

**PATENT ASSIGNMENT**

Electronic Version v1.1  
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
Toshiyoshi Watanabe	12/14/2009
Kouji Miyatake	12/10/2009
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	JEOL LTD.
<b>Street Address:</b>	1-2, Musashino 3-chome, Akishima
<b>City:</b>	Tokyo
<b>State/Country:</b>	JAPAN
<b>Postal Code:</b>	196-8558
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	12646496
<b>CORRESPONDENCE DATA</b>	
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<b>ATTORNEY DOCKET NUMBER:</b>	0116-092906
<b>NAME OF SUBMITTER:</b>	David C. Hanson

OP \$40.00 12646496

Total Attachments: 3  
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**501050302**

**PATENT  
 REEL: 023696 FRAME: 0891**



### RECORDATION FORM COVER SHEET PATENTS ONLY

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)**  
 Toshiyoshi Watanabe  
 Kouji Miyatake

Additional name(s) of conveying party(ies) attached?  Yes  No

**2. Name and address of receiving party(ies)**  
 Name: JEOL LTD.  
 Internal Address: \_\_\_\_\_  
 \_\_\_\_\_  
 Street Address: 1-2, Musashino 3-chome, Akishima  
Tokyo 196-8558, JAPAN  
 City: \_\_\_\_\_  
 State: \_\_\_\_\_  
 Country: \_\_\_\_\_ Zip: \_\_\_\_\_

Additional name(s) & address(es) attached?  Yes  No

**3. Nature of conveyance/Execution Date(s):**  
 Execution Date(s) 12/14/2009 and 12/10/2009

Assignment  Merger  
 Security Agreement  Change of Name  
 Joint Research Agreement  
 Government Interest Assignment  
 Executive Order 9424, Confirmatory License  
 Other \_\_\_\_\_

**4. Application or patent number(s):**  This document is being filed together with a new application.

A. Patent Application No.(s)  
12/646,496

B. Patent No.(s)  
 \_\_\_\_\_

Additional numbers attached?  Yes  No

**5. Name and address to whom correspondence concerning document should be mailed:**  
 Name: David C. Hanson  
 Internal Address: The Webb Law Firm  
 \_\_\_\_\_  
 Street Address: 436 Seventh Avenue  
700 Koppers Building  
 City: Pittsburgh  
 State: PA Zip: 15219  
 Phone Number: 412-471-8815  
 Fax Number: 412-945-5933  
 Email Address: assignments@webblaw.com

**6. Total number of applications and patents involved:** 1

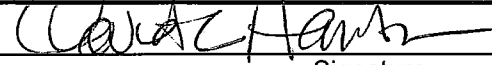
**7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40**

Authorized to be charged by credit card  
 Authorized to be charged to deposit account  
 Enclosed  
 None required (government interest not affecting title)

**8. Payment Information**

a. Credit Card Last 4 Numbers 4775  
 Expiration Date 05/2012

b. Deposit Account Number 23-0650  
 Authorized User Name \_\_\_\_\_

**9. Signature:**  December 23, 2009  
 Signature Date

David C. Hanson  
 Name of Person Signing

Total number of pages including cover sheet, attachments, and documents: 3

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:  
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

## ASSIGNMENT

In consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration paid to the undersigned, TOSHIYOSHI WATANABE and KOUJI MIYATAKE, do hereby sell and assign to JEOL LTD. of 1-2, Musashino 3-chome, Akishima, Tokyo 196-8558, Japan (hereinafter designated as the Assignee), the entire right, title, and interest for the United States of America as defined in 35 U.S.C. 100, in the invention known as SILICON DRIFT X-RAY DETECTOR for which we have this day executed an application for United States Letters Patent.

The undersigned agree to execute all papers necessary in connection with this application and any continuing, divisional or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

The undersigned agree to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation, division or reissue thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.

The undersigned agree to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for the Protection of Industrial Property or similar agreements.

The undersigned agree to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Assignee.

The undersigned hereby authorize and request the Commissioner for Patents and Trademarks to issue any and all Letters Patent of the United States resulting from said application or any division or divisions or continuing or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenant that they have full right to convey the entire interest herein assigned, and that they have not executed, and will not execute, any agreement in conflict herewith.

The undersigned hereby grant David C. Hanson (Registration No. 23,024), Richard L. Byrne (Registration No. 28,498) and Randall A. Notzen (Registration No. 36,882), 700 Koppers Building, 436 Seventh Avenue, Pittsburgh, Pennsylvania 15219, the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

In witness whereof, executed by the undersigned on the date opposite the undersigned's names.

Date 14. DEC. 2009 Inventor 渡邊 俊善  
Toshiyoshi WATANABE

Date Dec. 10, 2009 Inventor Kouji Miyatake  
Kouji MIYATAKE