

<b>PATENT ASSIGNMENT COVER SHEET</b>
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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
ALEXANDER GOLITSCHKEK EDLER VON ELBWART	04/20/2017
MICHAEL EINHAUS	04/20/2017
HIDETOSHI SUZUKI	04/24/2017
SUJUAN FENG	05/13/2017
LILEI WANG	05/03/2017
<b>RECEIVING PARTY DATA</b>	
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<b>Internal Address:</b>	SUITE 200
<b>City:</b>	TORRANCE
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	90503
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15521872
<b>CORRESPONDENCE DATA</b>	
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<b>ATTORNEY DOCKET NUMBER:</b>	736456.452USPC
<b>NAME OF SUBMITTER:</b>	SHOKO I. LEEK
<b>SIGNATURE:</b>	/Shoko Leek/
<b>DATE SIGNED:</b>	05/30/2017

**Total Attachments: 6**

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ASSIGNMENT

WHEREAS, we,

Alexander Golitschek Edler von Elbwart	c/o Panasonic R&D Center Germany GmbH, Monzastrasse 4C, Langen, Germany 63225
Michael Einhaus	c/o Panasonic R&D Center Germany GmbH, Monzastrasse 4C, Langen, Germany 63225
Hidetoshi Suzuki	c/o Panasonic Corporation, 1006, Oaza Kadoma, Kadoma-shi, Osaka, Japan 571-8501
Sujuan Feng	c/o Panasonic R&D Center Germany GmbH, Monzastrasse 4C, Langen, Germany 63225
Lilei Wang	c/o Panasonic R&D Center China Co., Ltd., 15F, Tower F Phoenix Place, 5A Shuguang Xili, Chaoyang District, Beijing, Peoples Republic of China 100028

(hereinafter referred to as ASSIGNORS), having mailing addresses as listed above, are the joint inventors of an invention entitled "IMPROVED RESOURCE ALLOCATION FOR TRANSMISSIONS ON UNLICENSED CARRIERS," as described and claimed in the specification for which an application for United States letters patent was filed and assigned Application No. 15/521,872, which application is a national stage application filed under 35 U.S.C. 371 of International Application No. PCT/CN2014/090610 accorded an International Filing Date of November 7, 2014;

WHEREAS, Panasonic Intellectual Property Corporation of America (hereinafter referred to as ASSIGNEE), having a usual place of business at 20000 Mariner Avenue, Suite 200, Torrance, California 90503, is desirous of acquiring the entire right, title and interest in and to the invention and in and to any letters patent that may be granted therefor in the United States;

NOW, THEREFORE, in exchange for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, ASSIGNORS hereby sell, assign and transfer unto said ASSIGNEE, the entire right, title and interest in and to said invention, said application and any and all letters patent which may be granted for said invention in the United States of America and its territorial possessions including any extensions or adjustments in term thereof, and in any and all divisions, reissues and continuations thereof, including the right to sue and collect damages for past and present infringement of said letters patent; said invention, application and all letters patent on said invention to be held and enjoyed by ASSIGNEE and its successors and assigns for their use and benefit and of their successors and assigns as fully and entirely as the same would have been held and enjoyed by ASSIGNORS had this assignment,

International Application No.: PCT/CN2014/090610

U.S. Application No.: 15/521,872

transfer and sale not been made. ASSIGNORS hereby authorize and request the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNORS agree to execute all instruments and documents required for the making and prosecution of applications for United States letters patent on said invention, for litigation regarding said letters patent, or for the purpose of protecting title to said invention or letters patent therefor.

Assignee's counsel is authorized to insert the application number information when it becomes available.

20 April 2017  
Date

*Alexander Golitschek Edler von Elbwart*  
Alexander Golitschek Edler von Elbwart

I certify that I know or have satisfactory evidence that Alexander Golitschek Edler von Elbwart signed this instrument of his/her own free will, as a voluntary act for the uses and purposes mentioned in the instrument.

Date \_\_\_\_\_  
(Type or Print)

Signed at \_\_\_\_\_

\_\_\_\_\_  
(Type or Print Name of Witness)

\_\_\_\_\_  
(Signature of Witness)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Michael Einhaus

I certify that I know or have satisfactory evidence that Michael Einhaus signed this instrument of his/her own free will, as a voluntary act for the uses and purposes mentioned in the instrument.

Date \_\_\_\_\_  
(Type or Print)

Signed at \_\_\_\_\_

\_\_\_\_\_  
(Type or Print Name of Witness)

\_\_\_\_\_  
(Signature of Witness)

transfer and sale not been made. ASSIGNORS hereby authorize and request the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNORS agree to execute all instruments and documents required for the making and prosecution of applications for United States letters patent on said invention, for litigation regarding said letters patent, or for the purpose of protecting title to said invention or letters patent therefor.

Assignee's counsel is authorized to insert the application number information when it becomes available.

Date \_\_\_\_\_ Alexander Golitschek Edler von Elbwart

I certify that I know or have satisfactory evidence that Alexander Golitschek Edler von Elbwart signed this instrument of his/her own free will, as a voluntary act for the uses and purposes mentioned in the instrument.

Date \_\_\_\_\_ Signed at \_\_\_\_\_  
(Type or Print)

\_\_\_\_\_  
(Type or Print Name of Witness) (Signature of Witness)

Date 20.04.18 \_\_\_\_\_  
Michael Einhaus

I certify that I know or have satisfactory evidence that Michael Einhaus signed this instrument of his/her own free will, as a voluntary act for the uses and purposes mentioned in the instrument.

Date \_\_\_\_\_ Signed at \_\_\_\_\_  
(Type or Print)

\_\_\_\_\_  
(Type or Print Name of Witness) (Signature of Witness)

International Application No.: PCT/CN2014/090610  
U.S. Application No.: 15/521,872

April 24, 2017  
Date

Hidetoshi Suzuki  
Hidetoshi Suzuki

I certify that I know or have satisfactory evidence that Hidetoshi Suzuki signed this instrument of his/her own free will, as a voluntary act for the uses and purposes mentioned in the instrument.

Date \_\_\_\_\_  
(Type or Print)

Signed at \_\_\_\_\_

\_\_\_\_\_  
(Type or Print Name of Witness)

\_\_\_\_\_  
(Signature of Witness)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Sujuan Feng

I certify that I know or have satisfactory evidence that Sujuan Feng signed this instrument of his/her own free will, as a voluntary act for the uses and purposes mentioned in the instrument.

Date \_\_\_\_\_  
(Type or Print)

Signed at \_\_\_\_\_

\_\_\_\_\_  
(Type or Print Name of Witness)

\_\_\_\_\_  
(Signature of Witness)

International Application No.: PCT/CN2014/090610  
U.S. Application No.: 15/521,872

Date \_\_\_\_\_

\_\_\_\_\_ Hidetoshi Suzuki

I certify that I know or have satisfactory evidence that Hidetoshi Suzuki signed this instrument of his/her own free will, as a voluntary act for the uses and purposes mentioned in the instrument.

Date \_\_\_\_\_

(Type or Print)

Signed at \_\_\_\_\_

\_\_\_\_\_  
(Type or Print Name of Witness)

\_\_\_\_\_  
(Signature of Witness)

Date \_\_\_\_\_

13/05/2017

\_\_\_\_\_ Sujuan Feng

Sujuan Feng

I certify that I know or have satisfactory evidence that Sujuan Feng signed this instrument of his/her own free will, as a voluntary act for the uses and purposes mentioned in the instrument.

Date \_\_\_\_\_

(Type or Print)

Signed at \_\_\_\_\_

\_\_\_\_\_  
(Type or Print Name of Witness)

\_\_\_\_\_  
(Signature of Witness)

International Application No.: PCT/CN2014/090610  
U.S. Application No.: 15/521,872

May 3, 2017  
Date

Lilei Wang  
Lilei Wang

I certify that I know or have satisfactory evidence that Lilei Wang signed this instrument of his/her own free will, as a voluntary act for the uses and purposes mentioned in the instrument.

Date \_\_\_\_\_  
(Type or Print)

Signed at \_\_\_\_\_

\_\_\_\_\_  
(Type or Print Name of Witness)

\_\_\_\_\_  
(Signature of Witness)

736456.463USPC/5523026\_1