PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	

CONVEYING PARTY DATA

Name	Execution Date
SAINT-GOBAIN GLASS FRANCE, S.A.	04/01/2014

RECEIVING PARTY DATA

Name:	CARDINAL IG COMPANY	
Street Address:	775 PRAIRIE CENTER DRIVE	
Internal Address:	SUITE 200	
City:	EDEN PRAIRIE	
State/Country:	MINNESOTA	
Postal Code: 55344		

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14409941

CORRESPONDENCE DATA

Fax Number: (612)492-7077

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

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

612-492-7000 Phone: Email: ip@fredlaw.com

Correspondent Name: PAUL J. LAVANWAY, JR. Address Line 1: 200 SOUTH SIXTH STREET

Address Line 2: **SUITE 4000**

Address Line 4: MINNEAPOLIS, MINNESOTA 55402

ATTORNEY DOCKET NUMBER:	44046.103.347.1	
NAME OF SUBMITTER: PAUL J. LAVANWAY, JR.		
FIGNATURE: /Paul J. Lavanway, Jr./		
DATE SIGNED:	08/02/2017	

Total Attachments: 4

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PATENT REEL: 043174 FRAME: 0516 504486088

PATENT ASSIGNMENT AGREEMENT

This PATENT ASSIGNMENT AGREEMENT ("Patent Assignment") is made by SAINT-GOBAIN GLASS FRANCE, S.A., a company registered under the laws of France, with registered offices at 18 avenue d'Alsace, 92400 Courbevoie, France ("Assignor") in favor of CARDINAL IG COMPANY, a Minnesota corporation having a place of business at 775 Prairie Center Drive, Suite 200, Eden Prairie, Minnesota 55344 United States of America ("Assignee"), the purchaser of certain assets of Assignor pursuant to a PVL2 Technology Transfer and Purchase Agreement between Assignee and Assignor dated April 1, 2014 (the "Asset Purchase Agreement").

WHEREAS, under the terms of the Asset Purchase Agreement, Assignor has conveyed, transferred and assigned to Assignee, among other assets, certain intellectual property rights of Assignor in Canada, the United States of America, and Mexico (the "NAFTA countries"), and has agreed to execute and deliver this Patent Assignment, for recording with governmental authorities including, but not limited to, the US Patent and Trademark Office;

NOW, THEREFORE, Assignor agrees as follow:

- 1. <u>Assignment</u>. In consideration for the execution of the Asset Purchase Agreement, the payment of the consideration stipulated in the Asset Purchase Agreement, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignor hereby irrevocably conveys, transfers and assigns to Assignee all of Assignor's right, title and interest in and to the following (the "Assigned Patents"):
- (a) the U.S. and Canadian patents and patent applications set forth in Schedule 1 and all patents and patent applications, whether existing currently or in the future, that cover one or more NAFTA countries and claim priority, in whole or in part, to one or more of the patent applications set forth in Schedule 1, and any patents or patent applications that cover one or more NAFTA countries and to which one or more of the patent applications set forth in Schedule 1 claim priority in whole or in part (collectively the "Patents");
- (b) the entire right, title, and interest to any United States and other NAFTA country patents that may issue with respect to the inventions described or claimed in the Patents:
- (c) the entire right, title, and interest to any equivalents, continuations, continuations-in-part, divisions, reissues, re-examinations, ex-parte reviews, post grant reviews, and extensions of the Patents;
- (d) the right to apply for patents in NAFTA countries in its own name and to claim any priority rights to which such NAFTA country applications are entitled under international conventions, treaties or otherwise; and

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- (e) the right to enforce patent rights to such Patents as fully and entirely as the same would have been held and enjoyed by the Assignor if this assignment had not been made; together with all claims by Assignor for damages by reason of past infringement or for provisional rights and including the right to sue for, and collect the same for its own use and benefit, and for the use and benefit of its successors, assigns, and other legal representatives.
- 2. Recordation and Further Actions. Assignor authorizes the Commissioner for Patents and any other governmental officials to record and register this Patent. Assignment upon request by Assignee. Assignor shall, upon reasonable request, and without further consideration, do such things and execute such further documents as may be reasonably necessary to vest title to the Assigned Patents in the NAFTA countries in Assignee and to enable Assignee to file, prosecute, enforce, defend, or license the Assigned Patents.
- 3. Terms of the Asset Purchase Agreement. The terms of the Asset Purchase Agreement, including, but not limited to, the representations, warranties, and indemnities relating to the Assigned Patents are incorporated herein by reference. The parties hereto acknowledge and agree that the representations, warranties, and indemnities contained in the Asset Purchase Agreement shall not be superseded hereby but shall remain in full force and effect to the full extent provided therein. In the event of any conflict or inconsistency between the terms of the Asset Purchase Agreement and the terms hereof, the terms of the Asset Purchase Agreement shall govern.
- 4. Successors and Assigns. This Patent Assignment shall be binding upon and shall inure to the benefit of the parties hereto and their respective successors and assigns.

SAINT-GOBAIN GLASS FRANCE, S.A.

موخم

Name:

Address: les Molini

92096 lu Defense. Franca

By:__(_Name:

Title;

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SCHEDULE 1

US Patent Applications

Patent App. No.	Date Filed	Title	Attorney Docket No.
13/806,489	February 21, 2013	LAMINATED GLAZING WITH VARIABLE LIQUID-CRYSTAL-INDUCED SCATTERING, AND PROCESS AND DEVICE FOR MANUFACTURING IT	
13/820,467	May 15, 2013	MULTIPLE GLAZING WITH VARIABLE SCATTERING BY LIQUID CRYSTALS AND ITS METHOD OF MANUFACTURE	
13/877,629	June 14, 2013	MULTIPLE GLAZING HAVING VARIABLE DIFFUSION BY LIQUID CRYSTALS, AND METHOD FOR MANUFACTURING SAME	

US Patents

Patent No.	Date Issued	Title:
6486928	November 26, 2002	ELECTRICALLY CONTROLLABLE SYSTEM HAVING A SEPARATE FUNCTIONAL COMPONENT FOR
		CONTROLLING LIGHT TRANSMISSION THAT INCLUDES AT LEAST ONE TRANSPARENT LAYER: SLOWING PHOTO REDUCTION DEGRADATION OF AN ACTIVE ELEMENT
6621534	September 16, 2003	ELECTRICALLY CONTROLLABLE SYSTEM AND GLAZING UNIT HAVING A FUNCTIONAL COMPONENT FOR CONTROLLING LIGHT TRANSMISSION THAT INCLUDES AT LEAST ONE TRANSPARENT LAYER SLOWING PHOTO REDUCTION DEGRADATION OF AN ACTIVE ELEMENT

Foreign and International Patent Applications

Country	Patent App. No.	Date Filed	Title
CA	2803535	December 29, 2011	LAMINATED GLAZING WITH VARIABLE DIFFUSION BY LIQUID CRYSTALS, METHOD FOR THE PRODUCTION THEREOF AND DEVICE FOR THE PRODUCTION OF SAME
PCT	PCT/FR2011/051 480	June 27, 2011	LAMINATED GLAZING WITH VARIABLE DIFFUSION BY LIQUID CRYSTALS, METHOD FOR THE PRODUCTION THEREOF AND DEVICE FOR THE PRODUCTION OF SAME
PCT	PCT/FR2011/051 990	August 31, 2011	MULTIPLE GLAZING WITH VARIABLE DIFFUSION BY LIQUID CRYSTALS AND PRODUCTION METHOD THEREOF
PCT	PCT/FR2011/052 311	October 4, 2011	MULTIPLE GLAZING HAVING VARIABLE DIFFUSION BY LIQUID CRYSTALS, AND METHOD FOR MANUFACTURING SAME
РСТ	PCT/FR2012/053 083	December 26, 2012	MULTIPLE GLAZING WITH VARIABLE DIFFUSION BY LIQUID CRYSTALS
PCT	PCT/FR2012/053	December	MULTIPLE GLAZING WITH VARIABLE DIFFUSION BY

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	088	27, 2012	LIQUID CRYSTALS AND METHOD OF MANUFACTURE THEREOF
PCT	PCT/FR2013/050 703	March 29, 2013	POWER SUPPLY OF AN ELECTRICALLY CONTROLLABLE LIQUID CRYSTAL GLAZING, AND METHOD FOR POWERING SUCH A GLAZING
PCT	PCT/FR2013/051 122	May 23, 2013	METHOD FOR PROJECTION OR BACK- PROJECTION ONTO GLASS COMPRISING A TRANSPARENT LAYERED ELEMENT HAVING DIFFUSE REFLECTION PROPERTIES
PCT	PCT/FR2013/051 267	June 4, 2013	REFLECTIVE PROJECTION SCREEN COMPRISING A VARIABLE LIGHT SCATTERING SYSTEM
PCT	PCT/FR2013/051 411	June 17, 2013	METHOD FOR PRODUCING A MULTIPLE GLAZING UNIT WITH VARIABLE DIFFUSION BY PDLC LAYER AND A MULTIPLE GLAZING UNIT WITH A PDLC LAYER PRODUCED ACCORDING TO SAID METHOD
PCT	PCT/CN2013/078 874	July 5, 2013	VEHÍCLÉ SAFETY ŘEMINDÍNG DEVIĆE AND VEHÍCLE SAFETY ŘEMINDÍNG METHOD
PCT	PCT/FR2013/051 764	July 22, 2013	VARIABLE LIGHT SCATTERING SYSTEM COMPRISING A POLC LAYER
PCT	PCT/FR2013/051 840	July 30, 2013	ELECTRICALLY CONDUCTIVE SUPPORT FOR A GLAZING UNIT HAVING LIQUID-CRYSTAL-MEDIATED VARIABLE SCATTERING PROPERTIES AND SUCH A GLAZING UNIT
PCŤ	PCT/FR2013/052 607	October 31, 2013	GLAZING UNIT COMPRISING A VARIABLE LIGHT SCATTERING SYSTEM AND A PAIR OF ABSORBING ELEMENTS
PCT	PCT/CN2013/089 520	December 16, 2013	OPTICAL COMPONENT, GLASS AND LIQUID CRYSTAL DISPLAY
PCT	PCT/FR2013/053 187	December 19, 2013	GLAZING COMPRISING A SYSTEM WITH VARIABLE LIGHT SCATTERING USED AS A SCREEN
PCT	PCT/EP2014/050 685	January 15, 2014	MULTILAYER FILM WITH ELECTRICALLY SWITCHABLE OPTICAL PROPERTIES
PCT	PCT/CN2014/071 978	February 11, 2014	SHADING DEVICE, VEHICLE AND GLASS SHADING METHOD