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## RECORDATION FORM COVER SHEET PATENTS ONLY

To the Director of the U.S. Patent and Trademark Office: Please record the attached document(s) or the new address(es) below:

1. Name of conveying party(ies):	2. Name and address of receiving party(ies):
Anna PANTELIDOU; Sami-Jukka HAKOLA; Timo KOSKELA; and, Samuli TURTINEN	Name: Renesas Mobile Corporation
Additional name(s) of conveying party(ies) attached?   3. Nature of Conveyance:  Assignment	Address: 6-2, Otemachi 2-chome Chiyoda-ku  City: Tokyo State: ZIP Code: 100-0004  Country: Japan  Additional name(s) & address(es) attached?   Yes  No
12, 2012; and April 3, 2012, respectively	
4. Application number(s) or patent number(s):  A. Patent Application No.(s):  13/418,746  Additional numbers atta	s document is being filed together with a new application.  B. Patent No.(s):
5. Name and address of party to whom correspondence	6. Total number of applications
concerning document should be mailed:	and/or patents involved; 1
Name: Jerry Stanton Address: Harrington & Smith, Attorneys At Law, LLC 4 Research Drive, Suite 202	7. Total fee (37 CFR 3.41);
City: Shelton	
State: CT ZIP Code: 06484-6212	8. Deposit account number: 50-1924
	ignature  April 12, 2002  Ignature  Date  s including cover sheet(s), attachments, and documents: 7
	Page 2 of 7.

**PATENT** 

## ASSIGNMENT

Title of Invention	Methods and Apparatus for Multicast Transmission
Filing Details	This assignment is directed to useful improvements as described in (check all that apply):  US Provisional Application No. Filed On
,	US Application No. 13/418,746 Filed On March 13, 2012
	a 371 national stage of Filed On United Kingdom Patent Application GB1114635.4 Filed On August 24, 2011
	PCT Application No. Filed On

This ASSIGNMENT is between inventor(s) Anna PANTELIDOU: Sami-Jukka HAKOLA; Timo KOSKELA; and, Samuli TURTINEN as Assignor(s); and RENESAS MOBILE CORPORATION as Assignee.

As the below named inventor(s), I/we have invented certain improvements in the patent application for which I/we have filed an application for Letters Patent as identified above;

WHEREAS. I'we authorize the attorney of record to update this document to include Filing Details as listed above (i/e., filing date, serial number, etc.) to correspond to the Title of the Invention and Docket Number if such Filing Details are not available at the time I/we signed this document;

WHEREAS, RENESAS MOBILE CORPORATION, a corporation organized under the laws of Japan, having its principal office in 6-2, Otemachi 2-chome, Chiyoda-ku, Tokyo, Japan, is desirous of acquiring the entire right, title and interest in and under the said invention and the said application, and in and to any and all Letters Patent which shall be granted therefore in any and all countries where it has been filled, including all rights to claim priority, and to any and all improvements which are disclosed in the invention entitled.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and other good and valuable consideration, we have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto said Assignee, its successors, legal representatives, and assigns, the entire right, title, and interest in, to and under said invention, and said application, and all divisional, renewal, substitutional, non-provisional, and continuing applications thereof, and all Letters Patent of any and all countries which may be granted thereon and all reissues, reexaminations, and extensions thereof, and all applications for Letters Patent which may be filed for said invention in any country or countries, and all extensions, renewals, reexaminations, and reissues thereof, and all prior patents and patent applications from which a filing priority of the above-described patent application may be obtained, including the right to collect past damages; and we hereby authorize and request the official of any country or countries, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said invention to said Assignee, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

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AND WE HEREBY covenant that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.

AND WE HEREBY further covenant and agree that we will communicate to said Assignce, its successors, legal representatives and assigns, any facts known to me respecting said invention, and testify in any legal proceedings, sign all lawful papers, execute all divisional, renewal, substitutional, continuing, reexamination, and reissue applications, make all rightful declarations and/or oaths and generally do everything possible to aid said Assignee, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said invention in all countries.

This Assignment is deemed to be effective at least as early as June 6, 2011 (the first filing priority date).

Inventor Name: Residence Address:

Anna PANTELIDOU Tiedonkaari 5 C12

Oulu, Finland 90570

Inventor Signature

Dated: 3-4-2012

Witness Signature

Witness Name: KROKE KEMPRINED

Inventor Name: Residence Address:

Samí-Jukka HAKOLA Peikontie 7 Kempele, Finland 90450

Inventor Signature

Dated: 4

Wiffness Signature

Witness Name: JAKKO KORDINE

Inventor Name: Residence Address:

Timo KOSKELA Rautatienkatu 50 as 5 Oulu, Finland 90120

Inventor Signature

Dated: 12.4, 2012

Witness Signature

Witness Name: JANKS KEMPANIS

Inventor Name; Residence Address;

Samudi TURTINEN

Poolatie 3a

Ii, Finland 91100

Inventor Signature

Dated: \_07 - 04 - 20/2

Witness Signature

Witness Name: UKekko Kompheto

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**PATENT** REEL: 028043 FRAME: 0735