PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Kai Liu	11/12/2012
Ghyslain Pelletier	10/29/2012
Peter S. Wang	11/12/2012
Samian J. Kaur	10/25/2012
Paul Marinier	10/29/2012

RECEIVING PARTY DATA

Name:	InterDigital Patent Holdings, Inc
Street Address:	3411 Silverside Road, Hagley Building
Internal Address:	Suite 105
City:	Wilmington
State/Country:	DELAWARE
Postal Code:	19810

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13659015

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER: 11199US02

NAME OF SUBMITTER: Eric Berkowitz

PATENT

Total Attachments: 6

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> PATENT REEL: 029492 FRAME: 0967

WORLDWIDE ASSIGNMENT

WHEREAS:

- Kai Liu
 12 Longstreet
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 United States of America
- Peter S. Wang412 Pond PathE. Setauket, NY 11733United States of America
- Paul Marinier
 1805 Stravinski
 Brossard, Quebec J4X 2J7
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- Ghyslain Pelletier
 2055 rue De Valmont
 Laval, Quebec H7M 3J3
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- Samian J. Kaur
 Ashwood Lane
 Plymouth Meeting, PA 19462
 United States of America

(hereinafter "Assignors") have invented a certain invention currently entitled:

METHODS, APPARATUS AND SYSTEMS FOR MINIMIZATION OF DRIVE TESTS (MDT) BASED ON QOS VERIFICATIONS

for which an application for a patent of the United States on October 24, 2012, under U.S. Patent Application Serial No. 13/659.015 has been filed, and

WHEREAS, InterDigital Patent Holdings, Inc. having a place of business at 3411 Silverside Road, Hagley Building, Suite 105, Wilmington, Delaware, United States of America, 19810 (hereinafter "Assignee"), a corporation of Delaware is desirous of acquiring the entire right, title and interest in and to the aforementioned patent application (hereinafter "Application"), and the invention(s) disclosed therein and in and to all embodiments and improvements of the invention(s), conceived, made or discovered by Assignors (hereinafter "Invention"), and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter "Patents") thereon granted in any and all countries and groups of countries.

NOW, THEREFORE, in deliberation of good and valuable consideration acknowledged by Assignors to have been received in full from Assignee:

- 1. Assignors hereby sell, assign, transfer and convey to Assignee full and exclusive right, title and interest (a) in and to Application and Invention; (b) in and to all rights to apply for patents covering the Invention in any and all countries pursuant to the International Convention for the Protection of Industrial Property or otherwise; (c) in and to any and all applications filed and any and all Patents granted, covering the Invention, in any and all countries and groups of countries, including each and every application filed and each and every Patent granted on any application which is a division, substitution, continuation, or continuation-in-part of the Application; (d) in and to each and every reissue or extension of any of the Patents; and (e) including our full right to sue for and collect damages for past violations of Assignor's rights in and to the Application and Invention including but not limited to provisional rights having arisen from any publication of the Application or any continuations, continuations-in-part, divisions.
- 2. Assignors hereby covenant and agree to cooperate with Assignee to enable Assignee to enjoy to the fullest extent the right, title and interest to the Invention herein conveyed in any and all countries and groups of countries. Such cooperation by Assignors, in general, shall include doing everything possible to aid Assignee to obtain and enforce, for benefit of Assignee, proper patent protection for the Invention in any and all countries; and in particular, such cooperation by Assignors shall include prompt production of pertinent facts and documents, giving testimony, execution of petitions, oaths, specifications, declarations or other papers,

and other assistance all to the extent deemed necessary or desirable by Assignee (a) for perfecting in Assignee the right, title and interest herein conveyed; (b) for prosecuting the Application, or related applications; (c) for filing and prosecuting substitute, divisional, continuing or additional applications covering embodiments of the Invention; (d) for filing and prosecuting applications for reissuance of any of the Patents; (e) for interference or other priority proceedings involving the Invention; and (f) for legal proceedings involving the Invention and any application therefore and any Patents granted thereon, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions.

- 3. Assignors hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any country or countries foreign to the United States whose duty is to issue patents on applications as aforesaid, to issue to Assignee, as Assignee of the entire right, title and interest, any and all Patents that may be issued and granted on or as a result of the Application in accordance with the terms of this Assignment.
- 4. Assignors hereby warrant and represent that Assignors have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.
- The term and covenants of this Assignment shall inure to the benefit of Assignee, its successors, assigns and
 other legal representatives, and shall be binding upon Assignors and Assignors' respective heirs, legal
 representatives and assigns.
- Assignors hereby authorize Assignee, its attorneys or agents, to insert into this Assignment the correct Application Number and/or Filing Date, if none is indicated on the date of Assignors' execution of this Assignment.
- 7. This Assignment should be deemed effective as of October 24, 2012.
- 8. This Assignment may be executed in multiple counterparts, each of which shall be deemed to be an original of this Assignment. Additionally, we hereby authorize our attorneys to collect the signature pages of each executed counterpart and to attach those signature pages to a single copy of this instrument, which single copy and attached signature pages together shall constitute an original of this Assignment.

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Worldwide Assignment	<u> </u>	Docket Ref. 11199US02
11-12-12-		
Date	Peter S. Wang	
Signed at	Mehil, M USA	
	(City) (Country)	
STATEMENT OF WITT	VESS: I, <u>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</u>	
	Address of Witness	
was personally present 20 1	and did see Peter S. Wang execute this Assignment or and such Assignor is personally known to me to be the person Signature of Witness	the day of described herein.

Worldwide Assignment	Docket Ref. 11199US0
Date 10 /25 /12	Jan -
, ,	Samian J. Kaur
/ 781 Third /	Venue, King of Prussis, PA 19408 USA
Signed at	
(City)	(Country)
STATEMENT OF WITNESS: 1,	<u>Caldul</u> ,
	Name of Witness
whose full address is:	1 Third Avenue, King of Prussia, PA 19406 USA
	Address of Witness
yeas personally present and did se	e Samian J. Kaur execute this Assignment on the day of assignor is personally known to me to be the person described herein. Signature of Witness

Worldwide Assignment	Docket Ref. 11199US02
<u>October 35,</u> 2017 Date	Paul Marinier
Signed at(C	Montreal OC Country)
STATEMENT OF WITNES	S: I, Sherbrooke St. West, 10th Floor
whose full address is:	Address of Witness
was personally present and	did see Paul Marinier execute this Assignment on the Assignment of the Assignor is personally known to me to be the person described herein. Signature of Witness