PACKET SWITCHED SERVICES
23694	23694-DE-EPA	60232943.4	02257627.6	1309213	DE	15-Jul-2009		4-Nov-2002	MBMS CHARGING INFORMATION EXCHANGE AND CONFIGURATION INCLUDING MOBILITY ASPECTS IN BOTH UE AND NW.
23694	23694-FR-EPA	1309213	02257627.6	1309213	FR	15-Jul-2009		4-Nov-2002	MBMS CHARGING INFORMATION EXCHANGE AND CONFIGURATION INCLUDING MOBILITY ASPECTS IN BOTH UE AND NW.
23694	23694-GB-EPA	1309213	02257627.6	1309213	GB	15-Jul-2009		4-Nov-2002	MBMS CHARGING INFORMATION EXCHANGE AND CONFIGURATION INCLUDING MOBILITY ASPECTS IN BOTH UE AND NW.
23757	23757-CN-NP	ZL200410045330.9	200410045330.9	1551538	CN	19-Dec-2007		20-May-2004	TX TIMESTAMPING WITH IPDL
23757	23757-DE-EPA	602004033349.2	04101975.3	1480356	DE	6-Jul-2011		7-May-2004	TX TIMESTAMPING WITH IPDL
23757	23757-GB-EPA	1480356	04101975.3	1480356	GB	6-Jul-2011		7-May-2004	TX TIMESTAMPING WITH IPDL
23851	23851-CN-NP	200410044601.9	200410044601.9	1574806	CN	13-Oct-2010		17-May-2004	MULTICARRIER EDGE CLIPPER
24017	24017-DE-EPA	69928851.7	99660042.5	0942526	DE	14-Dec-2005	10-Mar-2019	10-Mar-1999	CIRCUIT ARRANGEMENT FOR ADJUSTING THE IMPEDANCE OF A DIFFERENTIAL ACTIVE COMPONENT
24052	24052-CN-PCT	99804263.3	99804263.3	1294706	CN	10-Dec-2003	21-Jan-2019	21-Jan-1999	EMBEDDED SYSTEM
24052	24052-HK-FPR	1035416	01105987.3	1035416	HK	4-Jun-2004	21-Jan-2019	24-Aug-2001	EMBEDDED SYSTEM
24052	24052-JP-PCD[2]		2011-171579	2011-216132	JP			5-Aug-2011	COMBINATION OF TWO OPERATING SYSTEMS
24052	24052-JP-PCT		2000-528913	2002-501248	JP			21-Jan-1999	COMBINATION OF TWO OPERATING SYSTEMS
24052	24052-JP-PCT[2]		2007-041050	2007-164819	JP			21-Feb-2007	COMBINATION OF TWO OPERATING SYSTEMS
24052	24052-KR-PCT	10-0681875	2000-7007898	2001-34232	KR	6-Feb-2007	21-Jan-2019	21-Jan-1999	EMBEDDED SYSTEM
24294	24294-CN-PCT	99806278.2	99806278.2	1301468	CN	26-Mar-2008		18-Mar-1999	HANDSETLESS GSM ACCESS USING WIRELESS HEADSET AND WRIST UI
24302	24302-CN-PCT[2]	ZL99809446.3	99809446.3	1313009	CN	11-Aug-2004	5-Aug-2019	5-Aug-1999	UTILIZATION OF RADIO CHANNEL MEASUREMENTS IN VIDEO CODING
24302	24302-US-CNT		10/606522	20040091068	US			26-Jun-2003	UTILIZATION OF RADIO CHANNEL MEASUREMENTS IN VIDEO CODING
24374	24374-DE-EPA	69927774.4	99123418.8	1006480	DE	19-Oct-2005		24-Nov-1999	TINY SMOOTH ALIKE FILTER
24374	24374-FR-EPA	1006480	99123418.8	1006480	FR	19-Oct-2005		24-Nov-1999	TINY SMOOTH ALIKE FILTER
24374	24374-GB-EPA	1006480	99123418.8	1006480	GB	19-Oct-2005		24-Nov-1999	TINY SMOOTH ALIKE FILTER
24374	24374-NL-EPA	1006480	99123418.8	1006480	NL	19-Oct-2005	24-Nov-2019	24-Nov-1999	TINY SMOOTH ALIKE FILTER
24475	24475-DE-EPA	60040705.5	00660046.4	1035705	DE	5-Nov-2008		9-Mar-2000	TIEDONSIIRTOJÄRJESTELMÄ JA DATASOVITIN
24475	24475-FR-EPA	1035705	00660046.4	1035705	FR	5-Nov-2008		9-Mar-2000	TIEDONSIIRTOJÄRJESTELMÄ JA DATASOVITIN
24475	24475-GB-EPA	1035705	00660046.4	1035705	GB	5-Nov-2008		9-Mar-2000	TIEDONSIIRTOJÄRJESTELMÄ JA DATASOVITIN
24512	24512-DE-EPA	60039265.1	00660027.4	1030477	DE	25-Jun-2008		16-Feb-2000	METHOD AND CIRCUIT ARRANGEMENT FOR IMPLEMENTING INTER-SYSTEMSYNCHRONIZATION IN A MULTIMODE DEVICE
24512	24512-FR-EPA	1030477	00660027.4	1030477	FR	25-Jun-2008		16-Feb-2000	METHOD AND CIRCUIT ARRANGEMENT FOR IMPLEMENTING INTER-SYSTEMSYNCHRONIZATION IN A MULTIMODE DEVICE
24512	24512-GB-EPA	1030477	00660027.4	1030477	GB	25-Jun-2008		16-Feb-2000	METHOD AND CIRCUIT ARRANGEMENT FOR IMPLEMENTING INTER-SYSTEMSYNCHRONIZATION IN A MULTIMODE DEVICE
24512	24512-JP-NP	4417514	2000-048941	2000-252968	JP	4-Dec-2009		21-Feb-2000	METHOD AND CIRCUIT ARRANGEMENT FOR IMPLEMENTING INTER-SYSTEMSYNCHRONIZATION IN A MULTIMODE DEVICE

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
24512	24512-NL-EPA	1030477	00660027.4	1030477	NL	25-Jun-2008		16-Feb-2000	METHOD AND CIRCUIT ARRANGEMENT FOR IMPLEMENTING INTER-SYSTEMSYNCHRONIZATION IN A MULTIMODE DEVICE
24784	24784-CN-DIV		200510005668.6	1642029	CN			20-Jan-2005	FAST CDMA ACQUISITION ENGINE
24784	24784-CN-NP	ZL00137279.3	00137279.3	1299195	CN	16-Mar-2005	9-Dec-2020	9-Dec-2000	FAST CDMA ACQUISITION ENGINE
24784	24784-HK-FPR		01108403.3	1037813	HK			29-Nov-2001	FAST CDMA ACQUISITION ENGINE
24784	24784-JP-NP		2000-375929	2001-375929	JP			11-Dec-2000	FAST CDMA ACQUISITION ENGINE
24784	24784-KR-NP		2000-74889	2001-62290	KR			9-Dec-2000	FAST CDMA ACQUISITION ENGINE
24793	24793-DE-EPT	60136251.9	01919475.2	1177643	DE	22-Oct-2008		8-Mar-2001	ADAPTIVE DESENSITIZATION FOR MICROCELL WCDMA BASE STATION RECEIVER
24793	24793-FR-EPT	1177643	01919475.2	1177643	FR	22-Oct-2008		8-Mar-2001	ADAPTIVE DESENSITIZATION FOR MICROCELL WCDMA BASE STATION RECEIVER
24793	24793-GB-EPT	1177643	01919475.2	1177643	GB	22-Oct-2008		8-Mar-2001	ADAPTIVE DESENSITIZATION FOR MICROCELL WCDMA BASE STATION RECEIVER
24949	24949-DE-EPA	60232391.6	02396026.3	1255418	DE	20-May-2009		1-Mar-2002	SPECIAL FLASHING ALERT
25074	25074-CN-PCT	ZL99804261.7	99804261.7	1294803	CN	30-Jun-2004	21-Jan-2019	21-Jan-1999	A RADIO TELEPHONE
25074	25074-DE-EPT	69940632.3	99901763.5	1050139	DE	25-Mar-2009		21-Jan-1999	A RADIO TELEPHONE
25074	25074-ES-EPT	1050139	99901763.5	1050139	ES	25-Mar-2009		21-Jan-1999	A RADIO TELEPHONE
25074	25074-FR-EPT	1050139	99901763.5	1050139	FR	25-Mar-2009		21-Jan-1999	A RADIO TELEPHONE
25074	25074-GB-NP	2333674	9824426.2	2333674	GB	27-Aug-2003	6-Nov-2018	6-Nov-1998	A RADIO TELEPHONE
25074	25074-GB-PCT		0018666.8	2349317	GB			21-Jan-1999	A RADIO TELEPHONE
25074	25074-IE-EPT	1050139	99901763.5	1050139	IE	25-Mar-2009		21-Jan-1999	A RADIO TELEPHONE
25074	25074-IT-EPT	1050139	99901763.5	1050139	IT	25-Mar-2009		21-Jan-1999	A RADIO TELEPHONE
25074	25074-JP-PCT	4015363	2000-529064		JP	21-Sep-2007		21-Jan-1999	A RADIO TELEPHONE
25074	25074-NL-EPT	1050139	99901763.5	1050139	NL	25-Mar-2009		21-Jan-1999	A RADIO TELEPHONE
25074	25074-SE-EPT	1050139	99901763.5	1050139	SE	25-Mar-2009		21-Jan-1999	A RADIO TELEPHONE
25074	25074-US-CNT		11/839771	20070280375	US			16-Aug-2007	A RADIO TELEPHONE
25104	25104-DE-EPT	60014382.1	00951301.1	1196887	DE	29-Sep-2004		23-Jun-2000	JOYSTICK-ELASTO RESISTIVE
25104	25104-FR-EPT	1196887	00951301.1	1196887	FR	29-Sep-2004	23-Jun-2020	23-Jun-2000	JOYSTICK-ELASTO RESISTIVE
25104	25104-JP-PCT		2001-508770		JP			23-Jun-2000	JOYSTICK-ELASTO RESISTIVE
25503	25503-JP-PCT		PCT/IB02/00665	2004528767	JP			6-Mar-2002	EMBEDDED BEARER TAGS IN WML
25503	25503-KR-PCT		2003-7012726	200385074	KR			6-Mar-2002	EMBEDDED BEARER TAGS IN WML
25702	25702-CN-PCT		03817866.4	1672349	CN			24-Jul-2003	CHANNEL ESTIMATION AND SIGNAL DETECTION FOR MULTI-CARRIER CDMA SYSTEMS WITH PULSE-SHAPING FILTER
25702	25702-KR-PCT	0755937	2005-7001297	2005-25655	KR	30-Aug-2007		24-Jul-2003	CHANNEL ESTIMATION AND SIGNAL DETECTION FOR MULTI-CARRIER CDMA SYSTEMS WITH PULSE-SHAPING FILTER
26508	26508-FR-EPA	1049340	00303486.5	1049340	FR	3-Sep-2008		26-Apr-2000	A GATEWAY ARRANGEMENT
27344	27344-DE-EPT	60032168.1	00992135.4	1232624	DE	29-Nov-2006	30-Oct-2020	30-Oct-2000	TECHNIQUE FOR IMPROVING THROUGHPUT OF A GATEWAY INTERFACE
27344	27344-FR-EPT	1232624	00992135.4	1232624	FR	29-Nov-2006	30-Oct-2020	30-Oct-2000	TECHNIQUE FOR IMPROVING THROUGHPUT OF A GATEWAY INTERFACE
27344	27344-GB-EPT	1232624	00992135.4	1232624	GB	29-Nov-2006		30-Oct-2000	TECHNIQUE FOR IMPROVING THROUGHPUT OF A GATEWAY INTERFACE
28314	28314-DE-EPA	60134946.6	01660224.5	1220501	DE	23-Jul-2008		7-Dec-2001	GROUP CREATION BY USING PAN TRANSCEIVER
28314	28314-FR-EPA	1220501	01660224.5	1220501	FR	23-Jul-2008		7-Dec-2001	GROUP CREATION BY USING PAN TRANSCEIVER
28314	28314-GB-EPA	1220501	01660224.5	1220501	GB	23-Jul-2008		7-Dec-2001	GROUP CREATION BY USING PAN TRANSCEIVER
28314	28314-JP-NP	4065379	2001-396674	2002-261702	JP	11-Jan-2008		27-Dec-2001	GROUP CREATION BY USING PAN TRANSCEIVER
28314	28314-NL-EPA	1220501	01660224.5	1220501	NL	23-Jul-2008		7-Dec-2001	GROUP CREATION BY USING PAN TRANSCEIVER

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
28476	28476-DE-EPA	602004009622.9	04100331.0	1445703	DE	24-Oct-2007		29-Jan-2004	SIMPLE HOME APPLICATIONS BASED ON MOBILE DEVICE & DIGITAL TELEVISION INTERACTION
28563	28563-DE-EPT	60229667.6	02783421.7	1474875	DE	29-Oct-2008		25-Nov-2002	DVB-T FILTER DETECTION BY UDP LISTENER TABLE
28570	28570-CN-PCT	03804317.3	03804317.3	1729654	CN	6-Jan-2010		21-Feb-2003	BOOLEAN PROTOCOL FILTERING
28570	28570-DE-EPD	602007001354.2	07109321.5	1819111	DE	24-Jun-2009		31-May-2007	BOOLEAN PROTOCOL FILTERING
28570	28570-DE-EPT	60321544.0	03704849.3	1479202	DE	11-Jun-2008		21-Feb-2003	BOOLEAN PROTOCOL FILTERING
28578	28578-CN-PCT	ZL03814408.5	03814408.5	1663186	CN	27-Aug-2008		20-Jun-2003	PID SEARCH FILTERING
28578	28578-DE-EPT	60327697.0	03732817.6	1516456	DE	20-May-2009		20-Jun-2003	PID SEARCH FILTERING
28615	28615-DE-EPA	60305082.4	03250872.3	1337071	DE	10-May-2006	12-Feb-2023	12-Feb-2003	IDENTIFICATION METHOD FOR SERIE OF IP PACKETS THAT FORM A BURST
28615	28615-FR-EPA	1337071	03250872.3	1337071	FR	10-May-2006	12-Feb-2023	12-Feb-2003	IDENTIFICATION METHOD FOR SERIE OF IP PACKETS THAT FORM A BURST
28615	28615-GB-EPA	1337071	03250872.3	1337071	GB	10-May-2006	12-Feb-2023	12-Feb-2003	IDENTIFICATION METHOD FOR SERIE OF IP PACKETS THAT FORM A BURST
28615	28615-IT-EPA	1337071	03250872.3	1337071	IT	10-May-2006	12-Feb-2023	12-Feb-2003	IDENTIFICATION METHOD FOR SERIE OF IP PACKETS THAT FORM A BURST
28628	28628-CH-EPT	1543701	02772655.3	1543701	CH	11-Apr-2012		27-Sep-2002	METHOD TO FORM DYNAMICALLY FILE DELIVERY MULTICAST GROUPS USING SET QUEUES
28628	28628-CN-PCT	02829674.5	02829674.5	1669354	CN	6-Jan-2010		27-Sep-2002	METHOD TO FORM DYNAMICALLY FILE DELIVERY MULTICAST GROUPS USING SET QUEUES
28628	28628-DE-EPT	60242641.3	02772655.3	1543701	DE	11-Apr-2012		27-Sep-2002	METHOD TO FORM DYNAMICALLY FILE DELIVERY MULTICAST GROUPS USING SET QUEUES
28628	28628-FR-EPT	1543701	02772655.3	1543701	FR	11-Apr-2012		27-Sep-2002	METHOD TO FORM DYNAMICALLY FILE DELIVERY MULTICAST GROUPS USING SET QUEUES
28628	28628-GB-EPT	1543701	02772655.3	1543701	GB	11-Apr-2012		27-Sep-2002	METHOD TO FORM DYNAMICALLY FILE DELIVERY MULTICAST GROUPS USING SET QUEUES
28628	28628-IT-EPT	502012902064881	02772655.3	1543701	IT	11-Apr-2012		27-Sep-2002	METHOD TO FORM DYNAMICALLY FILE DELIVERY MULTICAST GROUPS USING SET QUEUES
28728	28728-CN-PCT	200380108123.7	200380108123.7	1732697	CN	25-Mar-2009		24-Dec-2003	HANDOVER DECISION FOR IP SERVICES IN DVB NETWORK BASED ON THE PRIORITY ORDER OF IP STREAMS
28728	28728-DE-EPT	60328313.6	03789584.4	1579704	DE	8-Jul-2009		24-Dec-2003	HANDOVER DECISION FOR IP SERVICES IN DVB NETWORK BASED ON THE PRIORITY ORDER OF IP STREAMS
28745	28745-CN-PCT	200480024844.4	200480024844.4	1846372	CN	12-May-2010		29-Jun-2004	METHOD FOR ADJUSTING BURST-FORM TRANSMISSION BETWEEN TWO CHANNELS HAVING DIFFERENT BIT RATES
28745	28745-DE-EPT	602004025700.1	04744420.3	1639726	DE	24-Feb-2010		29-Jun-2004	METHOD FOR ADJUSTING BURST-FORM TRANSMISSION BETWEEN TWO CHANNELS HAVING DIFFERENT BIT RATES
28814	28814-DE-EPT	602004026765	04770128.9	1687919	DE	21-Apr-2010		29-Sep-2004	SIMILAR SERVICE HANDOVER
28867	28867-CN-PCT	03827107.9	03827107.9	1839604	CN	16-Dec-2009		22-Sep-2003	FAST SCATTERED PILOT SYNCHRONIZATION
28867	28867-KR-PCT	0909434	2006-700528	2006-60732	KR	20-Jul-2009		22-Sep-2003	"FAST SCATTERED PILOT SYNCHRONIZATION
28873	28873-CN-PCT	200480034077.5	200480034077.5	1883143	CN	25-Jan-2012		10-Nov-2004	VARIABLE LEVEL SERVICE SUPPORT WITH TIME SLICING
28873	28873-DE-EPT	602004030710.6	04799103.9	1685667	DE	22-Dec-2010		10-Nov-2004	VARIABLE LEVEL SERVICE SUPPORT WITH TIME SLICING
28873	28873-IT-EPT	502011901926620	04799103.9	1685667	IT	22-Dec-2010		10-Nov-2004	VARIABLE LEVEL SERVICE SUPPORT WITH TIME SLICING
28881	28881-DE-EPA	602004037723.6	04253084.0	1494429	DE	9-May-2012		26-May-2004	METHOD FOR IMPLEMENTING SECURE CORPORATE COMMUNICATION
28884	28884-BR-PCT		PI0414484.8	PI0414484	BR			16-Sep-2004	IP ENCAPSULATOR AS A MULTICAST PROXY IN A BROADCAST NETWORK
28884	28884-CZ-EPT	1665633	04770015.8	1665633	CZ	17-Nov-2010		16-Sep-2004	IP ENCAPSULATOR AS A MULTICAST PROXY IN A BROADCAST NETWORK
28884	28884-DE-EPT	602004030133.7	04770015.8	1665633	DE	17-Nov-2010		16-Sep-2004	IP ENCAPSULATOR AS A MULTICAST PROXY IN A BROADCAST NETWORK



Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
28884	28884-GB-EPT	1665633	04770015.8	1665633	GB	17-Nov-2010		16-Sep-2004	IP ENCAPSULATOR AS A MULTICAST PROXY IN A BROADCAST NETWORK
28884	28884-HU-EPT	1665633	04770015.8	1665633	HU	17-Nov-2010		16-Sep-2004	IP ENCAPSULATOR AS A MULTICAST PROXY IN A BROADCAST NETWORK
28884	28884-KR-PCT	837313	2006-7005909		KR	4-Jun-2008		16-Sep-2004	IP ENCAPSULATOR AS A MULTICAST PROXY IN A BROADCAST NETWORK
28892	28892-CN-PCT	200480031704.X	200480031704.X	1875643	CN	11-Jan-2012		26-Oct-2004	IPDC SERVICE LINKS EMBEDDED INTO MOBILE OPERATORS SERVICE PORTALS
28892	28892-DE-EPT	602004027398.8	04791817.2	1678963	DE	26-May-2010		26-Oct-2004	IPDC SERVICE LINKS EMBEDDED INTO MOBILE OPERATORS SERVICE PORTALS
28892	28892-GB-EPT	1678963	04791817.2	1678963	GB	26-May-2010		26-Oct-2004	IPDC SERVICE LINKS EMBEDDED INTO MOBILE OPERATORS SERVICE PORTALS
28892	28892-KR-PCD	0928900	2008-7002862	08-28991	KR	20-Nov-2009		1-Feb-2008	IPDC SERVICE LINKS EMBEDDED INTO MOBILE OPERATORS SERVICE PORTALS
28951	28951-CN-PCT	200480039765.0	200480039765.0	1902943	CN	13-Jan-2010		26-Oct-2004	ERASURE DECODING FOR THE MPE-FEC WITH UNKNOWN LOCATION OF THE ZERO PADDING
28951	28951-DE-EPT	602004026340.0	04791818.0	1680927	DE	31-Mar-2010		26-Oct-2004	ERASURE DECODING FOR THE MPE-FEC WITH UNKNOWN LOCATION OF THE ZERO PADDING
29470	29470-DE-EPA	60125137.7	01310254.6	1215812	DE	13-Dec-2006	7-Dec-2021	7-Dec-2001	RF-VCXO CIRCUIT TOPOLOGY
29470	29470-DE-EPD	60140153.0	06125822.4	1777809	DE	7-Oct-2009		11-Dec-2006	RF-VCXO CIRCUIT TOPOLOGY
29470	29470-ES-EPA	1215812	01310254.6	1215812	ES	13-Dec-2006	7-Dec-2021	7-Dec-2001	RF-VCXO CIRCUIT TOPOLOGY
29470	29470-FR-EPA	1215812	01310254.6	1215812	FR	13-Dec-2006	7-Dec-2021	7-Dec-2001	RF-VCXO CIRCUIT TOPOLOGY
29470	29470-FR-EPD	1777809	06125822.4	1777809	FR	7-Oct-2009		11-Dec-2006	RF-VCXO CIRCUIT TOPOLOGY
29470	29470-GB-EPA	1215812	01310254.6	1215812	GB	13-Dec-2006	7-Dec-2021	7-Dec-2001	RF-VCXO CIRCUIT TOPOLOGY
29470	29470-GB-EPD	1777809	06125822.4	1777809	GB	7-Oct-2009		11-Dec-2006	RF-VCXO CIRCUIT TOPOLOGY
29470	29470-GB-NP[2]		0129612.8	2373114	GB			11-Dec-2001	RF-VCXO CIRCUIT TOPOLOGY
29470	29470-IT-EPA	1215812	01310254.6	1215812	IT	13-Dec-2006	7-Dec-2021	7-Dec-2001	RF-VCXO CIRCUIT TOPOLOGY
29571	29571-CN-PCT	01817301.2	01817301.2		CN	27-May-2009		25-Jul-2001	PHONE SERVER
29571	29571-DE-EPT	60132464.1	01962872.6	1314329	DE	16-Jan-2008		25-Jul-2001	PHONE SERVER
29571	29571-ES-EPT	1314329	01962872.6	1314329	ES	16-Jan-2008		25-Jul-2001	PHONE SERVER
29571	29571-FR-EPT	1314329	01962872.6	1314329	FR	16-Jan-2008		25-Jul-2001	PHONE SERVER
29571	29571-GB-EPT	1314329	01962872.6	1314329	GB	16-Jan-2008		25-Jul-2001	PHONE SERVER
29582	29582-DE-EPD	60147141.5	05108692.4	1615293	DE	19-Sep-2012		21-Sep-2005	INTERNAL ANTENNA
29699	29699-CH-EPA	1154282	01660089.2	1154282	CH	22-Jun-2011		7-May-2001	PSEUDO DGPS METHOD FOR RELATIVE POSITIONING
29699	29699-GB-EPA	1154282	01660089.2	1154282	GB	22-Jun-2011		7-May-2001	PSEUDO DGPS METHOD FOR RELATIVE POSITIONING
29699	29699-NL-EPA	1154282	01660089.2	1154282	NL	22-Jun-2011		7-May-2001	PSEUDO DGPS METHOD FOR RELATIVE POSITIONING
29948	29948-DE-EPA	60118479.3	01000371.3	1189208	DE	5-Apr-2006	15-Aug-2021	15-Aug-2001	CORRUPTED SPEECH RECOGNITION IN TETRA
29948	29948-FR-EPA	1189208	01000371.3	1189208	FR	5-Apr-2006	15-Aug-2021	15-Aug-2001	CORRUPTED SPEECH RECOGNITION IN TETRA
29948	29948-GB-EPA	1189208	01000371.3	1189208	GB	5-Apr-2006	15-Aug-2021	15-Aug-2001	CORRUPTED SPEECH RECOGNITION IN TETRA
29948	29948-HK-FPR		02106185.0		HK			22-Aug-2002	CORRUPTED SPEECH RECOGNITION IN TETRA
29948	29948-IT-EPA	1189208	01000371.3	1189208	IT	5-Apr-2006	15-Aug-2021	15-Aug-2001	CORRUPTED SPEECH RECOGNITION IN TETRA
30623	30623-CN-PCT	200380101685.9	200380101685.9	1706152	CN	29-Jul-2009		19-Nov-2003	A ROUTING OPTIMIZATION PROXY FOR MOBILE IPV6
31630	31630-CN-PCT	200580033278.8	200580033278.8	101069230	CN	10-Feb-2016		2-Aug-2005	STONE ESTIMATION FOR NAME
31653	31653-TW-NP	1349206	94109056		TW	21-Sep-2011		24-Mar-2005	STROKE FRONT-AND-END INPUT METHOD
32619	32619-DE-ETD	60143172.3	06000846.3	1655986	DE	29-Sep-2010		16-Jan-2006	COMBINED SERVICE AND LOAD BASED INTERFREQUENCY (WCDMA <-> WCDMA) AND INTERSYSTEM (WCDMA <-> GSM/EDGE) HANDOVERS

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
32619	32619-GB-ETD	1655986	06000846.3	1655986	GB	29-Sep-2010		16-Jan-2006	COMBINED SERVICE AND LOAD BASED INTERFREQUENCY (WCDMA <-> WCDMA) AND INTERSYSTEM (WCDMA <-> GSM/EDGE) HANDOVERS
32723	32723-DE-EPA	60213147.2	02396032.1	1241911	DE	19-Jul-2006	14-Mar-2022	14-Mar-2002	QOS REQUEST CHECKING AND QOS PROFILES IN MS
32723	32723-ES-EPA	1241911	02396032.1	1241911	ES	19-Jul-2006	14-Mar-2022	14-Mar-2002	QOS REQUEST CHECKING AND QOS PROFILES IN MS
32723	32723-FR-EPA	1241911	02396032.1	1241911	FR	19-Jul-2006	14-Mar-2022	14-Mar-2002	QOS REQUEST CHECKING AND QOS PROFILES IN MS
32723	32723-GB-EPA	1241911	02396032.1	1241911	GB	19-Jul-2006	14-Mar-2022	14-Mar-2002	QOS REQUEST CHECKING AND QOS PROFILES IN MS
32723	32723-IT-EPA	502006901457576	02396032.1	1241911	IT	19-Jul-2006	14-Mar-2022	14-Mar-2002	QOS REQUEST CHECKING AND QOS PROFILES IN MS
32845	32845-CN-PCT	02812740.4	02812740.4	1535503	CN	29-Jul-2009		13-Jun-2002	A METHOD AND CIRCUITRY FOR BREAKING THE TONES OF THE CYCLICDEM ALGORITHMS
32845	32845-GB-EPT	1402644	02735842.3	1402644	GB	1-Aug-2007		13-Jun-2002	A METHOD AND CIRCUITRY FOR BREAKING THE TONES OF THE CYCLICDEM ALGORITHMS
32845	32845-KR-PCT	893090	2003-7016939	2004-11558	KR	6-Apr-2009		13-Jun-2002	A METHOD AND CIRCUITRY FOR BREAKING THE TONES OF THE CYCLICDEM ALGORITHMS
33168	33168-CN-PCT	03814172.8	03814172.8	1685616	CN	28-Oct-2009		11-Jun-2003	A DIGITAL DELTA-SIGMA MODULATOR IN THE FRACTIONAL N SYNTHESIZER
33168	33168-DE-EPT	60323488.7	03732792.1	1514354	DE	10-Sep-2008		11-Jun-2003	A DIGITAL DELTA-SIGMA MODULATOR IN THE FRACTIONAL N SYNTHESIZER
33168	33168-FR-EPT	1514354	03732792.1	1514354	FR	10-Sep-2008		11-Jun-2003	A DIGITAL DELTA-SIGMA MODULATOR IN THE FRACTIONAL N SYNTHESIZER
33168	33168-GB-EPT	1514354	03732792.1	1514354	GB	10-Sep-2008		11-Jun-2003	A DIGITAL DELTA-SIGMA MODULATOR IN THE FRACTIONAL N SYNTHESIZER
33168	33168-KR-PCT		2004-7020675	2005-10954	KR			11-Jun-2003	A DIGITAL DELTA-SIGMA MODULATOR IN THE FRACTIONAL N SYNTHESIZER
33867	33867-CN-PCT		200480039303.9	1902895	CN			23-Dec-2004	INTEGRATING ROTATOR TECHNOLOGY WITH A KEYMAT
33867	33867-US-PCT		10/584381	20070273562	US			23-Dec-2004	INTEGRATING ROTATOR TECHNOLOGY WITH A KEYMAT
33873	33873-DE-EPT	602005047746.2	05757038.4	1762026	DE	21-Oct-2015		27-Jun-2005	API
33876	33876-CN-PCT	200480043487.6	200480043487.6	1977184	CN	8-Jun-2011		30-Jun-2004	ENHANCING TIME KEEPING ACCURACY FOR LOW POWER GPS RECEIVERSUSED IN CELLULAR TELEPHONES
33876	33876-KR-PCT	0933392	2007-7002415	20070037628	KR	14-Dec-2009		30-Jun-2004	ENHANCING TIME KEEPING ACCURACY FOR LOW POWER GPS RECEIVERSUSED IN CELLULAR TELEPHONES
33876	33876-NL-EPT	1761795	04743832.0	1761795	NL	11-Apr-2012		30-Jun-2004	ENHANCING TIME KEEPING ACCURACY FOR LOW POWER GPS RECEIVERSUSED IN CELLULAR TELEPHONES
34123	34123-CN-PCT	ZL02812996.2	02812996.2	1520545	CN	3-Jan-2007	30-May-2022	30-May-2002	3 DIMENSIONAL NAVIBARS
34123	34123-DE-EPT	60224669.5	02733080.2	1399804	DE	16-Jan-2008		30-May-2002	3 DIMENSIONAL NAVIBARS
34123	34123-GB-EPT	1399804	02733080.2	1399804	GB	16-Jan-2008		30-May-2002	3 DIMENSIONAL NAVIBARS
34155	34155-DE-EPT	60221876.4	60221876.4	1440569	DE	15-Aug-2007		31-Oct-2002	TV GUIDE USING NAVIBARS CROSS
34155	34155-GB-EPT	1440569	02777711.9	1440569	GB	15-Aug-2007		31-Oct-2002	TV GUIDE USING NAVIBARS CROSS
34813	34813-BR-PCT		PI0519041.0	PI0519041.0	BR			17-Nov-2005	MOBILE STATION BODY COMPRISED OF STACKED ELEMENTS
34981	34981-CN-PCT	200580026469.1	200580026469.1	101002427	CN	21-Oct-2009		20-May-2005	LISTENER-SOLUTION TO DYNAMIC DEVICE IP ADDRESS PROBLEM
34981	34981-DE-EPT	602005037399.3	05740438.6	1766860	DE	12-Dec-2012		20-May-2005	LISTENER-SOLUTION TO DYNAMIC DEVICE IP ADDRESS PROBLEM
34981	34981-NL-EPT	1766860	05740438.6	1766860	NL	12-Dec-2012		20-May-2005	LISTENER-SOLUTION TO DYNAMIC DEVICE IP ADDRESS PROBLEM
35977	35977-CN-PCT	200380105556.7	200380105556.7	1736089	CN	22-Apr-2009		10-Dec-2003	AUTOMATIC MMS SOUND CLIP AS REPLACEMENT FOR VOICE MAIL

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
35977	35977-DE-EPT	60321719.2	03778363.6	1570638	DE	18-Jun-2008		10-Dec-2003	AUTOMATIC MMS SOUND CLIP AS REPLACEMENT FOR VOICE MAIL
35977	35977-GB-EPT	1570638	03778363.6	1570638	GB	18-Jun-2008		10-Dec-2003	AUTOMATIC MMS SOUND CLIP AS REPLACEMENT FOR VOICE MAIL
35977	35977-KR-PCT	0711827	2005-7010349	2005-0085434	KR	19-Apr-2007		10-Dec-2003	AUTOMATIC MMS SOUND CLIP AS REPLACEMENT FOR VOICE MAIL
35977	35977-US-PCT		10/538287	20060128367	US			10-Dec-2003	AUTOMATIC MMS SOUND CLIP AS REPLACEMENT FOR VOICE MAIL
36166	36166-HK-FPR		05107213.1	1074268	HK			19-Aug-2005	IMPLEMENTATION OF MANAGEMENT TREE RUN-TIME NODES
36187	36187-KR-PCT	780869	2005-7021811	2006-19541	KR	23-Nov-2007		17-May-2004	PRINCIPLE OF OPTIMUM CSP (BGA) COMPONENT BALLOUT DESIGN FOR IMPROVED RELIABILITY UNDER DROP AND THERMAL CYCLING LOADS
36252	36252-BR-PCT		PI0111285.6		BR			30-May-2001	A RECEIVER
36252	36252-CA-PCT	2410790	2410790		CA	18-Mar-2008		30-May-2001	A RECEIVER
36252	36252-CN-PCT	ZL01813641.9	01813641.9	1451204	CN	10-Aug-2005	30-May-2021	30-May-2001	A RECEIVER
36252	36252-DE-EPT	60112582.7	01937090.7	1301997	DE	10-Aug-2005	30-May-2021	30-May-2001	A RECEIVER
36252	36252-ES-EPT	1301997	01937090.7	1301997	ES	10-Aug-2005	30-May-2021	30-May-2001	A RECEIVER
36252	36252-FI-EPT	1301997	01937090.7	1301997	FI	10-Aug-2005	30-May-2021	30-May-2001	A RECEIVER
36252	36252-FR-EPT	1301997	01937090.7	1301997	FR	10-Aug-2005	30-May-2021	30-May-2001	A RECEIVER
36252	36252-GB-EPT	1301997	01937090.7	1301997	GB	10-Aug-2005	30-May-2021	30-May-2001	A RECEIVER
36252	36252-IT-EPT	502005901350093	01937090.7	1301997	IT	10-Aug-2005	30-May-2021	30-May-2001	A RECEIVER
36252	36252-JP-PCD		2007-207211	2007-336588	JP			30-May-2007	A RECEIVER
36252	36252-JP-PCT		2002-500548		JP			30-May-2001	A RECEIVER
36252	36252-KR-PCT	484050	2002-7016333		KR	11-Apr-2005	30-May-2021	30-May-2001	A RECEIVER
36252	36252-NL-EPT	1301997	01937090.7	1301997	NL	10-Aug-2005	30-May-2021	30-May-2001	A RECEIVER
36253	36253-DE-EPT	602004032902.9	04719476.6	1604454	DE	1-Jun-2011		11-Mar-2004	SIMPLE DIGITAL SINUSOIDAL GENERATOR
36253	36253-GB-EPT	1604454	04719476.6	1604454	GB	1-Jun-2011		11-Mar-2004	SIMPLE DIGITAL SINUSOIDAL GENERATOR
36253	36253-NL-EPT	1604454	04719476.6	1604454	NL	1-Jun-2011		11-Mar-2004	SIMPLE DIGITAL SINUSOIDAL GENERATOR
36886	36886-CN-PCT	200480017876.1	200480017876.1	1813484	CN	29-Jul-2009		8-Jun-2004	USING CURRENT TARGET NETWORK IN ROAMING DECISIONS
36886	36886-DE-EPT	602004046544.5	04736310.6	1642476	DE	21-Jan-2015		8-Jun-2004	USING CURRENT TARGET NETWORK IN ROAMING DECISIONS
36886	36886-GB-EPT	1642476	04736310.6	1642476	GB	21-Jan-2015		8-Jun-2004	USING CURRENT TARGET NETWORK IN ROAMING DECISIONS
37135	37135-AR-NP	AR047911B1	P050100768	047911	AR	17-Jul-2009		1-Mar-2005	LIGHTNING DISTANCE METER FEATURE FOR MOBILE TERMINALS
37135	37135-CN-PCT	200580006669.0	200580006669.0	101095056	CN	30-Dec-2009		25-Feb-2005	LIGHTNING DISTANCE METER FEATURE FOR MOBILE TERMINALS
37135	37135-DE-EPT	602005012059.9	05708620.9	1721178	DE	31-Dec-2008		25-Feb-2005	LIGHTNING DISTANCE METER FEATURE FOR MOBILE TERMINALS
37135	37135-KR-PCT	824990	2006-7017841	2006-122945	KR	18-Apr-2008		25-Feb-2005	LIGHTNING DISTANCE METER FEATURE FOR MOBILE TERMINALS
37142	37142-CN-PCT	200480011576.2	200480011576.2	1781102	CN	5-May-2010		22-Apr-2004	LOW MEMORY DECISION TREE METHOD FOR TEXT-TO-PHONEME MAPPING
37142	37142-DE-EPT	602004023072.3	04728830.3	1618498	DE	9-Sep-2009		22-Apr-2004	LOW MEMORY DECISION TREE METHOD FOR TEXT-TO-PHONEME MAPPING
37142	37142-FR-EPT	1618498	04728830.3	1618498	FR	9-Sep-2009		22-Apr-2004	LOW MEMORY DECISION TREE METHOD FOR TEXT-TO-PHONEME MAPPING
37142	37142-GB-EPT	1618498	04728830.3	1618498	GB	9-Sep-2009		22-Apr-2004	LOW MEMORY DECISION TREE METHOD FOR TEXT-TO-PHONEME MAPPING
37142	37142-KR-PCD	883577	2007-7019768	07-94984	KR	6-Feb-2009		29-Aug-2007	LOW MEMORY DECISION TREE METHOD FOR TEXT-TO-PHONEME MAPPING

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
37288	37288-BR-PCT		PI0411605.4	PI-0411605-4	BR			2-Jun-2004	METHOD AND APPARATUS FOR CO-CHANNEL INTERFERENCE SUPPRESSION WITH SINGLE OR MULTI ANTENNA (BRANCH) RECEIVER
37288	37288-CA-PCT	2530622	2530622		CA	27-Apr-2010		2-Jun-2004	METHOD AND APPARATUS FOR CO-CHANNEL INTERFERENCE SUPPRESSION WITH SINGLE OR MULTI ANTENNA (BRANCH) RECEIVER
37288	37288-CN-PCT	200480018074.2	200480018074.2	1813414	CN	26-Nov-2008		2-Jun-2004	METHOD AND APPARATUS FOR CO-CHANNEL INTERFERENCE SUPPRESSION WITH SINGLE OR MULTI ANTENNA (BRANCH) RECEIVER
37288	37288-DE-EPT	602004035759.6	04735770.2	1639719	DE	21-Dec-2011		2-Jun-2004	METHOD AND APPARATUS FOR CO-CHANNEL INTERFERENCE SUPPRESSION WITH SINGLE OR MULTI ANTENNA (BRANCH) RECEIVER
37288	37288-JP-PCT		2006-515298	2007-528132	JP			2-Jun-2004	METHOD AND APPARATUS FOR CO-CHANNEL INTERFERENCE SUPPRESSION WITH SINGLE OR MULTI ANTENNA (BRANCH) RECEIVER
37288	37288-KR-PCT	796775	2005-7024997	2006-25572	KR	15-Jan-2008		2-Jun-2004	METHOD AND APPARATUS FOR CO-CHANNEL INTERFERENCE SUPPRESSION WITH SINGLE OR MULTI ANTENNA (BRANCH) RECEIVER
37288	37288-TW-NP	1246263	93118011	1246263	TW	21-Dec-2005	1-Jun-2024	23-Jun-2004	METHOD AND APPARATUS FOR CO-CHANNEL INTERFERENCE SUPPRESSION WITH SINGLE OR MULTI ANTENNA (BRANCH) RECEIVER
37312	37312-CN-PCT	200480042893.0	200480042893.0	1943141	CN	8-Jul-2015		16-Mar-2004	DUPLEX HOPPING
37312	37312-DE-EPT	602004023435.4	04720890.5	1730858	DE	30-Sep-2009		16-Mar-2004	DUPLEX HOPPING
37312	37312-EE-EPT	1730858	04720890.5	1730858	EE	30-Sep-2009		16-Mar-2004	DUPLEX HOPPING
37312	37312-GB-EPT	1730858	04720890.5	1730858	GB	30-Sep-2009		16-Mar-2004	DUPLEX HOPPING
37312	37312-HU-EPT	1730858	04720890.5	1730858	HU	30-Sep-2009		16-Mar-2004	DUPLEX HOPPING
37312	37312-JP-PCT	4463303	2007-503359	2007-529934	JP	26-Feb-2010		16-Mar-2004	DUPLEX HOPPING
37312	37312-KR-PCT	0920273	2006-7019083		KR	28-Sep-2009		16-Mar-2004	DUPLEX HOPPING
37361	37361-CN-PCT	200580017500.5	200580017500.5	1961518	CN	8-Sep-2010		12-Apr-2005	AN I/Q MIMO DETECTION FRAMEWORK FOR SINGLE/MULTI ANTENNA INTERFERENCE CANCELLATION
37361	37361-HK-FPR		07111148.1	1102878	HK			16-Oct-2007	AN I/Q MIMO DETECTION FRAMEWORK FOR SINGLE/MULTI ANTENNA INTERFERENCE CANCELLATION
37361	37361-KR-PCT	887605	2006-7023176	2006-129100	KR	2-Mar-2009		12-Apr-2005	AN I/Q MIMO DETECTION FRAMEWORK FOR SINGLE/MULTI ANTENNA INTERFERENCE CANCELLATION
37401	37401-BD-NP	1004555	197/2005		BD	18-Dec-2007		18-Aug-2005	BLOCK-INTERLEAVED BLOCK MODULATION
37401	37401-DE-EPT	602005042571.3	05771110.3	1797691	DE	22-Jan-2014		28-Jul-2005	BLOCK-INTERLEAVED BLOCK MODULATION
37401	37401-IN-PCT		2848/DELNP/2007		IN			28-Jul-2005	BLOCK-INTERLEAVED BLOCK MODULATION
37401	37401-TH-NP		0501003832		TH			16-Aug-2005	BLOCK-INTERLEAVED BLOCK MODULATION
37401	37401-TW-NP		94135089		TW			7-Oct-2005	BLOCK-INTERLEAVED BLOCK MODULATION
37402	37402-IN-PCT		815/DELNP/2007		IN			8-Jul-2005	METHOD FOR SELECTING TRANSMISSION PARAMETERS BASED ON AN UPPER BOUND TO THE TOTAL CHANNEL ENERGY
37402	37402-MY-NP	MY-148724-A	PI20053062		MY	31-May-2013		5-Jul-2005	METHOD FOR SELECTING TRANSMISSION PARAMETERS BASED ON AN UPPER BOUND TO THE TOTAL CHANNEL ENERGY
37524	37524-BR-PCT		PI0520643.0	PI0520643.0	BR			14-Oct-2005	UTILIZATION OF AUDIO CODEC IN LIGHTNING DETECTION IN MOBILE DEVICES
37524	37524-CN-PCT	200580051826.X	200580051826.X	101287993	CN	23-Mar-2011		14-Oct-2005	UTILIZATION OF AUDIO CODEC IN LIGHTNING DETECTION IN MOBILE DEVICES
37524	37524-IN-PCT		1919/DELNP/2008		IN			14-Oct-2005	UTILIZATION OF AUDIO CODEC IN LIGHTNING DETECTION IN MOBILE DEVICES
37524	37524-JP-PCT	4741674	2008-535051	2009-511888	JP	13-May-2011		14-Oct-2005	UTILIZATION OF AUDIO CODEC IN LIGHTNING DETECTION IN MOBILE DEVICES
37524	37524-KR-PCT	1031601	2008-7011427	08-65658	KR	20-Apr-2011		14-Oct-2005	UTILIZATION OF AUDIO CODEC IN LIGHTNING DETECTION IN MOBILE DEVICES
37524	37524-MX-PCT	285908	MX/a/2008/004601		MX	20-Apr-2011		14-Oct-2005	UTILIZATION OF AUDIO CODEC IN LIGHTNING DETECTION IN MOBILE DEVICES

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
37524	37524-VN-PCT	13610	1-2008-01155	17801	VN	29-Dec-2014		14-Oct-2005	UTILIZATION OF AUDIO CODEC IN LIGHTNING DETECTION IN MOBILEDEVICES
39160	39160-JP-PCT	4369926	2005-512803		JP	4-Sep-2009		25-Dec-2003	CAMERA SYSTEM HAVING AUTO FOCUS AND PROCESSING BASED SHARPENING FOR MOBILE PHONES
40256	40256-DE-EPT	602005037931.2	05817453.3	1832045	DE	16-Jan-2013		23-Nov-2005	ENHANCED AAL2 RESERVATION FOR COMMON AND SHARED CHANNELS INIUB
40256	40256-KR-PCT	0905942	2007-7017212	07-97551	KR	26-Jun-2009		23-Nov-2005	ENHANCED AAL2 RESERVATION FOR COMMON AND SHARED CHANNELS INIUB
40301	40301-DE-EPT	602005049994.6	05702498.6	1745597	DE	17-Aug-2016		14-Feb-2005	EXTENSION OF BSSAP MESSAGE LENGTH
40301	40301-GB-EPT	1745597	05702498.6	1745597	GB	17-Aug-2016		14-Feb-2005	EXTENSION OF BSSAP MESSAGE LENGTH
40301	40301-NL-EPT	1745597	05702498.6	1745597	NL	17-Aug-2016		14-Feb-2005	EXTENSION OF BSSAP MESSAGE LENGTH
40407	40407-CN-PCT	200580017606.5	200580017606.5	1961556	CN	3-Nov-2010		14-Mar-2005	ENABLING 16QAM MODULATION BY QPSK MODULATORS
40407	40407-DE-EPT	602005020918.2	05718201.6	1735982	DE	28-Apr-2010		14-Mar-2005	ENABLING 16QAM MODULATION BY QPSK MODULATORS
40407	40407-IT-EPT	502010901859727	05718201.6	1735982	IT	28-Apr-2010		14-Mar-2005	ENABLING 16QAM MODULATION BY QPSK MODULATORS
40407	40407-PL-EPT	1735982	05718201.6	1735982	PL	28-Apr-2010		14-Mar-2005	ENABLING 16QAM MODULATION BY QPSK MODULATORS
40458	40458-CN-PCD		201110307483.6	102546287	CN			8-Oct-2011	request for substantive examination (BINARY) STATE BASED CONTROL AND MONITORING MODEL FOR WIREDAND WIRELESS NETWORKS AND SERVICES
40490	40490-CN-PCT	200580020277.X	200580020277.X	1969516	CN	3-Oct-2012		9-Jun-2005	A METHOD TO CARRY MANAGEMENT SESSIONS OF MULTIPLE TERMINALSOVER SINGLE TCP/IP CONNECTION
40490	40490-DE-EPT	602005047220.7	05750036.5	1759503	DE	12-Aug-2015		9-Jun-2005	A METHOD TO CARRY MANAGEMENT SESSIONS OF MULTIPLE TERMINALSOVER SINGLE TCP/IP CONNECTION
40490	40490-FR-EPT	1759503	05750036.5	1759503	FR	12-Aug-2015		9-Jun-2005	A METHOD TO CARRY MANAGEMENT SESSIONS OF MULTIPLE TERMINALSOVER SINGLE TCP/IP CONNECTION
40490	40490-GB-EPT	1759503	05750036.5	1759503	GB	12-Aug-2015		9-Jun-2005	A METHOD TO CARRY MANAGEMENT SESSIONS OF MULTIPLE TERMINALSOVER SINGLE TCP/IP CONNECTION
40490	40490-NL-EPT	1759503	05750036.5	1759503	NL	12-Aug-2015		9-Jun-2005	A METHOD TO CARRY MANAGEMENT SESSIONS OF MULTIPLE TERMINALSOVER SINGLE TCP/IP CONNECTION
40943	40943-IN-PCT		10084/DELNP/2007		IN			29-Jun-2006	Resource Allocation Method, Communication System, Network Element, Module, Computer Program Product and Computer Program Distribution Medium
41186	41186-CN-PCT	200680019001.4	200680019001.4	101185311	CN	14-Nov-2012		10-Apr-2006	USE OF GENERIC AUTHENTICATION ARCHITECTURE FOR MOBILE IPV4
41186	41186-IN-PCT		7860/DELNP/2007		IN			10-Apr-2006	USE OF GENERIC AUTHENTICATION ARCHITECTURE FOR MOBILE IPV4
41186	41186-KR-PCT	0935421	2007-7024841	20070116275	KR	28-Dec-2009		10-Apr-2006	USE OF GENERIC AUTHENTICATION ARCHITECTURE FOR MOBILE IPV4
41318	41318-DE-EPT	602006014828.3	06765812.0	1897343	DE	9-Jun-2010		21-Jun-2006	ENHANCEMENT OF ISC DEFAULT HANDLING
41415	41415-CN-PCT	200780040761.8	200780040761.8	101536561	CN	7-Jan-2015		30-Oct-2007	MICRO INTERPRETER FOR DYNAMIC POLICY EXECUTION
41415	41415-IN-PCT		2383/DELNP/2009		IN			30-Oct-2007	MICRO INTERPRETER FOR DYNAMIC POLICY EXECUTION
41415	41415-KR-PCT		2009-7011184	09-74820	KR			30-Oct-2007	MICRO INTERPRETER FOR DYNAMIC POLICY EXECUTION
42220	42220-AU-PCT	2003298477	2003298477		AU	15-Jan-2009		30-Dec-2003	EFFECTIVE CO-EXISTING OF CELLULAR AND RELAY LINKS
42220	42220-CN-PCT	200380110940.6	200380110940.6	1886920	CN	5-May-2010		30-Dec-2003	EFFECTIVE CO-EXISTING OF CELLULAR AND RELAY LINKS
42220	42220-FR-EPT	1700404	03796220.6	1700404	FR	26-Aug-2009		30-Dec-2003	EFFECTIVE CO-EXISTING OF CELLULAR AND RELAY LINKS

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
42220	42220-IN-PCT	237037	2372/CHENP/2006	2372/CHENP/2006	IN	2-Dec-2009		30-Dec-2003	EFFECTIVE CO-EXISTING OF CELLULAR AND RELAY LINKS
42220	42220-JP-PCT	4562091	2005-513077	2007-517416	JP	6-Aug-2010		30-Dec-2003	EFFECTIVE CO-EXISTING OF CELLULAR AND RELAY LINKS
42220	42220-TW-NP	1329432	93140707		TW	21-Aug-2010		27-Dec-2004	EFFECTIVE CO-EXISTING OF CELLULAR AND RELAY LINKS
43143	43143-CN-PCT	200480034643.2	200480034643.2	1886832	CN	2-Sep-2009		24-Nov-2004	EDS IMPROVEMENT FOR REFLECTOR TYPE LED
43143	43143-KR-PCT	0894147	2006-7011741	2006-110322	KR	13-Apr-2009		24-Nov-2004	EDS IMPROVEMENT FOR REFLECTOR TYPE LED
43290	43290-CN-PCT	200580010577.X	200580010577.X	1939034	CN	26-May-2010		11-Mar-2005	NSM PROXY
43290	43290-DE-EPT	602005040624.7	05717275.1	1730926	DE	31-Jul-2013		11-Mar-2005	NSM PROXY
43290	43290-IN-PCT		5302/DELNP/2006		IN			11-Mar-2005	NSM PROXY
43317	43317-CN-PCT	200580014828.1	200580014828.1	1951086	CN	28-Mar-2012		11-May-2005	SHARED PICTURES
43317	43317-KR-PCT	0912420	10-2006-7025967	07-7963	KR	10-Aug-2009		11-May-2005	SHARED PICTURES
43387	43387-CN-PCT	200580009377.2	200580009377.2	1934892	CN	16-Feb-2011		16-Mar-2005	A MOVEMENT DETECTION ALGORITHM FOR FAST AND SMOOTH HANDOVER HETEROGENEOUS ACCESS TECHNOLOGY
43387	43387-DE-EPT	602005044585.4	05717339.5	1730984	DE	27-Aug-2014		16-Mar-2005	A MOVEMENT DETECTION ALGORITHM FOR FAST AND SMOOTH HANDOVER HETEROGENEOUS ACCESS TECHNOLOGY
43387	43387-GB-EPT	1730984	05717339.5	1730984	GB	27-Aug-2014		16-Mar-2005	A MOVEMENT DETECTION ALGORITHM FOR FAST AND SMOOTH HANDOVER HETEROGENEOUS ACCESS TECHNOLOGY
43387	43387-KR-PCT	789434	10-2006-7019701		KR	20-Dec-2007		16-Mar-2005	A MOVEMENT DETECTION ALGORITHM FOR FAST AND SMOOTH HANDOVER HETEROGENEOUS ACCESS TECHNOLOGY
43387	43387-NL-EPT	1730984	05717339.5	1730984	NL	27-Aug-2014		16-Mar-2005	A MOVEMENT DETECTION ALGORITHM FOR FAST AND SMOOTH HANDOVER HETEROGENEOUS ACCESS TECHNOLOGY
44030	44030-CN-PCT	200580030739.6	200580030739.6	101019417	CN	12-May-2010		13-Sep-2005	SLIDE AS A CAMERA SELECTOR IN A PHONE WITH TWO CAMERAS
44030	44030-KR-PCT	868282	2007-7005836	07-49209	KR	5-Nov-2008		13-Sep-2005	SLIDE AS A CAMERA SELECTOR IN A PHONE WITH TWO CAMERAS
44303	44303-CN-PCT	200580024133.1	200580024133.1	101103516	CN	3-Oct-2012		7-Jun-2005	ENERGY SAVING DRIVING CIRCUIT FOR PIEZOELECTRIC MOTOR
44303	44303-DE-EPT	602005037719.0	05749409.8	1769574	DE	2-Jan-2013		7-Jun-2005	ENERGY SAVING DRIVING CIRCUIT FOR PIEZOELECTRIC MOTOR
44303	44303-KR-PCT	0933958	2007-7000656	07-24719	KR	17-Dec-2009		7-Jun-2005	ENERGY SAVING DRIVING CIRCUIT FOR PIEZOELECTRIC MOTOR
44336	44336-CN-PCT	200680005474.9	200680005474.9	101129083	CN	28-Mar-2012		21-Feb-2006	ADAPTIVE DVB-H HANDOVER ALGORITHM MEASUREMENT INTERVAL
44945	44945-BR-PCT		PI0513210.0	PI0513210	BR			29-Jun-2005	AN APPLICATION PERSONALISATION TOOL WITH A MODEL-BASED DYNAMIC UI
44945	44945-CN-PCT	200580027307.X	200580027307.X	101002175	CN	3-Apr-2013		29-Jun-2005	AN APPLICATION PERSONALISATION TOOL WITH A MODEL-BASED DYNAMIC UI
44945	44945-HK-FPR	1102514	07110805.7	1102514	HK	27-Sep-2013		4-Oct-2007	AN APPLICATION PERSONALISATION TOOL WITH A MODEL-BASED DYNAMIC UI
44945	44945-JP-PCT	4498417	2007-518725	2008-504779	JP	23-Apr-2010		29-Jun-2005	AN APPLICATION PERSONALISATION TOOL WITH A MODEL-BASED DYNAMIC UI
44945	44945-KR-PCD	0971164	2009-7003279	09-31780	KR	13-Jul-2010		17-Feb-2009	AN APPLICATION PERSONALISATION TOOL WITH A MODEL-BASED DYNAMIC UI
44945	44945-RU-PCT	2355022	2007102691	2007102691	RU	10-May-2009		29-Jun-2005	AN APPLICATION PERSONALISATION TOOL WITH A MODEL-BASED DYNAMIC UI
45117	45117-KR-PCD	1032894	2008-7029426	20090008438	KR	27-Apr-2011		1-Dec-2008	SYSTEM FOR ENHANCED VOICE CAPACITY AND QUALITY OVER WLAN
45117	45117-KR-PCT		2007-7000382	07-22140	KR			1-Jun-2005	SYSTEM FOR ENHANCED VOICE CAPACITY AND QUALITY OVER WLAN

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
45117	45117-TW-NP	I270307	94118516		TW	1-Jan-2007		6-Jun-2005	SYSTEM FOR ENHANCED VOICE CAPACITY AND QUALITY OVER WLAN
45400	45400-CN-PCT	200680008349.3	200680008349.3	101142841	CN	16-May-2012		14-Mar-2006	HANDOVER ARRANGEMENT FOR DVB-H RECEIVER
45402	45402-CN-PCT	200580050037.4	200580050037.4	101194446	CN	9-Nov-2011		7-Jun-2005	METHOD FOR EFFICIENT CHANNEL SEARCH
45416	45416-AU-PCD	2008207622	2008207622		AU	25-Mar-2010		29-Aug-2008	MODIFICATIONS FOR MBOA MAC DRP PROTOCOL
45416	45416-AU-PCT	2005293267	2005293267		AU	13-Nov-2008		26-Jul-2005	MODIFICATIONS FOR MBOA MAC DRP PROTOCOL
45416	45416-BR-PCT		PI0516085.5	PI0516085	BR			26-Jul-2005	MODIFICATIONS FOR MBOA MAC DRP PROTOCOL
45416	45416-CA-PCT		2583479		CA			26-Jul-2005	MODIFICATIONS FOR MBOA MAC DRP PROTOCOL
45416	45416-CN-PCT		200580034718.1	101040464	CN			26-Jul-2005	MODIFICATIONS FOR MBOA MAC DRP PROTOCOL
45416	45416-DE-EPT	602005042207.2	05767718.9	1800420	DE	18-Dec-2013		26-Jul-2005	MODIFICATIONS FOR MBOA MAC DRP PROTOCOL
45416	45416-GB-EPT	1800420	05767718.9	1800420	GB	18-Dec-2013		26-Jul-2005	MODIFICATIONS FOR MBOA MAC DRP PROTOCOL
45416	45416-HK-FPR		07112530.5	1107196	HK			15-Nov-2007	MODIFICATIONS FOR MBOA MAC DRP PROTOCOL
45416	45416-IN-PCT		2031/CHENP/2007		IN			26-Jul-2005	MODIFICATIONS FOR MBOA MAC DRP PROTOCOL
45416	45416-JP-PCT	4549395	2007-536277	2008-516542	JP	16-Jul-2010		26-Jul-2005	MODIFICATIONS FOR MBOA MAC DRP PROTOCOL
45416	45416-KR-PCT	0913977	2007-7010510	07-84101	KR	19-Aug-2009		26-Jul-2005	MODIFICATIONS FOR MBOA MAC DRP PROTOCOL
45416	45416-MX-PCT	268435	MX/A/2007/004303		MX	17-Jul-2009		26-Jul-2005	MODIFICATIONS FOR MBOA MAC DRP PROTOCOL
45416	45416-NL-EPT	1800420	05767718.9	1800420	NL	18-Dec-2013		26-Jul-2005	MODIFICATIONS FOR MBOA MAC DRP PROTOCOL
45416	45416-RU-PCT	2342788	2007117718		RU	27-Dec-2008		26-Jul-2005	MODIFICATIONS FOR MBOA MAC DRP PROTOCOL
45416	45416-SG-PCT	130803	200702080.3		SG	30-Jun-2009		26-Jul-2005	MODIFICATIONS FOR MBOA MAC DRP PROTOCOL
45416	45416-TW-NP	287405	94135315		TW	21-Sep-2007		11-Oct-2005	MODIFICATIONS FOR MBOA MAC DRP PROTOCOL
45416	45416-ZA-PCT		2007/03659		ZA			26-Jul-2005	MODIFICATIONS FOR MBOA MAC DRP PROTOCOL
45424	45424-AU-PCT	2005302736	2005302736		AU	22-Jan-2009		26-Aug-2005	MODIFICATIONS FOR THE STREAM HANDLING OF THE MBOA MAC IMPLICIT DRP PROTOCOL
45424	45424-BR-PCT		PI0517230.6	PI0517230	BR			26-Aug-2005	MODIFICATIONS FOR THE STREAM HANDLING OF THE MBOA MAC IMPLICIT DRP PROTOCOL
45424	45424-CA-PCT	2586171	2586171		CA	16-Nov-2010		26-Aug-2005	MODIFICATIONS FOR THE STREAM HANDLING OF THE MBOA MAC IMPLICIT DRP PROTOCOL
45424	45424-CN-PCT	200580037608.0	200580037608.0	101053212	CN	26-Aug-2009		26-Aug-2005	MODIFICATIONS FOR THE STREAM HANDLING OF THE MBOA MAC IMPLICIT DRP PROTOCOL
45424	45424-HK-FPR	1113713	08102928.5	1113713	HK	18-Dec-2009		13-Mar-2008	MODIFICATIONS FOR THE STREAM HANDLING OF THE MBOA MAC IMPLICIT DRP PROTOCOL
45424	45424-IN-PCT		2368/CHENP/2007		IN			26-Aug-2005	MODIFICATIONS FOR THE STREAM HANDLING OF THE MBOA MAC IMPLICIT DRP PROTOCOL
45424	45424-JP-PCT	4467619	2007-539644	2008-519521	JP	5-Mar-2010		26-Aug-2005	MODIFICATIONS FOR THE STREAM HANDLING OF THE MBOA MAC IMPLICIT DRP PROTOCOL
45424	45424-KR-PCT	0913982	2007-7012304	07-84620	KR	19-Aug-2009		26-Aug-2005	MODIFICATIONS FOR THE STREAM HANDLING OF THE MBOA MAC IMPLICIT DRP PROTOCOL
45424	45424-MX-PCT	268559	MX/A/2007/005282		MX	22-Jul-2009		26-Aug-2005	MODIFICATIONS FOR THE STREAM HANDLING OF THE MBOA MAC IMPLICIT DRP PROTOCOL
45424	45424-RU-PCT	2361372	2007120590		RU	10-Jul-2009		26-Aug-2005	MODIFICATIONS FOR THE STREAM HANDLING OF THE MBOA MAC IMPLICIT DRP PROTOCOL
45424	45424-SG-PCT	131403	200702519.0		SG	28-Nov-2008		26-Aug-2005	MODIFICATIONS FOR THE STREAM HANDLING OF THE MBOA MAC IMPLICIT DRP PROTOCOL
45424	45424-TW-NP		94137754		TW			28-Oct-2005	MODIFICATIONS FOR THE STREAM HANDLING OF THE MBOA MAC IMPLICIT DRP PROTOCOL
45424	45424-ZA-PCT	2007/4238	2007/4238		ZA	27-Aug-2008		26-Aug-2005	MODIFICATIONS FOR THE STREAM HANDLING OF THE MBOA MAC IMPLICIT DRP PROTOCOL
45551	45551-BR-PCT		PI0608164.9	PI0608164.9	BR			18-Apr-2006	REDUCING BEACON SLOT ACQUISITION TIME IN DISTRIBUTED MAC UNDER CRITICAL DEVICE POPULATION CONDITIONS
45551	45551-CN-PCT		200680013109.2	101164255	CN			18-Apr-2006	REDUCING BEACON SLOT ACQUISITION TIME IN DISTRIBUTED MAC UNDER CRITICAL DEVICE POPULATION CONDITIONS

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
45551	45551-DE-EPT	602006043876.1	06744519.7	1872491	DE	3-Dec-2014		18-Apr-2006	REDUCING BEACON SLOT ACQUISITION TIME IN DISTRIBUTED MAC UNDER CRITICAL DEVICE POPULATION CONDITIONS
45551	45551-GB-EPT	1872491	06744519.7	1872491	GB	3-Dec-2014		18-Apr-2006	REDUCING BEACON SLOT ACQUISITION TIME IN DISTRIBUTED MAC UNDER CRITICAL DEVICE POPULATION CONDITIONS
45551	45551-IN-PCT		6703/DELNP/2007		IN			18-Apr-2006	REDUCING BEACON SLOT ACQUISITION TIME IN DISTRIBUTED MAC UNDER CRITICAL DEVICE POPULATION CONDITIONS
45551	45551-JP-PCT		2008-507185	2008-537423	JP			18-Apr-2006	REDUCING BEACON SLOT ACQUISITION TIME IN DISTRIBUTED MAC UNDER CRITICAL DEVICE POPULATION CONDITIONS
45551	45551-KR-PCT	0966505	2007-7023987	08-10396	KR	21-Jun-2010		18-Apr-2006	REDUCING BEACON SLOT ACQUISITION TIME IN DISTRIBUTED MAC UNDER CRITICAL DEVICE POPULATION CONDITIONS
45551	45551-MX-PCT		MX/a/2007/011224		MX			18-Apr-2006	REDUCING BEACON SLOT ACQUISITION TIME IN DISTRIBUTED MAC UNDER CRITICAL DEVICE POPULATION CONDITIONS
45551	45551-MY-NP		PI20061489		MY			3-Mar-2006	REDUCING BEACON SLOT ACQUISITION TIME IN DISTRIBUTED MAC UNDER CRITICAL DEVICE POPULATION CONDITIONS
45551	45551-SG-PCT	136569	200716882.6		SG	30-Nov-2009		18-Apr-2006	REDUCING BEACON SLOT ACQUISITION TIME IN DISTRIBUTED MAC UNDER CRITICAL DEVICE POPULATION CONDITIONS
45551	45551-TH-NP		0601001240	83208	TH			21-Mar-2006	REDUCING BEACON SLOT ACQUISITION TIME IN DISTRIBUTED MAC UNDER CRITICAL DEVICE POPULATION CONDITIONS
45551	45551-TW-NP		95113887		TW			19-Apr-2006	REDUCING BEACON SLOT ACQUISITION TIME IN DISTRIBUTED MAC UNDER CRITICAL DEVICE POPULATION CONDITIONS
45551	45551-VN-PCT		1-2007-02461	17055	VN			18-Apr-2006	REDUCING BEACON SLOT ACQUISITION TIME IN DISTRIBUTED MAC UNDER CRITICAL DEVICE POPULATION CONDITIONS
45551	45551-ZA-PCT	2007/08517	2007/08517		ZA	25-Mar-2009		18-Apr-2006	REDUCING BEACON SLOT ACQUISITION TIME IN DISTRIBUTED MAC UNDER CRITICAL DEVICE POPULATION CONDITIONS
45612	45612-CN-PCT	200680031276.X	200680031276.X	101253748	CN	30-Nov-2011		4-May-2006	MOBILE TV CLIENT MIDDLEWARE
46467	46467-IN-PCT		10781/DELNP/2008		IN			29-May-2007	SYNCHRONIZATION ALGORITHM FOR 802.16E OFDMA DOWNLINK
46467	46467-RU-PCT		2008152232		RU			29-May-2007	SYNCHRONIZATION ALGORITHM FOR 802.16E OFDMA DOWNLINK
46467	46467-TW-NP		96119316	200807935	TW			30-May-2007	SYNCHRONIZATION ALGORITHM FOR 802.16E OFDMA DOWNLINK
46541	46541-CN-PCT	200580033257.6	200580033257.6	101032094	CN	11-Mar-2015		1-Aug-2005	OUTER LOOP POWER CONTROL WITH TRANSPORT BLOCK DIVERSITY TRANSMISSION
46541	46541-DE-EPT	602005014780.2	05780175.5	1774676	DE	3-Jun-2009		1-Aug-2005	OUTER LOOP POWER CONTROL WITH TRANSPORT BLOCK DIVERSITY TRANSMISSION
46541	46541-GB-EPT	1774676	05780175.5	1774676	GB	3-Jun-2009		1-Aug-2005	OUTER LOOP POWER CONTROL WITH TRANSPORT BLOCK DIVERSITY TRANSMISSION
46541	46541-KR-PCT	0898524	2007-7004745	07-39972	KR	13-May-2009		1-Aug-2005	OUTER LOOP POWER CONTROL WITH TRANSPORT BLOCK DIVERSITY TRANSMISSION
46555	46555-DE-EPT	602005022437.8	05771662.3	1752012	DE	21-Jul-2010		2-Jun-2005	GPRS/UMTS AND CDMA2000 PACKET DATA ROAMING
46726	46726-CN-PCT	200680030226.X	200680030226.X	101243719	CN	17-Oct-2012		6-Jul-2006	PRE-EXCHANGED NONCES FOR FASTER INTER-BS HANDOVERS
46726	46726-DE-EPT	602006032059.0	06779839.7	1900245	DE	19-Sep-2012		6-Jul-2006	PRE-EXCHANGED NONCES FOR FASTER INTER-BS HANDOVERS
46726	46726-TW-NP	1393414	95124711		TW	11-Apr-2013		6-Jul-2006	PRE-EXCHANGED NONCES FOR FASTER INTER-BS HANDOVERS
46731	46731-CN-PCT		200780047775.2	101569110	CN			19-Dec-2007	FEEDBACK ASSISTED CARRIER PHASE SYNCHRONIZATION FOR DISTRIBUTED ANTENNAS SYSTEMS



Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
46783	46783-CN-PCT	200780024043.1	200780024043.1	101480077	CN	23-May-2012		18-May-2007	A COORDINATED SCHEDULING METHOD FOR INTERFERENCE CONTROL WITHOUT INTER-CELL SIGNALLING
46791	46791-CN-PCT	200680044943.8	200680044943.8	101322330	CN	17-Jul-2013		1-Nov-2006	SUBCHANNEL ASSIGNMENT METHOD FOR RELAY NODES
46791	46791-DE-EPT	602006049749.0	06809162.8	1952555	DE	27-Jul-2016		1-Nov-2006	SUBCHANNEL ASSIGNMENT METHOD FOR RELAY NODES
46791	46791-IN-PCT	264776	3876/DELNP/2008		IN	20-Jan-2015		1-Nov-2006	SUBCHANNEL ASSIGNMENT METHOD FOR RELAY NODES
46791	46791-JP-PCT	4871957	2008-538445	2009-515399	JP	25-Nov-2011		1-Nov-2006	SUBCHANNEL ASSIGNMENT METHOD FOR RELAY NODES
46791	46791-KR-PCT	1067515	2008-7012988	08-70727	KR	19-Sep-2011		1-Nov-2006	SUBCHANNEL ASSIGNMENT METHOD FOR RELAY NODES
46791	46791-NL-EPT	1952555	06809162.8	1952555	NL	27-Jul-2016		1-Nov-2006	SUBCHANNEL ASSIGNMENT METHOD FOR RELAY NODES
46829	46829-CN-PCT	200780012457.2	200780012457.2	101416414	CN	4-Jul-2012		3-Apr-2007	3.9G RECEIVER WHICH BY-PASSES MOTOROLA2S IRC PATENT
46829	46829-IN-PCT		8239/DELNP/2008		IN			3-Apr-2007	3.9G RECEIVER WHICH BY-PASSES MOTOROLA2S IRC PATENT
46829	46829-JP-PCT	4990964	2009-503605	2009-532967	JP	11-May-2012		3-Apr-2007	3.9G RECEIVER WHICH BY-PASSES MOTOROLA2S IRC PATENT
46829	46829-KR-PCT	0978779	2008-7026882	08-108602	KR	24-Aug-2010		3-Apr-2007	3.9G RECEIVER WHICH BY-PASSES MOTOROLA2S IRC PATENT
46971	46971-CN-PCT	200780021169.3	200780021169.3	101467411	CN	10-Jul-2013		27-Apr-2007	ORDERED LDPC CODED OFDM SYSTEM WITH ADAPTIVE POWER CONTROL WITH FIXED TRUNCATING RATIO IN MULTICARRIER COMMUNICATION
47576	47576-CN-PCT	200580048341.5	200580048341.5	101124685	CN	28-Oct-2009		15-Feb-2005	PIEZO ZOOM LENS
48042	48042-DE-EPT	602005033529.3	05814812.3	1817939	DE	4-Apr-2012		25-Nov-2005	A STEREO WIDENING NETWORK FOR TWO CLOSELY SPACED LOUDSPEAKERS
48042	48042-KR-PCT	0919160	2007-7012031	07-74645	KR	21-Sep-2009		25-Nov-2005	A STEREO WIDENING NETWORK FOR TWO CLOSELY SPACED LOUDSPEAKERS
48042	48042-NL-EPT	1817939	05814812.3	1817939	NL	4-Apr-2012		25-Nov-2005	A STEREO WIDENING NETWORK FOR TWO CLOSELY SPACED LOUDSPEAKERS
48259	48259-US-CNT		13/442292	20130173575	US			9-Apr-2012	LOCAL SERVICE DISCOVERY COMBINED WITH BROWSER SEARCH
48382	48382-CN-PCT	200480044166.8	200480044166.8	101040475	CN	27-Jun-2012		6-Oct-2004	ALIGNING FEC AND MEDIA STRUCTURES TO MINIMIZE DELAY AND BUFFERING REQUIREMENTS
48382	48382-IN-PCT		2102/DELNP/2007		IN			6-Oct-2004	ALIGNING FEC AND MEDIA STRUCTURES TO MINIMIZE DELAY AND BUFFERING REQUIREMENTS
48382	48382-TH-NP		0501004655	81210	TH			4-Oct-2005	ALIGNING FEC AND MEDIA STRUCTURES TO MINIMIZE DELAY AND BUFFERING REQUIREMENTS
48382	48382-TW-NP	1357739	94134581		TW	1-Feb-2012		4-Oct-2005	ALIGNING FEC AND MEDIA STRUCTURES TO MINIMIZE DELAY AND BUFFERING REQUIREMENTS
48724	48724-CN-PCT	200680028035.X	200680028035.X	101233440	CN	27-Nov-2013		7-Jun-2006	ADAPTIVE OPTICAL PLANE FORMATION WITH ROLLING SHUTTER
48724	48724-DE-EPT	602006046597.1	06779701.9	1896891	DE	9-Sep-2015		7-Jun-2006	ADAPTIVE OPTICAL PLANE FORMATION WITH ROLLING SHUTTER
48724	48724-FR-EPT	1896891	06779701.9	1896891	FR	9-Sep-2015		7-Jun-2006	ADAPTIVE OPTICAL PLANE FORMATION WITH ROLLING SHUTTER
48724	48724-GB-EPT	1896891	06779701.9	1896891	GB	9-Sep-2015		7-Jun-2006	ADAPTIVE OPTICAL PLANE FORMATION WITH ROLLING SHUTTER
48725	48725-CN-PCT	200680022589.9	200680022589.9	101268686	CN	16-Jan-2013		2-Jun-2006	MULTI-SCALE RAW CAMERA DATA
48725	48725-JP-PCT	4546565	2008-517637	2008-544673	JP	9-Jul-2010		2-Jun-2006	MULTI-SCALE RAW CAMERA DATA
49038	49038-BR-PCT		PI0520644.8	PI05206448	BR			14-Oct-2005	LIGHTNING DETECTION WITH (MODIFIED) STEREO FM RECEIVER
49038	49038-CN-PCT	200580051815.1	200580051815.1	101287992	CN	28-Mar-2012		14-Oct-2005	LIGHTNING DETECTION WITH (MODIFIED) STEREO FM RECEIVER
49038	49038-IN-PCT		1969/DELNP/2008		IN			14-Oct-2005	LIGHTNING DETECTION WITH (MODIFIED) STEREO FM RECEIVER

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
49038	49038-KR-PCT	1119212	2008-7011443	08-65659	KR	15-Feb-2012		14-Oct-2005	LIGHTNING DETECTION WITH (MODIFIED) STEREO FM RECEIVER
49443	49443-US-NP		11/350903	20070155346	US			10-Feb-2006	TEXT-TO-SPEECH TRANSCODING IN POC
49527	49527-CN-PCT	200580050921.8	200580050921.8	101213756	CN	13-Jul-2011		29-Jun-2005	TIME SLICING BURST RECEPTION OPTIMIZATION
49527	49527-GB-EPT	1897227	05780138.3	1897227	GB	28-Apr-2010		29-Jun-2005	TIME SLICING BURST RECEPTION OPTIMIZATION
49538	49538-SG-PCT	142788	200803808.5		SG	29-Apr-2011		27-Nov-2006	SYSTEM FOR CUSTOMIZING AND CONFIGURING DYNAMICALLY TERMINALS' APPLICATIONS
49774	49774-DE-EPT	602006027794.6	06766012.6	1910994	DE	22-Feb-2012		6-Jul-2006	FAST HIGH ACCURATE ADAPTIVE IMAGE BINARIZATION
49774	49774-KR-PCT	0945809	2008-7002389	08-21832	KR	26-Feb-2010		6-Jul-2006	FAST HIGH ACCURATE ADAPTIVE IMAGE BINARIZATION
50443	50443-DE-EPT	602006017734.8	06820907.1	1960994	DE	20-Oct-2010		14-Nov-2006	NOVEL METHOD FOR WINDING AUDIO CONTENT USING VOICE ACTIVITYDETECTION ALGORITHM
50443	50443-FR-EPT	1960994	06820907.1	1960994	FR	20-Oct-2010		14-Nov-2006	NOVEL METHOD FOR WINDING AUDIO CONTENT USING VOICE ACTIVITYDETECTION ALGORITHM
50443	50443-GB-EPT	1960994	06820907.1	1960994	GB	20-Oct-2010		14-Nov-2006	NOVEL METHOD FOR WINDING AUDIO CONTENT USING VOICE ACTIVITYDETECTION ALGORITHM
50443	50443-HK-FPR	1121282	09100893.9	1121282	HK	10-Jun-2011		30-Jan-2009	NOVEL METHOD FOR WINDING AUDIO CONTENT USING VOICE ACTIVITYDETECTION ALGORITHM
50776	50776-CN-PCT	200680040438.6	200680040438.6	101300740	CN	1-Apr-2015		18-Sep-2006	DVB-H VS. GSM INTEROPERABILITY IMPROVEMENT
50776	50776-DE-EPT	602006046525.4	06808854.1	1935099	DE	2-Sep-2015		18-Sep-2006	DVB-H VS. GSM INTEROPERABILITY IMPROVEMENT
50776	50776-GB-EPT	1935099	06808854.1	1935099	GB	2-Sep-2015		18-Sep-2006	DVB-H VS. GSM INTEROPERABILITY IMPROVEMENT
50877	50877-TW-NP	1436276	96112502	200807297	TW	1-May-2014		10-Apr-2007	ADAPTABLE RANDOM PLAY
50901	50901-CN-PCT	200680043476.7	200680043476.7	101589384	CN	29-Jun-2011		6-Oct-2006	A METHOD FOR MEASURING SVG DOCUMENT SIMILARITY BY REDUCING THE DOCUMENTS TO THEIR MINIMAL LOGICAL REPRESENTATIONS AND THEN ANALYZING USING TREE ISOMORPHISM TECHNIQUES
50901	50901-HK-FPR	1133711	10100703.6	1133711	HK	28-Oct-2011		22-Jan-2010	A METHOD FOR MEASURING SVG DOCUMENT SIMILARITY BY REDUCING THE DOCUMENTS TO THEIR MINIMAL LOGICAL REPRESENTATIONS AND THEN ANALYZING USING TREE ISOMORPHISM TECHNIQUES
50901	50901-KR-PCT	1040094	2008-7010901	08-69988	KR	2-Jun-2011		6-Oct-2006	METHOD FOR MEASURING SVG DOCUMENT SIMILARITY BY REDUCING THE DOCUMENTS TO THEIR MINIMAL LOGICAL REPRESENTATIONS AND THEN ANALYZING USING TREE ISOMORPHISM TECHNIQUES
50925	50925-CN-PCT	200680053594.6	200680053594.6	101395807	CN	25-Jul-2012		1-Mar-2006	OFDM RECEIVER WITH IMPROVED INTERFERENCE PERFORMANCE WITH OTHER TRANSCIVER
50925	50925-DE-EPT	602006016652.4	06710994.2	1989784	DE	1-Sep-2010		1-Mar-2006	OFDM RECEIVER WITH IMPROVED INTERFERENCE PERFORMANCE WITH OTHER TRANSCIVER
51901	51901-CN-DIV		201310054130.9	103200309	CN			18-Feb-2013	ENTERTAINMENT AUDIO FOR TEXT-ONLY APPLICATIONS
51901	51901-US-PCT	8694320	12/597937	20100145705	US	8-Apr-2014		28-Apr-2008	ENTERTAINMENT AUDIO FOR TEXT-ONLY APPLICATIONS
52305	52305-CN-PCT	200780025127.7	200780025127.7	101484937	CN	4-Jul-2012		24-May-2007	Low power decoding of AAC LTP content
52305	52305-DE-EPT	602007028705.7	07734657.5	2022045	DE	27-Feb-2013		24-May-2007	Low power decoding of AAC LTP content
52305	52305-IN-PCT		9575/DELNP/2008		IN			24-May-2007	Low power decoding of AAC LTP content
52305	52305-KR-PCT	1067514	2008-7029238	099278	KR	19-Sep-2011		24-May-2007	Low power decoding of AAC LTP content
52305	52305-MX-PCT	282674	MX/a/2008/015045		MX	10-Jan-2011		24-May-2007	Low power decoding of AAC LTP content
52305	52305-RU-PCT	2408089	2008148560		RU	27-Dec-2010		24-May-2007	Low power decoding of AAC LTP content
52418	52418-AU-PCT	755292	61532/99		AU	22-Oct-2001	17-Sep-2019	17-Sep-1999	DATABASE SYNCHRONIZATION AND ORGANIZATION SYSTEM AND METHOD
52418	52418-EA-EAT	2391	20010000363		EA	31-Oct-2002		17-Sep-1999	DATABASE SYNCHRONIZATION AND ORGANIZATION SYSTEM AND METHOD
52418	52418-GE-PCT	3072	1999004318	WO00/16222	GE	2-Jan-2004	17-Sep-2019	17-Sep-1999	DATABASE SYNCHRONIZATION AND ORGANIZATION SYSTEM AND METHOD

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
52418	52418-IL-PCT	142058	142058	38704	IL	19-Mar-2006	17-Sep-2019	17-Sep-1999	DATABASE SYNCHRONIZATION AND ORGANIZATION SYSTEM AND METHOD
52418	52418-RU-EAT	002931	20010000363		RU	31-Oct-2002	17-Sep-2019	17-Sep-1999	DATABASE SYNCHRONIZATION AND ORGANIZATION SYSTEM AND METHOD
52418	52418-SG-PCT	79633	200101472.9	WO00/16222	SG	30-Sep-2004	17-Sep-2019	17-Sep-1999	DATABASE SYNCHRONIZATION AND ORGANIZATION SYSTEM AND METHOD
52418	52418-UA-PCT	65638	20010042525	WO00/16222	UA	2-Jan-2004	17-Sep-2019	17-Sep-1999	DATABASE SYNCHRONIZATION AND ORGANIZATION SYSTEM AND METHOD
52418	52418-ZA-PCT	2001/2717	2001/2717	WO00/16222	ZA	26-Jun-2002	17-Sep-2019	17-Sep-1999	DATABASE SYNCHRONIZATION AND ORGANIZATION SYSTEM AND METHOD
52661	52661-IN-PCT		10623/DELNP/2008		IN			25-Jun-2007	MULTI-LEVEL OUTER LOOP ALGORITHM TO HANDLE TREE-BASED CQI MEASUREMENT REPORTS
52661	52661-KR-PCT	1098628	2008-7031891	20090018174	KR	19-Dec-2011		25-Jun-2007	MULTI-LEVEL OUTER LOOP ALGORITHM TO HANDLE TREE-BASED CQI MEASUREMENT REPORTS
52723	52723-CN-PCT	200780041618.0	200780041618.0	101536492	CN	28-Dec-2011		24-Oct-2007	Smart Image Capture with Auto Focus Cameras
52723	52723-DE-EPT	602007014570.8	07825477.8	2080366	DE	11-May-2011		24-Oct-2007	Smart Image Capture with Auto Focus Cameras
52723	52723-JP-PCT	4757941	2009-532908	2010-507124	JP	10-Jun-2011		24-Oct-2007	Smart Image Capture with Auto Focus Cameras
52723	52723-KR-PCT	1062582	2009-7011858	20090089380	KR	30-Aug-2011		24-Oct-2007	Smart Image Capture with Auto Focus Cameras
52723	52723-NL-EPT	2080366	07825477.8	2080366	NL	11-May-2011		24-Oct-2007	Smart Image Capture with Auto Focus Cameras
52769	52769-CN-PCT	200780048500.0	200780048500.0	101573695	CN	2-Jan-2013		5-Dec-2007	Multi-pass pre-processing and image statistics with compressed memory access
52769	52769-JP-PCT	5337707	2009-543530	2010-515326	JP	9-Aug-2013		5-Dec-2007	Multi-pass pre-processing and image statistics with compressed memory access
52769	52769-KR-PCT	1036421	2009-7015813		KR	16-May-2011		5-Dec-2007	Multi-pass pre-processing and image statistics with compressed memory access
52914	52914-CN-PCT	200780030700.3	200780030700.3	101507102	CN	18-Jul-2012		26-Jun-2007	PASSIIVINEN MIKSERI MULTIRADIOTA VARTEN
52914	52914-DE-EPT	602007026164.3	07788764.4	2041864	DE	17-Oct-2012		26-Jun-2007	PASSIIVINEN MIKSERI MULTIRADIOTA VARTEN
52914	52914-NL-EPT	2041864	07788764.4	2041864	NL	17-Oct-2012		26-Jun-2007	PASSIIVINEN MIKSERI MULTIRADIOTA VARTEN
54291	54291-FI-NP		20065464		FI			28-Dec-2006	PASSIIVINEN VAHVISTIN MULTIRADIOTA VARTEN
54606	54606-FI-NP		20065862		FI			28-Dec-2006	PASSIIVINEN MIKSERI, AGC-VAHVISTIN JA ALIPÄÄSTÖSUODATIN MULTIRADIOTA VARTEN/Passive mixer, AGC-amplifier and low pass filter for multiradio
53188	53188-RU-PCT	2417400	2009110949		RU	27-Apr-2011		22-Aug-2007	UNIFIED PHONEBOOK
53188	53188-ZA-PCT	2009/2148	2009/2148		ZA	26-May-2010		22-Aug-2007	UNIFIED PHONEBOOK
53191	53191-CN-PCT		200780037771.6	101529880	CN			24-Aug-2007	REPLY VIA ANOTHER CHANNEL
53420	53420-CN-PCT	200780050631.2	200780050631.2	101601185	CN	4-Jan-2012		19-Dec-2007	FREQUENCY TRANSLATING DELTA-SIGMA MODULATOR WITH TRANSFERREDIMPEDANCE RESONATOR
53420	53420-DE-EPT	602007028604.2	07858356.4	2119005	DE	20-Feb-2013		19-Dec-2007	FREQUENCY TRANSLATING DELTA-SIGMA MODULATOR WITH TRANSFERREDIMPEDANCE RESONATOR
53420	53420-DK-EPT	2119005	07858356.4	2119005	DK	20-Feb-2013		19-Dec-2007	FREQUENCY TRANSLATING DELTA-SIGMA MODULATOR WITH TRANSFERREDIMPEDANCE RESONATOR
53420	53420-NL-EPT	2119005	07858356.4	2119005	NL	20-Feb-2013		19-Dec-2007	FREQUENCY TRANSLATING DELTA-SIGMA MODULATOR WITH TRANSFERREDIMPEDANCE RESONATOR
54291	54291-CN-PCT	200780030728.7	200780030728.7	101507111	CN	19-Oct-2011		26-Jun-2007	PASSIIVINEN VAHVISTIN MULTIRADIOTA VARTEN
54291	54291-KR-PCT	1120650	2009-7000781	09-20700	KR	20-Feb-2012		26-Jun-2007	PASSIIVINEN VAHVISTIN MULTIRADIOTA VARTEN
54503	54503-IN-PCT		2905/CHENP/2009	2905/CHENP/2009	IN			24-Sep-2007	BATTERY SAVING METHOD FOR ALWAYS-ON CONNECTIONS
54606	54606-CN-PCT	200780030738.0	200780030738.0	101507103	CN	2-May-2012		26-Jun-2007	PASSIIVINEN MIKSERI, AGC-VAHVISTIN JA ALIPÄÄSTÖSUODATIN MULTIRADIOTA VARTEN/Passive mixer, AGC-amplifier and low pass filter for multiradio

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
54606	54606-DE-EPT	602007027330.7	07788766.9	2047591	DE	12-Dec-2012		26-Jun-2007	PASSIIVINEN MIKSERI, AGC-VAHVISTIN JA ALIPÄÄSTÖSUODATIN MULTIRADIOTA VARTEN/Passive mixer, AGC-amplifier and low pass filter for multiradio
54606	54606-GR-EPT	2047591	07788766.9	2047591	GR	12-Dec-2012		26-Jun-2007	PASSIIVINEN MIKSERI, AGC-VAHVISTIN JA ALIPÄÄSTÖSUODATIN MULTIRADIOTA VARTEN/Passive mixer, AGC-amplifier and low pass filter for multiradio
54606	54606-HK-FPR	1137863	10101433.1	1137863A	HK	25-Jan-2013		9-Feb-2010	PASSIIVINEN MIKSERI, AGC-VAHVISTIN JA ALIPÄÄSTÖSUODATIN MULTIRADIOTA VARTEN/Passive mixer, AGC-amplifier and low pass filter for multiradio
54606	54606-IE-EPT	2047591	07788766.9	2047591	IE	12-Dec-2012		26-Jun-2007	PASSIIVINEN MIKSERI, AGC-VAHVISTIN JA ALIPÄÄSTÖSUODATIN MULTIRADIOTA VARTEN/Passive mixer, AGC-amplifier and low pass filter for multiradio
54606	54606-PT-EPT	2047591	07788766.9	2047591	PT	12-Dec-2012		26-Jun-2007	PASSIIVINEN MIKSERI, AGC-VAHVISTIN JA ALIPÄÄSTÖSUODATIN MULTIRADIOTA VARTEN/Passive mixer, AGC-amplifier and low pass filter for multiradio
54939	54939-CN-PCT	200880006988.5	200880006988.5	101627597	CN	19-Sep-2012		4-Mar-2008	MAPPING OF SHARED SIGNALLING CHANNEL TO THE PHYSICAL RESOURCES OF AN OFDM TRANSMISSION SYSTEM
55049	55049-CN-PCT	200880014113.X	200880014113.X	101675592	CN	13-Feb-2013		29-Apr-2008	DELTA-SIGMA MODULATOR WITH EMBEDDED FILTERING
55049	55049-DE-EPT	602008026626.5	08775453.7	2143208	DE	7-Aug-2013		29-Apr-2008	DELTA-SIGMA MODULATOR WITH EMBEDDED FILTERING
55049	55049-IN-PCT		6378/DELNP/2009	6378/DELNP/2009 A	IN			29-Apr-2008	DELTA-SIGMA MODULATOR WITH EMBEDDED FILTERING
55083	55083-CN-PCT		200880012360.6	101663882	CN			15-Apr-2008	IMPROVEMENT TO SECURITY KEYGUARD.
55083	55083-KR-PCT	1132319	2009-7021001	09-119929	KR	26-Mar-2012		15-Apr-2008	IMPROVEMENT TO SECURITY KEYGUARD.
55453	55453-CN-PCT	200780046809.6	200780046809.6	101563946	CN	26-Feb-2014		15-Nov-2007	ESTIMATION OF THE ACTIVITY FACTOR OF HSDPA APPLICATIONS ANDRELATED QOS-AWARE RRM CONCEPT
55829	55829-TW-NP	1399980	97104224	200841727	TW	21-Jun-2013		4-Feb-2008	DVBH - AUTOMATIC AIR INTERFACE SELECTION
55997	55997-CN-PCT	200780053576.2	200780053576.2	101690322	CN	10-Apr-2013		29-Jun-2007	AVOIDING PING-PONG HANDOVERS IN MOBILE NETWORKS
56153	56153-IN-PCT		2114/CHENP/2009	2114/CHENP/2009	IN			17-Sep-2007	NOVEL METHOD FOR PROSODY CONVERSION
56497	56497-CN-PCT	200880019666.4	200880019666.4	101682639	CN	19-Jun-2013		11-Apr-2008	MAC LAYER GROUP KEY HANDSHAKE
56497	56497-IN-PCT	283044	6504/CHENP/2009	6504/CHENP/2009	IN	2-May-2017		11-Apr-2008	MAC LAYER GROUP KEY HANDSHAKE
56563	56563-CN-PCT	200880002261.X	200880002261.X	101675613	CN	4-Dec-2013		9-Jan-2008	IMPROVED BUFFERING DELAY ESTIMATION FOR ADAPTIVE JITTER BUFFER MANAGEMENT
56563	56563-IN-PCT	269229	3740/CHENP/2009	3740/CHENP/2009	IN	12-Oct-2015		9-Jan-2008	IMPROVED BUFFERING DELAY ESTIMATION FOR ADAPTIVE JITTER BUFFER MANAGEMENT
56909	56909-CN-PCT		200880013107.2	101663912	CN			12-Mar-2008	A CQI REPORTING AND SIMULTANEOUS TRANSMISSION MECHANISM TO IMPROVE RELIABILITY OF HO SIGNALING
56909	56909-DE-EPT	602008025734.7	08719287.8	2138004	DE	3-Jul-2013		12-Mar-2008	A CQI REPORTING AND SIMULTANEOUS TRANSMISSION MECHANISM TO IMPROVE RELIABILITY OF HO SIGNALING
56984	56984-KR-PCD	1285108	2011-7028095	11-133636	KR	5-Jul-2013		24-Nov-2011	DVB-T2/H2 GSM INTEROPERABILITY SOLUTION
57445	57445-CN-PCT	200880116151.6	200880116151.6	101861752	CN	17-Jul-2013		25-Sep-2008	ENERGY EFFICIENT NETWORK SELECTION METHOD FOR MULTI RADIO DEVICE
57445	57445-IN-PCT		2477/CHENP/2010	2477/CHENP/2010	IN			27-Apr-2010	ENERGY EFFICIENT NETWORK SELECTION METHOD FOR MULTI RADIO DEVICE
59013	59013-CN-PCT		201180045654.0	103119592	CN			31-Oct-2011	PROGRESSIVE MULTIMEDIA SYNCHRONIZATION SYNCHRONISATION MULTIMEDIA PROGRESSIVE
60052	60052-DE-EPT	602008022532.1	08763409.3	2156574	DE	27-Feb-2013		20-Jun-2008	Timing-Advance for UL Relay Synchronisation

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
60052	60052-NL-EPT	2156574	08763409.3	2156574	NL	27-Feb-2013		20-Jun-2008	Timing-Advance for UL Relay Synchronisation
60052	60052-SE-EPT	2156574	08763409.3	2156574	SE	27-Feb-2013		20-Jun-2008	Timing-Advance for UL Relay Synchronisation
60086	60086-CN-PCT	200880014872.6	200880014872.6	101675677	CN	20-Feb-2013		2-Apr-2008	Key Update for Network Application Function service Keys (e.g. Mobile TV)
60248	60248-CN-PCT	200880118794.4	200880118794.4	101884121	CN	17-Apr-2013		28-Nov-2008	Digital Camera Piezoelectric Bimorph Auto Focus motor drive
60248	60248-DE-EPT	602008036864.5	08857116.1	2215669	DE	25-Feb-2015		28-Nov-2008	Digital Camera Piezoelectric Bimorph Auto Focus motor drive
60248	60248-KR-PCT	1124871	2010-7014791		KR	29-Feb-2012		28-Nov-2008	Digital Camera Piezoelectric Bimorph Auto Focus motor drive
60746	60746-CN-PCT	200880122699.1	200880122699.1	101910977	CN	9-Oct-2013		26-Dec-2008	Desktop material simulation using a piezoelectric actuator
60820	60820-DE-EPT	602008014981.1	08789540.5	2176982	DE	18-Apr-2012		4-Aug-2008	Bi-directional Resource Allocation to decrease signaling for retransmissions
61202	61202-IN-PCT		8100/CHENP/2010	8100/CHENP/2010	IN			21-Apr-2009	Multiradio scheduling concept
61333	61333-CN-PCD		201410535954.2	104270189	CN			24-Feb-2009	PROTOCOLS FOR MULTI-HOP RELAY SYSTEM WITH CENTRALIZED SCHEDULING
61393	61393-KR-PCT	1110969	2010-7014244		KR	20-Jan-2012		28-Nov-2007	Method for identifying people and objects appearing on a picture
61813	61813-CN-PCT	200880126577.X	200880126577.X	101946518	CN	31-Jul-2013		9-Dec-2008	Adaptive Synchronize Decoding
61813	61813-IN-PCT		4666/CHENP/2010	4666/CHENP/2010	IN			9-Dec-2008	Adaptive Synchronize Decoding
61813	61813-KR-PCT	1234146	2010-7016858	10-113538	KR	12-Feb-2013		9-Dec-2008	Adaptive Synchronize Decoding
61924	61924-CN-PCT	200880117061.9	200880117061.9	101868933	CN	4-Jun-2014		30-Sep-2008	User Specific Load Balancing among HARQ Processes for Semi-persistent Scheduling in LTE TDD UL
61924	61924-DE-EPT	602008026843.8	08835383.4	2201717	DE	14-Aug-2013		30-Sep-2008	User Specific Load Balancing among HARQ Processes for Semi-persistent Scheduling in LTE TDD UL
62127	62127-IN-PCT		4507/CHENP/2010	4507/CHENP/2010	IN			11-Nov-2008	Novel Task Flow and User Interface for Secure Software Download and Installation
62407	62407-CN-PCT	200980103291.4	200980103291.4	101926216	CN	22-Jan-2014		14-Feb-2009	A Method of Distributed Synchronization and Estimation/Control in Cognitive Radio Networks
62407	62407-DE-EPT	602009019606.5	09711370.8	2241157	DE	23-Oct-2013		14-Feb-2009	A Method of Distributed Synchronization and Estimation/Control in Cognitive Radio Networks
62407	62407-IN-PCT		5097/CHENP/2010	5097/CHENP/2010	IN			14-Feb-2009	A Method of Distributed Synchronization and Estimation/Control in Cognitive Radio Networks
62407	62407-VN-PCT		1-2010-01855	25744	VN			14-Feb-2009	A Method of Distributed Synchronization and Estimation/Control in Cognitive Radio Networks
62680	62680-AR-NP		P-090100346	AR070552	AR			3-Feb-2009	Electromagnetic interference sensor for low-end diagnostic monitoring of devices
62680	62680-CN-PCT		200980106302.4	101960317	CN			26-Jan-2009	Electromagnetic interference sensor for low-end diagnostic monitoring of devices
62680	62680-IN-PCT		6216/CHENP/2010	6216/CHENP/2010	IN			26-Jan-2009	Electromagnetic interference sensor for low-end diagnostic monitoring of devices
62814	62814-CN-PCT	200880130197.3	200880130197.3	102084418	CN	6-Mar-2013		1-Jul-2008	Binaural audio image enhancement
62814	62814-IN-PCT		632/CHENP/2011	632/CHENP/2011	IN			1-Jul-2008	Binaural audio image enhancement
63120	63120-IN-PCT		5952/CHENP/2010	5952/CHENP/2010	IN			22-Sep-2010	A method and approach of adding new mobile search verticals using customizable mobile search forms
63581	63581-CN-PCT		200980104233.3	101940038	CN			4-Feb-2009	PC Arrangement for LTE TDD System
63581	63581-US-PCT	8385306	12/866380	20100322099	US	26-Feb-2013		4-Feb-2009	PC Arrangement for LTE TDD System
63651	63651-CN-PCT	200980108652.4	200980108652.4	101971553	CN	5-Jun-2013		3-Feb-2009	Mapping rules for PHICH resources for UL transmission in 3GPP LTE
63651	63651-KR-PCT	1161864	2010-7018884	10-102233	KR	26-Jun-2012		3-Feb-2009	Mapping rules for PHICH resources for UL transmission in 3GPP LTE
63702	63702-US-NP		12/388175	20090234945	US			18-Feb-2009	Social Mapping of Context Aware Mobile Viral Advertising
63723	63723-IN-PCT		6732/DELNP/2009	6732/DELNP/2009	IN			15-Jan-2009	Method and system for automatically finding email settings for mobile email access
63723	63723-KR-PCT	1148488	2010-7000838	2010-0027218	KR	15-May-2012		15-Jan-2009	Method and system for automatically finding email settings for mobile email access
63749	63749-CN-PCT	200980116724.X	200980116724.X	102017744	CN	18-Jun-2014		25-Feb-2009	Delayed Emergency Position
63749	63749-HK-FPR	1151408	11105531.2	1151408	HK	27-Mar-2015		2-Jun-2011	Delayed Emergency Position
63749	63749-IN-PCT		8049/CHENP/2010	8049/CHENP/2010	IN			25-Feb-2009	Delayed Emergency Position
63995	63995-CN-PCT	200980124199.6	200980124199.6	102077526	CN	12-Nov-2014		16-Jun-2009	Network and content aware information management in heterogeneous network environment
63995	63995-IN-PCT		205/CHENP/2011	205/CHENP/2011	IN			16-Jun-2009	Network and content aware information management in heterogeneous network environment
64102	64102-CN-PCT	200980124149.8	200980124149.8	102077553	CN	11-Jun-2014		18-May-2009	Context-triggered Distribution of Context Models in Smart Spaces
64102	64102-IN-PCT		497/CHENP/2011	497/CHENP/2011	IN			18-May-2009	Context-triggered Distribution of Context Models in Smart Spaces
64102	64102-KR-PCT	1198437	2011-7002046	2011-0044210	KR	31-Oct-2012		18-May-2009	Context-triggered Distribution of Context Models in Smart Spaces
64123	64123-US-CNT		14/947779		US			20-Nov-2015	Automatic promotion of contacts into friends (Top contacts)
64308	64308-AU-PCT	2009254903	2009254903		AU	9-Jan-2014		1-Jun-2009	Interference avoidance on common channels in uncoordinated network deployments with flexible spectrum use
64308	64308-CN-PCT		200980130596.4	102598752	CN			1-Jun-2009	Interference avoidance on common channels in uncoordinated network deployments with flexible spectrum use
64323	64323-CN-PCT	200980124316.9	200980124316.9	102077497	CN	8-Apr-2015		24-Apr-2009	Optimized UE specific mask generation for HS-SCCH
64501	64501-CN-NP	200910149705.9	200910149705.9	101583196	CN	14-Nov-2012		4-May-2009	A random access window configuration method to save processing power at eNB in LTE TDD

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
64501	64501-IN-NP	274026	1023/CHE/2009	1023/CHE/2009	IN	6-Jul-2016		2-May-2009	A random access window configuration method to save processing power at eNB in LTE TDD
64510	64510-IN-NP		1234/CHE/2009	1234/CHE/2009	IN			28-May-2009	Congestion and Rate Control for Internet Media Transmissions Using Adaptive Redundancy Encoding
64842	64842-CN-PCT	200980154253.1	200980154253.1	102272761	CN	9-Mar-2016		1-Dec-2009	MyTerritory
64856	64856-IN-PCT		115/CHENP/2011	115/CHENP/2011	IN			15-May-2009	Low bit-rate quantization tool for superwideband speech and audio codec
64978	64978-CN-PCT	200980139701.0	200980139701.0	102172070	CN	14-May-2014		19-Aug-2009	A load status indicator in multihop relay systems with distributed scheduling mode
65167	65167-IN-PCT		3173/CHENP/2011	3173/CHENP/2011 A	IN			15-Oct-2009	Enabling Dual-Mode Communication via DCCI Models
65444	65444-CN-PCT		200980137579.3	102165840	CN			17-Sep-2009	Synchronisation procedures for Device to Device Communications
65444	65444-DE-EPT	602009027769.3	09815736.5	2340681	DE	12-Nov-2014		17-Sep-2009	Synchronisation procedures for Device to Device Communications
65444	65444-IN-PCT		2491/CHENP/2011	2491/CHENP/2011 A	IN			17-Sep-2009	Synchronisation procedures for Device to Device Communications
65445	65445-CN-PCT	200980138886.3	200980138886.3	102172099	CN	17-Sep-2014		30-Sep-2009	Location procedure for Device to Device Communications
65445	65445-IN-PCT		2598/CHENP/2011	2598/CHENP/2011	IN			30-Sep-2009	Location procedure for Device to Device Communications
65560	65560-CN-PCT	200980144481.0	200980144481.0	102209943	CN	19-Oct-2016		1-Oct-2009	Multiple SIM Card Management and Device Setup
65560	65560-IN-PCT		4187/CHENP/2011	4187/CHENP/2011 A	IN			1-Oct-2009	Multiple SIM Card Management and Device Setup
65560	65560-KR-PCT	1331664	2011-7014142	2011-0088580	KR	14-Nov-2013		1-Oct-2009	Multiple SIM Card Management and Device Setup
65607	65607-US-CNT		14/961301		US			7-Dec-2015	System and user interface for sharing to 3rd party services
66117	66117-US-PCT		13/128764	20120026040	US			12-Nov-2008	CALIBRATION OF AN ANTENNA ARRAY IN A CELLULAR COMMUNICATION SYSTEM
66207	66207-CN-PCT	200980149873.6	200980149873.6	102246556	CN	19-Feb-2014		30-Oct-2009	Improved mobility for non-CSG UE's in a CSG environment
66328	66328-CN-PCT	201080022290.X	201080022290.X	102439554	CN	25-May-2016		14-Apr-2010	Efficient and intuitive way of handling many items with direct touch UI
66407	66407-KR-PCD		2013-7031109		KR			22-Nov-2013	Temperature Compensated Sensitivity Microphone
66411	66411-ID-PCT	IDP000038992	W00201103043		ID	6-Jul-2015		21-Jan-2010	A novel pre-coding procedure to suppress interference towards device-to-device communication
66680	66680-CN-PCT	201080011433.7	201080011433.7	102349076	CN	10-Aug-2016		14-Jan-2010	METHOD FOR USING DVB CPDM TO PROTECT PERSONAL CONTENT
66867	66867-ID-PCT	IDP000039706	W00201103069	051.5448	ID	5-Nov-2015		13-Jan-2010	Method to Link Electronic Business Cards to (Historical) Contextual Information on Mobile Devices
66867	66867-SG-PCD		201400700.9		SG			29-Jan-2014	Method to Link Electronic Business Cards to (Historical) Contextual Information on Mobile Devices
66953	66953-DE-EPA	69841157.9	98203819.2	0920179	DE	16-Sep-2009		12-Nov-1998	Photographic system involving data collection from a communicating scene
66953	66953-JP-NP	4330189	10-325645	11-272714	JP	26-Jun-2009		16-Nov-1998	Photographic system involving data collection from a communicating scene
66996	66996-CN-PCT		200980155153.0	102293016	CN			13-Oct-2009	Structure of MEMS microphone with sound port on the top of package
66996	66996-DE-PCT		112009004339.9	112009004339	DE			13-Oct-2009	Structure of MEMS microphone with sound port on the top of package
67361	67361-CN-PCT	201080010884.9	201080010884.9	102439869	CN	3-Dec-2014		28-Jan-2010	Signaling of the precoding information for downlink multi-user MIMO
67115	67115-VN-PCT		1-2012-00154		VN			7-Jun-2010	An improved input method for Vietnamese
67436	67436-CN-PCT	200980147734.X	200980147734.X	102227717	CN	29-Apr-2015		27-Nov-2009	Intelligent Multi-purpose Partitioned Cache
67436	67436-IN-PCT		4404/CHENP/2011	4404/CHENP/2011 A	IN			27-Nov-2009	Intelligent Multi-purpose Partitioned Cache
67446	67446-CN-PCD		201510648758.0	105160520	CN			9-Oct-2015	Advertising Channel OS
67446	67446-CN-PCT		200980138084.2	102165476	CN			28-Sep-2009	Advertising Channel OS
67446	67446-US-PCT		13/121661	2011-0307310	US			28-Sep-2009	Advertising Channel OS
67521	67521-CN-PCT		200880007396.5	101632281	CN			23-Jan-2008	Decision Point Plugins
67521	67521-GB-NP[2]		0801229.6	2449954	GB			23-Jan-2008	Decision Point Plugins
67521	67521-IN-PCT		4825/DELNP/2009		IN			23-Jan-2008	Decision Point Plugins
67521	67521-KR-PCT		2009-7017440		KR			21-Aug-2009	Decision Point Plugins
67593	67593-CN-PCT	101133395	200680006899.1	101133395	CN	19-May-2010		1-Mar-2006	Enabling Paging in a Real-Time OS
67593	67593-DE-EPT	602006002596.3	06709942.4	1856607	DE	3-Sep-2008		1-Mar-2006	Enabling Paging in a Real-Time OS
67593	67593-ES-EPT	1856607	06709942.4	1856607	ES	3-Sep-2008		1-Mar-2006	Enabling Paging in a Real-Time OS
67593	67593-FI-EPT	1856607	06709942.4	1856607	FI	3-Sep-2008		1-Mar-2006	Enabling Paging in a Real-Time OS
67593	67593-FR-EPT	1856607	06709942.4	1856607	FR	3-Sep-2008		1-Mar-2006	Enabling Paging in a Real-Time OS
67593	67593-GB-EPT	1856607	06709942.4	1856607	GB	3-Sep-2008		1-Mar-2006	Enabling Paging in a Real-Time OS
67593	67593-GB-NP[2]		0604117.2		GB			1-Mar-2006	Enabling Paging in a Real-Time OS
67593	67593-IN-PCT	277107	4349/CHENP/2007		IN	10-Nov-2016		1-Mar-2006	Enabling Paging in a Real-Time OS
67593	67593-IT-EPT	1856607	06709942.4	1856607	IT	3-Sep-2008		1-Mar-2006	Enabling Paging in a Real-Time OS
67593	67593-JP-PCT		2007-557581	2008-532163	JP			1-Mar-2006	Enabling Paging in a Real-Time OS
67593	67593-SE-EPT	1856607	06709942.4	1856607	SE	3-Sep-2008		1-Mar-2006	Enabling Paging in a Real-Time OS
67597	67597-CN-PCT	200680006943.9	200680006943.9	101133393	CN	16-Dec-2009		1-Mar-2006	Dual mode Real-Time and Paged Operating System
67597	67597-GB-NP[2]	2423843	0604119.8		GB	22-Apr-2009		1-Mar-2006	Dual mode Real-Time and Paged Operating System

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
67597	67597-IN-PCT		4348/CHENP/2007	4348/CHENP/2007	IN			1-Mar-2006	Dual mode Real-Time and Paged Operating System
67597	67597-JP-PCT	5145050	2007-557583	2008-532164	JP	30-Nov-2012		1-Mar-2006	Dual mode Real-Time and Paged Operating System
67628	67628-DE-EPT	602004011974.1	04769039.1	1678607	DE	20-Feb-2008		28-Oct-2004	Extension DLL
67628	67628-ES-EPT	1678607	04769039.1	1678607	ES	20-Feb-2008		28-Oct-2004	Extension DLL
67628	67628-FI-EPT	1678607	04769039.1	1678607	FI	20-Feb-2008		28-Oct-2004	Extension DLL
67628	67628-FR-EPT	1678607	04769039.1	1678607	FR	20-Feb-2008		28-Oct-2004	Extension DLL
67628	67628-GB-EPT	1678607	04769039.1	1678607	GB	20-Feb-2008		28-Oct-2004	Extension DLL
67628	67628-IT-EPT	1678607	04769039.1	1678607	IT	20-Feb-2008		28-Oct-2004	Extension DLL
67628	67628-JP-PCT		2006-537413	2007-510210	JP			28-Oct-2004	Extension DLL
67628	67628-SE-EPT	1678607	04769039.1	1678607	SE	20-Feb-2008		28-Oct-2004	Extension DLL
67641	67641-DE-EPT	602004030469.7	04768809.8	1678629	DE	8-Dec-2010		7-Oct-2004	Generic Parser
67641	67641-FR-EPT	1678629	04768809.8	1678629	FR	8-Dec-2010		7-Oct-2004	Generic Parser
67641	67641-GB-EPT	1678629	04768809.8	1678629	GB	8-Dec-2010		7-Oct-2004	Generic Parser
67641	67641-GB-NP[2]		0422300.4	2406939	GB			7-Oct-2004	Generic Parser
67641	67641-IT-EPT	1678629	04768809.8	1678629	IT	8-Dec-2010		7-Oct-2004	Generic Parser
67642	67642-JP-PCT	4834289	2003-565146	2005-516548	JP	30-Sep-2011		3-Feb-2003	Footprints
67697	67697-US-PCT		11/531524	20070124376	US			13-Sep-2006	Messaging Architecture
67698	67698-DE-EPT	69812285.2	98928464.1	0922250	DE	19-Mar-2003		12-Jun-1998	Descriptors
67698	67698-FI-EPT	0922250	98928464.1	0922250	FI	19-Mar-2003		19-Jun-1998	Descriptors
67698	67698-FR-EPT	0922250	98928464.1	0922250	FR	19-Mar-2003		12-Jun-1998	Descriptors
67698	67698-GB-EPT	0922250	98928464.1	0922250	GB	19-Mar-2003		12-Jun-1998	Descriptors
67698	67698-GB-NP[2]				GB			12-Jun-1998	Descriptors
67698	67698-HK-FPR	1021036	99105824.3	1021036	HK	5-Sep-2003		12-Jun-1998	Descriptors
67698	67698-IT-EPT	0922250	98928464.1	0922250	IT	19-Mar-2003		12-Jun-1998	Descriptors
67698	67698-JP-DIV	4611245	2006-153915	2006302303	JP	22-Oct-2010		12-Jun-1998	Descriptors
67698	67698-JP-DIV[2]		2008-185277	2009059350	JP			16-Jul-2008	Descriptors
67698	67698-JP-PCT		11-501913	2000501873	JP			12-Jun-1998	Descriptors
67698	67698-NL-EPT	0922250	98928464.1	0922250	NL	19-Mar-2003		12-Jun-1998	Descriptors
67698	67698-SE-EPT	0922250	98928464.1	0922250	SE	19-Mar-2003		19-Jun-1998	Descriptors
67726	67726-CN-PCT	201080026322.3	201080026322.3	102460386	CN	10-Feb-2016		25-May-2010	Access List
67726	67726-IN-PCT		9176/CHENP/2011	9176/CHENP/2011A	IN			25-May-2010	Access List
67726	67726-KR-PCT	1420026	2012-7002401	2012-0030573	KR	9-Jul-2014		25-May-2010	Access List
68302	68302-CN-PCT	201080022544.8	201080022544.8	102439606	CN	19-Aug-2015		17-May-2010	Face Recognition on Local Primitive Code
68386	68386-CN-PCT	201080026546.4	201080026546.4	102461299	CN	13-Apr-2016		10-May-2010	UE category signaling for Enhanced Uplink in CELL_FACH state
68386	68386-ID-PCT	IDP00035539	W00201104572	2012/00835	ID	14-Feb-2014		10-May-2010	UE category signaling for Enhanced Uplink in CELL_FACH state
68386	68386-VN-PCT	1-2011-03489	30045		VN			10-May-2010	UE category signaling for Enhanced Uplink in CELL_FACH state
68386	68386-ZA-PCT	2011/9230	2011/9230		ZA	29-May-2013		10-May-2010	UE category signaling for Enhanced Uplink in CELL_FACH state
68426	68426-IN-PCT		6624/CHENP/2011	6624/CHENP/2011	IN			5-Feb-2010	Power management scheme for WLAN ad hoc to allow awareness information sharing
68426	68426-RU-PCT	2502228	2011139361		RU	20-Dec-2013		5-Feb-2010	Power management scheme for WLAN ad hoc to allow awareness information sharing
68426	68426-SG-PCT	173549	201105635.5		SG	15-May-2012		5-Feb-2010	Power management scheme for WLAN ad hoc to allow awareness information sharing
68426	68426-VN-PCT	1-2011-02117	29317		VN			5-Feb-2010	Power management scheme for WLAN ad hoc to allow awareness information sharing
68507	68507-CN-PCT	201080015178.3	201080015178.3	102379107	CN	20-Jan-2016		14-Apr-2010	API notification to suggest the use of a UDP port when a reliable D2D connection is available.
68507	68507-IN-PCT		8301/CHENP/2011	8301/CHENP/2011A	IN			14-Apr-2010	API notification to suggest the use of a UDP port when a reliable D2D connection is available.
68507	68507-KR-PCT	1360570	2011-7024177	11-138240	KR	3-Feb-2014		14-Apr-2010	API notification to suggest the use of a UDP port when a reliable D2D connection is available.
68593	68593-CN-PCT		201080056701.7	102656870	CN			2-Dec-2010	Conventional sideslide with a tilting top part
68602	68602-CN-PCT	201080012860.7	201080012860.7	102362478	CN	2-Mar-2016		26-Feb-2010	Social network-based application sharing.

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
68602	68602-TW-NP	IS01610	99109130	201129043	TW	21-Sep-2015		26-Mar-2010	Social network-based application sharing
68634	68634-CN-PCT	201080012469.7	201080012469.7	102356674	CN	29-Jul-2015		16-Mar-2010	On interference control in mixed deployment of Node Bs supporting either single or dual carrier HSUPA transmission.
68634	68634-ID-PCT	IDP000037177	W00201103724		ID	6-Nov-2014		16-Mar-2010	On interference control in mixed deployment of Node Bs supporting either single or dual carrier HSUPA transmission.
68646	68646-CN-PCT	201080025897.3	201080025897.3	102460476	CN	17-Feb-2016		29-Apr-2010	Auto-generating visual writing guidance and hints for handwriting mathematical expression recognition systems
68646	68646-IN-PCT		8622/CHENP/2011	8622/CHENP/2011 A	IN			29-Apr-2010	Auto-generating visual writing guidance and hints for handwriting mathematical expression recognition systems
68646	68646-KR-PCT	1437211	2011-7028566	12-9505	KR	27-Aug-2014		29-Apr-2010	Auto-generating visual writing guidance and hints for handwriting mathematical expression recognition systems
68646	68646-NG-PCT		NG/C/2011/685		NG			29-Apr-2010	Auto-generating visual writing guidance and hints for handwriting mathematical expression recognition systems
68646	68646-VN-PCT		1-2011-03163	29441	VN			29-Apr-2010	Auto-generating visual writing guidance and hints for handwriting mathematical expression recognition systems
68742	68742-CN-PCT		201080019013.3	102422314	CN			28-Apr-2010	Natural Grouping/Clustering
68742	68742-IN-PCT		8555/CHENP/2011	8555/CHENP/2011 A	IN			28-Apr-2010	Natural Grouping/Clustering
69211	69211-CN-PCT	201080024615.8	201080024615.8	102461000	CN	8-Apr-2015		22-Apr-2010	A method for improved channel state information feedback
69211	69211-ID-PCT	IDP000038665	W00201104382		ID	25-May-2015		22-Apr-2010	A method for improved channel state information feedback
69412	69412-CN-PCT	201080045583.X	201080045583.X	102577441	CN	3-Jun-2015		12-Oct-2010	A 3D Positional Audio Algorithm based on Multi-way analysis
69700	69700-CN-PCT	201080045976.0	201080045976.0	102598035	CN	10-Feb-2016		11-Jun-2010	Method of augmenting social networking service interactions with person-to-person text/MMS message sessions to increase audience reach and social inclusiveness
69700	69700-IN-PCT		2128/CHENP/2012	2128/CHENP/2012 A	IN			11-Jun-2010	Method of augmenting social networking service interactions with person-to-person text/MMS message sessions to increase audience reach and social inclusiveness
69700	69700-KR-PCD		2015-7000655		KR			12-Jan-2015	Method of augmenting social networking service interactions with person-to-person text/MMS message sessions to increase audience reach and social inclusiveness
69700	69700-US-CNT		14/802298		US			17-Jul-2015	Method of augmenting social networking service interactions with person-to-person text/MMS message sessions to increase audience reach and social inclusiveness
69740	69740-US-NP	8295220	12/888869	20110069653	US	23-Oct-2012		23-Sep-2010	ACK/NACK-table notification by eNB for the semi-centralized control of intra-cluster retransmission
69838	69838-CN-PCT	201080042213.0	201080042213.0	102577443	CN	11-Feb-2015		19-Aug-2010	iLoc: A Computational Framework for Incremental Location-State Acquisition and Prediction based on Mobile Sensors
69838	69838-US-DIV		14/218477	20140199964	US			18-Mar-2014	iLoc: A Computational Framework for Incremental Location-State Acquisition and Prediction based on Mobile Sensors
70111	70111-CN-PCT	201080032454.7	201080032454.7	102472809	CN	25-Feb-2015		17-Aug-2010	RSTD method for improved RS Hearability in OTDOA
70111	70111-ID-PCT	TBA	W00201104620		ID	2-Nov-2015		17-Aug-2010	RSTD method for improved RS Hearability in OTDOA
70195	70195-CN-PCT	201080044724.6	201080044724.6	102577446	CN	23-Sep-2015		8-Sep-2010	Using Cell Broadcast Service and Crowd sourcing for constructing location connectivity graphs
70195	70195-IN-PCT		2979/CHENP/2012	2979/CHENP/2012	IN			8-Sep-2010	Using Cell Broadcast Service and Crowd sourcing for constructing location connectivity graphs
70273	70273-CA-PCT		2815288		CA			17-Oct-2011	One or more CPUs and their L1 or maybe also L2 cache is isolated from the rest of the system (Multicore symmetric CPU) with virtualization to form a binary matrix arithmetic unit.
70273	70273-CN-PCT	201180052551.7	201180052551.7	103189853	CN	29-Jun-2016		17-Oct-2011	One or more CPUs and their L1 or maybe also L2 cache is isolated from the rest of the system (Multicore symmetric CPU) with virtualization to form a binary matrix arithmetic unit.
70273	70273-IN-PCT		4083/CHENP/2013		IN			17-Oct-2011	One or more CPUs and their L1 or maybe also L2 cache is isolated from the rest of the system (Multicore symmetric CPU) with virtualization to form a binary matrix arithmetic unit.
70273	70273-KR-PCT	1529802	2013-7013641		KR	11-Jun-2015		17-Oct-2011	One or more CPUs and their L1 or maybe also L2 cache is isolated from the rest of the system (Multicore symmetric CPU) with virtualization to form a binary matrix arithmetic unit.
70305	70305-CN-PCT	201080051387.3	201080051387.3	102668524	CN	9-Sep-2015		4-Oct-2010	Cover integrated transparent keyboard
70305	70305-DE-PCT		112010004374.4		DE			4-Oct-2010	Cover integrated transparent keyboard
70439	70439-CN-PCT	201080034770.8	201080034770.8	102474465	CN	28-May-2014		17-Aug-2010	Control Signalling Design for LTE Backhaul Link
70443	70443-CN-PCT	201080059955.4	201080059955.4	102687487	CN	6-May-2015		25-Oct-2010	A method for client side persistency
70443	70443-IN-PCT		6677/CHENP/2012		IN			25-Oct-2010	A method for client side persistency
70597	70597-CN-PCT	201080052945.8	201080052945.8	102648650	CN	20-Jan-2016		17-Nov-2010	Qout assisted rescue handover
70599	70599-CN-PCT	201080048619.X	201080048619.X	102598730	CN	7-Sep-2016		22-Sep-2010	1-click activation
70599	70599-IN-PCT		4001/CHENP/2012	4001/CHENP/2012	IN			22-Sep-2010	1-click activation



Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
71012	71012-CN-PCT	200980163076.3	200980163076.3	102667664	CN	9-Mar-2016		23-Dec-2009	Energy accounting for mobile Web runtime
71100	71100-CN-PCT	201080063245.9	201080063245.9	102754098	CN	15-Apr-2015		13-Dec-2010	XSS solution with developer key -based access hardening
71223	71223-ID-PCT	IDP000036804	W00201202369	2012/04813	ID	22-Sep-2014		19-Jan-2010	eNB-controlled Centralized Resource Reuse for D2D and Cellular Users
71282	71282-TW-NP	1554067	99143967	2011143333	TW	11-Oct-2016		15-Dec-2010	Reliable network and service discovery in WIFI networks
71320	71320-CN-PCT		201180015706.X	102822787	CN			28-Jan-2011	Online sharing via physical transformation of dual display device
71392	71392-CN-NP	201110033728.0	201110033728.0	102143603	CN	27-May-2015		31-Jan-2011	A method to control multiradio RF platform
71392	71392-KR-NP	1222211	2011-0009836		KR	8-Jan-2013		31-Jan-2011	A method to control multiradio RF platform
71803	71803-CN-PCT		201180010636.9	102763105	CN			20-Jan-2011	Multi-phase probabilistic tagging for segmentation and summaries of media items
71845	71845-US-CNT		15/232335		US			9-Aug-2016	User friendly security solution combining service side PKI system with operating system independent framework
71845	71845-US-NP		13/072140	20110239270	US			25-Mar-2011	User friendly security solution combining service side PKI system with operating system independent framework
71900	71900-CN-PCT		201180025632.8	102906747	CN			4-Mar-2011	Improvised harvesting technique by decoupling of larger index from mounted removable drives and avoiding reindexing of the data to improve search experience
71964	71964-CN-PCT		201180019164.3	102972058	CN			15-Apr-2011	Network assisted secondary usage in future cellular system
71964	71964-IN-PCT		9388/CHENP/2012		IN			15-Apr-2011	Network assisted secondary usage in future cellular system
72074	72074-CN-PCT	201180028581.4	201180028581.4	102939579	CN	29-Jun-2016		30-May-2011	Granular reflective process migration based liquid user interface
72074	72074-IN-PCT		226/CHENP/2013		IN			30-May-2011	Granular reflective process migration based liquid user interface
72124	72124-CN-PCT		201180015702.1	102812486	CN			3-Mar-2011	Framework for Rule Based Behavior Modeling for URL Recommendation Service
72394	72394-CN-PCT		201180032146.9	102960043	CN			12-Apr-2011	Dynamic granularity of secondary communication resource allocation in future LTE networks
72394	72394-KR-PCT	1420558	2012-7031755	2013-0017091	KR	10-Jul-2014		12-Apr-2011	Dynamic granularity of secondary communication resource allocation in future LTE networks
72623	72623-TW-NP		100129076	201212561	TW			15-Aug-2011	Collaborative Context-Aware Reminder
72629	72629-TW-NP		100126381	201212599	TW			26-Jul-2011	Cubic Metric for Dual Cell HSUPA
72635	72635-CN-PCT	201180051539.4	201180051539.4	103189864	CN	6-Jul-2016		29-Aug-2011	Shared friends view in gallery (pre-reviewed by Jette Jensen and Morten Ovi) Intelligent UI project
72635	72635-VN-PCT		1-2013-00663		VN			29-Aug-2011	Shared friends view in gallery (pre-reviewed by Jette Jensen and Morten Ovi) Intelligent UI project
72740	72740-US-PCT		13/807155	20140148132	US			1-Jun-2011	Voice messaging over voice channel in various communication scenarios
72899	72899-CN-PCT	201180037491.1	201180037491.1	103039103	CN	20-Jan-2016		6-May-2011	Reducing the need for the air interface measurements in semi-autonomous device-to-device communication in the cellular network
73008	73008-CN-NP	201110250957.8	201110250957.8	102426351	CN	19-Mar-2014		16-Aug-2011	Improved buffering scheme for OTDOA
73063	73063-JP-PCD		2015-142529		JP			17-Jul-2015	An Automatic Context Segmentation Approach
73063	73063-TW-NP		100133381	201218099	TW			16-Sep-2011	An Automatic Context Segmentation Approach
73063	73063-US-NP		13/236461	20120072381	US			19-Sep-2011	An Automatic Context Segmentation Approach
73155	73155-US-CIP	8477862	12/959007	20120093249	US	2-Jul-2013		2-Dec-2010	Low-Complexity Soft-Output MIMO Detector Using n-Term-Log-MAP Approximation
73214	73214-CN-NP	201110265702.9	201110265702.9	102387097	CN	5-Mar-2014		5-Sep-2011	Bias Removal of Radio Link Quality Estimates
73214	73214-DE-EPA	602011023189.8	11178212.4	2426878	DE	10-Feb-2016		22-Aug-2011	Bias Removal of Radio Link Quality Estimates
73214	73214-TW-NP	1531181	100131694	201216638	TW	21-Apr-2016		2-Sep-2011	Bias Removal of Radio Link Quality Estimates
73214	73214-VN-NP		1-2011-02305		VN			31-Aug-2011	Bias Removal of Radio Link Quality Estimates
73310	73310-CN-PCT		201180048229.7	103154859	CN			20-Oct-2011	Adaptative SW logic based on user frustration and expected behavior of use case
73310	73310-IN-PCT		3743/CHENP/2013		IN			20-Oct-2011	Adaptative SW logic based on user frustration and expected behavior of use case
73348	73348-CN-PCT	201180035913.1	201180035913.1	103026385	CN	16-Sep-2015		9-Jun-2011	Robust Object Tracking Using Online Template Switching and Feature Adaptation
73348	73348-IN-PCT		333/CHENP/2013		IN			9-Jun-2011	Robust Object Tracking Using Online Template Switching and Feature Adaptation
73348	73348-KR-PCT	1457313	2013-7001565	2013-0025944	KR	27-Oct-2014		9-Jun-2011	Robust Object Tracking Using Online Template Switching and Feature Adaptation
73449	73449-CA-PCT		2676692	1413/MUMNP/2009	CA			8-Feb-2008	Method and System for Providing Portions of Information Content to a Client Device
73449	73449-IN-PCT		1413/MUMNP/2009	9	IN			8-Feb-2008	Method and System for Providing Portions of Information Content to a Client Device
73449	73449-JP-PCT	5312349	2009-549255	2010-532884	JP	12-Jul-2013		8-Feb-2008	Method and System for Providing Portions of Information Content to a Client Device
73538	73538-CN-PCT	201180043942.2	201180043942.2	103109509	CN	7-Sep-2016		13-Sep-2011	Stateless Notification ID generation method and apparatus
73538	73538-IN-PCT		2818/CHENP/2013		IN			13-Sep-2011	Stateless Notification ID generation method and apparatus
73538	73538-RU-PCT	2568287	2013114716		RU	20-Nov-2015		13-Sep-2011	Stateless Notification ID generation method and apparatus

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
73538	73538-TW-NP	1544774	100132612	201218730	TW	1-Aug-2016		9-Sep-2011	Stateless Notification ID generation method and apparatus
73538	73538-ZA-PCT	2013/02572	2013/2572		ZA	29-Oct-2014		13-Sep-2011	Stateless Notification ID generation method and apparatus
73840	73840-CN-PCT		201180045218.3	103119965	CN			28-Jul-2011	A method and apparatus for map creation with multiple users
73862	73862-BR-PCT		112013004193.5		BR			24-Aug-2011	Social Experience Privacy Rules
73862	73862-CN-PCT		201180043261.6	103098421	CN			24-Aug-2011	Social Experience Privacy Rules
73862	73862-IN-PCT		2830/CHENP/2013		IN			24-Aug-2011	Social Experience Privacy Rules
73862	73862-KR-PCT		2013-7009555	2013-0060324	KR			24-Aug-2011	Social Experience Privacy Rules
73862	73862-US-NP		13/233793	20120094721	US			15-Sep-2011	Social Experience Privacy Rules
73974	73974-CN-PCT	201180056351.9	201180056351.9	103222302	CN	25-Nov-2015		29-Sep-2011	PLMN handling with MDT reporting
74131	74131-IN-NP		10/CHE/2012	10/CHE/2012	IN			2-Jan-2012	Method to automatically adapt the keypad color contrast depending on the ambient light level
74250	74250-CN-NP	201210027550.3	201210027550.3	102629884	CN	10-Dec-2014		2-Feb-2012	SINR Estimation for HSDPA MIMO receiver for the case of using S-CPICH as phase reference
74250	74250-TW-NP		101103371	201236406	TW			2-Feb-2012	SINR Estimation for HSDPA MIMO receiver for the case of using S-CPICH as phase reference
74766	74766-US-NP		13/071270	20120221552	US			24-Mar-2011	Active and Dynamic Search/Direction/Found UI Element
74818	74818-US-NP		13/099978	20120253935	US			3-May-2011	Parallel Universes: System and method for displaying alternative future socio-spatial states of the user and embedding these with location based advertisements
74924	74924-US-NP		13/453354	20120278268	US			23-Apr-2012	Framework for Extracting Explicit Profile Representation through Adaptive Recommender System
75073	75073-US-NP		13/099677	20120254949	US			3-May-2011	Regenerable application identifier for mobile devices
75393	75393-DE-EPA	602012012553.5	12157025.3	2501175	DE	25-Nov-2015		27-Feb-2012	Method for distributed capacity based channel assignment
75394	75394-BR-PCT		112013027200.7		BR			18-Apr-2012	Mobile radar assisted control for incoming calls
75394	75394-CN-PCT		201280021130.2	103503427	CN			18-Apr-2012	Mobile radar assisted control for incoming calls
75394	75394-DE-EPT	602012019004.3	12786400.7	2708016	DE	25-May-2016		18-Apr-2012	Mobile radar assisted control for incoming calls
75394	75394-TW-NP		101116334	201246990	TW			8-May-2012	Mobile radar assisted control for incoming calls
75415	75415-CA-PCT		2832013		CA			24-Feb-2012	Recommendation Service Extension with new UI Paradigm
75415	75415-CN-PCT		201280028335.3	103597479	CN			24-Feb-2012	Recommendation Service Extension with new UI Paradigm
75415	75415-IN-PCT		8471/CHENP/2013		IN			24-Feb-2012	Recommendation Service Extension with new UI Paradigm
75521	75521-BR-PCT		112013028658.0		BR			30-Apr-2012	Multimodal Gesture UI based on camera and radar
75521	75521-CN-PCT		201280021975.1	103502911	CN			30-Apr-2012	Multimodal Gesture UI based on camera and radar
75597	75597-US-PCT		14/009,915	2014-0192663	US			30-Mar-2012	POWER DIFFERENCE BETWEEN SCCELL AND PCELL IN A CARRIER AGGREGATION SYSTEM
75618	75618-CN-NP	201210153858.2	201210153858.2	102780659	CN	13-Apr-2016		11-May-2012	HSPA MIMO receiver for imbalanced transmit signal
75618	75618-DE-EPA	602012017538.9	12166381.9	2523411	DE	27-Apr-2016		2-May-2012	HSPA MIMO receiver for imbalanced transmit signal
75618	75618-VN-NP		1-2012-01138		VN			24-Apr-2012	HSPA MIMO receiver for imbalanced transmit signal
75663	75663-IN-NP		2419/CHE/2012	2419/CHE/2012	IN			19-Jun-2012	System and method to reserve spectrum
75863	75863-TW-NP		101115766	201246977	TW			3-May-2012	RACH improvement
76040	76040-CN-PCT		201280045713.9	103814376	CN			29-Aug-2012	A method for merging and grouping detected multiple text regions for OCR preprocessing
76040	76040-IN-NP		3759/CHE/2012		IN			11-Sep-2012	A method for merging and grouping detected multiple text regions for OCR preprocessing
76128	76128-IN-NP		3766/CHE/2012		IN			11-Sep-2012	Recommendation Service Framework for Dual-SIM/Multi-SIM devices
76250	76250-CN-PCT		201280050480.1	103907329	CN			30-Aug-2012	Offline Web Application
76250	76250-IN-NP		3598/CHE/2012	3598/CHE/2012	IN			31-Aug-2012	Offline Web Application
76445	76445-CN-PCT		201280053119.4	103907113	CN			31-Aug-2012	Distributed JavaScript
76445	76445-IN-PCT		2731/CHENP/2014		IN			31-Aug-2012	Distributed JavaScript
76445	76445-US-NP		13/612298	20130212462	US			12-Sep-2012	Distributed JavaScript
76531	76531-CN-PCT		201280065284.1	104025627	CN			13-Dec-2012	System, Apparatus and Method for sharing Point-of-Interest (POI) as a microsite link via SMS/GPRS
76531	76531-US-PCT		14/367215	20140351354	US			13-Dec-2012	System, Apparatus and Method for sharing Point-of-Interest (POI) as a microsite link via SMS/GPRS
76671	76671-TW-NP		101139734	201322800	TW			26-Oct-2012	Methods for allocating Control Data to User Equipment
77301	77301-US-NP		13/718673	20130174050	US			18-Dec-2012	Distributed Nokia Store
78243	78243-CN-PCT		201380022744.7	104272807	CN			12-Feb-2013	More criteria to Probe Request and Response Exchange
78243	78243-IN-PCT		6358/CHENP/2014		IN			12-Feb-2013	More criteria to Probe Request and Response Exchange
78243	78243-RU-PCT		2014137426		RU			12-Feb-2013	More criteria to Probe Request and Response Exchange
78243	78243-SG-PCT		11201405332X		SG			12-Feb-2013	More criteria to Probe Request and Response Exchange
78553	78553-CN-PCT		201380037471.3	104429107	CN			7-May-2013	78553-CN-PCTWave to Share: Seamless Content Sharing and Transfer Through Proximity Sensing and Gesturing
78900	78900-CN-PCT		201380030599.7	104350797	CN			5-Jun-2013	Interferer activity signalling for TDM ICIC
78900	78900-IN-PCT		8692/CHENP/2014		IN			5-Jun-2013	Interferer activity signalling for TDM ICIC

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
82804	82804-US-NP		14/444129	20150074123	US			28-Jul-2014	A method and apparatus for asymmetric remix or mash-up creation.
84769	84769-CN-NP		201410779771.5	104717279	CN			16-Dec-2014	NAN service discovery with BT LE device filtering and SID based device addresses
84769	84769-IN-NP		5788/CHE/2014		IN			18-Nov-2014	NAN service discovery with BT LE device filtering and SID based device addresses
86626	86626-CN-NP		201511031082.7	105740318	CN			31-Dec-2015	Intelligent clothing and a service for dressing with the right amount of clothing to different activities
88191	88191-IN-PCT		2325/MUMNP/2008		IN			27-Apr-2007	Schnittstelle zur effizienten Übertragung von digitalen Signalen
88196	88196-IN-PCT		108/MUMNP/2009	108/MUMNP/2009	IN			5-Jul-2007	Verfahren und Vorrichtungen zur Vermeidung von Interferenzen in einem zellulären Funkkommunikationssystem
88234	88234-IN-PCT		4855/DELNP/2010		IN			13-Feb-2009	SYMMETRICAL COOPERATIVE DIVERSITY IN THE RELAY-ENABLED WIRELESS SYSTEMS
88258	88258-IN-PCT		1318/DELNP/2011		IN			4-Sep-2009	FRAME SYNCHRONIZATION USING BIDIRECTIONAL TRANSMIT AND RECEIVE ZONES
88309	88309-US-PCT		13/499,916	2012-0213195	US			5-Oct-2009	SIMULTANEOUS TRANSMISSION OF CONTROL INFORMATION
88359	88359-US-NP		12/912,131	2011-0269453	US			26-Oct-2010	APPARATUS AND METHOD FOR INTER-RADIO ACCESS TECHNOLOGY CARRIER AGGREGATION MOBILITY ENHANCEMENT
88371	88371-IN-PCT[1]		1161/DELNP/2013		IN			20-Jun-2011	Methods and devices for exchanging data in a communications network
88374	88374-US-PCT		13/825,132	2013-0201892	US			26-Jul-2011	DISCONTINUOUS RECEPTION ACROSS TRANSMISSIONS ON DIFFERENT RADIO ACCESS TECHNOLOGIES
88494	88494-US-PCT[1]		14/357377	20140308960	US			1-Nov-2012	NETWORK TO TERMINAL SIGNALING FOR CONTROL OF INTERFREQUENCY MEASUREMENTS
88513	88513-US-NP		13/908,524	2013-0324075	US			3-Jun-2013	Data Loading Control
88517	88517-CN-PCT		201380007158.5	104081828	CN			30-Jan-2013	SIGNALING MECHANISM FOR SUPPORTING FLEXIBLE PHYSICAL BROADCAST CHANNEL AND COMMON REFERENCE SIGNAL CONFIGURATIONS
88520	88520-BR-PCT[1]		1120140182752		BR			24-Jan-2013	METHOD AND APPARATUS FOR DETERMINING THE TRANSMISSION TIME INTERVAL LENGTH
88520	88520-CN-PCT[1]		201380006826.2	104067683	CN			24-Jan-2013	METHOD AND APPARATUS FOR DETERMINING THE TRANSMISSION TIME INTERVAL LENGTH
88520	88520-IN-PCT[1]		5676/DELNP/2014		IN			24-Jan-2013	METHOD AND APPARATUS FOR DETERMINING THE TRANSMISSION TIME INTERVAL LENGTH
88520	88520-JP-PCT[1]	6002245	2014-553709	2015-508624	JP	9-Sep-2016		24-Jan-2013	METHOD AND APPARATUS FOR DETERMINING THE TRANSMISSION TIME INTERVAL LENGTH
88520	88520-KR-PCT[1]	1657190	2014-7023877	2014-0127283	KR	7-Sep-2016		24-Jan-2013	METHOD AND APPARATUS FOR DETERMINING THE TRANSMISSION TIME INTERVAL LENGTH
88520	88520-US-PCT[1]	9585145	14/374,583	2015-0016431	US	28-Feb-2017		24-Jan-2013	METHOD AND APPARATUS FOR DETERMINING THE TRANSMISSION TIME INTERVAL LENGTH
88700	88700-CN-PCT		201480063178.9	105766049	CN			29-Sep-2014	Signaling Designs for Network Assisted Interference Cancellation and Suppression
15877	15877-CN-PCT	ZL01823420.8	01823420.8	1552164	CN	11-Jul-2007		26-Jun-2001	TRANSCODER DEVICE FOR NARROWBAND AND WIDEBAND SPEECH INTER-OPERATION
15877	15877-DE-EPT	60120504.9	01947407.1	1400139	DE	7-Jun-2006		26-Jun-2001	TRANSCODER DEVICE FOR NARROWBAND AND WIDEBAND SPEECH INTER-OPERATION
15877	15877-FI-EPT	1400139	01947407.1	1400139	FI	7-Jun-2006	26-Jun-2021	26-Jun-2001	TRANSCODER DEVICE FOR NARROWBAND AND WIDEBAND SPEECH INTER-OPERATION
15877	15877-FR-EPT	1400139	01947407.1	1400139	FR	7-Jun-2006		26-Jun-2001	TRANSCODER DEVICE FOR NARROWBAND AND WIDEBAND SPEECH INTER-OPERATION
15877	15877-GB-EPT	1400139	01947407.1	1400139	GB	7-Jun-2006		26-Jun-2001	TRANSCODER DEVICE FOR NARROWBAND AND WIDEBAND SPEECH INTER-OPERATION
15877	15877-NL-EPT	1400139	01947407.1	1400139	NL	7-Jun-2006		26-Jun-2001	TRANSCODER DEVICE FOR NARROWBAND AND WIDEBAND SPEECH INTER-OPERATION
17089	17089-US-NP	6831954	09/496120		US	14-Dec-2004	1-Feb-2020	1-Feb-2000	ADAPTIVE PHASE PREDISTORTION FOR CDMA2000 HANDSET
53955	53955-IN-NP		2603/DEL/2006		IN			5-Dec-2006	SIMPLE, UNAMBIGUOUS AND INTUITIVE METHODOLOGY FOR INPUTTING LIGATURE IN MULTI TAP MODE OF INPUT
60343	60343-CN-PCT		200880128506.3	101983490	CN			2-Apr-2008	Novel Precoding Scheme for Bi-directional Relaying System
60465	60465-CN-PCT		200880129182.5	102027797	CN			14-Mar-2008	Method, Devices and System for Local Collision Avoidance for Random Access in Relay Networks
63901	63901-US-NP		12/123761	20090292762	US			20-May-2008	System and method for cross-service media sharing and commenting
66407	66407-CN-PCT	200980160221.2	200980160221.2	102804807	CN	25-Nov-2015		29-Jun-2009	Temperature Compensated Sensitivity Microphone
68942	68942-CA-PCT	2800208	2800208		CA	17-May-2016		25-May-2010	An artificial bandwidth extension method for telephone speech based on the mel spectrum and time-domain processing
68942	68942-CN-PCT	201080068258.5	201080068258.5	103026407	CN	26-Aug-2015		25-May-2010	An artificial bandwidth extension method for telephone speech based on the mel spectrum and time-domain processing
68942	68942-IN-PCT		10225/CHENP/2012		IN			25-May-2010	An artificial bandwidth extension method for telephone speech based on the mel spectrum and time-domain processing

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
68942	68942-KR-PCT	1461774	2012-7033422	2013-0031849	KR	7-Nov-2014		25-May-2010	An artificial bandwidth extension method for telephone speech based on the mel spectrum and time-domain processing
68942	68942-RU-PCT	2552184	2012151035		RU	10-Jun-2015		25-May-2010	An artificial bandwidth extension method for telephone speech based on the mel spectrum and time-domain processing
68942	68942-SG-PCT	185606	201208436.4		SG	25-Aug-2015		25-May-2010	An artificial bandwidth extension method for telephone speech based on the mel spectrum and time-domain processing
69452	69452-CN-PCT	200980161483.0	200980161483.0	102498514	CN	18-Jun-2014		4-Aug-2009	Automatic downlink speech/music discrimination algorithm
69452	69452-DE-PCT		112009005215.0	112009005215	DE			4-Aug-2009	Automatic downlink speech/music discrimination algorithm
70664	70664-CN-PCT		200980162983.6	102656820	CN			18-Dec-2009	Reduced HARQ feedback delay for TDD system
70833	70833-US-NP		12/631387	20110137561	US			4-Dec-2009	Adjusting POI altitude visually in Augmented Reality application
70865	70865-CN-PCT	201080063524.5	201080063524.5	102753969	CN	2-Dec-2015		9-Feb-2010	Inverse haptic feedback
70983	70983-CN-PCT	201080062831.1	201080062831.1	102742346	CN	25-Mar-2015		2-Feb-2010	Improved Scheduling Request for Eutran
71313	71313-CN-PCT	200980163229.4	200980163229.4	102687166	CN	10-Feb-2016		31-Dec-2009	An efficient and novel algorithm for use interest modeling
71386	71386-US-PCT		13/582923	20120327091	US			8-Mar-2010	Gestural messages in social phonebook
71457	71457-US-PCT		13/699,429	2013-0065596	US			25-May-2010	Method and apparatus for controlling handover and reselection
71693	71693-CN-PCT	201080065874.5	201080065874.5	102823235	CN	28-Sep-2016		29-Mar-2010	Image sensor local saturation signal optimization
71693	71693-DE-PCT		112010005422.3		DE			29-Mar-2010	Image sensor local saturation signal optimization
72018	72018-CN-PCT	201080065576.6	201080065576.6	102812734	CN	13-Apr-2016		19-Mar-2010	E-UTRAN improvement on emergency call establishment, release and handling during RRC connection re-establishment.
72287	72287-US-NP		12/829899	20120001856	US			2-Jul-2010	virtual knock
72384	72384-CN-PCT	201080067527.6	201080067527.6	102947722	CN	21-Oct-2015		19-Jun-2010	Method and apparatus for direction of arrival estimation for spectrum sensing and radio positioning
72384	72384-US-PCT		13/805301	20130088395	US			19-Jun-2010	Method and apparatus for direction of arrival estimation for spectrum sensing and radio positioning
72858	72858-CN-PCT	201080067931.3	201080067931.3	103003748	CN	10-Feb-2016		8-Jul-2010	Pico Projector Data Sharing on Public Displays
73236	73236-CN-PCT	201080068899.0	201080068899.0	103080966	CN			2-Jul-2010	A Real-time Location-based Group-Buying Service
73236	73236-US-PCT		13/812358	20130332527	US			2-Jul-2010	A Real-time Location-based Group-Buying Service
73695	73695-US-PCT		13/825421	20130218974	US			21-Sep-2010	Collaborative Context Recognition
74034	74034-CN-PCT		201080070950.1	103430578	CN			27-Oct-2010	A method and system to organize short text messages by meaningful conversation
74034	74034-US-PCT		13/881517	20130273976	US			27-Oct-2010	A method and system to organize short text messages by meaningful conversation
74634	74634-CN-PCT		201080071154.X	103348367	CN			10-Dec-2010	Relevancy ranking of economic value in shopping service
74634	74634-IN-PCT		5345/CHENP/2013		IN			10-Dec-2010	Relevancy ranking of economic value in shopping service
74634	74634-US-PCT		13/992910	20130317894	US			10-Dec-2010	Relevancy ranking of economic value in shopping service
74726	74726-CN-PCT		201180071902.9	103620595	CN			29-Apr-2011	Context-aware Role Modeling and Recommendation
74752	74752-CN-PCT		201180071027.4	103548018	CN			20-May-2011	Dynamic Contextual Publish/Subscribe Matching System
74752	74752-US-PCT		14/116174	20140081915	US			20-May-2011	Dynamic Contextual Publish/Subscribe Matching System
75110	75110-US-PCT		14/116225	20140071170	US			11-May-2011	Virtual Map Folding
75318	75318-CN-PCT		201180072384.2	103688563	CN			26-May-2011	Method of group authentication in Machine Type Communication
75507	75507-CN-PCT		201180073109.2	103765428	CN			1-Jul-2011	Using DRM technologies for remote device or software authentication
75507	75507-US-PCT		14/130084	20140208441	US			1-Jul-2011	Using DRM technologies for remote device or software authentication
75908	75908-CN-PCT		201180074442.5	103907363	CN			30-Aug-2011	iFun - A Social Networking System focused on Location Based Event
75908	75908-US-PCT		14/241418	20150005010	US			30-Aug-2011	iFun - A Social Networking System focused on Location Based Event
75981	75981-CN-PCT		201180073339.9	103782615	CN			8-Jul-2011	SIM card conversion function for LTE
75988	75988-CN-PCT	201180072008.3	201180072008.3	103649806	CN	26-Oct-2016		30-Jun-2011	Automatic zooming for macro photography
76176	76176-US-NP		13/238440	20130074003	US			21-Sep-2011	Non-Intrusive Mobile Advertising
76680	76680-US-PCT		14/371052	20150017967	US			17-Jan-2012	Learning Based Stay Prediction for Mobile Users
77783	77783-CN-PCT		201280070002.7	104115475	CN			28-Apr-2012	Method and Apparatus for Neighborhood-Based Ringtone Advertisement
77895	77895-CN-PCT		201280070706.4	104137577	CN			27-Feb-2012	Method for Obtaining and Utilizing User Feedback for improved Collaborative Relative Indoor Positioning
77895	77895-JP-PCT	6073378	2014-558172	2015-514969	JP	13-Jan-2017		27-Feb-2012	Method for Obtaining and Utilizing User Feedback for improved Collaborative Relative Indoor Positioning
77895	77895-US-PCT		14/380364	20160192314	US			27-Feb-2012	Method for Obtaining and Utilizing User Feedback for improved Collaborative Relative Indoor Positioning
78129	78129-US-PCT		14/383248	20150045029	US			19-Mar-2012	Data offloading related measurement reporting
78501	78501-US-PCT		14/409567	20150208203	US			25-Jun-2012	A Public Transportation Based Recommender System
78552	78552-US-PCT		14/394303	20150117310	US			27-Apr-2012	Efficient methods to indicate LTE flow offloadability
81974	81974-TW-NP		103112075	201446045	TW			1-Apr-2014	UPLINK POWER CONTROL ENHANCEMENT FOR DYNAMIC TIME DIVISION DUPLEX UPLINK-DOWNLINK RECONFIGURATION

Exhibit A of Amended Schedule B3 - Assigned Patents (Tech Only Assets) of PPA

FAMILY	CASE REFERENCE	GRANT NUMBER	APPLICATION NUMBER	PUBLICATION NUMBER	COUNTRY	ISSUE DATE	EXPIRATION DATE	APPLICATION DATE	TITLE
81974	81974-US-NP		14/243,174	2014-0301256	US			2-Apr-2014	UPLINK POWER CONTROL ENHANCEMENT FOR DYNAMIC TIME DIVISION DUPLEX UPLINK-DOWNLINK RECONFIGURATION
82018	82018-US-NP		13/874869	20140327779	US			1-May-2013	Crowdsourced video service for following live events along a route (extended version of NC79822)
82359	82359-CN-PCT		201380078484.5	105409190	CN			20-Jun-2013	Help user to remember who is the unknown incoming call
82359	82359-US-PCT		14/898215	20160134750	US			20-Jun-2013	Help user to remember who is the unknown incoming call
82501	82501-GB-NP		1313164.4	2516472	GB			24-Jul-2013	Browser like a native app
83956	83956-US-NP		14/041980	20150095281	US			30-Sep-2013	Automatically adjusting update policy
84134	84134-CN-PCT		PCT/IB2013/060939		CN			13-Dec-2013	Extending protocol to support faster session establishment with less resource usage in user equipment and server
84629	84629-US-NP		14/181048		US			14-Feb-2014	A crowd-sourced method and apparatus for generating highlights and tuning of professional or broadcast content
88279	88279-DE-EPT	602008046843.7	08875374.4	2371161	DE	12-Oct-2016		26-Nov-2008	Data load redistribution within a relay enhanced telecommunication network
88283	88283-US-PCT		13/148415	20120039268	US			9-Feb-2009	APPARATUS FOR CONTROLLING SPECTRUM EXPLOITATION UTILISING OVERLAPPING CHANNEL BANDWIDTHS
88300	88300-US-PCT		13/388,705	2012-0149413	US			3-Aug-2009	REDUCING INTERFERENCE FROM DOMINANT INTERFERING NEIGHBORING BASE STATIONS
88302	88302-CN-PCT		200980160378.5	102474850	CN			9-Jul-2009	Spectral arrangement for radio resources
88324	88324-US-PCT		13/582,066	2013-0044674	US			5-Mar-2010	A METHOD AND APPARATUS FOR USE IN A MOBILE COMMUNICATIONS SYSTEM COMPRISING A RELAY NODE
88367	88367-US-PCT		13/819,365	2013-0201904	US			27-Aug-2010	HANDOVER OF CONNECTION OF USER EQUIPMENT
88373	88373-IN-PCT		1704/DELNP/2013		IN			28-Jul-2010	A METHOD OF ALLOCATING RESOURCES IN A RADIO ACCESS NETWORK (RAN) SHARED BY DIFFERENT NETWORK OPERATORS
88373	88373-US-PCT		13/812,296	2013-0190030	US			28-Jul-2010	A METHOD OF ALLOCATING RESOURCES IN A RADIO ACCESS NETWORK (RAN) SHARED BY DIFFERENT NETWORK OPERATORS
88375	88375-US-PCT		13/989,257	2013-0242932	US			24-Nov-2010	Secondary Spectrum Use
88384	88384-US-PCT		13/877,926	2013-0265901	US			6-Oct-2010	Coordinating communications in radio service areas
88387	88387-CN-PCT		201180065332.2	103329495	CN			18-Jan-2011	Matched Filtered Data Samples Processing
88387	88387-US-PCT		13/980,357	2013-0322581	US			18-Jan-2011	Matched Filtered Data Samples Processing
88388	88388-CN-PCT		201180070371.1	103563459	CN			27-Apr-2011	APPARATUS AND METHOD FOR COMMUNICATION WITH A NUMBER OF USER EQUIPMENTS USING OFDMA
88388	88388-US-PCT		14/113,592	2014-0044033	US			27-Apr-2011	APPARATUS AND METHOD FOR COMMUNICATION WITH A NUMBER OF USER EQUIPMENTS USING OFDMA
88399	88399-CN-PCT		201180069975.4	103460776	CN			11-Feb-2011	SIGNALLING A MUTING PATTERN TO A USER EQUIPMENT FOR TIME DOMAIN ENHANCED INTER-CELL INTERFERENCE COORDINATION
88399	88399-IN-PCT		7197/DELNP/2013		IN			11-Feb-2011	SIGNALLING A MUTING PATTERN TO A USER EQUIPMENT FOR TIME DOMAIN ENHANCED INTER-CELL INTERFERENCE COORDINATION
88414	88414-US-PCT		14/115,119	2014-0086117	US			3-May-2011	Control signalling in carrier aggregation systems
88416	88416-CN-PCT		201180070044.6	103650591	CN			11-Apr-2011	A method and Apparatus
88416	88416-US-PCT		14/110,480	2014-0038613	US			11-Apr-2011	A method and Apparatus
88425	88425-CN-PCT		201180074396.9	103918299	CN			30-Aug-2011	METHOD AND APPARATUS TO LOWER CAPACITY REQUIREMENTS ON BACKHAUL INTERFACE BETWEEN BASE STATIONS
88439	88439-CN-PCT		201180071679.8	103931252	CN			17-Jun-2011	LTE/HSDPA Carrier Aggregation
88439	88439-US-PCT		14/126,870	2014-0200011	US			17-Jun-2011	LTE/HSDPA Carrier Aggregation
88440	88440-CN-PCT		201180074070.6	103875294	CN			12-Aug-2011	Resource Reconfiguration for Uplink Transmission
88440	88440-US-PCT		14/238,238	20140198761	US			12-Aug-2011	Resource Reconfiguration for Uplink Transmission
88443	88443-CN-PCT		201180071633.6	103918207	CN			15-Jun-2011	Latency
88443	88443-HK-FPR		14109213.6	1196189	HK			11-Sep-2014	Latency
88443	88443-US-PCT		14/126,166	2014-0201586	US			15-Jun-2011	Latency
88463	88463-US-PCT		14/348644	2014-0328246	US			30-Sep-2011	Mobile relay support in relay-enhanced access networks
88486	88486-CN-PCT		201180075373.X	103999489	CN			8-Dec-2011	Network Synchronisation of Devices in a D2D Cluster
88486	88486-HK-FPR		14112387.0	1199156	HK			9-Dec-2014	Synchronisation
88491	88491-CN-PCT		201280077024.6	104782196	CN			28-Sep-2012	LOCATION REGISTRATION FOR A DEVICE-TO-DEVICE (D2D) COMMUNICATION USER EQUIPMENT BEING IN IDLE MODE
88491	88491-HK-FPR		15110925.2	1210357	HK			5-Nov-2015	LOCATION REGISTRATION FOR A DEVICE - TO - DEVICE D2D COMMUNICATION USER EQUIPMENT BEING IN IDLE MODE MOBILITY MANAGEMENT
88492	88492-US-PCT		14/384,433	2015-0110018	US			15-Mar-2012	Wireless Multi-flow communications in the uplink
88515	88515-US-PCT		14/398,157	2015-0126208	US			9-May-2012	COMMUNICATION MECHANISM FOR ADVERTISING SERVICES
88522	88522-US-PCT		14/385,563	2015-0181536	US			16-Mar-2012	Power control in wireless communications
88677	88677-US-PCT		14/905556		US			18-Jul-2013	Capability handling after inter radio access technology handover