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Alexandria, VA 22313-1450			Attorney Docket No. <u>151107</u>	
Please record the attached original document Total number of pages including cover sheet				
<ol> <li>A. Name of conveying parties:</li> <li>[1] Norio TANAKA</li> <li>[2] Shigeru TAKARAD.</li> <li>[3] Hirofumi WATANA</li> </ol>		[1] D	nd address of receiving parties: AINICHISEIKA COLOR & CHEMICALS MFG. CO., LTD. NIHONBASHI-BAKUROCHO 1-	
[4] Shiro FUTAKI [5] Ichiro UENO [6] Takashi HIRAGA [7] Noritaka YAMAMO	то	103-8	CHOME D-KU, TOKYO 383, JAPAN ITER ENERGY CO., LTD.	
B. Additional name(s) of conveying 3. A. Nature of conveyance:	party(ies) attached? Yes 🖾 No	KOH YOK	12, SHINYOKOHAMA OKU-KU OHAMA-SHI, KANAGAWA 033, JAPAN	
<ul> <li>Security Agreement</li> <li>Other <u>Record to correct Assignor</u> assignment document previously record 21, 2011, reel 027339/frame 0723</li> <li>B. Execution Date: [1 &amp; 2] Octob</li> </ul>	<u>ded on November</u> er 17, 2011; [3 &	3-1, K CHIY 100-8	ATIONAL INSTITUTE OF ADVANCED INDUSTRIAL SCIENCE AND TECHNOLOGY CASUMIGASEKI 1-CHOME ODA-KU, TOKYO 921 JAPAN	
4] November 10, 2011; [5-7] Octo 4. A. Patent Application No. 13/264.		B. Addition B. Patent N	nal name(s) & address(es) attached?	
	dditional numbers attac	ched? 🗌 Yes 🛛	No	
C. Title of Application: <u>OPTICAL PATH SWITCHING SIGNAL</u> <u>TRANSMISSION/RECEPTION APPARATUS AND CORRESPONDING METHOD</u>				
<ol> <li>Name and address of party to whom cor concerning document should be mailed:</li> </ol>		6. Total number	of applications and patents involved: $\underline{1}$	
Name: James A. Oliff			Deposit Account No. 15-0461 the total fee ) in the amount of \$40.00.	
Address: OLIFF & BERRIDGE, PLC P.O. Box 320850 Alexandria, VA 22320 Phone Number: 703-836-64 Fax Number: 703-836-278	)-4850 00		erpayment or charge any underpayment to nt number 15-0461.	
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<ul> <li>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 locument. James A. Hiff Registration No. 27,075 Joel S. Amstrong Registration No. 36,430</li> </ul>				
U			DATENT	

PATENT REEL: 027393 FRAME: 0527

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O: JAMES A. OLIFF COMPANY: OLIFF & BERRIDGE, PLC

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P.O. Box 1450 Alexandria, VA 22313-1450			Attanney Docket No.	<u>151107</u>
Please record the attached original doc Total number of pages including cover		ment: 6		
<ol> <li>A. Name of conveying parties:         <ol> <li>Notio TANAKA</li> <li>Notio TANAKA</li> <li>Shigeru TAKARA</li> <li>Shigeru TAKARA</li> <li>Hirofumi WATAN</li> <li>Shiro FUTAKI</li> <li>Shiro FUTAKI</li> <li>Ichiro UENO</li> <li>Takashi HIRAGA</li> <li>Takashi HIRAGA</li> <li>Noritaka YAMAM</li> <li>Additional name(s) of conve</li> </ol> </li> <li>A. Nature of conveyance:         <ol> <li>Assignment</li> <li>Security Agreement</li> <li>Security Agreement</li> <li>Other <u>Response to Notice of Document (Doc ID No. 70047551</u></li> <li>Execution Date: <a href="mailto:11.2.21C31">[1 &amp; 2] C31</a></li> </ol></li> </ol>	DA VABE IOTO sying party(ies) attached? Yes No Change of Name Non-Recordation of S Detober 17, 2011: [2 &	<ol> <li>A. Name an         <ol> <li>[1] D.4</li> <li>7-6, N</li> <li>CHUC</li> <li>103-83</li> <li>[2] IN</li> <li>3-20-1</li> <li>KOHC</li> <li>222-00</li> <li>[3] N.4</li> </ol> </li> <li>3-1, K         CHIY6         100-85     </li> </ol>	d address of receiving pr ANICHISEIKA CU CHEMICALS M IHONBASHI-BAJ CHOME D-KU, TOKYO 383, JAPAN IER ENERGY CC 2, SHINYOKOHA DKU-KU DHAMA-SHI, KAN DHAMA-SHI, KAN DHAMA-SHI, KAN DHAMA-SHI, KAN DHAMA-SHI, KAN DHAMA-SHI, KAN DHAMA-SHI, KAN DHAMA-SHI, KAN DHAMA-SHI, KAN CIENCE AND TECHNOLOGY ASUMIGASEKI I ODA-KU, TOKYO 221 JAPAN al neme(s) & address(es I)Yes	DLOR & FG. CO., LTD. KUROCHO 1- MA JAGAWA UTE OF IDUSTRIAL -CHOME
4. A. Patent Application No. <u>13/</u>	264.654	B. Patcot N	0.(S)	
	Additional numbers atta	abed? 🗌 Yes 🖾 I	No	
C. Title of Application: <u>OPTI</u> <u>APPARATUS AND CORRES</u>			RANSMISSION/F	ECEPTION
<ol> <li>Name and address of party to who concerning document should be manual</li> </ol>		6. Total auxiber (	of applications and pater	ts involved: <u>1</u>
Name: James A. Oliff			Deposit Account No. 15 in the amount of \$40.00	
Address: OLIFP & BERRIDGE P.O. Box 3208 Alexandria, VA Phone Number: 703-8 Fax Number: 703-83	50 22320-4850 36-6400		apsyment or charge say it number 15-0461.	underpayment to
<ol> <li>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 objected document.</li> </ol>				
James M. Oliff Registration No. 2 Joel S. Armstrong Registration No.	7,075 0. 36,430	9a	te: <u>December 5, 201</u>	

PATENT REEL: 027393 FRAME: 0528

## PCT/JP2010/056961

Whereas.

For Non-U.S. Clients

## Assignment

Whereas, I/We, Norio TANAKA, Shigeru TAKARADA, Hirofumi WATANABE, Shiro FUTAKI, Ichiro UENO, Takashi HIRAGA, and Noritaka YAMAMOTO

hereinafter called assignor(s), have invented certain improvements in

OPTICAL PATH SWITCHING SIGNAL TRANSMISSION/RECEPTION APPARATUS AND CORRESPONDING METHOD

and executed an application for Letters Patent of the United States of America therefor on

October 17, 2011, October 31, 2011, November 10, 2011; and

1) DAINICHISEIKA COLOR & CHEMICALS MFG. CO., LTD. of

7-6, Nihonbashi-Bakurocho 1-chome, Chuo-ku, Tokyo 103-8383, Japan,

2) Inter Energy Co., Ltd. of

3-20-12, Shinyokohama, Kohoku-ku, Yokohama-shi, Kanagawa 222-0033, Japan,

3) NATIONAL INSTITUTE OF ADVANCED INDUSTRIAL SCIENCE AND TECHNOLOGY of

3-1, Kasumigaseki 1-chome, Chiyoda-ku, Tokyo 100-8921 Japan,

(assignee(s)), desires to acquire the entire right, title, and interest in the application and invention, and to any United States patents to be obtained therefor;

Now therefore, for valuable consideration, receipt whereof is hereby acknowledged,

I/We, the above named assignor(s), hereby sell, assign and transfer to the above named assignee(s), its successors and assigns, the entire right, title and interest in the application and the invention disclosed therein for the United States of America, and all divisions, and continuations thereof, and all Letters Patent of the United States that may be granted thereon, and all reissues thereof, including the right to claim priority under 35 U.S.C. §119, and I/we request the Commissioner of Patents to issue any Letters Patent granted upon the invention set forth in the application to the assignee(s), its successors and assigns; and I/we will execute without further consideration all papers deemed necessary by the assignee(s) in connection with the United States application when called upon to do so by the assignee(s).

I/We hereby authorize and request our attorneys OLIFF & BERRIDGE, PLC of 277 South Washington Street, Suite 500, Alexandria, Virginia 22314 to insert here in parentheses (Application number \_\_\_\_\_\_, filed \_\_\_\_\_\_) the filing date and application number of said application when known.

Date:	October 17, 2011 Nouis	Tanaka	
	s/ Norio TANAK		
Date:	October 17, 2011 Shigere	Jaka Vada	
	s/ Shigeru TAKA	RADA	

PATENT REEL: 027393 FRAME: 0529

Date:	November 10, 2011 N. Watanake
	s/ Hirofumi WATANABE
Date:	November 10, 2011 Shiro Futaki
	s/ Shiro FUTAKI
Date;	actaber 31, 2011 (Ichiro Ueno
	s/ Ichiro UENO
Date:	October 31, 2011-7, Kashi Hiraga
	s/ Takashi HIRAGA
Date:	actober 31, 2011 Noritalia famameto
	s/Noritaka YAMAMOTO

(Legalization not required for recording but is prima facie evidence of execution under 35 U.S.C. §261) 8/92

RECORDED: 12/12/2011