U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office

198	14403 <u>Attorney Docket No. 1303.45454X00</u>			
To the Director of the U.S. Patent and Trademark Office, Please record the attached documents or the new address(es) below.				
1. Name of conveying party(ies): Shigenori SHIMIZU Kazuhisa KURASHIGE Tatsuya USUI Naoaki SHIMURA Hiroyuki ISHIBASHI Keiji SUMIYA Kenzou SUSA	2. Name and address of receiving party(ies) Hitachl Chemical Company, Ltd., 1-1, Nishi-Shinjuku 2-chome Shinjuku-ku, Tokyo 163-0449 JAPAN			
Additional name(s) of conveying party(ies) attached?  Yes No. 3. Nature of conveyance/Execution Date(s): Execution Date(s) September 14, 2005; September 15, 2005; September 16, 2005; September 16, 2005 September 21, 2005 and October 3, 2005  Assignment	Additional name(s) & address(es) attached? ☐ Yes ☒ No			
☐ Joint Research Agreement ☐ Government Interest Assignment ☐ Executive Order 9424, Confirmatory License ☐ Other				
4. Application or patent numbers(s):	This document is being filed together with a new application.			
A. Patent Application No.(s)	B. Patent Registration No.(s)			
11/220,743				
Additional number(s)	attached ☐ Yes ☒ No			
<ol><li>Name and address of party to whom correspondence concerning document should be mailed:</li></ol>	6. Total number of applications and patents involved 1			
Name: ANTONELLI, TERRY, STOUT & KRAUS, LLP	7. Total fee (37 CFR 3.41)			
Internal Address: 1300 NORTH 17 <sup>TH</sup> STREET – SUITE 1800	Authorized to be charged to deposit account  Enclosed  None required (government interest not affecting title)			
City: ARLINGTON State: VA Zip 22209  Phone Number: 703-312-6000  Fax Number: 703-312-6666  Email Address: email@antonelli.com	8. Payment Information  a. Credit Card Last 4 Numbers 1156 Expiration Date 06/06  b. Deposit account number: 01-2135  Authorized User Name: Alfred A. Stadnicki			
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William I. Solomon, Reg#28,565  Name of Person Signing  Total number of pages including cover sheet, attachments, and document: 2				
Total number of pages including cove	,			

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1/02/2005 SZEWDIE1 00000131 11220743 2 FC:8031 40.00

## **ASSIGNMENT**

Whereas, I/we,

## Address

Name	Address	
	c/o Research & Development Center, HITACHI CHEMICAL COMPANY, LTD.,	
i) Shigenori SHIMIZU	48, Wadai, Tsukuba-shi, Ibaraki 300-4247 Japan	
	c/o Yamazaki Works, HITACHI CHEMICAL COMPANY, LTD.,	
2) Kazuhisa KURASHIGE	1380-1, Nishihara, Ashizaki, Hitachinaka-shi, Ibaraki 312-0003 Japan	
	c/o Yamazaki Works, HITACHI CHEMICAL COMPANY, LTD.,	
3) Tatsuya USUI	1380-1, Nishihara, Ashizaki, Hitachinaka-shi, Ibaraki 312-0003 Japan	
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4) Naoaki SHIMURA	1380-1, Nishihara, Ashizaki, Hitachinaka-shi, Ibaraki 312-0003 Japan	
	c/o Yamazaki Works, HITACHI CHEMICAL COMPANY, LTD.,	
5) Hiroyuki ISHIBASHI	1380-1, Nishihara, Ashizaki, Hitachinaka-shi, Ibaraki 312-0003 Japan	
	c/o Research & Development Center, HITACHI CHEMICAL COMPANY, LTD.,	
6) Keiji SUMIYA	48, Wadai, Tsukuba-shi, Ibaraki 300-4247 Japan	
	c/o Research & Development Center, HITACHI CHEMICAL COMPANY, LTD.,	
7) Kenzou SUSA	48, Wadai, Tsukuba-shi. Ibaraki 300-4247 Japan	

hereinafter called assignor(s), have invented certain improvements in INORGANIC SCINTILLATOR AND PROCESS FOR ITS FABRICATION

and executed an application for Letters Patent of the United States of America therefor on even date herewith unless otherwise indicated below:

filed on <u>September 8, 2005</u>, Serial No. <u>11/220,743</u>; and

Whereas

## HITACHI CHEMICAL COMPANY, LTD.

1-1, Nishi-Shinjuku 2-chome,

Shinjuku-ku, Tokyo 163-0449 Japan

(assignee), 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, be it known that, for good and valuable consideration from assignee, the receipt of which is hereby acknowledged, I/WE, as assignor(s), have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the assignee, its lawful successors and assigns, MY/OUR entire right, title, and interest in and to this invention and this application, and all divisions, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof; and I/WE hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue all Letters Patent for this invention to assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, I/WE HEREBY further covenant and agree that I/WE will, without further consideration, communicate with assignee, its successors and assigns, any facts known to ME/US respecting this invention and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver all papers that may be necessary or desirable to perfect the title to this invention in said assignee, its successors and assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States, it being understood that any expense incident to the execution of such papers shall be borne by the assignee, its successors and assigns.

	INVENTORS	DATE SIGNED
1):	Shizenori Shimiza	September 14, 2005
Name:	Shigenori SHIMIZU	7 / 1/ 1/ 1/ 1/ 1/ 1/ 1/ 1/ 1/ 1/ 1/ 1/ 1
<b>2)</b> :	Kazuhisa Kurashige Kazuhisa KURASHIGE	September 15, 2005
Name: ¯	Kazuhisa KURASHIGE	

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

Page 1 of 2

PATENT REEL: 017166 FRAME: 0795

3):	Tatsurja · Usui	September 15, 2005
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4):	Masaki Shrmura	September 16, 2005.
Name:	Naoaki SHIMURA	
5):	Alivoyaki Schihashi	September 16, 2005
Name:	Hiroyuki ISHIBASHI	
6):	Reigi Sumiya	September 21, 2005
Name:	Keiji SUMIYA	
7):	Y a C	October 3 2005

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Page 2 of 2

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**RECORDED: 11/01/2005** 

PATENT REEL: 017166 FRAME: 0796