### PATENT ASSIGNMENT

### Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
Brian C. LaCourse	08/18/2011
Anne B. Hardy	08/24/2011
Helene Laetita Retot	09/21/2011
Qiwei Chen	08/22/2011
Xiaofeng Peng	08/22/2011

#### **RECEIVING PARTY DATA**

Name:	SAINT-GOBAIN CERAMICS & PLASTICS, INC.	
Street Address:	One New Bond Street	
City:	Worcester	
State/Country:	MASSACHUSETTS	
Postal Code:	01615-0138	

#### PROPERTY NUMBERS Total: 3

Property Type	Number	
Application Number:	61141580	
Application Number:	13142748	
PCT Number:	US0969533	

#### **CORRESPONDENCE DATA**

Fax Number: (512)308-6380 512-900-8500 Phone: Email: mail@abel-ip.com

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

via US Mail.

Correspondent Name: Abel Law Group, LLP Address Line 1: 7300 FM 2222 Address Line 2: Bldg. 1, Suite 210 Address Line 4: Austin, TEXAS 78730

**PATENT** 

**REEL: 027210 FRAME: 0743** 

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NAME OF SUBMITTER:	Jeffrey S. Abel	
Total Attachments: 12		
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PATENT REEL: 027210 FRAME: 0744

For good and valuable consideration, the receipt of which is hereby acknowledged, I, an ASSIGNOR named below,

Brian C. LaCourse of Pepperell MA 01463, US

hereby sell, assign and transfer to

ASSIGNEE:

 SAINT-GOBAIN CERAMICS & PLASTICS, INC., a Delaware Corporation, having a principal place of business at One New Bond Street, Worcester, MA 01615-0138,

its successors, assigns and legal representatives, my entire right, title and interest throughout the world, including all rights to claim priority, in and to the invention(s) disclosed in the applications as listed in Appendix A attached hereto, including without limitation, my entire right, title and interest in and to any and all United States and foreign applications (including international, regional and foreign national applications) for said invention(s), including divisions, continuations, continuations-in-part, renewals, substitutes and extensions thereof, and in and to any and all patents of every country or region that may be granted or have been granted for said invention(s), including any reissues and reexaminations thereof.

I authorize ASSIGNEE to apply for patents of foreign countries for said invention(s), and to claim all rights of priority without further authorization from me.

I agree to execute any and all papers useful in connection with any and all United States and foreign applications (including international, regional, and foreign national applications), and generally to do everything possible to aid ASSIGNEE, its successors, assigns and nominees, at their request and reasonable expense, in obtaining and enforcing patents for said invention(s) in all countries.

I hereby covenant that no assignment, sale, license, agreement, or encumbrance has been or will be made or entered into that would conflict with this Assignment.

I authorize and request the Commissioner of Patents and Trademarks to issue any U.S. Letters Patent that may be granted for said invention(s) to ASSIGNEE, its successors or assigns.

Executed on 8/18, 20/1 by Brian C. LaCourse

Witnessed on 8/18 , 20/1 by Witness Signature

- Page 1 of 2 -

Attorney Docket Nos.: 1035-BI4704; 1035-BI4819; 1035-BI4947; 1035-BI5047

Attorney Docket No.	Application No.	Filing Date	Title
1035-BI4704	61/141,577	30-Dec-2008	Scintillation Device and Method of Producing a Ceramic Scintillator Body
1035-BI4704-PCT	PCT/US2009/069532	24-Dec-2009	Scintillation Device and Method of Producing a Ceramic Scintillator Body
1035-BI4704-US	12/142,705	29-Jun-2011	Scintillation Device and Method of Producing a Ceramic Scintillator Body
1035-BI4819	61/141,580	30-Dec-2008	Scintillation Device and Method of Producing a Ceramic Scintillator Body
1035 <b>-</b> BI4819-PCT	PCT/US2009/069533	24-Dec-2009	Scintillation Device and Method of Producing a Ceramic Scintillator Body
1035-BI4819-US	13/142,748	29-Jun-2011	Scintillation Device and Method of Producing a Ceramic Scintillator Body
1035-BI4947	61/141,564	30-Dec-2008	Ceramic Scintillator Body and Scintillation Device
1035-В14947-РСТ	PCT/US2009/069538	24-Dec-2009	Ceramic Scintillator Body and Scintillation Device
1035 <b>-</b> BI4947-US	13/142,756	29-Jun-2011	Ceramic Scintillator Body and Scintillation Device
1035-BI5047	61/141,570	30-Dec-2008	Ceramic Scintillator Body and Scintillation Device
1035-BI5047-PCT	PCT/US2009/069539	24-Dec-2009	Ceramic Scintillator Body and Scintillation Device
1035-BI5047-US	13/142,763	29-Jun-2011	Ceramic Scintillator Body and Scintillation Device

For good and valuable consideration, the receipt of which is hereby acknowledged, I, an ASSIGNOR named below.

Anne B. Hardy of Paris 75016, FR

hereby sell, assign and transfer to

ASSIGNEE:

SAINT-GOBAIN CERAMICS & PLASTICS, INC., a Delaware Corporation, having a principal place of business at One New Bond

Street, Worcester, MA 01615-0138,

its successors, assigns and legal representatives, my entire right, title and interest throughout the world, including all rights to claim priority, in and to the invention(s) disclosed in the applications as listed in Appendix A attached hereto, including without limitation, my entire right, title and interest in and to any and all United States and foreign applications (including international, regional and foreign national applications) for said invention(s), including divisions, continuations, continuations-in-part, renewals, substitutes and extensions thereof, and in and to any and all patents of every country or region that may be granted or have been granted for said invention(s), including any reissues and reexaminations thereof.

I authorize ASSIGNEE to apply for patents of foreign countries for said invention(s), and to claim all rights of priority without further authorization from me.

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I authorize and request the Commissioner of Patents and Trademarks to issue any U.S. Letters Patent that may be granted for said invention(s) to ASSIGNEE, its successors or assigns.

Executed on Aug 24	, 20] by, Have b. Have
-3	Anne B. Hardy
Witnessed on <u>Aug 29</u>	a manufactor of

- Page 1 of 2 -

Attorney Docket Nos.: 1035-BI4704; 1035-BI4819; 1035-BI4947; 1035-BI5047

Attorney Docket No.	Application No.	Filling Date	Title
1035-BI4704	61/141,577	30-Dec-2008	Scintillation Device and Method of Producing a Ceramic Scintillator Body
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1035-B14704-US	12/142,705	29-Jun-2011	Scintillation Device and Method of Producing a Ceramic Scintillator Body
1035-814819	61/141,580	30-Dec-2008	Scintillation Device and Method of Producing a Ceramic Scintillator Body
1035-BI4819-PCT	PCT/US2009/069533	24-Dec-2009	Scintillation Device and Method of Producing a Ceramic Scintillator Body
1035-B14819-US	13/142,748	29-Jun-2011	Scintillation Device and Method of Producing a Ceramic Scintillator Body
1035-B14947	61/141,564	30-Dec-2008	Ceramic Scintillator Body and Scintillation Device
1035-BI4947-PCT	PCT/US2009/069538	24-Dec-2009	Ceramic Scintillator Body and Scintillation Device
1035-B <b>14</b> 947-US	13/142,756	29-Jun-2011	Ceramic Scintillator Body and Scintillation Device
1035-BI5047	61/141,570	30-Dec-2008	Ceramic Scintillator Body and Scintillation Device
1035-BI5047-PCT	PCT/US2009/069539	24-Dec-2009	Ceramic Scintillator Body and Scintillation Device
1035-BI5047-US	13/142,763	29-Jun-2011	Ceramic Scintillator Body and Scintillation Device

For good and valuable consideration, the receipt of which is hereby acknowledged, I, an ASSIGNOR named below,

Hélène Laetita Rétot of Avignon 84000, FR

hereby sell, assign and transfer to

ASSIGNEE:

SAINT-GOBAIN CRISTAUX ET DETECTEURS, having a principal

place of business at 18 Avenue d'Alsace, 92400 Courbevoie,

FRANCE,

its successors, assigns and legal representatives, my entire right, title and interest throughout the world, including all rights to claim priority, in and to the invention(s) disclosed in the applications as listed in Appendix A attached hereto, including without limitation, my entire right, title and interest in and to any and all United States and foreign applications (including international, regional and foreign national applications) for said invention(s), including divisions, continuations-in-part, renewals, substitutes and extensions thereof, and in and to any and all patents of every country or region that may be granted or have been granted for said invention(s), including any reissues and reexaminations thereof.

I authorize ASSIGNEE to apply for patents of foreign countries for said invention(s), and to claim all rights of priority without further authorization from me.

I agree to execute any and all papers useful in connection with any and all United States and foreign applications (including international, regional, and foreign national applications), and generally to do everything possible to aid ASSIGNEE, its successors, assigns and nominees, at their request and reasonable expense, in obtaining and enforcing patents for said invention(s) in all countries.

I hereby covenant that no assignment, sale, license, agreement, or encumbrance has been or will be made or entered into that would conflict with this Assignment.

I authorize and request the Commissioner of Patents and Trademarks to issue any U.S. Letters Patent that may be granted for said invention(s) to ASSIGNEE, its successors or assigns.

Executed on LL Avgust , 20 M by	HREEK S
Witnessed on <u>21 Aug</u> , 20 <u>11</u> by	Hélène Lactita Rétot  Witness-Signature
~	o massa ingilatare

REEL: 027210 FRAME: 0749

Attorney Docket No.	Application No.	Filing Date	Title
1035-BI4819	61/141,580	30-Dec-2008	Scintillation Device and Method of Producing a Ceramic Scintillator Body
1035-BI4819-PCT	PCT/US2009/069533	24-Dec-2009	Scintillation Device and Method of Producing a Ceramic Scintillator Body
1035-BI4819-US	13/142,748	29-Jun-2011	Scintillation Device and Method of Producing a Ceramic Scintillator Body
1035-BI4947	61/141,564	30-Dec-2008	Ceramic Scintillator Body and Scintillation Device
1035-BI4947-PCT	PCT/US2009/069538	24-Dec-2009	Ceramic Scintillator Body and Scintillation Device
1035-B14947-US	13/142,756	29-Jun-2011	Ceramic Scintillator Body and Scintillation Device
1035-B15047	61/141,570	30-Dec-2008	Ceramic Scintillator Body and Scintillation Device
1035-B15047-PCT	PCT/US2009/069539	24-Dec-2009	Ceramic Scintillator Body and Scintillation Device
1035-BI5047-US	13/142,763	29-Jun-2011	Ceramic Scintillator Body and Scintillation Device

This Agreement is made and entered into this 29<sup>th</sup> day of June 2011 ("Effective Date") between SAINT-GOBAIN CRISTAUX ET DETECTEURS, having an office at 18 Avenue d'Alsace, 92400 Courbevoie, FRANCE ("SGCD") and SAINT-GOBAIN CERAMICS & PLASTICS, INC., a Delaware Corporation, having an office at One New Bond Street, Worcester, MA 01615-0138 ("SGCP").

WHEREAS, SGCD owns particular patent applications that SGCD desires to assign to SGCP; and

WHEREAS, SGCP desires to be assigned such patent applications and be solely responsible for prosecution of such patent applications and for maintaining, defending, and enforcing any patents that are granted from such patent applications, and for any application filings claiming priority to such patent applications.

THEREFORE, in consideration of the rights and obligations of the parties, and for other good and valuable consideration, SGCD and SGCP agree as follows:

SGCD hereby sells, assigns, and transfers to SGCP its successors, assigns and legal representatives, its entire right, title and interest throughout the world, including all rights to claim priority, in and to the inventions disclosed in the applications as listed in Appendix A attached hereto, including without limitation, my entire right, title and interest in and to any and all United States and foreign applications (including international, regional and foreign national applications) for said inventions, including divisions, continuations, continuations-in-part, renewals, utility models, invention certificates, invention registrations, substitutes and extensions thereof, and in and to any and all patents, utility models, invention certificates, and invention registrations of every country or region that may be granted or have been granted for said inventions, including any reissues and reexaminations thereof.

SGCD authorizes SGCP to apply for patents of foreign countries for said inventions, and to claim all rights of priority without further authorization from SGCD.

SGCD agrees to execute any and all papers useful in connection with any and all United States and foreign applications (including international, regional, and foreign national applications), and generally to do everything reasonably possible to aid SGCP, its successors, assigns and nominees, at their request and reasonable expense, in obtaining, maintaining, defending, and enforcing patents utility models, invention certificates, and invention registrations for said inventions in all countries.

SGCD hereby covenants that no assignment, sale, license, agreement, or encumbrance has been or will be made or entered into that would conflict with this Assignment.

SGCD authorizes and requests the Director of the U.S. Patent and Trademark Office to issue any U.S. Letters Patent that may be granted for said inventions to SGCP, its successors or assigns.

SGCD agrees that SGCP has sole control regarding filing and prosecuting applications and maintaining, defending, and enforcing of any patents, utility models, invention certificates, invention registrations, and the like.

SGCP agrees that it will solely be responsible for all fees and costs associated with the filing and prosecuting applications and maintaining, defending, and enforcing of any patents, utility models, invention certificates, invention registrations, and the like.

This Agreement, including the Appendix A, constitute the entire agreement between the parties hereto with respect to the subject matter hereof and thereof and supersede all prior agreements and understandings, whether written or oral, between the parties in connection with such subject matter.

If any provision of this Agreement shall be determined invalid or otherwise unenforceable in whole or in part, such provision will be deemed surplus, and to the extent not so determined to be invalid or unenforceable, each provision shall remain in full force and effect.

This Agreement shall be governed by and construed under the Law of the State of Massachusetts, U.S.A.

IN WITNESS WHEREOF the parties have executed this Agreement.

SAINT-GOBAIN CRISTAUX ET DETECTEURS SAINT-GOBAIN CERAMICS & PLASTICS, INC.

Authorized Signature

Date: 21. 9. 20 4

Title: Director

Name: <u>Jean-Luc Allain</u>

Authorized Signature

Date: 21/9/11

Name: Scott T. Huth

Title: General Manager, Crystals

Attorney Docket No.	Application No.	Filing Date	Title
1035-BI4704	61/141,577	30-Dec-2008	Scintillation Device and Method of Producing a Ceramic Scintillator Body
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1035-BI5047-US	13/142,763	29-Jun-2011	Ceramic Scintillator Body and Scintillation Device

For good and valuable consideration, the receipt of which is hereby acknowledged, I, an ASSIGNOR named below,

Qiwei Chen of Shanghai 201109, CN

Xiaofeng Peng of Shanghai 201100, CN

hereby sell, assign and transfer to

ASSIGNEE:

SAINT-GOBAIN CERAMICS & PLASTICS, INC., a Delaware Corporation, having a principal place of business at One New Bond

Street, Worcester, MA 01615-0138,

its successors, assigns and legal representatives, my entire right, title and interest throughout the world, including all rights to claim priority, in and to the invention(s) disclosed in the applications as listed in Appendix A attached hereto, including without limitation, my entire right, title and interest in and to any and all United States and foreign applications (including international, regional and foreign national applications) for said invention(s), including divisions, continuations, continuations-in-part, renewals, substitutes and extensions thereof, and in and to any and all patents of every country or region that may be granted or have been granted for said invention(s), including any reissues and reexaminations thereof.

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Executed on AM. 22	,2011 by Dawer Clan ,
	Qiwei Chen 2011 by Xianghao Witness Signature
	Witness Signature

- Page 1 of 3 -

Attorney Docket Nos.: 1035-BI4704; 1035-BI4819; 1035-BI4947; 1035-BI5047

Executed on Aug 22 ,20 11 by	Wiapfeng Peng
Witnessed on Aug. 2011 by	

Attorney Docket No.	Application No.	Fling Date	Title
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1035-BI5047-US	13/142,763	1 / M., 13373 /3 ) 1 3	Ceramic Scintillator Body and Scintillation Device

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