504199218 01/27/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4245894

		NEW ASSIGNMENT		
NATURE OF CONVEYAN	ICE:	ASSIGNMENT	ASSIGNMENT	
CONVEYING PARTY DA	ATA			
		Name	Execution Date	
TAKANORI ISHIKAWA			05/14/2012	
TOMOYO SHIBAZAKI			05/14/2012	
MITSURU NAGANO			05/14/2012	
MASAHIRO YANAGISA	NA		05/14/2012	
HIROSHI TERUI			05/14/2012	
MIKITAKA ITOH			05/15/2012	
RECEIVING PARTY DA	ТА			
Name:		ECTRONICS CORPORATION		
Street Address:	1-32, S	HIN-URASHIMACHO 1-CHOME		
Internal Address:	KANAG	GAWA-KU		
City:	YOKO	HAMA-SHI, KANAGAWA		
State/Country:	JAPAN			
Postal Code:	2210031			
Name:	NIPPON TELEGRAPH AND TELEPHONE CORPORATION			
Street Address:	3-1, OTEMACHI 2-CHOME			
Internal Address:		DA-KU		
City:	ΤΟΚΥ)		
State/Country:	JAPAN			
Postal Code:	10081	6		
PROPERTY NUMBERS	Total: 1		7	
		Number		
Property Type Application Number:		15416853		

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REEL: 041099 FRAME: 0052

	TE 1000 T LAKE CITY, UTAH 84111	
ATTORNEY DOCKET NUMBER:	14321.156.1.1	
NAME OF SUBMITTER:	CARL T REED	
SIGNATURE:	/Carl T. Reed/	
DATE SIGNED:	01/27/2017	
Total Attachments: 6 source=14321-156-1-1_Assignment#page1.tif source=14321-156-1-1_Assignment#page2.tif source=14321-156-1-1_Assignment#page3.tif source=14321-156-1-1_Assignment#page4.tif source=14321-156-1-1_Assignment#page5.tif source=14321-156-1-1_Assignment#page6.tif		

WHEN RECORDED RETURN TO:

PATENT APPLICATION Docket No: 14321.156

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Workman Nydegger 1000 Eagle Gate Tower 60 East South Temple Salt Lake City, Utah 84111

Form P4

ASSIGNMENT

We the under signed, hereinafter collectively referred to as "Assignor", are the inventors of an invention entitled OPTICAL WAVEGUIDE DEVICE AND MODULE. Preferred embodiments of said invention are disclosed in a United States patent application which:

- [] is executed concurrently herewith for filing in the United States Patent and Trademark Office.
- [] was previously filed in the United States Patent and Trademark Office on Application Serial No.
- [X] is a United States National Application of PCT International Application No. PCT/JP2010/006913_____, filed _____November 26, 2010____.

The Assignees, (1) NTT ELECTRONICS CORPORATION, having a principal place of business at 1-32, Shin-urashimacho 1-chome, Kanagawa-ku, Yokohama-shi, Kanagawa 2210031 Japan, and (2) NIPPON TELEGRAPH AND TELEPHONE CORPORATION, having a principal place of business at 3-1, Otemachi 2-chome, Chiyoda-ku, Tokyo 1008116 Japan desire to secure the entire right, title and interest in said invention.

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

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

The right to claim the benefits of any prior related United States or foreign patent applications.

1

Assignor hereby authorizes and requests 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 behalf of the said Assignee, its successors, assigns and legal representatives.

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

Prompt execution of all original, divisional, 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.

Cooperation to the best of Assignor's ability in the execution of all lawful documents, the production of evidence, nullification, reissue, extension, or infringement proceedings involving said application.

This assignment and agreement shall be binding upon Assignor's heirs and legal representatives.

Full name of sole or first inventor

Takanori		ISHIKAWA	
(GIVEN NAME)	(MIDDLE INITIAL OR NAME)	FAMILY (OR LAST NAME)	
Inventor's signature	Takanori Ishikawa		
Date May 14, 2012	Country of Citizenship	Japan	
Address c/o NTT ELECTRONICS CORPORATION, 1-32, Shin-urashimacho1 -chome,			
Kanagawa-ku, Yokohama-s	hi, Kanagawa 2210031 Japan	· · · · · · · · · · · · · · · · · · ·	

Full name of second inventor, if any

Tomoyo		SHIBAZAKI	
(GIVEN NAME)	(MIDDLE INITIAL OR NAME)	FAMILY (OR LAST NAME)	
Inventor's signature	Tomoyo Shibazaki		
Date May 14, 2012	Country of Citizenship	an	
Address c/o NTT ELECTRONICS CORPORATION, 1-32, Shin-urashimacho 1 -chome,			
Kanagawa-ku, Yokohama-sh	i, Kanagawa 2210031 Japan		

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Full name of third inventor, if any	У		
Mitsuru		NAGANO	
(GIVEN NAME)	(MIDDLE INITIAL OR N.	AME) FAMILY (OR LAST NAME)	
Inventor's signature	Mitsurn A	lagano	
Date May 14, 2012	Country of Citize	nship <u>Japan</u>	
Address			
Kanagawa-ku, Yokohama-shi, Kanagawa 2210031 Japan			

 Full name of fourth inventor, if any
 Masahiro
 YANAGISAWA

 Masahiro
 (MIDDLE INITIAL OR NAME)
 YANAGISAWA

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

 Inventor's signature
 Masahiro
 (Masahiro
 Family (OR LAST NAME)

 Date
 May 14, 2012
 Country of Citizenship
 Japan

 Address
 c/o NTT ELECTRONICS CORPORATION, 1-32, Shin-urashimacho 1 -chome,

 Kanagawa-ku, Yokohama-shi, Kanagawa 2210031 Japan

Full name of fifth inventor,	if any		
Hiroshi		TERUI	
(GIVEN NAME)	(MIDDLE INITIAL OR NAME) Hiroshi (Terui	FAMILY (OR LAST NAME)	
Inventor's signature	Hiroshi Verui		
Date May 14, 2012	Country of Citizenship _	Japan	
Address <u>c/o NTT ELECTRONICS CORPORATION, 1-32, Shin-urashimacho 1 -chome,</u>			
Kanagawa-ku, Yokohama-shi, Kanagawa 2210031 Japan			

Full name of sixth inventor, if any		
Mikitaka		ITOH
(GIVEN NAME)	(MIDDLE INITIAL OR NAME)	FAMILY (OR LAST NAME)
Inventor's signature		
Date	Country of Citizenship	Japan
Address <u>Atsugi-shi, Kanagawa-</u>	ken, Japan	

WHEN RECORDED RETURN TO:

PATENT APPLICATION Docket No:

Workman Nydegger 1000 Eagle Gate Tower 60 East South Temple Salt Lake City, Utah 84111

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This assignment and agreement shall be binding upon Assignor's heirs and legal representatives.

Full name of sole or first inventor

Takanori (GIVEN NAME)	(MIDDLE INITIAL OR NAME)	ISHIKAWA FAMILY (OR LAST NAME)	
Inventor's signature	· · · · · · · · · · · · · · · · · · ·	· · ·	
Date	Country of Citizenship	Japan	
Address <u>c/o NTT ELECTRONICS CORPORATION</u> , 1-32, Shin-urashimacho 1 -chome,			
Kanagawa-ku, Yokoh	ama-shi, Kanagawa 2210031 Japan	. · ·	

Full name of second inventor, if any

Тотоуо		SHIBAZAKI	
(GIVEN NAME)	(MIDDLE INITIAL OR NAME)	FAMILY (OR LAST NAME)	
Inventor's signature			
Date	Country of Citizenship	pan	
Address <u>c/o NTT ELECTRONICS CORPORATION</u> , 1-32, Shin-urashimacho 1 -chome,			
Kanagawa-ku, Yokohama-sh	ii, Kanagawa 2210031 Japan		

Full name of third inventor, if ar Mitsuru	у	NAGANO	
(GIVEN NAME)	(MIDDLE INITIAL OR NAME)	FAMILY (OR LAST NAME)	
Inventor's signature	· · · · · · · · · · · · · · · · · · ·		
Date	Country of Citizenship	Japan	
Address c/o NTT ELECTR	ONICS CORPORATION, 1-32	, Shin-urashimacho 1 -chome,	
Kanagawa-ku, Yokohama-shi, k	Kanagawa 2210031 Japan		
Full name of fourth inventor, if	2021		
Masahiro	any	YANAGISAWA	
(GIVEN NAME)	(MIDDLE INITIAL OR NAME)	FAMILY (OR LAST NAME)	
Inventor's signature			
Date	Country of Citizenship	Japan	
Address <u>c/o NTT ELECTR</u>	ONICS CORPORATION, 1-32	, Shin-urashimacho 1 -chome,	
Kanagawa-ku, Yokohama-shi, F	Kanagawa 2210031 Japan		
Full name of fifth inventor, if ar	IV		
Hiroshi	2	TERUI	
(GIVEN NAME)	(MIDDLE INITIAL OR NAME)	FAMILY (OR LAST NAME)	
Inventor's signature			
Date	Country of Citizenship _	Japan	
Address			
Kanagawa-ku, Yokohama-shi, Kanagawa 2210031 Japan			
The line of the constant of the second secon			
Full name of sixth inventor, if a Mikitaka	ny	ІТОН	
(GIVEN NAME)	(MIDDLE INITIAL OR NAME)	FAMILY (OR LAST NAME)	
Inventor's signature	nikitaka Stoh		
DateMay 15, 2012	Country of Citizenship _	Japan	

Address Atsugi-shi, Kanagawa-ken, Japan

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RECORDED: 01/27/2017