PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
INTERDIGITAL TECHNOLOGY CORPORATION	08/29/2014

RECEIVING PARTY DATA

Name:	RAKUTEN, INC.
Street Address:	4-12-3, HIGASHISHINAGAWA, SHINAGAWA-KU,
City:	TOKYO
State/Country:	JAPAN
Postal Code:	140-0002

PROPERTY NUMBERS Total: 14

Property Type	Number
Application Number:	60297807
Application Number:	10010868
Application Number:	10314691
Application Number:	11122538
Application Number:	12368004
Application Number:	60322927
Application Number:	10171285
Application Number:	10901796
Application Number:	12368586
Application Number:	60397361
Application Number:	10622306
Application Number:	11897456
Application Number:	12329985
Application Number:	13535908

CORRESPONDENCE DATA

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NAME OF SUBMITTER:	DENNIS M HUBBS
SIGNATURE:	/Dennis M. Hubbs/
DATE SIGNED:	09/01/2014

Total Attachments: 8
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PATENT ASSIGNMENT

This Patent Assignment (this "***Assignment***"), is made as of August 29, 2014, by **InterDigital Technology Corporation**, a Delaware Corporation ("***Assignor***"),in favor of **Rakuten, Inc.**, a Japan Corporation ("***Assignee***").

WHEREAS, Assignee and Assignor have entered into that certain Patent Purchase Agreement, dated as of August 7, 2014 (the "***Patent Purchase Agreement***"), pursuant to which Assignor has agreed to sell, assign and transfer to Assignee, and Assignee has agreed to buy, all of Assignor's right, title and interest in and to those patents and patent applications listed on Appendix I attached hereto (collectively the "***Assigned Patents***");

Assignor does hereby sell, assign, transfer and convey unto Assignee its entire right, title and interest in and to the Assigned Patents listed in Appendix I hereto, including Assignor's rights under the Assigned Patents to sue for injunctive relief and damages for past, present and future infringement of the Assigned Patents. Assignee acknowledges and agrees that the Assigned Patents remain subject to a certain non-exclusive license to Assignor and certain other rights and licenses that, prior to the date hereof, have been granted or are required to be granted under the Assigned Patents, which shall remain in effect notwithstanding assignment of such Assigned Patents.

Assignor hereby authorizes the respective patent office or governmental agency to record the Assigned Patents and any reissues or reexaminations thereof in the name of Assignee, as the assignee of the entire interest therein.

This Assignment does not sell, assign or transfer any right, title or interest in or to any patents or patent applications other than those expressly listed in Appendix I to this Assignment.

This Assignment shall be construed and interpreted in accordance with the Patent Purchase Agreement. Nothing in this Assignment shall, or shall be deemed to, modify or otherwise affect any provisions of the Patent Purchase Agreement or affect or modify or expand any of the rights or obligations of the parties under the Patent Purchase Agreement. In the event of any conflict between the provisions hereof and the provisions of the Patent Purchase Agreement, the provisions of the Patent Purchase Agreement shall govern and control. Neither Assignor nor Assignee makes any representations or warranties of any kind, whether express, implied, or otherwise, under this Assignment, all of which are governed solely by the Patent Purchase Agreement.

This Assignment may be executed in counterparts, each of which will be deemed an original, and all of which together constitute one and the same instrument.

IN WITNESS WHEREOF, Assignor has caused this Assignment to be executed by their respective duly authorized representatives as of the date first set forth above.

InterDigital Technology Corporation

By: _____

Name: Timothy Doeghuis

Title: Vice President

EXHIBIT 1

Family No.	App Title	Country	App No.	Patent No.
6	BINARY-TREE METHOD AND SYSTEM FOR MULTIPLEXING SCHEDULING	Argentina	P020102191	AR034460B1
6	BINARY-TREE METHOD AND SYSTEM FOR MULTIPLEXING SCHEDULING	Canada	2,450,008	
6	BINARY-TREE METHOD AND SYSTEM FOR MULTIPLEXING SCHEDULING	China	02811780.8	ZL02811780.8
6	BINARY-TREE METHOD AND SYSTEM FOR MULTIPLEXING SCHEDULING	European Patent	02706498.9	1396116
6	BINARY-TREE METHOD AND SYSTEM FOR MULTIPLEXING SCHEDULING	France	02706498.9	1396116
6	BINARY-TREE METHOD AND SYSTEM FOR MULTIPLEXING SCHEDULING	Germany (Federal Republic of)	02706498.9	60227515.6
6	BINARY-TREE METHOD AND SYSTEM FOR MULTIPLEXING SCHEDULING	Hong Kong	04107105.3	
6	BINARY-TREE METHOD AND SYSTEM FOR MULTIPLEXING SCHEDULING	Japan	2003-504608	3817247
6	BINARY-TREE METHOD AND SYSTEM FOR MULTIPLEXING SCHEDULING	Korea, Republic of (KR)	10-2003-7016255	0590460
6	BINARY-TREE METHOD AND SYSTEM FOR MULTIPLEXING SCHEDULING	Korea, Republic of (KR)	10-2005-7015359	0766841
6	BINARY-TREE METHOD AND SYSTEM FOR MULTIPLEXING SCHEDULING	Korea, Republic of (KR)	10-2007-7011997	0877170
6	BINARY-TREE METHOD AND SYSTEM FOR MULTIPLEXING SCHEDULING	Korea, Republic of (KR)	10-2007-7024235	
6	BINARY-TREE METHOD AND SYSTEM FOR MULTIPLEXING SCHEDULING	Malaysia	PI20022201	MY-126227-A
6	BINARY-TREE METHOD AND SYSTEM FOR MULTIPLEXING SCHEDULING	Mexico	PA/A/2003/011545	239429
6	BINARY-TREE METHOD AND SYSTEM FOR MULTIPLEXING	Mexico	PA/a/2006/009086	

	SCHEDULING			
6	BINARY-TREE METHOD AND SYSTEM FOR MULTIPLEXING SCHEDULING	Netherlands	02706498.9	1396116
6	BINARY-TREE METHOD AND SYSTEM FOR MULTIPLEXING SCHEDULING	Norway	20035495	
6	BINARY-TREE METHOD AND SYSTEM FOR MULTIPLEXING SCHEDULING	Patent Cooperation Treaty	PCT/US02/06966	
6	BINARY-TREE METHOD AND SYSTEM FOR MULTIPLEXING SCHEDULING	Philippines	1-2002-00416	1-2002-00416
6	BINARY-TREE METHOD AND SYSTEM FOR MULTIPLEXING SCHEDULING	Taiwan	91108889	189699
6	BINARY-TREE METHOD AND SYSTEM FOR MULTIPLEXING SCHEDULING	Taiwan	92127554	
6	BINARY-TREE METHOD AND SYSTEM FOR MULTIPLEXING SCHEDULING	United Kingdom	02706498.9	1396116
6	BINARY-TREE MULTIPLEXING SCHEDULING	United States of America	12/368,004	
6	BINARY-TREE METHOD AND SYSTEM FOR MULTIPLEXING SCHEDULING	United States of America	60/297,807	
6	BINARY-TREE METHOD AND SYSTEM FOR MULTIPLEXING SCHEDULING	United States of America	10/010,868	6,504,848
6	USER EQUIPMENT WITH BINARY-TREE MULTIPLEXING SCHEDULING	United States of America	10/314,691	6,904,050
6	BINARY-TREE MULTIPLEXING SCHEDULING	United States of America	11/122,538	7,499,467
6	BINARY-TREE METHOD AND SYSTEM FOR MULTIPLEXING SCHEDULING	Venezuela	1142-02	
7	METHOD AND APPARATUS FOR INTERFERENCE SIGNAL CODE POWER AND NOISE VARIANCE ESTIMATION	Canada	2,460,799	2,460,799
7	CODE DIVISION MULTIPLE ACCESS USER EQUIPMENT FOR ESTIMATING INTERFERENCE SIGNAL CODE POWERAND A NOISE VARIANCE	China	02254962.5	ZL02254962.5
7	CODE DIVISION MULTIPLE ACCESS BASE STATION FOR ESTIMATING INTERFERENCE SIGNAL CODE POWER AND A NOISE VARIANCE	China	02254961.7	ZL02254961.7

7	METHOD AND APPARATUS FOR INTERFERENCE SIGNAL CODE POWER AND NOISE VARIANCE ESTIMATION	China	02818139.5	ZL02818139.5
7	METHOD AND APPARATUS FOR INTERFERENCE SIGNAL CODE POWER AND NOISE VARIANCE ESTIMATION	European Patent	02773449.0	1428338
7	METHOD AND APPARATUS FOR INTERFERENCE SIGNAL CODE POWER AND NOISE VARIANCE ESTIMATION	France	02773449.0	1428338
7	METHOD AND APPARATUS FOR INTERFERENCE SIGNAL CODE POWER AND NOISE VARIANCE ESTIMATION	Germany (Federal Republic of)	02773449.0	60236878.2-08
7	CODE DIVISION MULTIPLE ACCESS USER EQUIPMENT ESTIMATING INTERFERENCE SIGNAL CODE POWER AND A NOISE VARIANCE	Germany (Federal Republic of)	20214391.0	20214391.0
7	CODE DIVISION MULTIPLE ACCESS BASE STATION FOR ESTIMATING INTERFERENCE SIGNAL CODE POWER AND A NOISE VARIANCE	Germany (Federal Republic of)	20214390.2	20214390.2
7	METHOD AND APPARATUS FOR INTERFERENCE SIGNAL CODE POWER AND NOISE VARIANCE ESTIMATION	Hong Kong	05101097.5	HK1068749
7	METHOD AND APPARATUS FOR INTERFERENCE SIGNAL CODE POWER AND NOISE VARIANCE ESTIMATION	Japan	2003-529096	3853790
7	CODE DIVISION MULTIPLE ACCESS USER EQUIPMENT FOR ESTIMATING INTERFERENCE SIGNAL CODE POWER AND A NOISE VARIANCE	Korea, Republic of (KR)	2002-28106	302894
7	CODE DIVISION MULTIPLE ACCESS BASE STATION FOR ESTIMATING INTERFERENCE SIGNAL CODE POWER AND A NOISE VARIANCE	Korea, Republic of (KR)	2002-28107	302895
7	CODE DIVISION MULTIPLE ACCESS USER EQUIPMENT FOR ESTIMATING INTERFERENCE SIGNAL CODE POWER AND A NOISE VARIANCE	Korea, Republic of (KR)	10-2004-0002631	0572169
7	CODE DIVISION MULTIPLE ACCESS BASE STATION FOR ESTIMATING INTERFERENCE SIGNAL CODE POWER AND A NOISE VARIANCE	Korea, Republic of (KR)	10-2004-0002632	

7	CODE DIVISION MULTIPLE ACCESS USER EQUIPMENT FOR ESTIMATING INTERFERENCE SIGNAL CODE POWER AND A NOISE VARIANCE	Korea, Republic of (KR)	10-2005-0076156	0801124
7	CODE DIVISION MULTIPLE ACCESS BASE STATION FOR ESTIMATING INTERFERENCE SIGNAL CODE POWER AND A NOISE VARIANCE	Korea, Republic of (KR)	10-2005-0090148	
7	CODE DIVISION MULTIPLE ACCESS USER EQUIPMENT FOR ESTIMATING INTERFERENCE SIGNAL CODE POWER AND A NOISE VARIANCE	Korea, Republic of (KR)	10-2007-0097993	
7	METHOD AND APPARATUS FOR INTERFERENCE SIGNAL CODE POWER AND NOISE VARIANCE ESTIMATION	Netherlands	02773449.0	1428338
7	METHOD AND APPARATUS FOR INTERFERENCE SIGNAL CODE POWER AND NOISE VARIANCE ESTIMATION	Norway	20041543	
7	METHOD AND APPARATUS FOR INTERFERENCE SIGNAL CODE POWER AND NOISE VARIANCE ESTIMATION	Patent Cooperation Treaty	PCT/US02/29553	
7	USER EQUIPMENT	Taiwan	098102124	
7	METHOD AND APPARATUS FOR INTERFERENCE SIGNAL CODE POWER AND NOISE VARIANCE ESTIMATION	Taiwan	91121332	262669
7	CODE DIVISION MULTIPLE ACCESS USER EQUIPMENT FOR ESTIMATING INTERFERENCE SIGNAL CODE POWER AND A NOISE VARIANCE	Taiwan	91214722	208164
7	CODE DIVISION MULTIPLE ACCESS BASE STATION FOR ESTIMATING INTERFERENCE SIGNAL CODE POWER AND A NOISE VARIANCE	Taiwan	91214721	219567
7	METHOD AND APPARATUS FOR INTERFERENCE SIGNAL CODE POWER AND NOISE VARIANCE ESTIMATION	Taiwan	92127569	I267264
7	METHOD AND APPARATUS FOR INTERFERENCE SIGNAL CODE POWER AND NOISE VARIANCE ESTIMATION	Taiwan	94132570	281327
7	METHOD AND APPARATUS FOR INTERFERENCE SIGNAL CODE POWER AND NOISE VARIANCE ESTIMATION	Taiwan	096103431	

7	ESTIMATION METHODS OF INTERFERENCE SIGNAL CODE POWER AND NOISE VARIANCE	Taiwan	102114706	
7	METHOD AND APPARATUS FOR INTERFERENCE SIGNAL CODE POWER AND NOISE VARIANCE ESTIMATION	United Kingdom	02773449.0	1428338
7	ESTIMATION METHODS OF INTERFERENCE SIGNAL CODE POWER AND NOISE VARIANCE	United States of America	60/322,927	
7	METHOD AND APPARATUS FOR INTERFERENCE SIGNAL CODE POWER AND NOISE VARIANCE ESTIMATION	United States of America	10/171,285	6,816,470
7	METHOD AND APPARATUS EMPLOYED IN A USER EQUIPMENT FOR INTERFERENCE SIGNAL CODE POWER AND NOISE VARIANCE ESTIMATION	United States of America	10/901,796	7,492,750
7	METHOD AND APPARATUS EMPLOYED IN A USER EQUIPMENT FOR INTERFERENCE SIGNAL CODE POWER AND NOISE VARIANCE ESTIMATION	United States of America	12/368,586	8,300,520
9	GROUPWISE SUCCESSIVE INTERFERENCE CANCELLATION FOR BLOCK TRANSMISSION WITH RECEPTION DIVERSITY	Canada	2,493,195	
9	GROUPWISE SUCCESSIVE INTERFERENCE CANCELLATION FOR BLOCK TRANSMISSION WITH RECEPTION DIVERSITY	China	03817191.0	ZL03817191.0
9	GROUPWISE SUCCESSIVE INTERFERENCE CANCELLATION FOR BLOCK TRANSMISSION WITH RECEPTION DIVERSITY	European Patent	03765803.6	
9	GROUPWISE SUCCESSIVE INTERFERENCE CANCELLATION FOR BLOCK TRANSMISSION WITH RECEPTION DIVERSITY	Hong Kong	05109786.4	
9	GROUPWISE SUCCESSIVE INTERFERENCE CANCELLATION FOR BLOCK TRANSMISSION WITH RECEPTION DIVERSITY	Japan	2004-523175	4316500
9	GROUPWISE SUCCESSIVE INTERFERENCE CANCELLATION FOR BLOCK TRANSMISSION WITH RECEPTION DIVERSITY	Korea, Republic of (KR)	10-2005-7000940	0765873

9	GROUPWISE SUCCESSIVE INTERFERENCE CANCELLATION FOR BLOCK TRANSMISSION WITH RECEPTION DIVERSITY	Korea, Republic of (KR)	10-2005-7019023	
9	GROUPWISE SUCCESSIVE INTERFERENCE CANCELLATION FOR BLOCK TRANSMISSION WITH RECEPTION DIVERSITY	Mexico	PA/A/2005/000828	250904
9	GROUPWISE SUCCESSIVE INTERFERENCE CANCELLATION FOR BLOCK TRANSMISSION WITH RECEPTION DIVERSITY	Mexico	MX/A/2007/013282	
9	GROUPWISE SUCCESSIVE INTERFERENCE CANCELLATION FOR BLOCK TRANSMISSION WITH RECEPTION DIVERSITY	Norway	20050800	
9	GROUPWISE SUCCESSIVE INTERFERENCE CANCELLATION FOR BLOCK TRANSMISSION WITH RECEPTION DIVERSITY	Patent Cooperation Treaty	PCT/US03/22652	
9	GROUPWISE SUCCESSIVE INTERFERENCE CANCELLATION FOR BLOCK TRANSMISSION WITH RECEPTION DIVERSITY	Taiwan	92119759	239723
9	GROUPWISE SUCCESSIVE INTERFERENCE CANCELLATION FOR BLOCK TRANSMISSION WITH RECEPTION DIVERSITY	Taiwan	093105767	I330952
9	GROUPWISE SUCCESSIVE INTERFERENCE CANCELLATION FOR BLOCK TRANSMISSION WITH RECEPTION DIVERSITY	Taiwan	095126443	I335735
9	GROUPWISE SUCCESSIVE INTERFERENCE CANCELLATION FOR BLOCK TRANSMISSION WITH RECEPTION DIVERSITY	Taiwan	098132175	
9	GROUPWISE SUCCESSIVE INTERFERENCE CANCELLATION FOR BLOCK TRANSMISSION WITH RECEPTION DIVERSITY IN MULTIUSER WIDEBAND CDMA SYSTEMS	Taiwan	102113364	
9	GROUPWISE SUCCESSIVE INTERFERENCE CANCELLATION FOR BLOCK TRANSMISSION WITH RECEPTION DIVERSITY IN MULTIUSER WIDEBAND CDMA SYSTEMS	United States of America	60/397,361	

9	GROUPWISE SUCCESSIVE INTERFERENCE CANCELLATION FOR BLOCK TRANSMISSION WITH RECEPTION DIVERSITY	United States of America	10/622,306	7,266,168
9	GROUPWISE SUCCESSIVE INTERFERENCE CANCELLATION FOR BLOCK TRANSMISSION WITH RECEPTION DIVERSITY	United States of America	11/897,456	7,463,694
9	GROUPWISE SUCCESSIVE INTERFERENCE CANCELLATION FOR BLOCK TRANSMISSION WITH RECEPTION DIVERSITY	United States of America	12/329,985	8,284,854
9	GROUPWISE SUCCESSIVE INTERFERENCE CANCELLATION FOR BLOCK TRANSMISSION WITH RECEPTION DIVERSITY	United States of America	13/535,908	8,553,820