503704179 02/23/2016

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT3750820

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
HANWU HU	02/18/2016
NIMA AHMADVAND	02/22/2016

RECEIVING PARTY DATA

Name:	CONVERSANT INTELLECTUAL PROPERTY MANAGEMENT INC.	
Street Address:	515 LEGGET DRIVE	
Internal Address:	SUITE 704	
City:	OTTAWA	
State/Country:	ONTARIO	
Postal Code:	K2K3G4	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14801146

CORRESPONDENCE DATA

Fax Number: (613)591-8148

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.

613-576-3000 Phone:

Email: ipadmin@conversantip.com

Correspondent Name: RONAN O'BYRNE

Address Line 1: 515 LEGGET DRIVE, SUITE 704

Address Line 2: CONVERSANT IPM

Address Line 4: OTTAWA, ONTARIO K2K3G4

ATTORNEY DOCKET NUMBER:	01406-US-PAT
NAME OF SUBMITTER:	RONAN O'BYRNE
SIGNATURE:	/Ronan O'Byrne/
DATE SIGNED:	02/23/2016

Total Attachments: 6

source=2016-02-23 - EXECUTED Assignment - Inventors to Conversant#page1.tif source=2016-02-23 - EXECUTED Assignment - Inventors to Conversant#page2.tif source=2016-02-23 - EXECUTED Assignment - Inventors to Conversant#page3.tif

PATENT REEL: 037793 FRAME: 0887 503704179

source=2016-02-23 - EXECUTED Assignment - Inventors to Conversant#page4.tif source=2016-02-23 - EXECUTED Assignment - Inventors to Conversant#page5.tif source=2016-02-23 - EXECUTED Assignment - Inventors to Conversant#page6.tif

PATENT REEL: 037793 FRAME: 0888

ASSIGNMENT AND AGREEMENT

As a below named inventor, I hereby declare that for good and valuable consideration, the receipt of which is hereby acknowledged, I do hereby sell, assign, transfer and convey unto Conversant Intellectual Property Management Inc., having the principal place of business at 515 Legget Drive, Suite 704, Ottawa, Ontario, Canada K2K 3G4 ("Assignee"), its successors, assigns or its designees and legal representatives, my entire right, title and interest in and to any and all of the patents and applications listed below ("Patents"),

Country/State/ Organization	Application/Patent No.	Filing Date	Title
(Code)			
US	14/801,146	2015-07-16	SYSTEM AND METHOD FOR
			FREQUENCY SYNCHRONIZATION OF
		***************************************	DOPPLER-SHIFTED SUBCARRIERS
US	62/025,650	2014-07-17	SYSTEM AND METHOD FOR
			FREQUENCY SYNCHRONIZATION OF
			DOPPLER-SHIFTED SUBCARRIERS

the inventions described therein, and any other governmental grants or issuances throughout the world which directly or indirectly claim priority from Patents or for which any of the Patents directly or indirectly forms a basis for priority, including but not limited to: (1) any patents, registrations, or certificates of invention that have issued or may issue in the future on any patent applications listed in the Appendix; (2) any and all counterpart United States, international, and foreign patents, applications, utility models, industrial design protection, design patent protection, and certificates of invention based upon, covering, or otherwise related to any portion of the foregoing; (3) any expired or abandoned applications or patents based upon, covering, or otherwise related to any portion of the foregoing; (4) patents or other governmental rights that may be granted in the future based upon, covering, or otherwise related to any portion of the foregoing; (5) any continuations, continuations-in-part, divisionals, provisionals, renewals, and extensions of any of the foregoing; (6) all reissues and reexamination certificates of any of the foregoing, and (7) all applications or patents subject to or resulting from any pending inter-partes review, supplemental examination, post-grant review, derivation proceedings, or other

HE486-US-PAT - Inventor to Conversant Assignment Page 1 of 6 review proceeding of any of the foregoing (the foregoing are collectively referred to herein as the "Patent Rights").

I hereby authorize the firm of Conversant Intellectual Property Management Inc. to insert any further identification necessary to make this assignment suitable for recordation in the Patent Office of any jurisdiction as may be required.

I further agree to and hereby do sell, assign, transfer and convey unto Assignee all rights: (i) in and to causes of action and enforcement rights for the Patent Rights (whether known or unknown or whether currently pending, filed, or otherwise), including, without limitation, all rights to pursue damages, injunctive relief and other remedies for past, current and future infringement, misappropriation, or other violation of the Patent Rights and to license the Patent Rights; (ii) to apply in any or all countries of the world for patents, certificates of invention or other governmental grants for the Patent Rights, including, without limitation, to invoke and claim for any application for patent or other form of protection for said Patents filed by it or them, the benefit of the right of priority provided by under the Paris Convention for the Protection of Industrial Property, the International Patent Cooperation Treaty, or any other convention, treaty, agreement or understanding and to invoke and claim such right of priority without further written or oral authorization from Assignor; (iii) to assert the attorney/client and/or solicitor/client privilege associated with the prosecution of the Patent Rights and/or work product immunity associated with enforcement of the Patent Rights; (iv) to collect royalties or other payments under or on account of the Patent Rights; and (v) of cooperation assigned or granted by any third party with respect to the Patent Rights. I further agree to assert the attorney/client and/or solicitor/client privilege and/or work product immunity to the fullest extent of the law to promote enforcement of the patents. I also hereby authorize the respective patent office or governmental agency in each jurisdiction to issue any and all patents or certificates of invention which may be granted upon any of the Patent Rights in the name of the Assignee, as the assignee to the entire interest therein.

I agree to not sign any writing or do any act conflicting with this Assignment and to communicate to Assignee any facts known to me respecting any improvements listed in the **Patents**; and, when requested and without any further consideration, to

\$6-86-US-PAT - Insertor to Conversant Assignment Page 2 of 6 sign all papers, cause all rightful oaths to be taken, and do or cause to be done all acts which may be necessary, desirable or convenient for securing, maintaining, and enforcing said Patents in any and all countries and for vesting title thereto in said Assignee, its successors, assigns and legal representatives or nominees. I request that the respective Patent Office or governmental agency in each jurisdiction 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 the Assignee, as the assignee to the entire interest therein.

I hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any assignment, consent to file or like document which may be required in any country for any purpose and more particularly in proof of the right of the said Assignee or nominee to claim the aforesaid benefit of the right of priority provided by: (a) the International Convention for the protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it; and (b) the Patent Cooperation Treaty, as amended, or by any treaty which may henceforth be substituted for it.

I covenant with said Assignee, its successors and assigns and legal representatives that the rights and property herein conveyed are free and clear of any encumbrance, and that I have the full right to convey the same as herein expressed.

Should any part of this Agreement be rendered or declared invalid by a court of competent jurisdiction, such invalidation of such part or portion of this Agreement should not invalidate the remaining portions thereof, and the remaining portions shall remain in full force and effect.

DIMS-US-PAT - Inventor to Conversant Assignment Page I of 6

Name of Inventor: Hanwu HU
STATEMENT OF WITNESS
(、 <u>Konan O'Byene</u> whose full post office address is
(name of whitess)
479 CHURCHILL AVE NORTH, OTTAWA, ONTARIO
KIZ SE1 CANADA
was personally present and did see Hanwu HU execute the within assignment and such assignor is personally known to me to be the person described in such document.

<u>Canada</u> Country

(Signature of Witness)

SIGNED at Ottowa City or Town this 18 day of February 2016.

Name of Inventor: Nima AHMADVAND
Klahanler
STATEMENT OF WITNESS
(name of witness)
224 CONTOA LANARK
Carleton Place ON KTCOCS.

was personally present and did see Nima AHMADVAND execute the within assignment and such

assignor is personally known to me to be the person described in such document.

Canada Country

SIGNED at Ottawa
City or Town

this 30 day of 46/10004, 2016.

SIGNED at Ottawa City or Town

<u>Canada</u> Country

this 25 day of 16-2016.

Assignee

Conversant Intellectual Property Management Inc.,

Address: 515/Legget Drive/Suite 704, Ottawa, Ontario, Canada K2K 3G4

By: Name/Phil Shaer

Title Senior Vice President, Chief Licensing Officer & General Counsel

STATEMENT OF WITNESS
I, Range O'B'/ENE whose full post office address is
(name of witness)
479 CHURCHILL AVE N., OTTAWA
ONTARIO KIZ SEI CANADA
was personally present and did see Phil Shaer execute the within assignment and such assignor is personally known to me to be the person described in such document.
(Signature of Witness)

\$1-996-US-PAT - Inventor to Conversed Assignment

PATENT REEL: 037793 FRAME: 0894

RECORDED: 02/23/2016