504911546 05/11/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4958290

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
TELEFONAKTIEBOLAGET LM ERICSSON (PUBL)	02/18/2015

RECEIVING PARTY DATA

Name:	CLUSTER LLC
Street Address:	615 SOUTH DUPONT HIGHWAY
Internal Address:	KENT COUNTY
City:	DOVER
State/Country:	DELAWARE
Postal Code:	19901

PROPERTY NUMBERS Total: 1

Property Type	Number			
Application Number:	15816426			

CORRESPONDENCE DATA

Fax Number: (972)202-5013

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: 9722029906

Email: tmugabe@marconigroup.com
Correspondent Name: TARA WILSON-MUGABE
Address Line 1: 7160 DALLAS PKWY.
Address Line 4: PLANO, TEXAS 75024

ATTORNEY DOCKET NUMBER:	HE606US5
NAME OF SUBMITTER:	TARA WILSON-MUGABE
SIGNATURE:	/Tara Wilson-Mugabe/
DATE SIGNED:	05/11/2018
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 7

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PATENT 504911546 REEL: 045782 FRAME: 0868

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> PATENT REEL: 045782 FRAME: 0869

PATENT ASSIGNMENT AGREEMENT

This PATENT ASSIGNMENT AGREEMENT ("Agreement") dated as of February 18, 2015 (the "Effective Date") by and between:

- (i) Telefonaktiebolaget L M Ericsson (publ), a company duly established under the laws of Sweden, with registration number 556016-0680, having its registered office at SE-164 83 Stockholm, Sweden ("Assignor"); and
- (ii) Cluster LLC, a Delaware limited liability company, with its registered office presently located at c/o National Corporate Research, Ltd., 615 South DuPont, Highway, Dover, Kent County, Delaware 19901 ("Assignee").

WITNESSETH

WHEREAS, Assignee is an affiliate of Assignor and Assignor now wishes to transfer its rights in the Assigned Patents (as defined below) to Assignee as further set forth below.

NOW, THEREFORE, in consideration of the foregoing and the mutual promises and agreements contained in this Agreement, and for other good and valuable consideration the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree as follows:

1. Assignment. Assignor hereby transfers, assigns and conveys to Assignee its right, title, and interest throughout the world (under any and all laws and in any and all jurisdictions) in and to all of the patents, patent applications and provisional patent applications set forth on Schedule A attached hereto (collectively, the "Assigned Patents"), in each case, subject to all existing encumbrances. Pursuant to the foregoing assignment, each of the Assigned Patents shall hereafter be for Assignee's own use and enjoyment, and for the use and enjoyment of Assignee's successors and assigns, as fully and entirely as the same would have been held and enjoyed by the applicable Assignor if this Agreement had not been made. The foregoing assignment includes, without limitation, the rights of Assignor, if any, to (A) register or apply in all countries and regions for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for the Assigned Patents; (B) prosecute, maintain and defend the Assigned Patents before any public or private agency, office or registrar including by filing reissues, reexaminations, divisions, continuations, continuations-in-part, substitutes, extensions and all other applications and post issue proceedings included in the Assigned Patents; (C) claim priority based on the filing dates of any of the Assigned Patents under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, the Paris Convention, and all other treaties of like purposes; and (D) sue and recover damages or other compensation for past, present or future infringements thereof, the right to sue and obtain equitable relief, including injunctive relief, in respect of such infringements, and the right to fully and entirely stand in the place of the applicable Assignor in all matters related to the Assigned Patents.

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[Patent Assignment Agreement - L M Ericsson to Cluster LLC]

- 2. <u>Authorization</u>. Assignor also hereby expressly authorizes the respective patent office or governmental agency in each and every jurisdiction worldwide (including the Commissioner of Patents and Trademarks in the United States Patent and Trademark Office, and the corresponding entities or agencies in any applicable foreign countries or multinational authorities) (the "<u>Applicable IP Offices</u>") to: (A) issue any and all patents or certificates of invention or equivalent which may be granted upon any of the Assigned Patents in the name of Assignee, as the assignee to the Assignor's interest therein; and (B) record Assignee as the assignee of the Assigned Patents and to deliver to Assignee, and to Assignee's attorneys, agents, successors or assigns, all official documents and communications as may be warranted by this Agreement.
- 3. <u>Further Assurances.</u> Each party hereby agrees to execute and deliver to the other party all necessary documents and take all necessary actions reasonably requested by such party from time to time to confirm or effect the assignments set forth in this Agreement, or otherwise to carry out the purposes of this Agreement, including, without limitation, by providing executed originals of short-form assignment agreements entered into by Assignor and Assignee on the Effective Date for filing or otherwise evidencing the assignments set forth in this Agreement with the Applicable IP Offices; <u>provided</u>, <u>however</u>, that nothing contained herein shall obligate Assignor to incur any cost or pay any expense in connection therewith.
 - 4. Governing Law. This Agreement shall be governed by the laws of Delaware.
- 5. <u>General Provisions</u>. This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original, and all of which together shall constitute one and the same instrument. Delivery of an executed counterpart of a signature page to this Agreement by facsimile or electronic mail shall be as effective as delivery of a manually executed counterpart of this Agreement. This Agreement may not be supplemented, altered, or modified in any manner except by a writing signed by all parties hereto. The failure of any party to enforce any terms or provisions of this Agreement shall not waive any of its rights under such terms or provisions.

[Remainder of this page intentionally left blank.]

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IN WITNESS WHEREOF, Assignor and Assignee have caused this instrument to be executed by their respective duly authorized representative as of the Effective Date.

Assignor:

TELEFONAKTIEBOLAGET L M ERICSSON (PUBL)

Name: Joseph Stringbers
Title: Head of Group Confunctional

By

Name:

Title: Vice Prosident. Group Controller

REEL: 045782 FRAME: 0872

Assignee:

CLUSTER LLC

Ву

Name: MAN HOX

Title: AUTHORIZED PERSON

REEL: 045782 FRAME: 0873

Schedule A

LIST OF ASSIGNED PATENTS

Family Ref.	Country	Status	Appl. No.	Appl. Date	Patent No.	Patent Date
P25295 FAM	AT	GRANTED	08794159.7	2008-08-20	2225907	2011-10-12
P29960 FAM	AT	GRANTED	09804080,1	2009-12-22	2484074	2014-06-25
P25295 FAM	AU	GRANTED	2008336328	2008-08-20	2008336328	2013-11-14
P29325 FAM	AU	FILED(EXA)	2009348012	2009-06-22		
P25295 FAM	BE	GRANTED	08794159.7	2008-08-20	2225907	2011-10-12
P29325 FAM	BE	GRANTED	09788574,3	2009-06-22	2443886	2015-01-28
P25295 FAM	BR	FILED	PI 0820141-2	2008-08-20		
P23880 FAM	CA	FILED	2,683,476	2008-04-03		
P25295 FAM	CA	FILED	2821063	2008-08-20		
P29325 FAM	CA	FILED(EXA)	2765671	2009-06-22		
P29960 FAM	CH	GRANTED	09804080.1	2009-12-22	2484074	2014-06-25
P23617 FAM	CN	GRANTED	200880004933.0	2008-02-11	ZL200880004933.0	2014-05-14
P23880 FAM	CN	GRANTED	200880019152.9	2008-04-03	ZL200880019152.9	2013-12-11
P23880 FAM	CN	FILED	201310341725.9	2008-04-03		
P25295 FAM	CN	GRANTED	200880121057.X	2008-08-20	ZL200880121057.X	2013-09-18
P29325 FAM	CN	FILED(EXA)	200980160091.2	2009-06-22		
P29960 FAM	CN	FILED(EXA)	200980161844.1	2009-12-22		
P25295 FAM	DE	GRANTED	08794159.7	2008-08-20	2225907	2011-10-12
P29325 FAM	DE	GRANTED	09788574.3	2009-06-22	2443886	2015-01-28
P29960 FAM	DE	GRANTED	09804080.1	2009-12-22	602009024973.8	2014-06-25
P25295 FAM	DK	GRANTED	08794159.7	2008-08-20	2225907	2011-10-12
P29325 FAM	DK	GRANTED	09788574.3	2009-06-22	2443886	2015-01-28
P23617 FAM	DZ	GRANTED	090475	2008-02-11	6698	2011-06-09
P23297 FAM	EР	FILED	07857692.3	2007-12-17		
P23617 FAM	EP	FILED(Exa)	08712790.8	2008-02-11		
P23880 FAM	EP	FILED	08724334.1	2008-04-03		
P25295 FAM	EP	GRANTED	08794159.7	2008-08-20	2225907	2011-10-12
P29325 FAM	ΕP	GRANTED	09788574.3	2009-06-22	2443886	2015-01-28
P29325 FAM	ΕP	FILED	14186213.6	2009-06-22		
P29325 FAM	ξP	FILED	14186216.9	2009-06-22		
P29960 FAM	ξÞ	GRANTED	09804080.1	2009-12-22	2484074	2014-06-25
P25295 FAM	ES	GRANTED	08794159.7	2008-08-20	2225907	2011-10-12
P29325 FAM	ES	GRANTED	09788574.3	2009-06-22	2443886	2015-01-28
P29960 FAM	ES	GRANTED	09804080.1	2009-12-22	2484074	2014-06-25
P29960 FAM	FI	GRANTED	09804080.1	2009-12-22	2484074	2014-06-25
P25295 FAM	FR	GRANTED	08794159.7	2008-08-20	2225907	2011-10-12

[Schedule A to Patent Assignment Agreement – I. M Ericsson to Cluster LLC]

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P29325 FAM	FR	GRANTED	09788574.3	2009-06-22	2443886	2015-01-28
P29960 FAM	ER	GRANTED	09804080.1	2009-12-22	2484074	2014-06-25
P25295 FAM	GB	GRANTED	08794159.7	2008-08-20	2225907	2011-10-12
P29325 FAM	GB	GRANTED	09788574.3	2009-06-22	2443886	2015-01-28
P29960 FAM	GB	GRANTED	09804080.1	2009-12-22	2484074	2014-06-25
P29325 FAM	HU	GRANTED	09788574.3	2009-06-22	2443886	2015-01-28
P23297 FAM	ID	FILED	W-00200901635	2007-12-17		
P23617 FAM	ID	GRANTED	W-00 2009 02249	2008-02-11	ID P0031188	2012-06-18
P29325 FAM	ID OIL	FILED	W-00 2011 04627	2009-06-22		
P29960 FAM	ID	FILED(EXA)	W-00 2012 01117	2009-12-22		
P25295 FAM	1E	GRANTED	08794159.7	2008-08-20	2225907	2011-10-12
P29325 FAM	1E	GRANTED	09788574.3	2009-06-22	2443886	2015-01-28
P23297 FAM	IN	FILED	3780/DELNP/2009	2007-12-17		
P23617 FAM	IN	FILED	4128DELNP/2009	2008-02-11		
P23880 FAM	IN	FILED	3874/KOLNP/2009	2008-04-03		
P25295 FAM	IN	FILED	1050/MUMNP/2010	2008-08-20		
P29325 FAM	IN	FILED	84/KOLNP/2012	2009-06-22		
P29960 FAM	IN	FILED	987/KOLPN/2012	2009-12-22		
P25295 FAM	IT	GRANTED	08794159.7	2008-08-20	2225907	2011-10-12
P29325 FAM	IT	GRANTED	09788574.3	2009-06-22	2443886	2015-01-28
P29960 FAM	IT	GRANTED	09804080.1	2009-12-22	2484074	2014-06-25
P23297 FAM	ΊÞ	GRANTED	2009-540792	2007-12-17	4988854	2012-05-11
P23617 FAM	ĴΡ	GRANTED	2009-549557	2008-02-11	5135358	2012-11-16
P23617 FAM	Jb	FILED(EXA)	2012-248664	2008-02-11		
P23880 FAM	JР	GRANTED	2010-502973	2008-04-03	4972705	2012-04-13
P23880 FAM	JР	GRANTED	2012-088748	2008-04-03	5401580	2013-11-01
P25295 FAM	JΡ	GRANTED	2010-537892	2008-08-20	4956674	2012-03-23
P29325 FAM	JP	FILED	2014-131763	2009-06-22		
P29325 FAM	JР	FILED	2012-516028	2009-06-22		
P29960 FAM	JP	GRANTED	2012-532042	2009-12-22	5580899	2014-07-18
P23297 FAM	KR	FILED(EXA)	2009-7011816	2007-12-17		
P23617 FAM	KR	FILED(ALL)	2009-7017070	2008-02-11		
P25295 FAM	MA	GRANTED	PV/32878	2008-08-20	31871	2010-11-01
P23880 FAM	MX	GRANTED	MX/A/2009/010915	2008-04-03	298239	2012-04-17
P29960 FAM	MX	GRANTED	MX/A/2012/003399	2009-12-22	308378	2013-04-03
P23880 FAM	MY	FILED(EXA)	PI20094229	2008-04-08		
P29325 FAM	MY	GRANTED	P12011005740	2009-06-22	MY-152715-A	2014-11-28
P25295 FAM	NL	GRANTED	08794159.7	2008-08-20	2225907	2011-10-12
P29325 FAM	NL	GRANTED	09788574.3	2009-06-22	2443886	2015-01-28
P29960 FAM	NL	GRANTED	09804080.1	2009-12-22	2484074	2014-06-25
P23880 FAM	NZ	GRANTED	580305	2008-04-03	580305	2012-12-11
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P29960 FAM	PΓ	GRANTED	09804080.1	2009-12-22	2484074	2014-06-25
P25295 FAM	PT	GRANTED	08794159.7	2008-08-20	2225907	2011-10-12
P29960 FAM	PT	GRANTED	09804080.1	2009-12-22	2484074	2014-06-25
P29325 FAM	RO	GRANTED	09788574.3	2009-06-22	2443886	2015-01-28
P23617 FAM	RU	GRANTED	2009134167	2008-02-11	2452088	2012-05-27
P25295 FAM	SE	GRANTED	08794159.7	2008-08-20	2225907	2011-10-12
P29325 FAM	\$E	GRANTED	09788574.3	2009-06-22	2443886	2015-01-28
P23880 FAM	TH	FILED(EXA)	0801001820	2008-04-10		
P25295 FAM	TH	FILED	0801005964	2008-11-20		
P29325 FAM	TR	GRANTED	09788574.3	2009-06-22	2443886	2015-01-28
P29960 FAM	TR	GRANTED	09804080.1	2009-12-22	2484074	2014-06-25
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P23617 FAM	TW	FILED(ALL)	097105069	2008-02-13		
P23297 FAM	US	GRANTED	12/516711	2007-12-17	8254392	2012-08-28
P23617 FAM	US	GRANTED	12/029103	2008-02-11	8064394	2011-11-22
P23617 FAM	US	FILED(EXA)	13/292790	2011-11-09		
P23880 FAM	US	GRANTED	12/595304	2008-04-03	8351319	2013-01-08
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P23880 FAM	US	FILED	14/523189	2014-10-24		
P25295 FAM	US	GRANTED	12/747593	2008-08-20	8553590	2013-10-08
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P29325 FAM	US	GRANTED	12/488303	2009-06-19	8462736	2013-06-11
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P29960 FAM	US	FILED(EXA)	13/498195	2009-12-22		
P29960 FAM	US	FILED	14/042892	2013-10-01		
P23617 FAM	ZA	GRANTED	2009/05127	2008-02-11	2009/05127	2010-09-29
P25295 FAM	ZA	GRANTED	2010/03319	2008-08-20	2010/03319	2011-08-31

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RECORDED: 05/11/2018

REEL: 045782 FRAME: 0876