

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT2739450

SUBMISSION TYPE:	NEW ASSIGNMENT																		
NATURE OF CONVEYANCE:	ASSIGNMENT																		
CONVEYING PARTY DATA																			
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<table border="1"><tr><td>Name:</td><td>NIPPON TELEGRAPH AND TELEPHONE CORPORATION</td></tr><tr><td>Street Address:</td><td>3-1, OTEMACHI 2-CHOME, CHIYODA-KU</td></tr><tr><td>City:</td><td>TOKYO</td></tr><tr><td>State/Country:</td><td>JAPAN</td></tr><tr><td>Postal Code:</td><td>1008116</td></tr></table>		Name:	NIPPON TELEGRAPH AND TELEPHONE CORPORATION	Street Address:	3-1, OTEMACHI 2-CHOME, CHIYODA-KU	City:	TOKYO	State/Country:	JAPAN	Postal Code:	1008116								
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CORRESPONDENCE DATA																			
Fax Number:																			
Email:	ckoy@wnlaw.com																		
<i>Correspondence will be sent via US Mail when the email attempt is unsuccessful.</i>																			
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Address Line 4:	SALT LAKE CITY, UTAH 84111																		
ATTORNEY DOCKET NUMBER:	14321.178																		

NAME OF SUBMITTER:	SCOTT A. WOODBURY
Signature:	/Scott A. Woodbury/
Date:	02/24/2014
<p>Total Attachments: 6 source=14321-178_Dec-Assign#page1.tif source=14321-178_Dec-Assign#page2.tif source=14321-178_Dec-Assign#page3.tif source=14321-178_Dec-Assign#page4.tif source=14321-178_Dec-Assign#page5.tif source=14321-178_Dec-Assign#page6.tif</p>	

COMBINED DECLARATION and ASSIGNMENT
(Utility, Design, National Stage of PCT)

TITLE OF INVENTION:²

LIGHT MERGING/BRANCHING DEVICE, BIDIRECTIONAL LIGHT PROPAGATION
DEVICE, AND LIGHT TRANSMISSION/RECEPTION SYSTEM

As a below named inventor, I hereby declare that:

SPECIFICATION IDENTIFICATION

This declaration and assignment is directed to:

*(complete (a), (b), or (c))*³

- (a) ☐ The attached application (United States Application No. _____,
filed on _____);
- (b) ☐ Previously filed United States Application No. _____,
filed on _____; or
- (c) ☒ PCT International Application No. PCT/JP2012/006196,
filed on September 27, 2012 (nationalized as United States Application
No. _____, filed on _____).

I hereby authorize the patent attorneys and/or patent agents of Workman Nydegger to insert the
above Application No(s). and filing date(s) when known.

DECLARATION AND ACKNOWLEDGEMENT

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
above-identified application.

I hereby state that I have reviewed and understand the contents of the above-identified application, including the claim(s).

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, NIPPON TELEGRAPH AND TELEPHONE CORPORATION, having a principal place of business at 3-1, Otemachi 2-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.

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.

Full name of sole or first inventor

Masamichi		FUJIWARA
(GIVEN NAME)	(MIDDLE INITIAL OR NAME)	FAMILY (OR LAST NAME)

Inventor's signature Masamichi Fujiwara

Date December 24, 2013 Country of Citizenship Japan

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Full name of second joint inventor, if any

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Inventor's signature Kenichi Suzuki

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Full name of third joint inventor, if any

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Inventor's signature Naoto Yoshimoto
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Full name of fourth joint inventor, if any

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Full name of fifth joint inventor, if any

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Inventor's signature Toshio Watanabe
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Full name of sixth joint inventor, if any

Hiroshi		TAKAHASHI
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Residence <u>Atsugi-shi, Kanagawa-ken</u>	<u>Japan</u>	
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Mailing Address <u>c/o NTT Intellectual Property Center,</u>		
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Full name of seventh joint inventor, if any

Hiromasa		TANOBE
(GIVEN NAME)	(MIDDLE INITIAL OR NAME)	FAMILY (OR LAST NAME)
Inventor's signature <u>Hiromasa Tanobe</u>		
Date <u>December 24, 2013</u>	Country of Citizenship <u>Japan</u>	
Residence <u>Atsugi-shi, Kanagawa-ken</u>	<u>Japan</u>	
(city)	(State or Country)	
Mailing Address <u>c/o NTT Intellectual Property Center,</u>		
<u>9-11, Midori-cho 3-chome, Musashino-shi, Tokyo 1808585 Japan</u>		

Full name of eighth joint inventor, if any

Tsutomu		KITOH
(GIVEN NAME)	(MIDDLE INITIAL OR NAME)	FAMILY (OR LAST NAME)
Inventor's signature <u>Tsutomu Kitoh</u>		
Date <u>December 24, 2013</u>	Country of Citizenship <u>Japan</u>	
Residence <u>Atsugi-shi, Kanagawa-ken</u>	<u>Japan</u>	
(city)	(State or Country)	
Mailing Address <u>c/o NTT Intellectual Property Center,</u>		
<u>9-11, Midori-cho 3-chome, Musashino-shi, Tokyo 1808585 Japan</u>		

INSTRUCTION SHEET FOR
COMBINED DECLARATION and ASSIGNMENT (Form Foreign)

General. The attached form should be used when filing a US utility application, a US design patent application, or a PCT nationalization where all of the inventors are assigning their rights to a third party.

Footnotes. The instructions listed below correspond to the footnotes in form:

-
- ¹ The Attorney Docket No. references our internal docket number and is completed by us upon receipt of the application.
- ² Insert the title of the invention.
- ³ Mark Section (a) if the attached Declaration will be filed concurrently with the application and the application is NOT a PCT nationalization. We will insert the application number and filing date after filing the application but before recording the assignment. Mark Section (b) and insert the application number and filing date if the attached Declaration will be filed after filing the application and the application is NOT a PCT nationalization. Mark Section (c) and insert the International Application Number and International filing date if the application is a US PCT nationalization. We will insert the US application number and filing date before recording the assignment.
- ⁴ Insert the full legal name and address of the Assignee.
- ⁵ Complete both the "Residence" and "Post Office Address." At "Residence," insert only the city and state or country. A full address is not required. The "Mailing Address" need not be a residence address but can be any address, including a PO Box, where correspondence can be received.