PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date	
PROVENANCE ASSET GROUP LLC	04/05/2019	

RECEIVING PARTY DATA

Name:	SISVEL INTERNATIONAL S.A.
Street Address:	6 AVENUE MARIE-THÉRÈSE
City:	LUXEMBOURG
State/Country:	LUXEMBOURG
Postal Code:	2132

PROPERTY NUMBERS Total: 18

Property Type	Number
Application Number:	10932899
Application Number:	11833829
Application Number:	12235132
Application Number:	12548004
Application Number:	13540900
Application Number:	13917198
Application Number:	11267538
Application Number:	12326446
Application Number:	13447394
Application Number:	11542462
Application Number:	12793670
Application Number:	13244744
Application Number:	10921079
Application Number:	12267412
Application Number:	13244776
Application Number:	13617241
Application Number:	11503465
Application Number:	12830650

CORRESPONDENCE DATA

PATENT REEL: 049674 FRAME: 0758

505558586

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Phone: 2023729132

Email: Lucia.Santos@Dinsmore.com

Correspondent Name: BRIAN P. O'SHAUGHNESSY, ESQ.

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Address Line 2: SUITE 610

Address Line 4: WASHINGTON, D.C. 20004

ATTORNEY DOCKET NUMBER:	122249-01
NAME OF SUBMITTER:	BRIAN P. O'SHAUGHNESSY
SIGNATURE:	/BRIAN P. O'SHAUGHNESSY/
DATE SIGNED:	07/05/2019

Total Attachments: 12

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PATENT ASSIGNMENT

This Patent Assignment (this "Assignment") is made effective as of April 5, 2019 (the "Effective Date") between Provenance Asset Group LLC, a Delaware limited liability company ("Assignor"), and Sisvel International S.A., a company incorporated under the laws of Luxembourg, having its registered office at 6, Avenue Marie Thérèse, 2132 Luxembourg, Grand Duchy of Luxembourg ("Assignee").

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

- 1. Assignor hereby irrevocably sells, assigns, transfers, and conveys to Assignee all of Assignor's right, title, and interest in and to any and all of the following (collectively, the "Patent Rights"): (a) the patents and patent applications identified in the attached Exhibit A hereto, together with any patent issuing on any such patent application, including all inventions and discoveries claimed therein), and including any rights of priority in or to any of the foregoing patents and patent applications, (b) all reissues, extensions, renewals, reissues, reexaminations, divisionals, substitutions, provisionals, continuations, continuations-in-part, conversions, continued examinations, continued prosecution applications, and domestic and foreign counterparts (collectively "Related Cases") of any of the patents or patent applications described in (a) above, as well as each patent and patent application throughout the world, directly or through one or more applications, that directly or indirectly derives priority from, or directly or indirectly forms a basis for priority for, any of the foregoing patents or patent applications; (c) each patent or patent application that is referenced by a terminal disclaimer filed in connection with any of the patents or patent applications identified in (a) or (b) above; (d) the patents identified in the attached Exhibit B, including all inventions and discoveries claimed therein, as well as any rights of priority in any of the foregoing patents (the patents and patent applications described in clause (a) through and including this clause (d) are, collectively, the "Assigned Patents"), (e) to the extent they exist, any and all rights to sue and causes of action (whether known or unknown or whether currently pending, filed, or otherwise) and other enforcement rights under, or on account of, any of the Assigned Patents, including all causes of action and other enforcement rights for damages, injunctive or other equitable relief, and any other remedies of any kind (in each case for past, current, and future infringement), and all rights to collect and receive damages, royalties and other payments under or on account of each of the Assigned Patents and/or inventions claimed in the Assigned Patents, and (f) the right to apply (or continue prosecution) in any and all countries of the world for patents, design patents, utility models, certificates of invention or other governmental grants for the Patent Rights, including under the Paris Convention for the Protection of Industrial Property, the International Patent Cooperation Treaty, or any other convention, treaty, agreement or understanding, as well as the rights, if any, to revive any abandoned Patent Rights.
- 2. Assignor hereby authorizes the respective patent office or governmental agency in each jurisdiction to issue any and all patents, certificates of invention, utility models or other governmental grants or issuances that may be granted upon any of the Patent Rights in the name of Assignee, as the assignee to the entire interest therein.

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- 3. Assignor hereby authorizes and requests the attorney or agent of record to insert on this Assignment any further identification that may be necessary or desirable in order to comply with the rules of the respective patent office or governmental agency in each jurisdiction for recordation or other official recognition.
- 4. The construction, validity, performance, and effect of this Assignment will be governed by the laws of New York without giving effect to principles of conflicts of laws. All disputes arising out of or relating to this Assignment shall be finally settled by binding arbitration under the Rules of Arbitration of the International Chamber of Commerce by three arbitrators appointed in accordance with those Rules. The place of the arbitration shall be the city of New York, New York, United States of America, and the arbitration shall be conducted in the English language.
- 5. This Assignment shall be binding upon and inure to the benefit of the parties and their respective successors and permitted assigns.
- 6. Any rule of construction to the effect that ambiguities are to be resolved against the drafting party will not be applied in the construction or interpretation of this Assignment. The words "include", "including" and variations thereof will be deemed to be followed by the words "without limitation". The use of "or" will not be deemed to be exclusive. This Assignment may be executed in counterparts, each of which when executed will be deemed to be an original but all of which taken together will constitute one and the same agreement.

In Witness Whereof, intending to be legally bound, the parties through their duly authorized representatives have executed this Assignment as of the Effective Date.

PROVE	NANCE ASSET GROUP LLC	SISVELINTERNATIONAL S.A.
8y:	MATALUNA.	By MACTICAL CONTRACTOR
Name:	Timothy Lynch	Name: MATTIA GOZZZACCO
Title:	CEO	Title:

Exhibit A to Patent Assignment

Patents and Patent Applications

Family No.	Ref. Application Number	Grant Number	Country Eode	Title	Inventor(s)	Filing Sate	Priority Bate
11094	2680720	2580720	CA	HOME NETWORK NAME DISPLAYING METHODS AND APPARATUS FOR MULTIPLE HOME NETWORKS	Noushed S. Naqvi (Catherine M. Coode (Ingo W. Weigele (Scotte Zinn	2009-09-10	2003-09-03
11094	2478008	2478008	CA	HOME NETWORK NAME DISPLAYING METHODS AND APPARATUS FOR MULTIPLE HOME NETWORKS	Noushad S. Naqvi Catherine M. Coode Ingo W. Welgele Scotte Zinn	2004-08-20	2003-09-03
11094	03255483.4	60312326,0	DΕ	HOME NETWORK NAME DISPLAYING METHODS AND APPARATUS	Noushad S. Nagvi Catherine M. Coode Ingo W. Weigele Scotte Zinn	2003-09-03	
11094	03255483.4	1513358	Eβ	HOME NETWORK NAME DISPLAYING METHODS AND APPARATUS	Noushad S. Naqvi Catherine M. Coode Ingo W. Weigele Scotte Zinn	2003-09-03	
11094	03255483.4	1513358	FR	HOME NETWORK NAME DISPLAYING METHODS AND APPARATUS	Noushad S. Naqvi Catherine M. Coode Ingo W. Weigele Scotte Zinn	2003-09-03	
22024	03255483.4	1513358	GB	HOME NETWORK NAME DISPLAYING METHODS AND APPARATUS	Noushad S. Naqvi [Catherine M. Coode [Ingo W. Weigele [Scotte Zinn	2003-09-03	
11094	05107395.1	1075996	HK	HOME NETWORK NAME DISPLAYING METHODS AND APPARATUS	Noushad S. Naqvi Catherine M. Coode Ingo W. Weigele Scotte Zinn	2005-08-23	
11094	11/833829	7460868	US	HOME NETWORK NAME DISPLAYING METHODS AND APPARATUS FOR MULTIPLE HOME NETWORKS	Noushad S. Nagvi Catherine M. Coode Ingo W. Weigele Scotte Zinn	2007-08-03	2003-09-03
11054	12/235132	7596375	US	HOME NETWORK NAME DISPLAYING METHODS AND APPARATUS FOR MULTIPLE HOME NETWORKS	Nowhed S. Nagvi Catherine M. Coode Ingo W. Weigele Scotte Zinn	2008-09-22	2003-09-03

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11094	12/548004	8275374	⊎s	HOME NETWORK NAME DISPLAYING METHODS AND APPARATUS FOR MULTIPLE HOME NETWORKS	Noushad S. Naqvi Catherine M. Coode Jingo W. Weigele J Scotte Zinn	2009-08-26	2003-09-03
11098	13/540900	8472955	US	NETWORK SELECTION METHODS AND APPARATUS WITH MULTIPLE HOME NETWORKS	Noushad S. Naqvi Catherine M. Coode Ingo W. Weigele Scotte Zinn	2012-07-93	2003-09-03
11004	13/917198	8948756	US	HOME NETWORK NAME DISPLAYING METHODS AND APPARATUS FOR MULTIPLE HOME NETWORKS	Noushad S. Naqvi Catherine M. Coode Ingo W. Weigele Scotte Zinn	2013-06-13	2003-09-03
11094	10/932899	7274933	us	HOME NETWORK NAME DISPLAYING METHODS AND APPARATUS FOR MULTIPLE HOME NETWORKS	Noushad 5, Naqvi Catherine M. Coode Ingo W. Weigele Sootte Zinn	2004-05-02	2003-09-03
33532	2010257363	2910257363	LUA UA	SYSTEM AND METHOD FOR RESOLVING CONTENTION AMONG APPLICATIONS REQUIRING DATA CONNECTIONS BETWEEN A MOBILE COMMUNICATIONS DEVICE AND A WIRELESS NETWORK	Kenneth J. Liang (Colin S. Ho (Mahmud-Ul Rassan	2015-12-22	2005-11-04
30522	2006235810	2006235%10	BU .	SYSTEM AND METHOD FOR RESOLVING CONTENTION AMONG APPLICATIONS REQUIRING DATA CONNECTIONS BETWEEN A MOBILE COMMUNICATIONS DEVICE AND A WIRELESS NETWORK	Kenneth J. Liang (Colin S. Ho (Mahmud-Uf Hassan	2006-11-62	2005-11-04
30533	P10522295.1		B8	SYSTEM AND METHOD FOR RESOLVING CONTENTION AMONG APPLICATIONS REQUIRING DATA CONNECTIONS BETWEEN A MOBILE COMMUNICATIONS DEVICE AND A WIRELESS NETWORK	Kenneth J. Liang Colin S. Ho Mahmud-Ul Hassan	2011-02-21	2005-11-04
30522	P10605755.1		BR	SYSTEM AND METHOD FOR RESOLVING CONTENTION AMONG APPLICATIONS REQUIRING DATA CONNECTIONS BETWEEN A MOBILE COMMUNICATIONS DEVICE AND A WIRELESS NETWORK	Kenneth J. Liang Colin S. Ho Mahmud-Ul Hassan	2005-11-01	2005-11-04
30522	2567115	2567115	CA	SYSTEM AND METHOD FOR RESOLVING CONTENTION AMONG APPLICATIONS REQUIRING DATA CONNECTIONS BETWEEN A MOBILE COMMUNICATIONS DEVICE AND A WIRELESS NETWORK	Kenneth J. Liang Colin S. Ho Mahmud-Ul Hassan	2006-11-93	2005-11-04

39522	201010576392.8	201010576392.8	CM	System and method for Resolving Contention Among Applications Requiring Data Connections Between a mobile Communications Device and a Wireless Network	Kenneth J. Liang) Colin S. Hoj Mahmud-Ul Rassan	2010-12-01	2005-31-04
39522	200610064045.5	200610064046.5	CH	SYSTEM AND METHOD FOR RESOLVING CONTENTION AMONG APPLICATIONS REQUIRING DATA CONNECTIONS BETWEEN A MOBILE COMMUNICATIONS DEVICE AND A WIRELESS NETWORK	Kenneth J. Liang) Colin S. Ho i Mahmud-Ul Hassan	2006-11-03	2005-11-04
30522	05256859.9	502005005834.6	DE	CONTENTION RESLOUTION AMONG APPLICATIONS REQUIRING DATA CONNECTIONS BETWEEN A MOBILE COMMUNICATIONS DEVICE AND A WIRELESS PACKET DATA NETWORK	Kenneth J. Liang Colin S. Ho Mahmud-Ul Hassan	2005-11-04	
30522	0815170 3 .9	502005026525.8	DE	CONTENTION RESLOUTION AMONG APPLICATIONS REQUIRING DATA CONNECTIONS BETWEEN A MOBILE COMMUNICATIONS DEVICE AND A WIRELESS PACKET DATA NETWORK	Kenneth J. Liang)Colin S. Ho [Mahmud-Ul Hassan	2008-02-20	
30522	10155276.8	502005025375.2	DE	CONTENTION RESLOUTION AMONG APPLICATIONS REQUIRING DATA CONNECTIONS BETWEEN A MOBILE COMMUNICATIONS DEVICE AND A WIRELESS PACKET DATA NETWORK	Kenneth J. Liang Colin S. Ho Mahmud-Ul Hassan	2016-03-03	
20522	052568S9.9	1783961	£\$	CONTENTION RESOLUTION AMONG APPLICATIONS REQUIRING DATA CONNECTIONS BETWEEN A MOBILE COMMUNICATIONS DEVICE AND A WIRELESS PACKET DATA NETWORK	Kenneth J. Uang Colin S. Ho (Mahmud-Ul Hassan	2005-11-04	
32522	09151703.9	1924037	43	CONTENTION RESCUITION AMONG APPLICATIONS REQUIRING DATA CONNECTIONS BETWEEN A MOBILE COMMUNICATIONS DEVICE AND A WIRELESS PACKET DATA NETWORK	Kenneth J. Usngs Colin S. Ho Mahmud-Ul Hassan	2008-02-20	
30522	10155276.8	2184945	€ ₽	CONTENTION RESLOUTION AMONG APPLICATIONS REQUIRING DATA CONNECTIONS BETWEEN A MOBILE COMMUNICATIONS DEVICE AND A WIRELESS PACKET DATA NETWORK	S. Ho Mahmud-Ul	2018-83-83	
30522	85256859.9	1783961	ES	CONTENTION RESLOUTION AMONG APPLICATIONS REQUIRING DATA CONNECTIONS BETWEEN A MOBILE COMMUNICATIONS DEVICE AND A WIRELESS PACKET DATA NETWORK	S. Ho Mahmud-Ul	2005-11-04	
			1		l .	1	

30522	05258859.9	1783961	FB	CONTENTION RESLOUTION AMONG APPLICATIONS REQUIRING DATA CONNECTIONS BETWEEN A MOBILE COMMUNICATIONS DEVICE AND A WIRELESS PACKET DATA NETWORK	Kenneth J. Liang (Colin S. Ho (Mahmud-Ul Hassari	2005-11-04	
30522	08151703.9	1924037	FR	CONTENTION RESCULTION AMONS APPLICATIONS REQUIRING DATA CONNECTIONS BETWEEN A MOBILE COMMUNICATIONS DEVICE AND A WIRELESS PACKET DATA NETWORK	Kenneth J. Liang (Colin S. Ho (Mahmud-Ul Hassan	2008-02-20	
30522	10155276.8	2184945	FR	CONTENTION RESLOUTION AMONG APPLICATIONS REQUIRING DATA CONNECTIONS BETWEEN A MOBILE COMMUNICATIONS DEVICE AND A WIRELESS PACKET DATA NETWORK	Kenneth J. Liang(Colin S. Ho (Mahmud-Ul Hassan	2010-03-03	
30522	05256859.9	1783961	GB.	CONTENTION RESLOUTION AMONG APPLICATIONS REQUIRING DATA CONNECTIONS BETWEEN A MOBILE COMMUNICATIONS DEVICE AND A WIRELESS PACKET DATA NETWORK	Kenneth J. Liang(Colin S. Ho (Mahmud-Ul Hassan	2005-11-04	
305.22	08151703.9	1924037	GB	CONTENTION RESCULTION AMONG APPLICATIONS REQUIRING DATA CONNECTIONS BETWEEN A MOBILE COMMUNICATIONS DEVICE AND A WIRELESS PACKET DATA NETWORK	Kenneth J. Lising(Colin S. Ho (Mahmud-Ul Hassan	2008-02-20	
30522	10155278.8	2184946	GB	CONTENTION RESIDUTION AMONG APPLICATIONS REQUIRING DATA CONNECTIONS BETWEEN A MOBILE COMMUNICATIONS DEVICE AND A WIRELESS PACKET DATA NETWORK	Kenneth J. Liang(Colin S. Ho(Mahmud-Ul Hassan	2010-03-03	
30522	67111229.3	1102880	E-S#C	CONTENTION RESOLUTION AMONG APPLICATIONS REQUIRING DATA CONNECTIONS BETWEEN A MOBILE COMMUNICATIONS DEVICE AND A WIRELESS PACKET DATA NETWORK	Kenneth J. Liang(Colin S. Ho(Mahmud-Ul Hassan	2987-16-17	
30522	10109517.3	1143266	∃ ¥	CONTENTION RESOLUTION AMONG APPLICATIONS REQUIRING DATA CONNECTIONS BETWEEN A MOBILE COMMUNICATIONS DEVICE AND A WIRELESS PACKET DATA NETWORK	Kenneth J. Liang\Colin S. Ho\Mahmud-Ul Hassan	2010-16-06	2005-11-04
30522	680/DEL/2011		ETW	SYSTEM AND METHOD FOR RESOLVING CONTENTION AMONG APPLICATIONS REQUIRING DATA CONNECTIONS BETWEEN A MOBILE COMMUNICATIONS DEVICE AND A WIRELESS NETWORK	Kenneth J. Liang(Colin S. Ho(Mahmud-Ul Hassan	2011-03-10	2005-11-04

<u>30822</u>	2372/DEL/2006		in	SYSTEM AND METHOD FOR RESOLVING CONTENTION AMONG APPLICATIONS REQUIRING DATA CONNECTIONS BETWEEN A MOBILE COMMUNICATIONS DEVICE AND A WIRELESS NETWORK	Kenneth J. Liang(Colin S. Ho(Mahmud-Ul Hassan	2006-10-31	2005-11-04
30522	08151703.9	1924037	<u> </u>	CONTENTION RESLOUTION AMONG APPLICATIONS REQUIRING DATA CONNECTIONS BETWEEN A MOBILE COMMUNICATIONS DEVICE AND A WIRELESS PACKET DATA NETWORK	S. Ho Mahmud-Ul	2008-02-20	
30577	10155276.8	2184946	E¥	CONTENTION RESLOUTION AMONG APPLICATIONS REQUIRING DATA CONNECTIONS BETWEEN A MOBILE COMMUNICATIONS DEVICE AND A WIRELESS PACKET DATA NETWORK	S. Ho Mahmud-Ul	2010-03-03	
20522	2011-31346	5368498	æ	SYSTEM AND METHOD FOR RESOLVING CONTENTION AMONG APPLICATIONS REQUIRING DATA CONNECTIONS BETWEEN A MOBILE COMMUNICATIONS DEVICE AND A WIRELESS NETWORK	Kenneth J. Liang (Colin S. Ho Mahmud-Ul Hassan	2011-02-18	2005-11-04
30522	2006-297339	4909707	終	SYSTEM AND METHOD FOR RESOLVING CONTENTION AMONG APPLICATIONS REQUIRING DATA CONNECTIONS BETWEEN A MOBILE COMMUNICATIONS DEVICE AND A WIRELESS NETWORK	Kenneth J. Liang(Colin S. Ho (Mahmud-Ul Hassan	2006-11-01	2005-11-04
30522	19-2011-0027211	10-1118459	KR	SYSTEM AND METHOD FOR RESOLVING CONTENTION AMONG APPLICATIONS REQUIRING DATA CONNECTIONS BETWEEN A MOBILE COMMUNICATIONS DEVICE AND A WIRELESS NETWORK	Kenneth I. Liang(Colin S. Ho (Mahmud-Ul Hassan	2011-03-25	2005-11-64
30522	10-2006-0108315	1116524	KB	SYSTEM AND METHOD FOR RESOLVING CONTENTION AMONG APPLICATIONS REQUIRING DATA CONNECTIONS BETWEEN A MOBILE COMMUNICATIONS DEVICE AND A WIRELESS NETWORK	Kenneth J. Liang (Colin S. Ho (Mahmud-Uf Hassan	2005-11-03	2005-11-04
30522	05256859.9	1783961	NE.	CONTENTION RESLOUTION AMONG APPLICATIONS REQUIRING DATA CONNECTIONS BETWEEN A MOBILE COMMUNICATIONS DEVICE AND A WIRELESS PACKET DATA NETWORK	S. Ho (Mahmud-U)	2005-11-04	

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<u>32322</u>	10155278.8	2184945	NE.	CONTENTION RESLOUTION AMONG APPLICATIONS REQUIRING DATA CONNECTIONS BETWEEN A MOBILE COMMUNICATIONS DEVICE AND A WIRELESS PACKET DATA NETWORK	Kenneth I. Liang Colin S. Ho Mahmusl-Ul Hassan	2010-03-03	
30022	10155276.8	2184945	SE	CONTENTION RESLOUTION AMONG APPLICATIONS REQUIRING DATA CONNECTIONS BETWEEN A MOBILE COMMUNICATIONS DEVICE AND A WIRELESS PACKET DATA NETWORK	Kenneth J. Liang(Colin S. Ho(Mahmud-Ul Hassan	2010-03-03	
30522	200607589-1	131920	3G	SYSTEM AND METHOD FOR RESOLVING CONTENTION AMONG APPLICATIONS REQUIRING DATA CONNECTIONS SETWEEN A MOBILE COMMUNICATIONS DEVICE AND A WIRELESS NETWORK	Kenneth J. Liang Colin S. Ho Mahmud-Ul Hassan	2006-19-31	2005-11-04
30002	095140877	338527	īW	SYSTEM AND METHOD FOR RESOLVING CONTENTION AMONG APPLICATIONS REQUIRING DATA CONNECTIONS BETWEEN A MOBILE COMMUNICATIONS DEVICE AND A WIRELESS NETWORK	Kenneth J. Liang(Colin S. Ho(Mahmud-Ul Hassan	2006-11-03	2005-11-04
30522	12/326446	3199611	us	SYSTEM AND METHOD FOR RESOLVING CONTENTION AMONG APPLICATIONS REQUIRING DATA CONNECTIONS RETWEEN A MOBILE COMMUNICATIONS DEVICE AND A WIRELESS NETWORK	Kenneth I. Liang(Colin S. Ho(Mahmud-Ul Hassan	2008-12-02	
30522	13/447394	8379666	US	SYSTEM AND METHOD FOR RESOLVING CONTENTION AMONG APPLICATIONS REQUIRING DATA CONNECTIONS BETWEEN A MOBILE COMMUNICATIONS DEVICE AND A WIRELESS NETWORK	Kenneth J. Liang Colin S. Ho Mahmud-Ul Hassan	2012-04-16	
30522	11/267538	7474671	US	SYSTEM AND METHOD FOR RESOLVING CONTENTION AMONG APPLICATIONS REQUIRING DATA CONNECTIONS BETWEEN A MOBILE COMMUNICATIONS DEVICE AND A WIRELESS NETWORK	Kenneth I. Liang Colin S. Ho Mahmud-Ul Hassan	2005-11-04	
32352	2007221785	2007221785	AU	SYSTEM AND METHOD FOR MANAGING CALL CONTINUITY IN IMS NETWORK ENVIRONMENT USING SIP MESSAGING	Michael Shenfield Andrew M. Allen Adrian Suckley	2007-10-02	2005-10-03
31348	2505098	2505098	CA	SYSTEM AND METHOD FOR MANAGING CALL CONTINUITY IN	Michael Shenfield Andrew M. Allen Adrian Buckley	2007-10-02	2005-10-03

				IMS NETWORK ENVIRONMENT USING SIP MESSAGING			
				C21462 214 (WE22WC114)2			
31348	06121688.7	502006023270.5	DE	METHOD AND APPARATUS FOR MANAGING CALL CONTINUITY IN IMS NETWORK ENVIRONMENT USING SIP MESSAGING	Michael Shenfield Andrew M. Ailen Adrian Buckley	2006-10-03	
31340	05121685.7	1909451	EP	METHOD AND APPARATUSES FOR MANAGING CALL CONTINUITY IN IMS NETWORK ENVIRONMENT USING SIP MESSAGING	Michael Shenfield Andrew M. Ailen Adrian Buckley	2006-10-03	
31358	06121686.7	1509451	FS	METHOD AND APPARATUS FOR MANAGING CALL CONTINUITY IN IMS NETWORK ENVIRONMENT USING SIP MESSAGING	Michael Shenfield Andrew M. Allen Adrian Buckley	2006-10-03	
31346	05121685,7	1909451	GB	METHOD AND APPARATUS FOR MANAGING CALL CONTINUITY IN IMS NETWORK ENVIRONMENT USING SIP MESSAGING	Michael Shenfield Andrew M. Allen Adrian Buckley	2006-10-03	
32348	08110307.5	1114980	HK	METHOD AND APPARATUSES FOR MANAGING CALL CONTINUITY IN IMS NETWORK ENVIRONMENT USING SIP MESSAGING	Michael Shenfield JAndrew M. Allen JAdrian Buckley	2008-10-03	2908-10-03
31315	2158/CHE/2007	256296	in:	SYSTEM AND METHOD FOR MANAGING CALL CONTINUITY IN IMS NETWORK ENVIRONMENT USING SIP MESSAGING	Michael Shenfield Andrew M. Allen Adrian Buckley	2007-05-25	2006-10-03
31346	2007-259204	4772021	F	SYSTEM AND METHOD FOR MANAGING CALL CONTINUITY IN IMS NETWORK ENVIRONMENT USING SIP MESSAGING	Michael Shenfield Andrew M. Ailen Adrian Buckley	2007-10-02	2906-10-03
31345	2007-0099389	0940548	KR	SYSTEM AND METHOD FOR MANAGING CALL CONTINUITY IN IMS NETWORK ENVIRONMENT USING SIP MESSAGING	Michael Shenfield JAndrew M. Allen JAdrian Buckley	2007-10-02	2006-10-03
31346	MX/a/2007/012244	283699	MX	SYSTEM AND METHOD FOR MANAGING CALL CONTINUITY IN IMS NETWORK ENVIRONMENT USING SIP MESSAGING	Michael Shenfield Andrew M. Allen Adrian Buckley	2007-10-01	2906-10-03
31348	201002326.8	161778	36	SYSTEM AND METHOD FOR MANAGING CALL CONTINUITY IN IMS NETWORK ENVIRONMENT USING SIP MESSAGING	Michael Shenfield Andrew M. Allen Adrian Buckley	2010-04-01	2006-10-03

31346	096135865	355828	TW	SYSTEM AND METHOD FOR	Michael Shenfield	2007-09-27	2008-10-03
				MANAGING CALL CONTINUITY IN IMS NETWORK ENVIRONMENT USING SIP MESSAGING	Andrew M. Allen Adrian Buckley		
31349	11/542462	7995565	us us	SYSTEM AND METHOD FOR MANAGING CALL CONTINUITY IN IMS NETWORK ENVIRONMENT USING SIP MESSAGING	Michael Shenfield Andrew M. Allen Adrian Buckley	2006-10-03	
35744-1	10725377.4		EP	VOICE SERVICE IN EVOLVED PACKET SYSTEM	Johanna Dwyer Chen Ho Chin Stefano Faccin Richard Burbidge	2010-06-03	2009-05-03
35744-1	9005/CHENP/2011		ii i	VOICE SERVICE IN EVOLVED PACKET SYSTEM	Johanna Dwyer Chen Ho Chin Stefano Faccin Richard Burbidge	2010-06-03	2009-06-03
35744-1	13/244744	8879503	មទ	VOICE SERVICE IN EVOLVED PACKET SYSTEM	Johanna Dwyer Chen Ho Chin Stefano Faccin Richard Burbidge	2011-09-26	2009-06-03
35744-1	12/793670		មន	VOICE SERVICE IN EVOLVED PACKET SYSTEM	Johanna Dwyer Chen Ho Chin Stefano Faczin Richard Burbidge	2010-06-03	2009-06-03
12073	2516278	2515278	CA	APPARATUS AND METHOD FOR MAKING MEASUREMENTS IN MOBILE TELECOMMUNICATIONS SYSTEM USER EQUIPMENT	Robert Harrison (Richard John George (Gjalt de Jong) Gideon Roberts	2005-08-18	2004-08-18
12075	84254971.7	802004023575.5	D£	APPARATUS AND METHOD FOR MAKING MEASUREMENTS IN MOBILE TELECOMMUNICATIONS SYSTEM USER EQUIPMENT	Robert Harrison (Richard John George (Gjalt de Jong) Gideon Roberts	2004-08-18	2004-08-18
12075	04254971.7	1628497	EP	APPARATUS AND METHOD FOR MAKING MEASUREMENTS IN MOBILE TELECOMMUNICATIONS SYSTEM USER EQUIPMENT	Robert Harrison (Richard John George (Sjalt de Jong (Gideon Roberts	2004-08-18	
12272	04254971.7	1628497	Eš	APPARATUS AND METHOD FOR MAKING MEASUREMENTS IN MOBILE TELECOMMUNICATIONS SYSTEM USER EQUIPMENT	Robert Harrison (Richard John George (Gjalt de Jong (Gideon Roberts	2004-08-18	2004-08-18
12072	04254971.7	1628497	Fi	APPARATUS AND METHOD FOR MAKING MEASUREMENTS IN MOSILE TELECOMMUNICATIONS SYSTEM USER EQUIPMENT	Robert Harrison Richard John George Gjalt de Jong Gideon Roberts	2004-08-18	2004-08-18

12079	04254971.7	1628497	FR	APPARATUS AND METHOD FOR MAKING MEASUREMENTS IN MOBILE TELECOMMUNICATIONS	Robert Harrison (Richard John George (Gjalt de	2004-08-18	
				SYSTEM USER EQUIPMENT	Jong Gideon Roberts		
12072	04254971.7	1628497	GB	APPARATUS AND METHOD FOR MAKING MEASUREMENTS IN MOBILE TELECOMMUNICATIONS SYSTEM USER EUOIPMENT	Robert Harrison(Richard John George (Gjalt de Jong) Gideon Roberts	2804-08-18	2004-08-18
12079	04254971.7	1528497	:7	APPARATUS AND METHOD FOR MAKING MEASUREMENTS IN MOBILE TELECOMMUNICATIONS SYSTEM USER EQUIPMENT	Robert Harrison i Richard John George i Gjalt de Jong i Gideon Roberts	2994-08-18	2004-08-18
12079	12/257412	8351940	us	APPARATUS AND METHOD FOR MAKING MEASUREMENTS IN MOBILE TELECOMMUNICATIONS SYSTEM USER EQUIPMENT	Robert Harrison Richard John George Gjalf de Jong Gideon Roberts	2998-11-97	
12079	13/244776	8290481	US	APPARATUS AND METHOD FOR MAKING MEASUREMENTS IN MOBILE TELECOMMUNICATIONS SYSTEM USER EQUIPMENT	Robert Harrison (Richard John George (Gjalt de Jong (Gideon Roberts	2011-09-26	
12073	13/817241	8800383	US	APPARATUS AND METHOD FOR MAKING MEASUREMENTS IN MOBILE TELECOMMUNICATIONS SYSTEM USER EQUIPMENT	Robert Harrison (Richard John George (Gjalt de Jong (Gideon Roberts	2012-09-14	
12072	30/921079	7463887	US	APPARATUS AND METHOD FOR MAKING MEASUREMENTS IN MOBILE TELECOMMUNICATIONS SYSTEM USER EQUIPMENT	Robert Harrison (Richard John George (Gjaft de Jong (Gideon Roberts	2804-08-18	

Exhibit B to Patent Assignment

Patents and Patent Applications

Family Ref No.	Application Number	Grant Number	Country Code	Title	inventor(s)	Filing Date	Priority Date
31258	12/830650	8542678	บร	SYSTEM AND METHOD FOR MANAGING CALL CONTINUITY IN IMS NETWORK ENVIRONMENT	Adrian Buckley	2010-07-06	2006-08-11
31258	11/503465	7760712	ùs	SYSTEM AND METHOD FOR MANAGING CALL CONTINUITY IN IMS NETWORK ENVIRONMENT	Adrian Buckley	2006-08-11	2006-08-11

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RECORDED: 07/05/2019