506828667 08/20/2021

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT6875487

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT	
NATURE OF CONVEYANCE:	Corrective Assignment to correct the SPELLING OF THE INVENTOR'S NAME previously recorded on Reel 053987 Frame 0170. Assignor(s) hereby confirms the INVENTOR NAME "YOSHICHIKA OHTA" SHOULD BE CORRECTED TO "YOSHICHIKA OTA".	
RESUBMIT DOCUMENT ID:	506760386	

CONVEYING PARTY DATA

Name	Execution Date
MITSUKUNI KONISHI	10/02/2020
ATSUSHI NAGATE	10/06/2020
YOSHICHIKA OTA	06/01/2021
KENJI HOSHINO	10/02/2020

RECEIVING PARTY DATA

Name:	SOFTBANK CORP.
Street Address:	9-1, HIGASHI-SHIMBASHI 1-CHOME, MINATO-KU
City:	TOKYO
State/Country:	JAPAN
Postal Code:	1057317

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16959694

CORRESPONDENCE DATA

Fax Number: (508)898-8602

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.

Phone: 5088988601

docketing@westboro-ip.com Email:

MUIRHEAD AND SATURNELLI, LLC Correspondent Name:

200 FRIBERG PARKWAY Address Line 1:

Address Line 2: **SUITE 1001**

Address Line 4: WESTBOROUGH, MASSACHUSETTS 01581

ATTORNEY DOCKET NUMBER: SBM-026US NAME OF SUBMITTER: DONALD W. MUIRHEAD SIGNATURE: /Donald W. Muirhead/ **DATE SIGNED:** 08/20/2021

PATENT **REEL: 057469 FRAME: 0229** 506828667

Total Attachments: 19 source=SBM-026US, Assignment#page1.tif source=SBM-026US, Assignment#page2.tif source=SBM-026US, Assignment#page3.tif source=SBM-026US, Assignment#page4.tif source=SBM-026US, Assignment#page5.tif source=SBM-026US, Assignment#page6.tif source=SBM-026US, Assignment#page7.tif source=SBM-026US, Assignment#page8.tif source=SBM-026US, Assignment#page9.tif source=SBM-026US, Assignment#page10.tif source=SBM-026US, Assignment#page11.tif source=SBM-026US, Assignment#page12.tif source=SBM-026US, Assignment#page13.tif source=SBM-026US, Assignment#page14.tif source=SBM-026US, Assignment#page15.tif source=SBM-026US, Assignment#page16.tif source=SBM-026US, Assignment#page17.tif source=SBM-026US, Assignment#page18.tif source=SBM-026US, Assignment#page19.tif

PATENT REEL: 057469 FRAME: 0230

ASSIGNMENT

WHEREAS, each of the undersigned inventors has developed certain inventions described in a U.S. patent application entitled:

DOPPLER-SHIFT CORRECTION IN THREE-DIMENSIONAL NETWORK

which was filed on December 21, 2018 as PCT Application Serial No. PCT/JP2018/047241, and the undersigned have full right to convey the entire right, title and interest, both legal and equitable, in and to said inventions, free from all prior assignments, agreements, licenses, mortgages, security interests, or other encumbrances whatsoever; and

WHEREAS, SoftBank Corp. ("ASSIGNEE"), a company having executive offices at 9-1, Higashi-shimbashi 1-chome, Minato-ku, Tokyo 1057317, Japan, is desirous of acquiring the entire right, title and interest in and to said invention or inventions and any and all patents to be obtained therefor;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged by the undersigned, the undersigned do hereby sell, assign, transfer and set over unto said ASSIGNEE, its successors and assigns, the entire right, title and interest throughout the world in and to said inventions, as described in the above-identified application, in any form or embodiment thereof, and in and to the above-identified application; and in and to any application filed in the U.S. or any foreign country based thereon, including the right to file said applications and claim priority under the provisions of any U.S. or international convention or treaty, also the entire right, title and interest throughout the world in and to any and all patents or reissues or extensions thereof to be obtained in this or any foreign country upon said inventions and any divisional, continuation, continuation-in-part or substitute applications which may be filed upon said invention or inventions in this or any foreign country; and the undersigned hereby authorize and request the issuing authority to issue any and all patents on said application or applications to said ASSIGNEE or its successors and assigns.

The undersigned further agree, without any further payment or compensation by said ASSIGNEE or its successors and assigns, to communicate to said ASSIGNEE, its representatives or agents or its successors and assigns, any facts relating to said invention or inventions including evidence for interference purposes or for other legal proceedings whenever requested; testify in any interference or other legal proceedings, whenever requested; execute and deliver, on request, all lawful papers required to make any of the foregoing provisions effective; and generally do everything possible to aid said ASSIGNEE, its successors or assigns and nominees to secure, obtain and enforce proper patent protection for said inventions in this or any foreign country.

Each of the undersigned hereby declares that:

- a. The above-identified application was made or authorized to be made by me.
- b. I believe that I am the original inventor or an original joint inventor of a claimed invention in the above-identified application.
- c. I have reviewed and understand the contents of the above-identified application, including the claims.
- d. I acknowledge the duty to disclose information which is material to patentability as defined in Title 37 C.F.R. § 1.56.
- e. I hereby acknowledge that any willful false statement made in the above declarations is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

	Each of the undersigned hereby authorizes attorneys of Muirhead and Saturnelli, LLC to insert here in parenthesis
() the application number and filing date of the above-identified application
(or US	or foreign counterpart application) to facilitate the recording or other official processing of this Assignment.

IN TESTIMONY WHEREOF, the undersigned have hereunto set their hands and seals on the date next to their signatures.

	Inventor(s)	Date Signed
1		
Name:	Mitsukuni KONISHI	
2.		
Name:	Atsushi NAGATE	

(X) Additional inventors are being named on a separate sheet attached hereto

<u>Inventor(s)</u>	Date Signed
3. /Yoshichika OTA/	June 01, 2021
Name: Yoshichika OTA	
4.	
Name: Kenii HOSHINO	

ASSIGNMENT

WHEREAS, each of the undersigned inventors has developed certain inventions described in a U.S. patent application entitled:

DOPPLER-SHIFT CORRECTION IN THREE-DIMENSIONAL NETWORK

which was filed on December 21, 2018 as PCT Application Serial No. PCT/JP2018/047241, and the undersigned have full right to convey the entire right, title and interest, both legal and equitable, in and to said inventions, free from all prior assignments, agreements, licenses, mortgages, security interests, or other encumbrances whatsoever; and

WHEREAS, SoftBank Corp. ("ASSIGNEE"), a company having executive offices at 9-1, Higashi-shimbashi 1-chome, Minato-ku, Tokyo 1057317, Japan, is desirous of acquiring the entire right, title and interest in and to said invention or inventions and any and all patents to be obtained therefor;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged by the undersigned, the undersigned do hereby sell, assign, transfer and set over unto said ASSIGNEE, its successors and assigns, the entire right, title and interest throughout the world in and to said inventions, as described in the above-identified application, in any form or embodiment thereof, and in and to the above-identified application; and in and to any application filed in the U.S. or any foreign country based thereon, including the right to file said applications and claim priority under the provisions of any U.S. or international convention or treaty, also the entire right, title and interest throughout the world in and to any and all patents or reissues or extensions thereof to be obtained in this or any foreign country upon said inventions and any divisional, continuation, continuation-in-part or substitute applications which may be filed upon said invention or inventions in this or any foreign country; and the undersigned hereby authorize and request the issuing authority to issue any and all patents on said application or applications to said ASSIGNEE or its successors and assigns.

The undersigned further agree, without any further payment or compensation by said ASSIGNEE or its successors and assigns, to communicate to said ASSIGNEE, its representatives or agents or its successors and assigns, any facts relating to said invention or inventions including evidence for interference purposes or for other legal proceedings whenever requested; testify in any interference or other legal proceedings, whenever requested; execute and deliver, on request, all lawful papers required to make any of the foregoing provisions effective; and generally do everything possible to aid said ASSIGNEE, its successors or assigns and nominees to secure, obtain and enforce proper patent protection for said inventions in this or any foreign country.

Each of the undersigned hereby declar	ares that:
a. The above-identified application was made	or authorized to be made by me.
b. I believe that I am the original inventor or a	un original joint inventor of a claimed invention in the above-identified application.
c. I have reviewed and understand the contents of	of the above-identified application, including the claims.
d. I acknowledge the duty to disclose informatio	on which is material to patentability as defined in Title 37 C.F.R. § 1.56.
e. I hereby acknowledge that any willful false	statement made in the above declarations is punishable under 18 U.S.C. 1001 by fine
or imprisonment of not more than five (5) year	rs, or both.
(16/959,694 filed July 2, 2020	orizes attorneys of Muirhead and Saturnelli, LLC to insert here in parenthesis the application number and filing date of the above-identified application facilitate the recording or other official processing of this Assignment.
IN TESTIMONY WHEREOF, the ur	ndersigned have hereunto set their hands and seals on the date next to their signatures.
Inventor(s)	Date Signed
/Mitsukuni KONISHI/ Name: Mitsukuni KONISHI	October 2, 2020
2Name: Atsushi NAGATE	

(X) Additional inventors are being named on a separate sheet attached hereto

	Inventor(s)	Date Signed
3.		
Name:	Yoshichika OTA	
4.		
Name:	Kenii HOSHINO	

ASSIGNMENT

WHEREAS, each of the undersigned inventors has developed certain inventions described in a U.S. patent application entitled:

DOPPLER-SHIFT CORRECTION IN THREE-DIMENSIONAL NETWORK

which was filed on December 21, 2018 as PCT Application Serial No. PCT/JP2018/047241, and the undersigned have full right to convey the entire right, title and interest, both legal and equitable, in and to said inventions, free from all prior assignments, agreements, licenses, mortgages, security interests, or other encumbrances whatsoever; and

WHEREAS, SoftBank Corp. ("ASSIGNEE"), a company having executive offices at 9-1, Higashi-shimbashi 1-chome, Minato-ku, Tokyo 1057317, Japan, is desirous of acquiring the entire right, title and interest in and to said invention or inventions and any and all patents to be obtained therefor;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged by the undersigned, the undersigned do hereby sell, assign, transfer and set over unto said ASSIGNEE, its successors and assigns, the entire right, title and interest throughout the world in and to said inventions, as described in the above-identified application, in any form or embodiment thereof, and in and to the above-identified application; and in and to any application filed in the U.S. or any foreign country based thereon, including the right to file said applications and claim priority under the provisions of any U.S. or international convention or treaty, also the entire right, title and interest throughout the world in and to any and all patents or reissues or extensions thereof to be obtained in this or any foreign country upon said inventions and any divisional, continuation, continuation-in-part or substitute applications which may be filed upon said invention or inventions in this or any foreign country; and the undersigned hereby authorize and request the issuing authority to issue any and all patents on said application or applications to said ASSIGNEE or its successors and assigns.

The undersigned further agree, without any further payment or compensation by said ASSIGNEE or its successors and assigns, to communicate to said ASSIGNEE, its representatives or agents or its successors and assigns, any facts relating to said invention or inventions including evidence for interference purposes or for other legal proceedings whenever requested; testify in any interference or other legal proceedings, whenever requested; execute and deliver, on request, all lawful papers required to make any of the foregoing provisions effective; and generally do everything possible to aid said ASSIGNEE, its successors or assigns and nominees to secure, obtain and enforce proper patent protection for said inventions in this or any foreign country.

Each of the undersigned hereby declares that:

a.	The above-identified	application	was made or	authorized to	be made b	v me.

- b. I believe that I am the original inventor or an original joint inventor of a claimed invention in the above-identified application.
- c. I have reviewed and understand the contents of the above-identified application, including the claims.
- d. I acknowledge the duty to disclose information which is material to patentability as defined in Title 37 C.F.R. § 1.56.
- e. I hereby acknowledge that any willful false statement made in the above declarations is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

IN TESTIMONY WHEREOF, the undersigned have hereunto set their hands and seals on the date next to their signatures.

Inventor(s)	Date Signed
1.	
Name: Mitsukuni KONISHI	
2. /Atsushi Nagate/	October 6, 2020
Name: Atsushi NAGATE	

(X) Additional inventors are being named on a separate sheet attached hereto

	Inventor(s)	Date Signed
3.		
Name:	Yoshichika OTA	
4.		
Name:	Kenji HOSHINO	

ASSIGNMENT

WHEREAS, each of the undersigned inventors has developed certain inventions described in a U.S. patent application entitled:

DOPPLER-SHIFT CORRECTION IN THREE-DIMENSIONAL NETWORK

which was filed on December 21, 2018 as PCT Application Serial No. PCT/JP2018/047241, and the undersigned have full right to convey the entire right, title and interest, both legal and equitable, in and to said inventions, free from all prior assignments, agreements, licenses, mortgages, security interests, or other encumbrances whatsoever; and

WHEREAS, SoftBank Corp. ("ASSIGNEE"), a company having executive offices at 9-1, Higashi-shimbashi 1-chome, Minato-ku, Tokyo 1057317, Japan, is desirous of acquiring the entire right, title and interest in and to said invention or inventions and any and all patents to be obtained therefor;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged by the undersigned, the undersigned do hereby sell, assign, transfer and set over unto said ASSIGNEE, its successors and assigns, the entire right, title and interest throughout the world in and to said inventions, as described in the above-identified application, in any form or embodiment thereof, and in and to the above-identified application; and in and to any application filed in the U.S. or any foreign country based thereon, including the right to file said applications and claim priority under the provisions of any U.S. or international convention or treaty, also the entire right, title and interest throughout the world in and to any and all patents or reissues or extensions thereof to be obtained in this or any foreign country upon said inventions and any divisional, continuation, continuation-in-part or substitute applications which may be filed upon said invention or inventions in this or any foreign country; and the undersigned hereby authorize and request the issuing authority to issue any and all patents on said application or applications to said ASSIGNEE or its successors and assigns.

The undersigned further agree, without any further payment or compensation by said ASSIGNEE or its successors and assigns, to communicate to said ASSIGNEE, its representatives or agents or its successors and assigns, any facts relating to said invention or inventions including evidence for interference purposes or for other legal proceedings whenever requested; testify in any interference or other legal proceedings, whenever requested; execute and deliver, on request, all lawful papers required to make any of the foregoing provisions effective; and generally do everything possible to aid said ASSIGNEE, its successors or assigns and nominees to secure, obtain and enforce proper patent protection for said inventions in this or any foreign country.

Each of the undersigned hereby declares that:

- a. The above-identified application was made or authorized to be made by me.
- b. I believe that I am the original inventor or an original joint inventor of a claimed invention in the above-identified application.
- c. I have reviewed and understand the contents of the above-identified application, including the claims.
- d. I acknowledge the duty to disclose information which is material to patentability as defined in Title 37 C.F.R. § 1.56.
- e. I hereby acknowledge that any willful false statement made in the above declarations is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

IN TESTIMONY WHEREOF, the undersigned have hereunto set their hands and seals on the date next to their signatures.

1.	Inventor(s)	Date Signed
2.		
Name:	Atsushi NAGATE	

(X) Additional inventors are being named on a separate sheet attached hereto

Inventor(s)	Date Signed
3. /Yoshichika OHTA/	October 2, 2020
Name: Yoshichika OHTA	
4.	
Name: Kenii HOSHINO	

ASSIGNMENT

WHEREAS, each of the undersigned inventors has developed certain inventions described in a U.S. patent application entitled:

DOPPLER-SHIFT CORRECTION IN THREE-DIMENSIONAL NETWORK

which was filed on December 21, 2018 as PCT Application Serial No. PCT/JP2018/047241, and the undersigned have full right to convey the entire right, title and interest, both legal and equitable, in and to said inventions, free from all prior assignments, agreements, licenses, mortgages, security interests, or other encumbrances whatsoever; and

WHEREAS, SoftBank Corp. ("ASSIGNEE"), a company having executive offices at 9-1, Higashi-shimbashi 1-chome, Minato-ku, Tokyo 1057317, Japan, is desirous of acquiring the entire right, title and interest in and to said invention or inventions and any and all patents to be obtained therefor;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged by the undersigned, the undersigned do hereby sell, assign, transfer and set over unto said ASSIGNEE, its successors and assigns, the entire right, title and interest throughout the world in and to said inventions, as described in the above-identified application, in any form or embodiment thereof, and in and to the above-identified application; and in and to any application filed in the U.S. or any foreign country based thereon, including the right to file said applications and claim priority under the provisions of any U.S. or international convention or treaty, also the entire right, title and interest throughout the world in and to any and all patents or reissues or extensions thereof to be obtained in this or any foreign country upon said inventions and any divisional, continuation, continuation-in-part or substitute applications which may be filed upon said invention or inventions in this or any foreign country; and the undersigned hereby authorize and request the issuing authority to issue any and all patents on said application or applications to said ASSIGNEE or its successors and assigns.

The undersigned further agree, without any further payment or compensation by said ASSIGNEE or its successors and assigns, to communicate to said ASSIGNEE, its representatives or agents or its successors and assigns, any facts relating to said invention or inventions including evidence for interference purposes or for other legal proceedings whenever requested; testify in any interference or other legal proceedings, whenever requested; execute and deliver, on request, all lawful papers required to make any of the foregoing provisions effective; and generally do everything possible to aid said ASSIGNEE, its successors or assigns and nominees to secure, obtain and enforce proper patent protection for said inventions in this or any foreign country.

Each of the undersigned hereby declares that:

- a. The above-identified application was made or authorized to be made by me.
- b. I believe that I am the original inventor or an original joint inventor of a claimed invention in the above-identified application.
- c. I have reviewed and understand the contents of the above-identified application, including the claims.
- d. I acknowledge the duty to disclose information which is material to patentability as defined in Title 37 C.F.R. § 1.56.
- e. I hereby acknowledge that any willful false statement made in the above declarations is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

IN TESTIMONY WHEREOF, the undersigned have hereunto set their hands and seals on the date next to their signatures.

1.	Inventor(s)	<u>Date Signed</u>
2		
Name:	Atsushi NAGATE	

(X) Additional inventors are being named on a separate sheet attached hereto

<u>Inventor(s)</u>	Date Signed
3.	
Name: Yoshichika OTA	
4. /Kenji HOSHINO/	October 2, 2020
Name: Kenji HOSHINO	

Page 2 of 2