Docket No.: 14321.59

FORM PTO-1595 (Modified) (Rev. 03-01) 03 - 10 - 1	U.S. DEPARTMENT OF COMMERCE			
OMB No. 0651-0027 (exp.5/31/2002) 3/3/1) 4	Patent and Trademark Office			
POBA/REV03 Tab settings → → ▼	V • • • • • • • • • • • • • • • • • • •			
To the Honorable Commissioner of Pate. 102690	4.1.1attached original documents or copy thereof.			
1. Name of conveying party(ies):	2. Name and address of receiving party(ies):			
Shin Kamei Yasuyuki Inoue	Name: Nippon Telegraph and Telephone Corporation			
Takuya Tanaka (MAR U 3 ZAUA 🔌)	Address: 3-1 Otemachi 2-chome			
Toshikazu Hashimoto				
Additional names(s) of conveying party(ies)	Chiyoda-ku			
3. Nature of conveyance:				
☑ Assignment ☐ Merger				
☐ Security Agreement ☐ Change of Name	City: Tokyo State/Prov.:			
Other	Country: Japan ZIP: 100-8116			
Execution Date: February 9, 2004	Additional name(s) & address(es) ☐ Yes ☒ No			
4. Application number(s) or patent numbers(s):				
If this document is being filed together with a new application	n, the execution date of the application is:			
Patent Application No. Filing date	B. Patent No.(s)			
	2.1 dishirtion(5)			
10/715,146 November 17, 2003				
03/08/2004 SMINASS1 00000055 10715146				
04 FC:8021 40.00 dp				
Additional numbers	☐ Yes ☒ No			
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:			
Name: Dana L. Tangren	7. Total fee (37 CFR 3.41):\$ 40.00 Enclosed - Any excess or insufficiency should be			
Registration No. 37,246				
Address:	credited or debited to deposit account			
022913	☐ Authorized to be charged to deposit account			
PATENT TRADEMARK OFFICE CUSTOMER NO.	8. Deposit account number:			
City: State/Prov.:	23-3178			
Country: ZIP:	(Attach duplicate copy of this page if paying by deposit account)			
DO NOT USE THIS SPACE				
9. Statement and signature.				
To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.				
Dana L. Tangren	7/angu 3/3/04			
Name of Person Signing	Signature			
Total number of pages including	cover sheet, attachments, and			

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents & Trademarks, Box Assignments

Washington, D.C. 20231

WHEN RECORDED RETURN TO:

PATENT APPLICATION Docket No: 14321.59

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

ASSIGNMENT				
I/We the under signed, hereinafter collectively referred to as "Assignor", are the inventors of an invention entitled OPTICAL WAVEGUIDE CIRCUIT				
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.				
[X] was previously filed in the United States Patent and Trademark Office on November 17, 2003, Application Serial No. 10/715,146.				
[] is a United States National Application of PCT International Application No				
The Assignee, <u>NIPPON TELEGRAPH AND TELEPHONE CORPORATION</u> , having a principal place of business at <u>3-1, Otemachi 2-chome, Chiyoda-ku, Tokyo 100-8116, Japan</u> , desires to secure the entire right, title and interest in said application.				

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Assignor by the Assignee, the receipt and sufficiency of which is hereby acknowledge,

ASSIGNOR HEREBY ASSIGNS TO THE ASSIGNEE:

In consideration of One Dollar (\$1.00) and other good and valuable consideration paid to

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.

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 behoof 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				
Shin		KAMEI		
(GIVEN NAME)	(MIDDLE INITIAL OR NAME)	FAMILY (OR LAST NAME)		
Inventor's signature	Shin Kamei			
Date February 9, 2004	_ Country of Citizenship	Japan		
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(GIVEN NAME)	(MIDDLE INITIAL OR NAME)	TFAMILY (OR LAST NAME)		
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Full name of fourth inventor	, if any			
Toshikazu		HASHIMOTO		
(GIVEN NAME)	(MIDDLE INITIAL OR NAME)	FAMILY (OR LAST NAME)		
Inventor's signature	Toshikazu Hashimo	to		
Date February 9, 2004	_ Country of Citizenship	Japan		
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RECORDED: 03/03/2004