

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT4899361

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
RENESAS ELECTRONICS CORPORATION	10/25/2013
RENESAS MOBILE CORPORATION	10/25/2013
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	BROADCOM INTERNATIONAL LIMITED
<b>Street Address:</b>	122 MARY STREET
<b>Internal Address:</b>	4TH FLOOR
<b>City:</b>	GRAND CAYMAN
<b>State/Country:</b>	CAYMAN ISLANDS
<b>Postal Code:</b>	1107
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	14891888
<b>CORRESPONDENCE DATA</b>	
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<b>ATTORNEY DOCKET NUMBER:</b>	106861-1221
<b>NAME OF SUBMITTER:</b>	GWEN M. BENOY
<b>SIGNATURE:</b>	/Gwen M. Benoy/
<b>DATE SIGNED:</b>	04/04/2018
<b>Total Attachments: 52</b>	
source=Renesas to Broadcom Limited Assignment#page1.tif	
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AMENDED AND RESTATED PATENT ASSIGNMENT

THIS AMENDED AND PATENT ASSIGNMENT ("Patent Assignment") is made and entered into as of October 25, 2013 (the "Effective Date"), by and between RENESAS ELECTRONICS CORPORATION, a Japanese corporation ("REL"), and RENESAS MOBILE CORPORATION, a Japanese corporation and a wholly owned subsidiary of REL ("RMC" and, collectively with REL, "Assignors" and each individually, an "Assignor") and BROADCOM INTERNATIONAL LIMITED, a limited company incorporated in the Cayman Islands ("Assignee").

WHEREAS, Assignors and Assignee have entered into an Amended and Restated Intellectual Property Assignment, dated as of the date hereof, pursuant to which Assignors have agreed to assign to Assignee the Patents (as defined below).

NOW, THEREFORE, in consideration of the premises and the mutual representations, warranties, covenants and agreements set forth in this Patent Assignment and in the Amended and Restated Intellectual Property Assignment, the parties agree as follows:

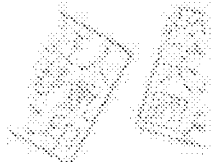
1. Patents.

"Patents" means the patents and patent applications listed on Attachment A-1 hereto, and any continuations, divisionals, continuations-in-part, provisionals and other applications that claim priority from any of such patents and patent applications and any patents issuing on any of the foregoing, and any reissues, reexaminations, substitutions, renewals and extensions of any of the foregoing.

2. Assignment.

Each Assignor hereby assigns, transfers and conveys to Assignee all of its rights, title and interest in and to the Patents, and all rights, claims and privileges pertaining to the Patents, including, without limitation, rights to the underlying inventions, the right to prosecute and maintain the Patents, and the right to sue and recover damages for past, present and future infringement of any of the Patents.

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IN WITNESS WHEREOF, Assignors and Assignee have caused this Patent Assignment to be signed and executed by the undersigned officers thereunto duly authorized as of the Effective Date.

RENESAS ELECTRONICS CORPORATION

By: Hisao Sakuta

Name: Hisao Sakuta

Title: Chairman & CEO

RENESAS MOBILE CORPORATION

By: Hideaki Chaki

Name: HIDEAKI CHAKI

Title: President & CEO

BROADCOM INTERNATIONAL LIMITED

By: Eric Brandt

Name: ERIC BRANDT

Title: Director

**ACKNOWLEDGMENT**

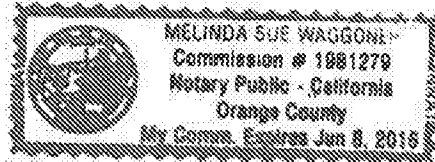
State of California  
County of Orange

On October 17, 2013 before me, Melinda Sue Waggoner, Notary Public  
(insert name and title of the officer)

personally appeared Eric Brandt  
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are  
subscribed to the within instrument and acknowledged to me that he/she/they executed the same in  
his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the  
person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing  
paragraph is true and correct.

WITNESS my hand and official seal.



Signature *[Handwritten Signature]* (Seal)

[Insert Notary Public acknowledgement]





























Patent No.	Country	Class	Pub No.	Pub Date	Pub Title	App No.	App Date	App Title	App Status	App Date	App Title	App Status
868115183	US01	PCDA	US2011029682.2	9 Aug 2011	GB11119682.2	US2011029682.2	9 Feb 2013	Reporting Joint PDCCH-EPDCCH and PDCCH out-of-synchronization detection and reporting	Granted	9 Feb 2013	Reporting Joint PDCCH-EPDCCH and PDCCH out-of-synchronization detection and reporting	Granted
868115183	US01	PCDA	US2011029682.2	9 Aug 2011	GB11119682.2	US2011029682.2	7 Feb 2013	Reporting Joint PDCCH-EPDCCH and PDCCH out-of-synchronization detection and reporting	Granted	7 Feb 2013	Reporting Joint PDCCH-EPDCCH and PDCCH out-of-synchronization detection and reporting	Granted
868115184	Family	PCDA	US2011029682.2	15 Jul 2011	US2011029682.2	US2011029682.2	13 Feb 2013	Enhanced Connectivity Setup for Advanced Dynamic Wireless Mesh Networks	Granted	13 Feb 2013	Enhanced Connectivity Setup for Advanced Dynamic Wireless Mesh Networks	Granted
868115184	US01	PCDA	US2011029682.2	15 Jul 2011	US2011029682.2	US2011029682.2	17 Jan 2013	Enhanced Connectivity Setup for Advanced Dynamic Wireless Mesh Networks	Granted	17 Jan 2013	Enhanced Connectivity Setup for Advanced Dynamic Wireless Mesh Networks	Granted
868115184	Family	PCDA	US2011029682.2	2 Sep 2011	US2011029682.2	US2011029682.2	13 Mar 2013	Spaced Beamforming for enhanced PDCCH search spaces	Granted	13 Mar 2013	Spaced Beamforming for enhanced PDCCH search spaces	Granted
868115184	US01	PCDA	US2011029682.2	2 Sep 2011	US2011029682.2	US2011029682.2	7 Mar 2013	Spaced Beamforming for enhanced PDCCH search spaces	Granted	7 Mar 2013	Spaced Beamforming for enhanced PDCCH search spaces	Granted
868115184	US01	PCDA	US2011029682.2	2 Sep 2011	US2011029682.2	US2011029682.2	7 Mar 2013	Spaced Beamforming for enhanced PDCCH search spaces	Granted	7 Mar 2013	Spaced Beamforming for enhanced PDCCH search spaces	Granted
868115184	Family	PCDA	US2011029682.2	30 Aug 2011	US2011029682.2	US2011029682.2	8 Mar 2013	On-Off resource allocation for device-to-device discovery in LTE TDD system	Granted	8 Mar 2013	On-Off resource allocation for device-to-device discovery in LTE TDD system	Granted
868115184	US01	PCDA	US2011029682.2	30 Aug 2011	US2011029682.2	US2011029682.2	8 Mar 2013	On-Off resource allocation for device-to-device discovery in LTE TDD system	Granted	8 Mar 2013	On-Off resource allocation for device-to-device discovery in LTE TDD system	Granted
868115184	US01	PCDA	US2011029682.2	30 Aug 2011	US2011029682.2	US2011029682.2	29 Feb 2013	On-Off resource allocation for device-to-device discovery in LTE TDD system	Granted	29 Feb 2013	On-Off resource allocation for device-to-device discovery in LTE TDD system	Granted
868115184	US01	PCDA	US2011029682.2	30 Aug 2011	US2011029682.2	US2011029682.2	7 Mar 2013	On-Off resource allocation for device-to-device discovery in LTE TDD system	Granted	7 Mar 2013	On-Off resource allocation for device-to-device discovery in LTE TDD system	Granted
868115187	Family	PCDA	US2011029682.2	28 Jul 2011	US2011029682.2	US2011029682.2	31 Jun 2013	A method of quality frequency switch between cellular based and internet based mobile systems	Granted	31 Jun 2013	A method of quality frequency switch between cellular based and internet based mobile systems	Granted
868115187	US01	PCDA	US2011029682.2	28 Jul 2011	US2011029682.2	US2011029682.2	31 Jun 2013	A method of quality frequency switch between cellular based and internet based mobile systems	Granted	31 Jun 2013	A method of quality frequency switch between cellular based and internet based mobile systems	Granted
868115188	Family	PCDA	US2011029682.2	8 Sep 2011	US2011029682.2	US2011029682.2	14 Mar 2013	Method for Video Splice	Granted	14 Mar 2013	Method for Video Splice	Granted
868115188	US01	PCDA	US2011029682.2	8 Sep 2011	US2011029682.2	US2011029682.2	14 Mar 2013	Method for Video Splice	Granted	14 Mar 2013	Method for Video Splice	Granted
868115188	US01	PCDA	US2011029682.2	8 Sep 2011	US2011029682.2	US2011029682.2	13 Sep 2012	Method for Video Splice	Granted	13 Sep 2012	Method for Video Splice	Granted
868115188	US01	PCDA	US2011029682.2	28 Jul 2011	US2011029682.2	US2011029682.2	31 Jun 2013	Method for Video Splice	Granted	31 Jun 2013	Method for Video Splice	Granted
868115188	US01	PCDA	US2011029682.2	28 Jul 2011	US2011029682.2	US2011029682.2	31 Jun 2013	Method for Video Splice	Granted	31 Jun 2013	Method for Video Splice	Granted
868115188	US01	PCDA	US2011029682.2	7 Oct 2011	US2011029682.2	US2011029682.2	10 Apr 2013	Method for Video Splice	Granted	10 Apr 2013	Method for Video Splice	Granted
868115188	US01	PCDA	US2011029682.2	7 Oct 2011	US2011029682.2	US2011029682.2	11 Apr 2013	Method for Video Splice	Granted	11 Apr 2013	Method for Video Splice	Granted
868115188	Family	PCDA	US2011029682.2	24 Aug 2011	US2011029682.2	US2011029682.2	22 Feb 2013	Method for Video Splice	Granted	22 Feb 2013	Method for Video Splice	Granted
868115188	US01	PCDA	US2011029682.2	24 Aug 2011	US2011029682.2	US2011029682.2	22 Feb 2013	Method for Video Splice	Granted	22 Feb 2013	Method for Video Splice	Granted
868115188	US01	PCDA	US2011029682.2	24 Aug 2011	US2011029682.2	US2011029682.2	28 Feb 2013	Method for Video Splice	Granted	28 Feb 2013	Method for Video Splice	Granted
868115188	US01	PCDA	US2011029682.2	13 Mar 2012	US2011029682.2	US2011029682.2	28 Feb 2013	Method for Video Splice	Granted	28 Feb 2013	Method for Video Splice	Granted
868115188	Family	PCDA	US2011029682.2	8 Aug 2011	US2011029682.2	US2011029682.2	14 Feb 2013	Method for Video Splice	Granted	14 Feb 2013	Method for Video Splice	Granted
868115188	US01	PCDA	US2011029682.2	8 Aug 2011	US2011029682.2	US2011029682.2	14 Feb 2013	Method for Video Splice	Granted	14 Feb 2013	Method for Video Splice	Granted
868115188	Family	PCDA	US2011029682.2	14 Nov 2011	US2011029682.2	US2011029682.2	23 May 2013	Method for Video Splice	Granted	23 May 2013	Method for Video Splice	Granted
868115188	US01	PCDA	US2011029682.2	14 Nov 2011	US2011029682.2	US2011029682.2	23 May 2013	Method for Video Splice	Granted	23 May 2013	Method for Video Splice	Granted
868115188	US01	PCDA	US2011029682.2	1 Aug 2011	US2011029682.2	US2011029682.2	7 Feb 2013	Method for Video Splice	Granted	7 Feb 2013	Method for Video Splice	Granted
868115188	US01	PCDA	US2011029682.2	1 Aug 2011	US2011029682.2	US2011029682.2	7 Feb 2013	Method for Video Splice	Granted	7 Feb 2013	Method for Video Splice	Granted
868115188	US01	PCDA	US2011029682.2	24 Aug 2011	US2011029682.2	US2011029682.2	28 Feb 2013	Method for Video Splice	Granted	28 Feb 2013	Method for Video Splice	Granted
868115188	US01	PCDA	US2011029682.2	15 Aug 2011	US2011029682.2	US2011029682.2	8 Mar 2013	Method for Video Splice	Granted	8 Mar 2013	Method for Video Splice	Granted
868115188	US01	PCDA	US2011029682.2	15 Aug 2011	US2011029682.2	US2011029682.2	8 Mar 2013	Method for Video Splice	Granted	8 Mar 2013	Method for Video Splice	Granted
868115188	US01	PCDA	US2011029682.2	15 Aug 2011	US2011029682.2	US2011029682.2	21 Feb 2013	Method for Video Splice	Granted	21 Feb 2013	Method for Video Splice	Granted
868115188	US01	PCDA	US2011029682.2	18 Aug 2011	US2011029682.2	US2011029682.2	21 Feb 2013	Method for Video Splice	Granted	21 Feb 2013	Method for Video Splice	Granted
868115188	US01	PCDA	US2011029682.2	2 Nov 2011	US2011029682.2	US2011029682.2	8 Mar 2013	Method for Video Splice	Granted	8 Mar 2013	Method for Video Splice	Granted
868115188	US01	PCDA	US2011029682.2	2 Nov 2011	US2011029682.2	US2011029682.2	8 Mar 2013	Method for Video Splice	Granted	8 Mar 2013	Method for Video Splice	Granted
868115188	US01	PCDA	US2011029682.2	3 Nov 2011	US2011029682.2	US2011029682.2	3 Mar 2013	Method for Video Splice	Granted	3 Mar 2013	Method for Video Splice	Granted
868115188	Family	PCDA	US2011029682.2	14 Nov 2011	US2011029682.2	US2011029682.2	3 Mar 2013	Method for Video Splice	Granted	3 Mar 2013	Method for Video Splice	Granted



















































Case No.	Country	Class	Filing date	Expiry date	Publication number	Publication date	Priority	Priority date	Grant date	Provisional No.
804 128 958	WO/01	F,Med	29 Jul 2012		PC/T/CN/2012/079608					Enhanced vehicle CVR access method in cellular network for vehicle communications
804 128 959	Family	F,Med	31 May 2012							CS3 reporting and eRRB scheduling in support of vehicle power receivers
804 128 960	Family	F,Med	31 May 2012							CS3 reporting and eRRB scheduling in support of vehicle power receivers
804 128 961	WO/01	F,Med	28 May 2012		PC/T/EP/2012/064438					CS3 reporting and eRRB scheduling in support of vehicle power receivers
804 128 962	Family	F,Med	13 Jul 2012							Small cell discovery and measurement using PDSCH and CSI-RS
804 128 963	Family	F,Med	13 Jul 2012							Small cell discovery and measurement using PDSCH and CSI-RS
804 128 964	WO/01	POA	13 Jul 2012		PC/T/CA/2012/067169					Suboptimal synchronization reference sequences design for Local Area Communications
804 128 972	Family	F,Med	18 Dec 2012							Suboptimal synchronization reference sequences design for Local Area Communications
804 128 973	WO/01	F,Med	18 Dec 2012		PC/T/EP/2012/067170_4					Suboptimal synchronization reference sequences design for Local Area Communications
804 128 974	Family	F,Med	12 Oct 2012							SCN-based RIS configurations for New Carrier Type
804 128 975	WO/01	POA	15 Oct 2012		PC/T/CA/2012/067169_0					SCN-based RIS configurations for New Carrier Type
804 128 976	Family	F,Med	16 Oct 2012							SCN-based RIS configurations for New Carrier Type
804 128 977	WO/01	F,Med	16 Oct 2012		PC/T/CA/2012/067169_0					SCN-based RIS configurations for New Carrier Type
804 128 978	Family	F,Med	16 Oct 2012							SCN-based RIS configurations for New Carrier Type
804 128 979	WO/01	F,Med	6 Oct 2012							Special Subframe configuration for Low-Cost Machine Type Communications
804 128 977	WO/01	POA	6 Oct 2012		PC/T/EP/2012/069380					Special Subframe configuration for Low-Cost Machine Type Communications
804 128 978	Family	F,Med	26 Jun 2012							Necessary signaling and procedures for UE initialization centralized in H-UE
804 128 979	WO/01	F,Med	26 Jun 2012		PC/T/EP/2012/077772					Necessary signaling and procedures for UE initialization centralized in H-UE
804 128 980	Family	F,Med	11 Oct 2012							Necessary signaling and procedures for UE initialization centralized in H-UE
804 128 981	WO/01	F,Med	11 Oct 2012		PC/T/EP/2012/064260					Necessary signaling and procedures for UE initialization centralized in H-UE
804 128 982	Family	F,Med	18 Oct 2012							Necessary signaling and procedures for UE initialization centralized in H-UE
804 128 983	WO/01	POA	18 Oct 2012		PC/T/EP/2012/064260					Necessary signaling and procedures for UE initialization centralized in H-UE
804 128 984	Family	F,Med	13 Sep 2012							Necessary signaling and procedures for UE initialization centralized in H-UE
804 128 985	WO/01	F,Med	13 Sep 2012		PC/T/EP/2012/064260					Necessary signaling and procedures for UE initialization centralized in H-UE
804 128 986	Family	F,Med	9 Sep 2012							Necessary signaling and procedures for UE initialization centralized in H-UE
804 128 987	WO/01	POA	14 Jun 2012		PC/T/EP/2012/064260					Necessary signaling and procedures for UE initialization centralized in H-UE
804 128 988	Family	F,Med	14 Jun 2012							Necessary signaling and procedures for UE initialization centralized in H-UE
804 128 989	WO/01	F,Med	18 Oct 2012							Necessary signaling and procedures for UE initialization centralized in H-UE
804 128 990	Family	F,Med	18 Oct 2012							Necessary signaling and procedures for UE initialization centralized in H-UE
804 128 991	WO/01	F,Med	4 Sep 2012		PC/T/EP/2012/064260					Necessary signaling and procedures for UE initialization centralized in H-UE
804 128 992	Family	F,Med	4 Sep 2012							Necessary signaling and procedures for UE initialization centralized in H-UE
804 128 993	WO/01	F,Med	28 Sep 2012		PC/T/EP/2012/064260					Necessary signaling and procedures for UE initialization centralized in H-UE
804 128 994	Family	F,Med	28 Sep 2012							Necessary signaling and procedures for UE initialization centralized in H-UE
804 128 995	WO/01	F,Med	28 Sep 2012		PC/T/EP/2012/064260					Necessary signaling and procedures for UE initialization centralized in H-UE
804 128 996	Family	F,Med	30 Aug 2012							Necessary signaling and procedures for UE initialization centralized in H-UE
804 128 997	WO/01	F,Med	30 Aug 2012		PC/T/EP/2012/064260					Necessary signaling and procedures for UE initialization centralized in H-UE
804 128 998	Family	F,Med	3 Aug 2012							Necessary signaling and procedures for UE initialization centralized in H-UE
804 128 999	WO/01	F,Med	3 Aug 2012		PC/T/EP/2012/079640					Necessary signaling and procedures for UE initialization centralized in H-UE
804 129 000	Family	F,Med	16 Jul 2012							Necessary signaling and procedures for UE initialization centralized in H-UE
804 129 001	WO/01	F,Med	16 Jul 2012		PC/T/EP/2012/064260					Necessary signaling and procedures for UE initialization centralized in H-UE
804 129 002	Family	F,Med	16 Jul 2012							Necessary signaling and procedures for UE initialization centralized in H-UE
804 129 003	WO/01	F,Med	16 Jul 2012		PC/T/EP/2012/064260					Necessary signaling and procedures for UE initialization centralized in H-UE
804 129 004	Family	F,Med	15 Jul 2012							Necessary signaling and procedures for UE initialization centralized in H-UE
804 129 005	WO/01	F,Med	15 Jul 2012		PC/T/EP/2012/064260					Necessary signaling and procedures for UE initialization centralized in H-UE
804 129 006	Family	F,Med	15 Jul 2012							Necessary signaling and procedures for UE initialization centralized in H-UE
804 129 007	WO/01	F,Med	15 Jul 2012		PC/T/EP/2012/064260					Necessary signaling and procedures for UE initialization centralized in H-UE
804 129 008	Family	F,Med	13 Oct 2012							Necessary signaling and procedures for UE initialization centralized in H-UE
804 129 009	WO/01	F,Med	13 Oct 2012		PC/T/EP/2012/064260					Necessary signaling and procedures for UE initialization centralized in H-UE
804 129 010	Family	F,Med	28 Sep 2012							Necessary signaling and procedures for UE initialization centralized in H-UE
804 129 011	WO/01	F,Med	28 Sep 2012		PC/T/EP/2012/064260					Necessary signaling and procedures for UE initialization centralized in H-UE
804 129 012	Family	F,Med	28 Sep 2012							Necessary signaling and procedures for UE initialization centralized in H-UE
804 129 013	WO/01	F,Med	28 Sep 2012		PC/T/EP/2012/064260					Necessary signaling and procedures for UE initialization centralized in H-UE
804 129 014	Family	F,Med	28 Sep 2012							Necessary signaling and procedures for UE initialization centralized in H-UE
804 129 015	WO/01	F,Med	28 Sep 2012		PC/T/EP/2012/064260					Necessary signaling and procedures for UE initialization centralized in H-UE
804 129 016	Family	F,Med	30 Aug 2012							Necessary signaling and procedures for UE initialization centralized in H-UE
804 129 017	WO/01	F,Med	3 Aug 2012		PC/T/EP/2012/064260					Necessary signaling and procedures for UE initialization centralized in H-UE
804 129 018	Family	F,Med	3 Aug 2012							Necessary signaling and procedures for UE initialization centralized in H-UE
804 129 019	WO/01	F,Med	3 Aug 2012		PC/T/EP/2012/079640					Necessary signaling and procedures for UE initialization centralized in H-UE
804 129 020	Family	F,Med	16 Jul 2012							Necessary signaling and procedures for UE initialization centralized in H-UE
804 129 021	WO/01	F,Med	16 Jul 2012		PC/T/EP/2012/064260					Necessary signaling and procedures for UE initialization centralized in H-UE
804 129 022	Family	F,Med	16 Jul 2012							Necessary signaling and procedures for UE initialization centralized in H-UE
804 129 023	WO/01	F,Med	16 Jul 2012		PC/T/EP/2012/064260					Necessary signaling and procedures for UE initialization centralized in H-UE
804 129 024	Family	F,Med	15 Jul 2012							Necessary signaling and procedures for UE initialization centralized in H-UE
804 129 025	WO/01	F,Med	15 Jul 2012		PC/T/EP/2012/064260					Necessary signaling and procedures for UE initialization centralized in H-UE
804 129 026	Family	F,Med	15 Jul 2012							Necessary signaling and procedures for UE initialization centralized in H-UE
804 129 027	WO/01	F,Med	15 Jul 2012		PC/T/EP/2012/064260					Necessary signaling and procedures for UE initialization centralized in H-UE
804 129 028	Family	F,Med	7 Mar 2012							Necessary signaling and procedures for UE initialization centralized in H-UE
804 129 029	WO/01	F,Med	7 Mar 2012		PC/T/EP/2012/064260					Necessary signaling and procedures for UE initialization centralized in H-UE
804 129 030	Family	F,Med	29 Jun 2012							Necessary signaling and procedures for UE initialization centralized in H-UE
804 129 031	WO/01	F,Med	29 Jun 2012		PC/T/EP/2012/064260					Necessary signaling and procedures for UE initialization centralized in H-UE
804 129 032	Family	F,Med	29 Jun 2012							Necessary signaling and procedures for UE initialization centralized in H-UE
804 129 033	WO/01	F,Med	29 Jun 2012		PC/T/EP/2012/064260					Necessary signaling and procedures for UE initialization centralized in H-UE
804 129 034	Family	F,Med	28 Jun 2012							Necessary signaling and procedures for UE initialization centralized in H-UE
804 129 035	WO/01	F,Med	28 Jun 2012		PC/T/EP/2012/064260					Necessary signaling and procedures for UE initialization centralized in H-UE







Case No.	Category	Status	Filing Date	Expiry Date	Application Number	Publication Number	Priority Number	Grant Date	Project No.	Summary
8681262986	Family	Filed	13 Dec 2012	13 Dec 2012						Signaling to convey scrambling code information in support of interference
8681262986	G06F1	Filed	13 Dec 2012	13 Dec 2012	G081222616.8					Signaling to convey scrambling code information in support of interference
8681262987	Family	Filed	23 Oct 2012	23 Oct 2012						Method and apparatus for configuring measurement gaps
8681262987	G06F1	Filed	23 Oct 2012	23 Oct 2012	G081222617.3					Method and apparatus for configuring measurement gaps
8681262988	Family	Filed	23 Oct 2012	23 Oct 2012						RLF and MCF handling for dual connection
8681262988	G06F1	Filed	23 Oct 2012	23 Oct 2012	G081222618.5					RLF and MCF handling for dual connection
8681262989	Family	Filed	8 Dec 2012	8 Dec 2012						A base band antenna cancellation scheme to suppress self-interference for full duplex wireless network design
8681262989	G06F1	Filed	8 Dec 2012	8 Dec 2012	PCT/CA2012/00864.0					A base band antenna cancellation scheme to suppress self-interference for full duplex wireless network design
8681262990	Family	Filed	13 Dec 2012	13 Dec 2012						Dynamic coordination of L3 offer coefficient to enter to uplink response to R800 announcement
8681262990	G06F1	Filed	13 Dec 2012	13 Dec 2012	G081222619.7					Dynamic coordination of L3 offer coefficient to enter to uplink response to R800 announcement
8681262991	Family	Filed	21 Nov 2012	21 Nov 2012						Method and apparatus for configuring measurement gaps
8681262991	G06F1	Filed	21 Nov 2012	21 Nov 2012	G081222620.4					Method and apparatus for configuring measurement gaps
8681262992	Family	Filed	7 Feb 2013	7 Feb 2013						Method and apparatus for configuring measurement gaps
8681262992	G06F1	Filed	7 Feb 2013	7 Feb 2013	PCT/CA2013/00715.18					Method and apparatus for configuring measurement gaps
8681262993	Family	Filed	28 Dec 2012	28 Dec 2012						Method and apparatus for configuring measurement gaps
8681262993	G06F1	Filed	28 Dec 2012	28 Dec 2012	PCT/CA2012/00872.28					Method and apparatus for configuring measurement gaps
8681262994	Family	Filed	18 Dec 2012	18 Dec 2012						Parameterizations of low density parity check matrices by using interleavers
8681262994	G06F1	Filed	18 Dec 2012	18 Dec 2012	G081222620.2					Parameterizations of low density parity check matrices by using interleavers
8681262995	Family	Filed	2 Apr 2013	2 Apr 2013						Method and apparatus for configuring measurement gaps
8681262995	G06F1	Filed	2 Apr 2013	2 Apr 2013	G081222620.3					Method and apparatus for configuring measurement gaps
8681262996	Family	Filed	22 Jun 2013	22 Jun 2013						Method and apparatus for configuring measurement gaps
8681262996	G06F1	Filed	22 Jun 2013	22 Jun 2013	PCT/CA2013/00709.98					Method and apparatus for configuring measurement gaps
8681262997	Family	Filed	17 Jun 2013	17 Jun 2013						Method and apparatus for configuring measurement gaps
8681262997	G06F1	Filed	17 Jun 2013	17 Jun 2013	G081222620.4					Method and apparatus for configuring measurement gaps
8681263000	Family	Filed	4 Dec 2012	4 Dec 2012						Method and apparatus for configuring measurement gaps
8681263000	G06F1	Filed	4 Dec 2012	4 Dec 2012	G081222621.4					Method and apparatus for configuring measurement gaps
8681263001	Family	Filed	2 Nov 2012	2 Nov 2012						Method and apparatus for configuring measurement gaps
8681263001	G06F1	Filed	2 Nov 2012	2 Nov 2012	G081222621.8					Method and apparatus for configuring measurement gaps
8681263002	Family	Filed	28 Oct 2012	28 Oct 2012						Method and apparatus for configuring measurement gaps
8681263002	G06F1	Filed	28 Oct 2012	28 Oct 2012	G081222621.9					Method and apparatus for configuring measurement gaps
8681263003	Family	Filed	21 Dec 2012	21 Dec 2012						Method and apparatus for configuring measurement gaps
8681263003	G06F1	Filed	21 Dec 2012	21 Dec 2012	G081222622.0					Method and apparatus for configuring measurement gaps
8681263004	Family	Filed	21 Dec 2012	21 Dec 2012						Method and apparatus for configuring measurement gaps
8681263004	G06F1	Filed	21 Dec 2012	21 Dec 2012	G081222622.1					Method and apparatus for configuring measurement gaps
8681263005	Family	Filed	18 Jun 2013	18 Jun 2013						Method and apparatus for configuring measurement gaps
8681263005	G06F1	Filed	18 Jun 2013	18 Jun 2013	G081222622.2					Method and apparatus for configuring measurement gaps
8681263006	Family	Filed	14 Dec 2012	14 Dec 2012						Method and apparatus for configuring measurement gaps
8681263006	G06F1	Filed	14 Dec 2012	14 Dec 2012	G081222622.3					Method and apparatus for configuring measurement gaps
8681263007	Family	Filed	7 Feb 2013	7 Feb 2013						Method and apparatus for configuring measurement gaps
8681263007	G06F1	Filed	7 Feb 2013	7 Feb 2013	G081222622.4					Method and apparatus for configuring measurement gaps
8681263008	Family	Filed	18 Jun 2013	18 Jun 2013						Method and apparatus for configuring measurement gaps
8681263008	G06F1	Filed	18 Jun 2013	18 Jun 2013	G081222622.5					Method and apparatus for configuring measurement gaps
8681263009	Family	Filed	10 Dec 2012	10 Dec 2012						Method and apparatus for configuring measurement gaps
8681263009	G06F1	Filed	10 Dec 2012	10 Dec 2012	G081222622.6					Method and apparatus for configuring measurement gaps
8681263010	Family	Filed	14 Dec 2012	14 Dec 2012						Method and apparatus for configuring measurement gaps
8681263010	G06F1	Filed	14 Dec 2012	14 Dec 2012	G081222622.7					Method and apparatus for configuring measurement gaps
8681263011	Family	Filed	3 Apr 2013	3 Apr 2013						Method and apparatus for configuring measurement gaps
8681263011	G06F1	Filed	3 Apr 2013	3 Apr 2013	G081222622.8					Method and apparatus for configuring measurement gaps
8681263012	Family	Filed	9 Apr 2013	9 Apr 2013						Method and apparatus for configuring measurement gaps
8681263012	G06F1	Filed	9 Apr 2013	9 Apr 2013	G081222622.9					Method and apparatus for configuring measurement gaps
8681263013	Family	Filed	28 May 2013	28 May 2013						Method and apparatus for configuring measurement gaps
8681263013	G06F1	Filed	28 May 2013	28 May 2013	G081222623.0					Method and apparatus for configuring measurement gaps
8681263014	Family	Filed	28 May 2013	28 May 2013						Method and apparatus for configuring measurement gaps
8681263014	G06F1	Filed	28 May 2013	28 May 2013	G081222623.1					Method and apparatus for configuring measurement gaps
8681263015	Family	Filed	28 May 2013	28 May 2013						Method and apparatus for configuring measurement gaps
8681263015	G06F1	Filed	28 May 2013	28 May 2013	G081222623.2					Method and apparatus for configuring measurement gaps
8681263016	Family	Filed	28 May 2013	28 May 2013						Method and apparatus for configuring measurement gaps
8681263016	G06F1	Filed	28 May 2013	28 May 2013	G081222623.3					Method and apparatus for configuring measurement gaps
8681263017	Family	Filed	28 May 2013	28 May 2013						Method and apparatus for configuring measurement gaps
8681263017	G06F1	Filed	28 May 2013	28 May 2013	G081222623.4					Method and apparatus for configuring measurement gaps
8681263018	Family	Filed	28 May 2013	28 May 2013						Method and apparatus for configuring measurement gaps
8681263018	G06F1	Filed	28 May 2013	28 May 2013	G081222623.5					Method and apparatus for configuring measurement gaps
8681263019	Family	Filed	28 May 2013	28 May 2013						Method and apparatus for configuring measurement gaps
8681263019	G06F1	Filed	28 May 2013	28 May 2013	G081222623.6					Method and apparatus for configuring measurement gaps
8681263020	Family	Filed	28 May 2013	28 May 2013						Method and apparatus for configuring measurement gaps
8681263020	G06F1	Filed	28 May 2013	28 May 2013	G081222623.7					Method and apparatus for configuring measurement gaps
8681263021	Family	Filed	28 May 2013	28 May 2013						Method and apparatus for configuring measurement gaps
8681263021	G06F1	Filed	28 May 2013	28 May 2013	G081222623.8					Method and apparatus for configuring measurement gaps
8681263022	Family	Filed	28 May 2013	28 May 2013						Method and apparatus for configuring measurement gaps
8681263022	G06F1	Filed	28 May 2013	28 May 2013	G081222623.9					Method and apparatus for configuring measurement gaps
8681263023	Family	Filed	28 May 2013	28 May 2013						Method and apparatus for configuring measurement gaps
8681263023	G06F1	Filed	28 May 2013	28 May 2013	G081222624.0					Method and apparatus for configuring measurement gaps
8681263024	Family	Filed	28 May 2013	28 May 2013						Method and apparatus for configuring measurement gaps
8681263024	G06F1	Filed	28 May 2013	28 May 2013	G081222624.1					Method and apparatus for configuring measurement gaps
8681263025	Family	Filed	28 May 2013	28 May 2013						Method and apparatus for configuring measurement gaps
8681263025	G06F1	Filed	28 May 2013	28 May 2013	G081222624.2					Method and apparatus for configuring measurement gaps
8681263026	Family	Filed	28 May 2013	28 May 2013						Method and apparatus for configuring measurement gaps
8681263026	G06F1	Filed	28 May 2013	28 May 2013	G081222624.3					Method and apparatus for configuring measurement gaps
8681263027	Family	Filed	28 May 2013	28 May 2013						Method and apparatus for configuring measurement gaps
8681263027	G06F1	Filed	28 May 2013	28 May 2013	G081222624.4					Method and apparatus for configuring measurement gaps
8681263028	Family	Filed	28 May 2013	28 May 2013						Method and apparatus for configuring measurement gaps
8681263028	G06F1	Filed	28 May 2013	28 May 2013	G081222624.5					Method and apparatus for configuring measurement gaps
8681263029	Family	Filed	28 May 2013	28 May 2013						Method and apparatus for configuring measurement gaps
8681263029	G06F1	Filed	28 May 2013	28 May 2013	G081222624.6					Method and apparatus for configuring measurement gaps
8681263030	Family	Filed	28 May 2013	28 May 2013						Method and apparatus for configuring measurement gaps
8681263030	G06F1	Filed	28 May 2013	28 May 2013	G081222624.7					Method and apparatus for configuring measurement gaps
8681263031	Family	Filed	28 May 2013	28 May 2013						Method and apparatus for configuring measurement gaps
8681263031	G06F1	Filed	28 May 2013	28 May 2013	G081222624.8					Method and apparatus for configuring measurement gaps
8681263032	Family	Filed	28 May 2013	28 May 2013						Method and apparatus for configuring measurement gaps
8681263032	G06F1	Filed	28 May 2013	28 May 2013	G081222624.9					Method and apparatus for configuring measurement gaps
8681263033	Family	Filed	28 May 2013	28 May 2013						Method and apparatus for configuring measurement gaps
8681263033	G06F1	Filed	28 May 2013	28 May 2013	G081222625.0					Method and apparatus for configuring measurement gaps













Case No.	Country	Class.	Pub. No.	Pub. Date	Expiry Date	Publication Number	Publication Date	Grant Date	Priority Date
868135114	Family	F:06d	10 May 2013	10 May 2013					Continuation of Patent 868135114
868135114	Family	F:06d	10 May 2013	10 May 2013					Continuation of Patent 868135114
868135114	Family	F:06d	28 May 2013	28 May 2013					Method and apparatus for indicating network capability
868135115	Family	F:06d	28 May 2013	28 May 2013					Method and apparatus for indicating network capability
868135118	Family	F:06d	10 May 2013	10 May 2013					BTIC traffic volume and periodically transmitted indications
868135118	Family	F:06d	10 May 2013	10 May 2013					BTIC traffic volume and periodically transmitted indications
868135118	Family	F:06d	10 May 2013	10 May 2013					BTIC traffic volume and periodically transmitted indications
868135118	Family	F:06d	31 May 2013	31 May 2013					Chemical composition for US, non-transmission transmission in dual connectivity
868135118	Family	F:06d	31 May 2013	31 May 2013					Chemical composition for US, non-transmission transmission in dual connectivity
868135120	Family	F:06d	18 Jul 2013	18 Jul 2013					Observed configuration for US, non-transmission transmission in dual connectivity
868135120	Family	F:06d	18 Jul 2013	18 Jul 2013					A novel PHY method to change TDD configuration in 4G/LTE
868135120	Family	F:06d	15 Jul 2013	15 Jul 2013					A novel PHY method to change TDD configuration in 4G/LTE
868135121	Family	F:06d	5 Jul 2013	5 Jul 2013					Signaling for Flexible Uplink DM RS
868135121	Family	F:06d	5 Jul 2013	5 Jul 2013					Signaling for Flexible Uplink DM RS
868135124	Family	F:06d	10 May 2013	10 May 2013					Method and apparatus for an enhanced/provisional indication
868135124	Family	F:06d	10 May 2013	10 May 2013					Method and apparatus for an enhanced/provisional indication
868135127	Family	F:06d	30 May 2013	30 May 2013					Method of flexible TDD scheduling for SC-FDMA
868135127	Family	F:06d	30 May 2013	30 May 2013					Method of flexible TDD scheduling for SC-FDMA
868135128	Family	F:06d	17 May 2013	17 May 2013					Enabling CoMP for flexible TDD systems
868135128	Family	F:06d	17 May 2013	17 May 2013					Enabling CoMP for flexible TDD systems
868135128	Family	F:06d	31 May 2013	31 May 2013					LTE-A 4G/5G category indication
868135128	Family	F:06d	31 May 2013	31 May 2013					LTE-A 4G/5G category indication
868135128	Family	F:06d	21 May 2013	21 May 2013					Interference management in a multi system
868135128	Family	F:06d	21 May 2013	21 May 2013					Interference management in a multi system
868135130	Family	F:06d	14 Aug 2013	14 Aug 2013					Resource allocation in a multi system
868135130	Family	F:06d	14 Aug 2013	14 Aug 2013					Resource allocation in a multi system
868135132	Family	F:06d	11 Jul 2013	11 Jul 2013					Subchannel specific CSI report for flexible TDD systems
868135132	Family	F:06d	11 Jul 2013	11 Jul 2013					Subchannel specific CSI report for flexible TDD systems
868135133	Family	F:06d	3 Jun 2013	3 Jun 2013					Double subband measurement
868135133	Family	F:06d	3 Jun 2013	3 Jun 2013					Double subband measurement
868135135	US01	F:06d	9 Jun 2013	9 Jun 2013					Bi-directional channel bonding scheme to overcome limited full-duplex communication
868135137	Family	F:06d	12 Jul 2013	12 Jul 2013					Bi-directional channel bonding scheme to overcome limited full-duplex communication
868135137	Family	F:06d	12 Jul 2013	12 Jul 2013					Bi-directional channel bonding scheme to overcome limited full-duplex communication
868135144	Family	F:06d	3 Apr 2012	3 Apr 2012					868115342 Scaled-Persistent Scheduling with Opportunity for Discontinuous Reception
868135144	Family	F:06d	3 Apr 2012	3 Apr 2012					868115342 Scaled-Persistent Scheduling with Opportunity for Discontinuous Reception
868135144	Family	F:06d	9 Apr 2012	9 Apr 2012					868115342 Scaled-Persistent Scheduling with Opportunity for Discontinuous Reception
868135148	Family	F:06d	23 Feb 2012	23 Feb 2012					868115348 On Feedback Design in Discovery Process
868135148	Family	F:06d	23 Feb 2012	23 Feb 2012					868115348 On Feedback Design in Discovery Process
868135148	Family	F:06d	2 Jul 2013	2 Jul 2013					Method and apparatus of retransmission status indication
868135148	Family	F:06d	2 Jul 2013	2 Jul 2013					Method and apparatus of retransmission status indication
868135148	Family	F:06d	2 Jul 2013	2 Jul 2013					Method and apparatus of retransmission status indication
868135148	Family	F:06d	8 Aug 2013	8 Aug 2013					Efficient traffic steering for DLE/COMBINED UE
868135148	Family	F:06d	8 Aug 2013	8 Aug 2013					Efficient traffic steering for DLE/COMBINED UE
868135157	Family	F:06d	8 Aug 2013	8 Aug 2013					Efficient traffic steering for DLE/COMBINED UE
868135157	Family	F:06d	8 Aug 2013	8 Aug 2013					Efficient traffic steering for DLE/COMBINED UE

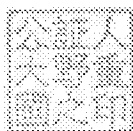


# NOTARIAL CERTIFICATE

This is to certify that Yukihiro Nakao an agent of Hisao Sakuta, Chairman & CEO of RENESAS ELECTRONICS CORPORATION, has stated in my presence that said Hisao Sakuta has acknowledged to have signed the attached document.

This is to certify that Yukihiro Nakao an agent of HIDEAKI CHAKI, President & CEO of RENESAS MOBILE CORPORATION, has stated in my presence that said HIDEAKI CHAKI has acknowledged to have signed the attached document.

Dated this 28th day of October, 2013.



A handwritten signature in black ink, appearing to read 'S. Ono'.

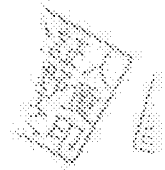
Shigekuni Ono

NOTARY

3-1, Marunouchi 3-chome,

Chiyoda-ku, Tokyo

Tokyo Legal Affairs Bureau



平成 25 年 登簿第 0293 号

添付書面における作成名義人ルネサスエレクトロニクス株式会社代表取締役作田久男及び同ルネサスマバイル株式会社代表取締役茶木英明の代理人中尾行宏は、当職の面前で、各本人が作成名義人の署名を自認していると陳述した。

よって、これを認証する。

平成 25 年 10 月 28 日、本職役場において

東京都千代田区丸の内三丁目 3 番 1 号

東京法務局所属

公証人

大野重國

