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PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE: NEW ASSIGNMENT

EPAS ID: PAT4773562

CONVEYING PARTY DATA

NATURE OF CONVEYANCE:

Name	Execution Date
KIYOFUMI KIKUCHI	11/21/2017
HIROSHI FUKUDA	11/21/2017
TAKASHI SAIDA	11/21/2017
SHIN KAMEI	11/21/2017
KEN TSUZUKI	11/21/2017

ASSIGNMENT

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:	15744193

CORRESPONDENCE DATA

Fax Number: (801)328-1707

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: 801-533-9800

dwilson@wnlaw.com Email: WORKMAN NYDEGGER **Correspondent Name:** Address Line 1: 60 EAST SOUTH TEMPLE

Address Line 2: **SUITE 1000**

Address Line 4: SALT LAKE CITY, UTAH 84111

ATTORNEY DOCKET NUMBER:	14321.231
NAME OF SUBMITTER:	DANA L. TANGREN
SIGNATURE:	/dana I. tangren/
DATE SIGNED:	01/12/2018
	This document serves as an Oath/Declaration (37 CFR 1.63).

PAIENI REEL: 044606 FRAME: 0384 504726838

Total Attachments: 4

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PATENT REEL: 044606 FRAME: 0385

UNITED ST Form Foreign	ATES PATENT	¹ Attorney Docket No.	14321.231
	COMBINED DECLARATION an (Utility, Design, National Sta	d ASSIGNMENT ge of PCT)	
TITLE OF I	NVENTION:2		
	OPTICAL MODUI	<u>LE</u>	
As a below no	amed inventor, I hereby declare that:		
	SPECIFICATION IDENTIF	FICATION	
This declarati	on and assignment is directed to:		
	(complete (a), (b), or	(c)) ³	
(a) []	The attached application (United States A	Application No.	
	filed on);		
(b) []	Previously filed United States Application	n No	
	filed on; or	•	
(c) [X]	PCT International Application No. PCT/	P2016/003487, filed on .	July 27, 2016
X 2	(nationalized as United States Application		
	filed on January 12, 2018).		
I hereby auth	orize the patent attorneys and/or patent age	nts of Workman Nydegge	r to insert the
above Applic	ation No(s). and filing date(s) when known.	. ***	
	DECLARATION AND ACKNOW	VLEDGEMENT	
The above-ide	entified application was made or authorized	to be made by me.	
	I am the original inventor or an original joir ied application.	nt inventor of a claimed in	vention in the
	te that I have reviewed and understand	the contents of the ab	ove-identified

I acknowledge the duty to disclose all information which is material to patentability as defined in 37 C.F.R. § 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

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.

ASSIGNMENT⁴

The Assignee, <u>NIPPON TELEGRAPH AND TELEPHONE CORPORATION</u>, having a principal place of business at 5-1. Otemachi 1-chome, Chiyoda-ku, Tokyo 1008116 Japan, desires to secure the entire right, title and interest in the above-identified application.

In consideration of One Dollar (\$1.00) and other good and valuable consideration paid to me by the Assignee, the receipt and sufficiency of which is hereby acknowledge, I HEREBY ASSIGN TO THE ASSIGNEE:

The entire right, title and interest in the above-identified application and in all divisions, continuations and continuations-in-part of said application and in all patents issuing thereon in the United States and in all reissues or extensions of patents granted thereon.

The right to claim priority to or the benefit of any prior related United States or foreign patent applications including under all applicable treaties and conventions.

I hereby authorize and request the United States Commissioner of Patents and Trademarks, to issue any and all patents on said application to the Assignee as the owner of the entire interest, for the sole use and behoof of the said Assignee, its successors, assigns and legal representatives.

I hereby agree, without further consideration, to sign all lawful papers and to perform all other lawful acts which the Assignee may request me to make this Assignment fully effective, including, by way of example but not of limitation, the following:

Prompt execution of all original, divisional, continuation, continuation-in-part, substitute, reissue, and other United States applications and all lawful documents requested by the Assignee to further the prosecution of any of such patent applications.

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PATENT REEL: 044606 FRAME: 0387 With regard to the above-identified application and applications claiming priority thereto, cooperate to the best of my ability in: (1) proceedings relating to nullification, reissue, extension, post grant, inter parties, derivation, supplemental examination, and infringement; (2) execution of all lawful documents; and (3) the production of evidence.

This assignment and agreement shall be binding upon my heirs and legal representatives.

SIGNATURE(S)5

NOTE: Carefully indicate the family (or last) name, as it should appear on the filing receipt and all other documents.

Kiyofumi		KIKUCHI
(GIVEN NAME)	(MIDDLE INITIAL OR NAME)	FAMILY (OR LAST NAME)
Inventor's signature	<u> Nyofiri Kkuila</u>	
Date November 21,	Country of Citizenship	Japan
Residence Atsugi-shi.	Kanagawa-ken	Japan
	ity)	(State or Country)
Mailing Addressc/o	NTT Intellectual Property Center,	
	1, Midori-cho 3-chome, Musashino-s	L: T-1 1000585 I
Full name of second joint	inventor, if any	
Full name of second joint Hiroshi	inventor, if any	FUKUDA
	(MIDDLE INITIAL OR NAME)	FUKUDA FAMILY (OR LAST NAME)
Hiroshi	•	
Hiroshi (GIVEN NAME)	(MIDDLE INITIAL OR NAME) Hiroshi Fukuda	
Hiroshi (GIVEN NAME) Inventor's signature Date <u>November 21, 2</u>	(MIDDLE INITIAL OR NAME) **Atrashi Fukuda **2017 Country of Citizenship	FAMILY (OR LAST NAME)
Hiroshi (GIVEN NAME) Inventor's signature	(MIDDLE INITIAL OR NAME) 14 rs. hi Fulcuda 2017 Country of Citizenship Kanagawa-ken	FAMILY (OR LAST NAME) Japan
Hiroshi (GIVEN NAME) Inventor's signature Date November 21, 3 Residence Atsugi-shi, (ci	(MIDDLE INITIAL OR NAME) 14 rs. hi Fulcuda 2017 Country of Citizenship Kanagawa-ken	FAMILY (OR LAST NAME) Japan Japan

Full name of third joint inventor, if any	
Takashi	SAIDA
(GIVEN NAME) (MIDDLE INITIAL OR NAME)	
Inventor's signature <u>Jakashi Saiola</u>	
Date November 21, 2017 Country of Citizenship	Japan
Residence Atsugi-shi, Kanagawa-ken	Japan
(city)	(State or Country)
Mailing Address <u>c/o NTT Intellectual Property Center,</u>	
9-11, Midori-cho 3-chome, Musashino-sh	ii. Tokyo 1808585 Japan
Full name of fourth joint inventor, if any	
Shin	KAMEI
(GIVEN NAME) (MIDDLE INITIAL OR NAME)	FAMILY (OR LAST NAME)
Inventor's signature <u>Shin Kamei</u>	
Date November 21, 2017 Country of Citizenship	Japan
Residence Atsugi-shi, Kanagawa-ken	Japan
(city)	Japan (State or Country)
Mailing Address <u>c/o NTT Intellectual Property Center,</u>	
9-11, Midori-cho 3-chome, Musashino-sh	i, Tokyo 1808585 Japan
Full name of fifth joint inventor, if any Ken (GIVEN NAME) (MIDDLE INITIAL OR NAME)	TSUZUKI FAMILY (OR LAST NAME)
0.3	
Date November 21, 2017 Country of Citizenship	
Residence Atsugi-shi, Kanagawa-ken	***************************************
(city)	(State or Country)
Mailing Addressc/o NTT Intellectual Property Center,	****
	i Tokyo 1808585 Japan

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