502572366 11/18/2013

PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT2618245

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SUJUAN FENG	10/14/2013
ALEXANDER GOLITSCHEK EDLER VON ELBWART	10/14/2013
CHRISTIAN WENGERTER	10/18/2013
AYAKO HORIUCHI	10/17/2013
AKIHIKO NISHIO	10/15/2013

RECEIVING PARTY DATA

Name:	PANASONIC CORPORATION
Street Address:	1006, OAZA KADOMA, KADOMA-SHI
City:	OSAKA
State/Country:	JAPAN

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14006332

CORRESPONDENCE DATA

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 216-579-1700

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Correspondent Name: PEARNE & GORDON LLP
Address Line 1: 1801 EAST 9TH STREET

Address Line 2: SUITE 1200

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ATTORNEY DOCKET NUMBER:	PGRU-51671
NAME OF SUBMITTER:	AARON A. FISHMAN

PATENT REEL: 031619 FRAME: 0862

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Signature:	/Aaron A. Fishman/
Date:	11/18/2013
Total Attachments: 9 source=Assignment#page1.tif source=Assignment#page2.tif source=Assignment#page3.tif source=Assignment#page4.tif source=Assignment#page5.tif source=Assignment#page5.tif source=Assignment#page7.tif	
source=Assignment#page8.tif source=Assignment#page9.tif	

PATENT REEL: 031619 FRAME: 0863

ASSIGNMENT

WHEREAS, new and useful improvements have been made by the undersigned in

SEARCH SPACE FOR UPLINK GRANT IN AN AGGREGATED-CARRIER MOBILE COMMUNICATION SYSTEM

for which an application for Letters Patent of the United States was filed on September 20, 2013 which application is identified by Serial No. 14/006,332 (Pearne & Gordon LLP Docket No. PGRU-51671).

WHEREAS, Panasonic Corporation, a corporation of Japan, having a place of business at 1006, Oaza Kadoma, Kadoma-shi, Osaka, Japan hereinafter referred to as "assignee", is desirous of acquiring all right, title, and interest throughout the world in, to, and under said improvements and inventions and patent rights therefor.

NOW, THEREFORE, be it known that, for valuable consideration, the receipt and sufficiency of which are hereby acknowledged, all right, title, and interest, in the United States and throughout the world, in, to and under said improvements and inventions and all patents, patent applications, patent rights, and inventors' certificates thereof, therefor, and therein, including without limitation said application for patent in the United States, all divisions and continuations thereof, all patents which may be granted thereon, all reissues and extensions thereof, all right to sue for past infringement thereunder, all patents which may be granted for said improvements and inventions by states or nations other than the United States, or by other authority, entity, or organization, and all applications therefor, have been and are hereby sold, assigned, transferred, and delivered unto assignee, its successors and assigns; and it is covenanted and agreed by the undersigned, and for executors, administrators, and legal representatives of the undersigned, that at assignee's request any and all applications, affidavits, assignments, and other instruments will be made, executed, and delivered as may be necessary, or desirable to secure for or vest in assignee, its successors or assigns, any improvement, inventions, right, title, interest, application, patent, patent right or other right or property covered by this assignment, and the United States Commissioner of Patents and Trademarks is hereby requested and authorized to issue any and all United States patents granted on any of said applications to assignee as owner of the entire right, title, and interest in, to, and under the same, and appropriately empowered officials of foreign countries are hereby authorized to issue any letters patent granted on any of said applications to assignee as owner of the entire right, title and interest in, to, and under the same.

The undersigned hereby grant the firm of Pearne & Gordon LLP the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

Page 1 of 3

IN WITNESS WHEREOF, this assignment has been executed below by the undersigned:

(1)	Inventor Name: Sujuan Feng
	Signature:
	Date I Signed Declaration: 14/10/2013
	Witness:
	Witness:
(2)	Inventor Name: Alexander Golitschek Edler von Elbwart
	Signature: Kunds Som Sles modern
	Today's Date: 14/10/7013
	Date I Signed Declaration: 14/10/2013
	Witness:
	Witness:
(3)	Inventor Name: Christian Wengerter
	Signature:
	Today's Date:
	Date I Signed Declaration:
	Witness:
	Witness

Page 2 of 3

PA75 (4)	347US-lau Inventor Name: <u>Ayako Horiuchi</u>
	Signature:
	Today's Date:
	Date I Signed Declaration:
	Witness:
	Witness:
(5)	Inventor Name: <u>Akihiko Nishio</u> Signature:
	Today's Date:
	Date I Signed Declaration:
	Witness:
	Witness:

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	Signature:
	Today's Date:
	Date I Signed Declaration:
	Witness:
	Witness:
(3)	Inventor Name: Christian Wengerter
	Signature:
	Today's Date:
	Date I Signed Declaration:
	Witness:
	Witness:

Page 2 of 3

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(4)	Inventor Name: Ayako Horiuchi
	Signature: <u>Agako Hounel</u>
	Today's Date: <u>Oct</u> 17, 2013
	Date I Signed Declaration: Oct. 17, 2013
	Witness:
	Witness:
(5)	Inventor Name: Akihiko Nishio
	Signature: Akilisho Mishio
	Today's Date: 0c+. 15, Zo 13
	Date I Signed Declaration: Oct. 15, 2013
	Witness:
	Witness:

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	Signature:
	Today's Date:
	Date I Signed Declaration:
	Witness:
	Witness:
(3)	Inventor Name: Christian Wengerter
	Signature: Like V
	Today's Date: 18.10.2013
	Date I Signed Declaration: 18.10. 7013
	Witness:
	Witness:

Page 2 of 3

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(4)	Inventor Name: Ayako Horiuchi
	Signature:
	Today's Date:
	Date I Signed Declaration:
	Witness:
	Witness:
(5)	Inventor Name: Akihiko Nishio Signature:
	Today's Date:
	Date I Signed Declaration:
	Witness:
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Page 3 of 3