

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT5521222

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
ROGER SHUN HONG TONG	09/05/2016
FRED CHUN YIN VONG	09/05/2016
HARRY YIN CHUNG LEUNG	09/05/2016
HAI HU	09/05/2016
MAN HEI CHAN	09/05/2016
KAT FAN YIP	09/04/2016
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	ASIA SATELLITE TELECOMMUNICATIONS COMPANY LIMITED
<b>Street Address:</b>	12/F, HARBOUR CENTRE, 25 HARBOUR ROAD
<b>City:</b>	WANCHAI
<b>State/Country:</b>	HONG KONG
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	16408104
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(312)580-9696
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
<b>Phone:</b>	312-580-1020
<b>Email:</b>	jliu@hfzlaw.com
<b>Correspondent Name:</b>	HANLEY FLIGHT & ZIMMERMAN LLC
<b>Address Line 1:</b>	150 S. WACKER DRIVE
<b>Address Line 2:</b>	SUITE 2200
<b>Address Line 4:</b>	CHICAGO, ILLINOIS 60606
<b>ATTORNEY DOCKET NUMBER:</b>	121-0003USP2
<b>NAME OF SUBMITTER:</b>	MARK C. ZIMMERMAN
<b>SIGNATURE:</b>	/Mark C. Zimmerman/
<b>DATE SIGNED:</b>	05/14/2019
<b>Total Attachments: 54</b>	

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**ASSIGNMENT**

WHEREAS, I/WE, (hereinafter referred to as the “ASSIGNOR(S)”):

**TONG, Roger Shun Hong**

15 Dai Kwai Street, Tai Po Industrial Estate, NT, Hong Kong

**VONG, Fred Chun Yin**

15 Dai Kwai Street, Tai Po Industrial Estate, NT, Hong Kong

**LEUNG, Harry Yin Chung**

15 Dai Kwai Street, Tai Po Industrial Estate, NT, Hong Kong

**HU, Hai**

15 Dai Kwai Street, Tai Po Industrial Estate, NT, Hong Kong

**CHAN, Man Hei**

15 Dai Kwai Street, Tai Po Industrial Estate, NT, Hong Kong

**YIP, Kat Fan**

15 Dai Kwai Street, Tai Po Industrial Estate, NT, Hong Kong

has/have invented a **DUAL-BAND COMMUNICATION SATELLITE SYSTEM AND METHOD** (“Invention”) for which one or more applications for patent, design registration, utility model registration, or other form of protection, rights, or title have been or will be made in certain countries (“Applications”), as further described below:

**US Patent Application No.** 15/259,911, **filed** September 8, 2016

AND WHEREAS, **Asia Satellite Telecommunications Company Limited**, (hereinafter referred to as the “ASSIGNEE”), 12/F, Harbour Centre, 25 Harbour Road, Wanchai, Hong Kong, has acquired and/or is desirous of acquiring the full and exclusive right, title and interest in and to said Invention, said Applications inclusive of all ancillary rights relating thereto, any and all priority rights derived from said Applications, and all patents, design registrations, utility model registrations and other forms of protection, rights and titles relating to said Invention, in

any country or countries and in respect of the whole or any part or parts of or improvements to the Invention;

NOW THEREFORE, for valuable consideration, the receipt and sufficiency of which are hereby acknowledged, ASSIGNOR(S) does/do hereby confirm that ASSIGNOR(S) has/have transferred, conveyed and assigned, and by way of further assurance does/do hereby transfer, convey and assign, any and all of ASSIGNOR(S)'s respective rights, title and interest in and to: the Invention; the Applications; any further applications for patent, design registration, utility model registration or other forms of protection, rights or titles for the whole or any part or parts of or improvements to the Invention in any country or countries ("Further Applications") together with the right to file divisional applications, substitute applications and continuation applications of any one or more of the Applications and Further Applications ("Divisionals"); the right to obtain patents, design registrations, utility model registrations and all other forms of protection, rights and titles relating to the Invention; the right in and to any patent or reissue patent relating to the Applications, Further Applications and Divisionals ("Grants"); and the right to obtain any extensions / supplementary protection certificates ("Extensions"); together with the right to bring proceedings to recover damages and/or to obtain other remedies for acts committed in respect of one or more of the aforesaid Invention, Applications, Grants, Further Applications, Divisionals and Extensions, whether such acts are committed before or after the date of this Worldwide Assignment; with the intent that the Invention, Applications, Grants, Further Applications, Divisionals and Extensions are owned and enjoyed by ASSIGNEE absolutely to the full end of the term or terms for same.

ASSIGNOR(S) does/do hereby agree, upon request, to provide assistance and to execute any and all further documents, at the expense of ASSIGNEE and/or its successors and assigns (as applicable), which may be necessary or desirable to enable ASSIGNEE, and/or its successors and assigns, to file, prosecute, bring proceedings and take other actions with respect to any and all of the Invention, Applications, Further Applications, Divisionals, Grants and Extensions, and any and all patents and registrations granted thereon and other forms of protection, rights and titles relating thereto, and ASSIGNOR(S) further agrees/agree to execute, upon request and at the expense of ASSIGNEE and/or its successors and assigns, any and all further documents which may be necessary to vest or perfect the title of ASSIGNEE therein.

ASSIGNOR(S) does/do hereby authorize ASSIGNEE or its patent agents or attorneys to insert, above, the jurisdictions, application numbers, filing dates and any other indicia identifying the Applications when such information is available for the purpose of recording this assignment.

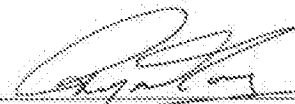
ASSIGNOR(S) does/do hereby authorize and request The Commissioner of Patents or any equivalent authority to issue to ASSIGNEE each and every patent, registration and other form of protection, right, and title granted upon the Applications, Further Applications, Divisionals and Extensions.

THIS ASSIGNMENT shall inure to the benefit of ASSIGNEE and its successors and assigns, and shall be binding upon ASSIGNOR(S) and their successors and permitted assigns.

DELIVERY of this Worldwide Assignment by copy, however transmitted, constitutes valid and effective delivery. This Assignment may be executed in one or more counterparts, each of which when so executed and delivered shall be an original, and such counterparts shall together constitute one and the same instrument.

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

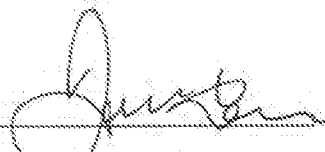
Date: 5/Sept/2016

  
TONG, Roger Shun Hong

STATEMENT BY WITNESS

I, Janus Lam, hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Assignment, duly sign and execute same.

Date: 5 Sept. 2016

  
(Signature of Witness)

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

Date: \_\_\_\_\_

\_\_\_\_\_  
**VONG, Fred Chun Yin**

**STATEMENT BY WITNESS**

I, \_\_\_\_\_, hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Assignment, duly sign and execute same.

Date: \_\_\_\_\_

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



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

Date: \_\_\_\_\_

\_\_\_\_\_  
**LEUNG, Harry Yin Chung**

**STATEMENT BY WITNESS**

I, \_\_\_\_\_, hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Assignment, duly sign and execute same.

Date: \_\_\_\_\_

\_\_\_\_\_

(Signature of Witness)

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

Date: \_\_\_\_\_

**HU, Hai**

**STATEMENT BY WITNESS**

I, \_\_\_\_\_, hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Assignment, duly sign and execute same.

Date: \_\_\_\_\_

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

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

Date: \_\_\_\_\_

\_\_\_\_\_  
**CHAN, Man Hei**

**STATEMENT BY WITNESS**

I, \_\_\_\_\_, hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Assignment, duly sign and execute same.

Date: \_\_\_\_\_

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

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

Date: \_\_\_\_\_

\_\_\_\_\_  
**YIP, Kat Fan**

STATEMENT BY WITNESS

I, \_\_\_\_\_, hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Assignment, duly sign and execute same.

Date: \_\_\_\_\_

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

**ASSIGNMENT**

WHEREAS, I/WE, (hereinafter referred to as the “ASSIGNOR(S)”):

**TONG, Roger Shun Hong**

15 Dai Kwai Street, Tai Po Industrial Estate, NT, Hong Kong

**VONG, Fred Chun Yin**

15 Dai Kwai Street, Tai Po Industrial Estate, NT, Hong Kong

**LEUNG, Harry Yin Chung**

15 Dai Kwai Street, Tai Po Industrial Estate, NT, Hong Kong

**HU, Hai**

15 Dai Kwai Street, Tai Po Industrial Estate, NT, Hong Kong

**CHAN, Man Hei**

15 Dai Kwai Street, Tai Po Industrial Estate, NT, Hong Kong

**YIP, Kat Fan**

15 Dai Kwai Street, Tai Po Industrial Estate, NT, Hong Kong

has/have invented a **DUAL-BAND COMMUNICATION SATELLITE SYSTEM AND METHOD** (“Invention”) for which one or more applications for patent, design registration, utility model registration, or other form of protection, rights, or title have been or will be made in certain countries (“Applications”), as further described below:

**US Patent Application No.** 15/259,911, **filed** September 8, 2016

AND WHEREAS, **Asia Satellite Telecommunications Company Limited**, (hereinafter referred to as the “ASSIGNEE”), 12/F, Harbour Centre, 25 Harbour Road, Wanchai, Hong Kong, has acquired and/or is desirous of acquiring the full and exclusive right, title and interest in and to said Invention, said Applications inclusive of all ancillary rights relating thereto, any and all priority rights derived from said Applications, and all patents, design registrations, utility model registrations and other forms of protection, rights and titles relating to said Invention, in

any country or countries and in respect of the whole or any part or parts of or improvements to the Invention;

NOW THEREFORE, for valuable consideration, the receipt and sufficiency of which are hereby acknowledged, ASSIGNOR(S) does/do hereby confirm that ASSIGNOR(S) has/have transferred, conveyed and assigned, and by way of further assurance does/do hereby transfer, convey and assign, any and all of ASSIGNOR(S)'s respective rights, title and interest in and to: the Invention; the Applications; any further applications for patent, design registration, utility model registration or other forms of protection, rights or titles for the whole or any part or parts of or improvements to the Invention in any country or countries ("Further Applications") together with the right to file divisional applications, substitute applications and continuation applications of any one or more of the Applications and Further Applications ("Divisionals"); the right to obtain patents, design registrations, utility model registrations and all other forms of protection, rights and titles relating to the Invention; the right in and to any patent or reissue patent relating to the Applications, Further Applications and Divisionals ("Grants"); and the right to obtain any extensions / supplementary protection certificates ("Extensions"); together with the right to bring proceedings to recover damages and/or to obtain other remedies for acts committed in respect of one or more of the aforesaid Invention, Applications, Grants, Further Applications, Divisionals and Extensions, whether such acts are committed before or after the date of this Worldwide Assignment; with the intent that the Invention, Applications, Grants, Further Applications, Divisionals and Extensions are owned and enjoyed by ASSIGNEE absolutely to the full end of the term or terms for same.

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THIS ASSIGNMENT shall inure to the benefit of ASSIGNEE and its successors and assigns, and shall be binding upon ASSIGNOR(S) and their successors and permitted assigns.

DELIVERY of this Worldwide Assignment by copy, however transmitted, constitutes valid and effective delivery. This Assignment may be executed in one or more counterparts, each of which when so executed and delivered shall be an original, and such counterparts shall together constitute one and the same instrument.

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

Date: \_\_\_\_\_

\_\_\_\_\_  
**TONG, Roger Shun Hong**

STATEMENT BY WITNESS

I, \_\_\_\_\_, hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Assignment, duly sign and execute same.

Date: \_\_\_\_\_

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



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

Date: 05 Sep 2016

Fred Vong  
VONG, Fred Chun Yin

STATEMENT BY WITNESS

I, William Ma, hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Assignment, duly sign and execute same.

Date: 5 Sep 2016

William Ma  
(Signature of Witness)

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

Date: \_\_\_\_\_

\_\_\_\_\_  
**LEUNG, Harry Yin Chung**

**STATEMENT BY WITNESS**

I, \_\_\_\_\_, hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Assignment, duly sign and execute same.

Date: \_\_\_\_\_

\_\_\_\_\_

(Signature of Witness)

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

Date: \_\_\_\_\_

**HU, Hai**

**STATEMENT BY WITNESS**

I, \_\_\_\_\_, hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Assignment, duly sign and execute same.

Date: \_\_\_\_\_

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

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

Date: \_\_\_\_\_

\_\_\_\_\_  
**CHAN, Man Hei**

**STATEMENT BY WITNESS**

I, \_\_\_\_\_, hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Assignment, duly sign and execute same.

Date: \_\_\_\_\_

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

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

Date: \_\_\_\_\_

\_\_\_\_\_  
**YIP, Kat Fan**

STATEMENT BY WITNESS

I, \_\_\_\_\_, hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Assignment, duly sign and execute same.

Date: \_\_\_\_\_

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

**ASSIGNMENT**

WHEREAS, I/WE, (hereinafter referred to as the "ASSIGNOR(S)");

**TONG, Roger Shun Hong**

15 Dai Kwai Street, Tai Po Industrial Estate, NT, Hong Kong

**VONG, Fred Chun Yin**

15 Dai Kwai Street, Tai Po Industrial Estate, NT, Hong Kong

**LEUNG, Harry Yin Chung**

15 Dai Kwai Street, Tai Po Industrial Estate, NT, Hong Kong

**HU, Hai**

15 Dai Kwai Street, Tai Po Industrial Estate, NT, Hong Kong

**CHAN, Man Hei**

15 Dai Kwai Street, Tai Po Industrial Estate, NT, Hong Kong

**YIP, Kat Fan**

15 Dai Kwai Street, Tai Po Industrial Estate, NT, Hong Kong

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

Date: \_\_\_\_\_

TONG, Roger Shun Hong

STATEMENT BY WITNESS

I, \_\_\_\_\_, hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Assignment, duly sign and execute same.

Date: \_\_\_\_\_

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

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

Date: \_\_\_\_\_

\_\_\_\_\_  
VONG, Fred Chun Yin

STATEMENT BY WITNESS

I, \_\_\_\_\_, hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Assignment, duly sign and execute same.

Date: \_\_\_\_\_

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

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

Date: 5/9/16

Harry Leung  
LEUNG, Harry Yin Chung

STATEMENT BY WITNESS

I, William Ma, hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Assignment, duly sign and execute same.

Date: 5 Sep 2016

William Ma  
(Signature of Witness)

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

Date: \_\_\_\_\_

HU, Hai

STATEMENT BY WITNESS

I, \_\_\_\_\_, hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Assignment, duly sign and execute same.

Date: \_\_\_\_\_

(Signature of Witness)

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

Date: \_\_\_\_\_

\_\_\_\_\_  
CHAN, Man Hei

STATEMENT BY WITNESS

I, \_\_\_\_\_, hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Assignment, duly sign and execute same.

Date: \_\_\_\_\_

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

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

Date: \_\_\_\_\_

YIP, Kat Fan

STATEMENT BY WITNESS

I, \_\_\_\_\_, hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Assignment, duly sign and execute same.

Date: \_\_\_\_\_

(Signature of Witness)

**ASSIGNMENT**

WHEREAS, I/WE, (hereinafter referred to as the "ASSIGNOR(S)");

**TONG, Roger Shun Hong**

15 Dai Kwai Street, Tai Po Industrial Estate, NT, Hong Kong

**VONG, Fred Chun Yin**

15 Dai Kwai Street, Tai Po Industrial Estate, NT, Hong Kong

**LEUNG, Harry Yin Chung**

15 Dai Kwai Street, Tai Po Industrial Estate, NT, Hong Kong

**HU, Hai**

15 Dai Kwai Street, Tai Po Industrial Estate, NT, Hong Kong

**CHAN, Man Hoi**

15 Dai Kwai Street, Tai Po Industrial Estate, NT, Hong Kong

**YIP, Kat Fan**

15 Dai Kwai Street, Tai Po Industrial Estate, NT, Hong Kong

has/have invented a **DUAL-BAND COMMUNICATION SATELLITE SYSTEM AND METHOD** ("Invention") for which one or more applications for patent, design registration, utility model registration, or other form of protection, rights, or title have been or will be made in certain countries ("Applications"), as further described below:

US Patent Application No. 15/259,911, filed September 8, 2016

AND WHEREAS, **Asia Satellite Telecommunications Company Limited**, (hereinafter referred to as the "ASSIGNEE"), 12/F, Harbour Centre, 25 Harbour Road, Wanchai, Hong Kong, has acquired and/or is desirous of acquiring the full and exclusive right, title and interest in and to said Invention, said Applications inclusive of all ancillary rights relating thereto, any and all priority rights derived from said Applications, and all patents, design registrations, utility model registrations and other forms of protection, rights and titles relating to said Invention, in

any country or countries and in respect of the whole or any part or parts of or improvements to the Invention;

NOW THEREFORE, for valuable consideration, the receipt and sufficiency of which are hereby acknowledged, ASSIGNOR(S) does/do hereby confirm that ASSIGNOR(S) has/have transferred, conveyed and assigned, and by way of further assurance does/do hereby transfer, convey and assign, any and all of ASSIGNOR(S)'s respective rights, title and interest in and to: the Invention; the Applications; any further applications for patent, design registration, utility model registration or other forms of protection, rights or titles for the whole or any part or parts of or improvements to the Invention in any country or countries ("Further Applications") together with the right to file divisional applications, substitute applications and continuation applications of any one or more of the Applications and Further Applications ("Divisionals"); the right to obtain patents, design registrations, utility model registrations and all other forms of protection, rights and titles relating to the Invention; the right in and to any patent or reissue patent relating to the Applications, Further Applications and Divisionals ("Grants"); and the right to obtain any extensions / supplementary protection certificates ("Extensions"); together with the right to bring proceedings to recover damages and/or to obtain other remedies for acts committed in respect of one or more of the aforesaid Invention, Applications, Grants, Further Applications, Divisionals and Extensions, whether such acts are committed before or after the date of this Worldwide Assignment; with the intent that the Invention, Applications, Grants, Further Applications, Divisionals and Extensions are owned and enjoyed by ASSIGNEE absolutely to the full end of the term or terms for same.

ASSIGNOR(S) does/do hereby agree, upon request, to provide assistance and to execute any and all further documents, at the expense of ASSIGNEE and/or its successors and assigns (as applicable), which may be necessary or desirable to enable ASSIGNEE, and/or its successors and assigns, to file, prosecute, bring proceedings and take other actions with respect to any and all of the Invention, Applications, Further Applications, Divisionals, Grants and Extensions, and any and all patents and registrations granted thereon and other forms of protection, rights and titles relating thereto, and ASSIGNOR(S) further agrees/agree to execute, upon request and at the expense of ASSIGNEE and/or its successors and assigns, any and all further documents which may be necessary to vest or perfect the title of ASSIGNEE therein.



ASSIGNOR(S) does/do hereby authorize ASSIGNEE or its patent agents or attorneys to insert, above, the jurisdictions, application numbers, filing dates and any other indicia identifying the Applications when such information is available for the purpose of recording this assignment.

ASSIGNOR(S) does/do hereby authorize and request The Commissioner of Patents or any equivalent authority to issue to ASSIGNEE each and every patent, registration and other form of protection, right, and title granted upon the Applications, Further Applications, Divisionals and Extensions.

THIS ASSIGNMENT shall inure to the benefit of ASSIGNEE and its successors and assigns, and shall be binding upon ASSIGNOR(S) and their successors and permitted assigns.

DELIVERY of this Worldwide Assignment by copy, however transmitted, constitutes valid and effective delivery. This Assignment may be executed in one or more counterparts, each of which when so executed and delivered shall be an original, and such counterparts shall together constitute one and the same instrument.

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

Date: \_\_\_\_\_

\_\_\_\_\_  
**TONG, Roger Shun Hong**

STATEMENT BY WITNESS

I, \_\_\_\_\_, hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Assignment, duly sign and execute same.

Date: \_\_\_\_\_

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

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

Date: \_\_\_\_\_

\_\_\_\_\_  
VONG, Fred Chun Yin

STATEMENT BY WITNESS

I, \_\_\_\_\_, hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Assignment, duly sign and execute same.

Date: \_\_\_\_\_

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

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

Date: \_\_\_\_\_

\_\_\_\_\_  
LEUNG, Harry Yin Chung

STATEMENT BY WITNESS

I, \_\_\_\_\_, hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Assignment, duly sign and execute same.

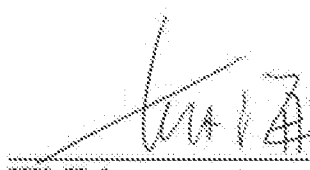
Date: \_\_\_\_\_

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

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

Date:

2016.09.05

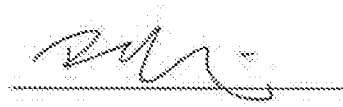
  
\_\_\_\_\_  
HU, Hai

STATEMENT BY WITNESS

I, Ba Yin Fu, hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Assignment, duly sign and execute same.

Date:

5 Sep 2016

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

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

Date: \_\_\_\_\_

\_\_\_\_\_  
CHAN, Man Hei

STATEMENT BY WITNESS

I, \_\_\_\_\_, hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Assignment, duly sign and execute same.

Date: \_\_\_\_\_

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

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

Date: \_\_\_\_\_

\_\_\_\_\_  
YIP, Kat Fan

STATEMENT BY WITNESS

I, \_\_\_\_\_, hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Assignment, duly sign and execute same.

Date: \_\_\_\_\_

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

**ASSIGNMENT**

WHEREAS, I/WE, (hereinafter referred to as the "ASSIGNOR(S)");

**TONG, Roger Shun Hong**

15 Dai Kwai Street, Tai Po Industrial Estate, NT, Hong Kong

**VONG, Fred Chun Yin**

15 Dai Kwai Street, Tai Po Industrial Estate, NT, Hong Kong

**LEUNG, Harry Yin Chung**

15 Dai Kwai Street, Tai Po Industrial Estate, NT, Hong Kong

**HU, Hai**

15 Dai Kwai Street, Tai Po Industrial Estate, NT, Hong Kong

**CHAN, Man Hei**

15 Dai Kwai Street, Tai Po Industrial Estate, NT, Hong Kong

**YIP, Kat Fan**

15 Dai Kwai Street, Tai Po Industrial Estate, NT, Hong Kong

has/have invented a **DUAL-BAND COMMUNICATION SATELLITE SYSTEM AND METHOD** ("Invention") for which one or more applications for patent, design registration, utility model registration, or other form of protection, rights, or title have been or will be made in certain countries ("Applications"), as further described below:

US Patent Application No. 15/259,911, filed September 8, 2016

AND WHEREAS, **Asia Satellite Telecommunications Company Limited**, (hereinafter referred to as the "ASSIGNEE"), 12/F, Harbour Centre, 25 Harbour Road, Wanchai, Hong Kong, has acquired and/or is desirous of acquiring the full and exclusive right, title and interest in and to said Invention, said Applications inclusive of all ancillary rights relating thereto, any and all priority rights derived from said Applications, and all patents, design registrations, utility model registrations and other forms of protection, rights and titles relating to said Invention, in



any country or countries and in respect of the whole or any part or parts of or improvements to the Invention;

NOW THEREFORE, for valuable consideration, the receipt and sufficiency of which are hereby acknowledged, ASSIGNOR(S) does/do hereby confirm that ASSIGNOR(S) has/have transferred, conveyed and assigned, and by way of further assurance does/do hereby transfer, convey and assign, any and all of ASSIGNOR(S)'s respective rights, title and interest in and to: the Invention; the Applications; any further applications for patent, design registration, utility model registration or other forms of protection, rights or titles for the whole or any part or parts of or improvements to the Invention in any country or countries ("Further Applications") together with the right to file divisional applications, substitute applications and continuation applications of any one or more of the Applications and Further Applications ("Divisionals"); the right to obtain patents, design registrations, utility model registrations and all other forms of protection, rights and titles relating to the Invention; the right in and to any patent or reissue patent relating to the Applications, Further Applications and Divisionals ("Grants"); and the right to obtain any extensions / supplementary protection certificates ("Extensions"); together with the right to bring proceedings to recover damages and/or to obtain other remedies for acts committed in respect of one or more of the aforesaid Invention, Applications, Grants, Further Applications, Divisionals and Extensions, whether such acts are committed before or after the date of this Worldwide Assignment; with the intent that the Invention, Applications, Grants, Further Applications, Divisionals and Extensions are owned and enjoyed by ASSIGNEE absolutely to the full end of the term or terms for same.

ASSIGNOR(S) does/do hereby agree, upon request, to provide assistance and to execute any and all further documents, at the expense of ASSIGNEE and/or its successors and assigns (as applicable), which may be necessary or desirable to enable ASSIGNEE, and/or its successors and assigns, to file, prosecute, bring proceedings and take other actions with respect to any and all of the Invention, Applications, Further Applications, Divisionals, Grants and Extensions, and any and all patents and registrations granted thereon and other forms of protection, rights and titles relating thereto, and ASSIGNOR(S) further agrees/agree to execute, upon request and at the expense of ASSIGNEE and/or its successors and assigns, any and all further documents which may be necessary to vest or perfect the title of ASSIGNEE therein.

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

Date: \_\_\_\_\_

\_\_\_\_\_  
TONG, Roger Shun Hong

STATEMENT BY WITNESS

I, \_\_\_\_\_, hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Assignment, duly sign and execute same.

Date: \_\_\_\_\_

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

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

Date: \_\_\_\_\_

\_\_\_\_\_  
VONG, Fred Chun Yin

STATEMENT BY WITNESS

I, \_\_\_\_\_, hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Assignment, duly sign and execute same.

Date: \_\_\_\_\_

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

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

Date: \_\_\_\_\_

\_\_\_\_\_  
LEUNG, Harry Yin Chung

STATEMENT BY WITNESS

I, \_\_\_\_\_, hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Assignment, duly sign and execute same.

Date: \_\_\_\_\_

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

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

Date: \_\_\_\_\_

HU, Hai

STATEMENT BY WITNESS

I, \_\_\_\_\_, hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Assignment, duly sign and execute same.

Date: \_\_\_\_\_

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(Signature of Witness)

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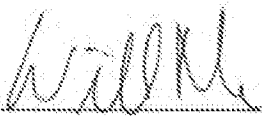
Date: 05 Sep 2016

  
CHAN, Man Hei

STATEMENT BY WITNESS

I, William Ma, hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Assignment, duly sign and execute same.

Date: 5 Sep 2016

  
(Signature of Witness)

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

Date: \_\_\_\_\_

YIP, Kat Fan

STATEMENT BY WITNESS

I, \_\_\_\_\_, hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Assignment, duly sign and execute same.

Date: \_\_\_\_\_

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



ASSIGNMENT

WHEREAS, I/WE, (hereinafter referred to as the "ASSIGNOR(S)");

**TONG, Roger Shun Hong**

15 Dai Kwai Street, Tai Po Industrial Estate, NT, Hong Kong

**VONG, Fred Chun Yin**

15 Dai Kwai Street, Tai Po Industrial Estate, NT, Hong Kong

**LEUNG, Harry Yin Chung**

15 Dai Kwai Street, Tai Po Industrial Estate, NT, Hong Kong

**HU, Hai**

15 Dai Kwai Street, Tai Po Industrial Estate, NT, Hong Kong

**CHAN, Man Hei**

15 Dai Kwai Street, Tai Po Industrial Estate, NT, Hong Kong

**YIP, Kat Fan**

15 Dai Kwai Street, Tai Po Industrial Estate, NT, Hong Kong

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

Date: \_\_\_\_\_

\_\_\_\_\_  
**TONG, Roger Shun Hong**

STATEMENT BY WITNESS

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Date: \_\_\_\_\_

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

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

Date: \_\_\_\_\_

\_\_\_\_\_  
VONG, Fred Chun Yin

STATEMENT BY WITNESS

I, \_\_\_\_\_, hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Assignment, duly sign and execute same.

Date: \_\_\_\_\_

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

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

Date: \_\_\_\_\_

\_\_\_\_\_  
**LEUNG, Harry Yin Chung**

STATEMENT BY WITNESS

I, \_\_\_\_\_, hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Assignment, duly sign and execute same.

Date: \_\_\_\_\_

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

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

Date: \_\_\_\_\_

HU, Hai

STATEMENT BY WITNESS

I, \_\_\_\_\_, hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Assignment, duly sign and execute same.

Date: \_\_\_\_\_

\_\_\_\_\_

(Signature of Witness)

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

Date: \_\_\_\_\_

\_\_\_\_\_  
CHIAN, Man Hei

STATEMENT BY WITNESS

I, \_\_\_\_\_, hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Assignment, duly sign and execute same.

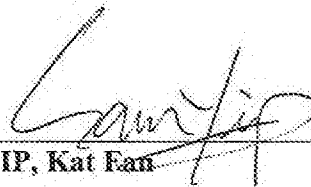
Date: \_\_\_\_\_

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



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

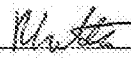
Date: 4 Sep 2016

  
YIP, Kat Fan

STATEMENT BY WITNESS

I, Chui Wai Yan, hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Assignment, duly sign and execute same.

Date: 4 Sep 2016

  
(Signature of Witness)