#### 506532254 03/02/2021

#### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6579030

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE: ASSIGNMENT		

#### **CONVEYING PARTY DATA**

Name	Execution Date
AKIRA MASUDA	11/13/2020
SEIJI OKAMOTO	11/09/2020
SHUTO YAMAMOTO	11/16/2020
FUKUTARO HAMAOKA	11/10/2020
MASANORI NAKAMURA	01/18/2021
ASUKA MATSUSHITA	01/19/2021
YOSHIAKI KISAKA	01/20/2021

#### **RECEIVING PARTY DATA**

Name:	NIPPON TELEGRAPH AND TELEPHONE CORPORATION	
Street Address:	5-1, OTEMACHI 1-CHOME	
Internal Address:	CHIYODA-KU	
City:	TOKYO	
State/Country:	JAPAN	
Postal Code:	1008116	

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	17272790

#### **CORRESPONDENCE DATA**

**Fax Number:** (248)641-0270

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:** 248.641.1230

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ATTORNEY DOCKET NUMBER: 5259-000368-US-NP

NAME OF SUBMITTER: KERI KLATY

SIGNATURE: /kk/

DATE SIGNED:	03/02/2021	
Total Attachments: 7		
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# DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE

Title of DIGITAL COHERENT RECEIVER AND DIGITAL COHERENT RECEIVING METHOD  Invention		
As the below named inventor, I hereby declare that:		
This declaration The attached application, or		
is directed to: X United States application or PCT international application number PCT/JP2019/033470 filed on August 27, 2019		
The above-identified application was made or authorized to be made by me.		
I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.		
WHEREAS, NIPPON TELEGRAPH AND TELEPHONE CORPORATION		
(hereinafter referred to as "ASSIGNEE") having places of business at: 5-1, Otemachi 1-chome, Chiyoda-ku, Tokyo 100-8116 Japan, is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefore in the United States and its territorial possessions and in any and all foreign countries;		
NOW, THEREFORE, for good, valuable, and adequate consideration, the receipt of which is hereby acknowledged, I, by these presents do sell, assign and transfer unto said ASSIGNEE, the full and exclusive right to the said invention in the United States and its territorial possessions and in all foreign countries (including the right to claim priority under the terms of the International Convention and other relevant International Treaties and Arrangements from the aforesaid application) and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof.		
I hereby authorize and request the Patent Office Officials in the United States and its territorial possessions and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me had this Assignment and sale not been made.		
Further, I agree that I will communicate to said ASSIGNEE or its representatives any facts known to me respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEE, its successors and assigns, to obtain and enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries.		
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.  LEGAL NAME OF INVENTOR		
Inventor: Akira MASUDA Date: 2020////3		
Signature: Aki ra Masuda		
Signature. 2 3 27 1 20 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		

# DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE

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The above-identified	l application was made or authoriz	ed to be made by me	
I believe that I am the	e original inventor or an original j	oint inventor of a claimed	I invention in the application
WHEREAS, NIPP	ON TELEGRAPH AND TELEPI	HONE CORPORATION	
100-8116 Japan, is d	lesirous of acquiring the entire rig	ht, title and interest in ar	emachi 1-chome, Chiyoda-ku, Tokyo nd to said invention and in and to any possessions and in any and all foreign
I, by these presents d in the United States under the terms of th aforesaid application therefor in the United	to sell, assign and transfer unto sai and its territorial possessions and the International Convention and of the and the entire right, title and into	d ASSIGNEE, the full an in all foreign countries her relevant International crest in and to any and all ons and in any and all fo	eipt of which is hereby acknowledged dexclusive right to the said invention (including the right to claim priority). Treaties and Arrangements from the Letters Patent which may be granted reign countries and in and to any and
and all foreign count of my entire right, tit and assigns, to the fu	ries to issue any and all of said Le tle and interest in and to the same,	tters Patent, when grante for the sole use and beho etters Patent may be gra	and its territorial possessions and any d, to said ASSIGNEE as the assigned of of said ASSIGNEE, its successorated, as fully and entirely as the same
said invention, and substitute, renewal ar Patent to be issued t ASSIGNEE, its succe	testify in any legal proceeding, nd reissue applications, execute all to said ASSIGNEE, make all rig	sign all lawful papers, necessary assignment pap htful oaths, and, general inforce proper protection	ves any facts known to me respecting execute all divisional, continuation pers to cause any and all of said Letters by do everything possible to aid said for said invention in the United States
by fine or imprisonm	ent of not more than five (5) years	nt made in this declarations, or both	n is punishable under 18 U.S.C. 100
LEGAL NAME OF	INVENTOR		
Inventor: Seiji OKA	AMOTO	Date	November 9th, 2020
Signature Lei	is Okamsto		

### DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE

Title of DIGITAL COHERENT RECEIVER AND DIGITAL COHERENT RECEIVING METHOD  Invention		
As the below named inventor, I hereby declare that:		
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is directed to: X United States application or PCT international application number PCT/JP2019/033470 filed on August 27, 2019		
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I believe that I am the original inventor or an original join: inventor of a claimed invention in the application.		
WHEREAS, <u>NIPPON TELEGRAPH AND TELEPHONE CORPORATION</u>		
(hereinafter referred to as "ASSIGNEE") having places of business at: 5-1, Otemachi 1-chome, Chiyoda-ku, Tokyo 100-8116 Japan, is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefore in the United States and its territorial possessions and in any and all foreign countries;		
NOW, THEREFORE, for good, valuable, and adequate consideration, the receipt of which is hereby acknowledged, I, by these presents do sell, assign and transfer unto said ASSIGNEE, the full and exclusive right to the said invention in the United States and its territorial possessions and in all foreign countries (including the right to claim priority under the terms of the International Convention and other relevant International Treaties and Arrangements from the aforesaid application) and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof.		
I hereby authorize and request the Patent Office Officials in the United States and its territorial possessions and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me had this Assignment and sale not been made.		
Further, I agree that I will communicate to said ASSIGNEE or its representatives any facts known to me respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEE, its successors and assigns, to obtain and enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries.		
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.		
LEGAL NAME OF INVENTOR		
Inventor: Shuto YAMAMOTO Date: フロスクイレー / と		
Signature: Math Gangarotte		

## DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE

Invention DIGITAL CORE	RENT RECEIVER AND DIGITAL COHERENT RECEIVING WETHOD
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is directed to: X United States a filed on Augu	application or PCT international application number PCT/JP2019/033470 ust 27, 2019
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I believe that I am the original inver	ntor or an original joint inventor of a claimed invention in the application.
WHEREAS, NIPPON TELEGRA	APH AND TELEPHONE CORPORATION
100-8116 Japan, is desirous of acqu	NEE") having places of business at: 5-1, Otemachi 1-chome, Chiyoda-ku, Tokyo iring the entire right, title and interest in and to said invention and in and to any herefore in the United States and its territorial possessions and in any and all foreign
I, by these presents do sell, assign a in the United States and its territor under the terms of the International aforesaid application) and the entire therefor in the United States and its	valuable, and adequate consideration, the receipt of which is hereby acknowledged, and transfer unto said ASSIGNEE, the full and exclusive right to the said invention ial possessions and in all foreign countries (including the right to claim priority Convention and other relevant International Treaties and Arrangements from the right, title and interest in and to any and all Letters Patent which may be granted territorial possessions and in any and all foreign countries and in and to any and s, substitutions and renewals thereof.
and all foreign countries to issue an of my entire right, title and interest and assigns, to the full end of the te	e Patent Office Officials in the United States and its territorial possessions and any y and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee in and to the same, for the sole use and behoof of said ASSIGNEE, its successors or for which said Letters Patent may be granted, as fully and entirely as the same is Assignment and sale not been made.
said invention, and testify in any substitute, renewal and reissue appli Patent to be issued to said ASSIG	unicate to said ASSIGNEE or its representatives any facts known to me respecting legal proceeding, sign all lawful papers, execute all divisional, continuation, cations, execute all necessary assignment papers to cause any and all of said Letters NEE, make all rightful oaths, and, generally do everything possible to aid said gns, to obtain and enforce proper protection for said invention in the United States any and all foreign countries.
	villful false statement made in this declaration is punishable under 18 U.S.C. 1001
by fine or imprisonment of not mor	e than five (5) years, or both.
LEGAL NAME OF INVENTOR	Å
Inventor: Fukutaro HAMAOKA	Date: $\sqrt{0}$ $\sqrt{10}$ $\sqrt{2020}$
Signature: Tubutaro	Hamabla

### DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE

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The above-identified application was made or authorized to be made by me.		
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NOW, THEREFORE, for good, valuable, and adequate consideration, the receipt of which is hereby acknowledged I, by these presents do sell, assign and transfer unto said ASSIGNEE, the full and exclusive right to the said invention in the United States and its territorial possessions and in all foreign countries (including the right to claim priority under the terms of the International Convention and other relevant International Treaties and Arrangements from the aforesaid application) and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof.		
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LEGAL NAME OF INVENTOR		
Inventor: Masanori NAKAMURA Date: January 18, 2021		
Signature: Maranogi Nakamura		

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LEGAL NAME OF INVENTOR		
Inventor: Asuka MATSUSHITA Date: 2021 Jan (9		
Signature: Linka Mateurhto		

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WHEREAS, NIPPON TELEGRAPH AND TELEPH	IONE CORPORATION
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I, by these presents do sell, assign and transfer unto said in the United States and its territorial possessions and under the terms of the International Convention and off aforesaid application) and the entire right, title and inte	ate consideration, the receipt of which is hereby acknowledged, I ASSIGNEE, the full and exclusive right to the said invention in all foreign countries (including the right to claim priority her relevant International Treaties and Arrangements from the rest in and to any and all Letters Patent which may be granted ons and in any and all foreign countries and in and to any and renewals thereof.
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I hereby acknowledge that any willful false statement by fine or imprisonment of not more than five (5) years LEGAL NAME OF INVENTOR	nt made in this declaration is punishable under 18 U.S.C. 1001 or both.
	7 70 703
Inventor: Yoshiaki KISAKA	Date: January 20,202/
Signature: Joshiaki Hisaka	

PATENT REEL: 055459 FRAME: 0951

**RECORDED: 03/02/2021**