04/22/2016 503794884

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3841531

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
NATURE OF CONVEYANCE:	Corrective Assignment to correct the PATENT NUMBER ORIGINALLY LISTED ON DOCUMENT ID NO 503714411 previously recorded on Reel 037957 Frame 0956. Assignor(s) hereby confirms the PATENT NO. 6449357 SHOULD BE LISTED AS 6499357.
RESUBMIT DOCUMENT ID:	503789954

CONVEYING PARTY DATA

Name	Execution Date
FM GLOBAL TECHNOLOGIES LLC	01/01/2006

RECEIVING PARTY DATA

Name:	e: FACTORY MUTUAL INSURANCE COMPANY	
Street Address: 270 CENTRAL AVENUE		
City: JOHNSTON		
State/Country:	tate/Country: RHODE ISLAND	
Postal Code: 02919		

PROPERTY NUMBERS Total: 12

Property Type	Number
Patent Number:	6971792
Patent Number:	7363813
Patent Number:	7131238
Patent Number:	7134507
Patent Number:	7458618
Patent Number:	6779413
Patent Number:	6085585
Patent Number:	6367560
Patent Number:	6499357
Patent Number:	6862941
Patent Number:	7181952
Patent Number:	7210995

CORRESPONDENCE DATA

Fax Number: (202)344-8300

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.

Phone: 2023444295

Email: tjr01@venable.com, ptomail@venable.com, tjx01@venable.com

Correspondent Name: STEVEN J. SCHWARZ **Address Line 1:** 575 7TH STREET NW

Address Line 2: VENABLE LLP

Address Line 4: WASHINGTON, D.C. 20004

ATTORNEY DOCKET NUMBER: 36737-393124

NAME OF SUBMITTER: STEVEN J. SCHWARZ

SIGNATURE: //Steven J. Schwarz//

DATE SIGNED: 04/22/2016

Total Attachments: 7

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PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3761052

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	CONFIRMATORY ASSIGNMENT OF PATENTS

CONVEYING PARTY DATA

Name	Name Execution Date
FM GLOBAL TECHNOLOGIES LLC	GLOBAL TECHNOLOGIES LLC 01/01/2006

RECEIVING PARTY DATA

Name:	FACTORY MUTUAL INSURANCE COMPANY	
Street Address: 270 CENTRAL AVENUE		
City:	y: JOHNSTON	
State/Country: RHODE ISLAND		
Postal Code: 02919		

PROPERTY NUMBERS Total: 12

Property Type	Number
Patent Number:	6971792
Patent Number:	7210995
Patent Number:	7363813
Patent Number:	7131238
Patent Number:	7134507
Patent Number:	7458618
Patent Number:	6779413
Patent Number:	6085585
Patent Number:	6367560
Patent Number:	6449357
Patent Number:	6862941
Patent Number:	7181952

CORRESPONDENCE DATA

Fax Number:

(202)344-8300

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.

Phone:

2023444295

Email:

tjr01@venable.com, ptomail@venable.com, tjx01@venable.com

Correspondent Name:

STEVEN J. SCHWARZ

Address Line 1:

575 7TH STREET NW

Address Line 2:

VENABLE LLP

CONFIRMATORY ASSIGNMENT OF PATENTS

This CONFIRMATORY ASSIGNMENT OF PATENTS (this "Assignment") is made and entered into as of January 1, 2006 by and between FM GLOBAL TECHNOLOGIES LLC, a State of Rhode Island limited liability company ("Assignor"), and FACTORY MUTUAL INSURANCE COMPANY, a State of Rhode Island mutual insurance company ("Assignee"). Assignor and Assignee are each a "party," and together, the "parties" to this Assignment.

WHEREAS, Assignor and Assignee are parties to that certain Asset Purchase Agreement dated as of January 1, 2006 ("Asset Purchase Agreement") whereby Assignor has agreed to sell to Assignee and Assignee has agreed to purchase from Assignor various assets, including without limitation, the patents and patent applications identified in Exhibit A attached hereto (the "Patents and Patent Applications").

WHEREAS, this Assignment is contemplated pursuant to the terms of the Asset Purchase Agreement;

WHEREAS, Assignee wishes to confirm the acquisition of all right, title, interest, benefits, and privileges in and to the Patents and Patent Applications, and the inventions disclosed therein and covered thereby; and

WHEREAS, Assignor, pursuant to the Asset Purchase Agreement, agrees, and is otherwise obligated, to assign to Assignee all of the right, title, interest, benefit, and privileges in and to the Patents and Patent Applications, and the inventions disclosed therein and covered thereby.

NOW THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

Assignment. Assignor sold, assigned, transferred, and set over to Assignee and 1. by this Assignment does sell, assign, transfer, and set over, with Assignee hereby acknowledging receipt of, all right, title and interest in and to the Patents and Patent Applications, and to any and all inventions described in the Patents and Patent Applications, in the United States, its territorial possessions and all foreign countries, and in any and all continuations-in-part, continuations, divisions, substitutes, reissues, extensions thereof, and all other applications for letters patent relating thereto that have been or shall be filed in the United States, its territorial possessions and/or any foreign countries, and all rights, together with all priority rights, under any of the international conventions, unions, agreements, acts, and treaties, including all future conventions, unions, agreements, acts, and treaties, the same to be held and enjoyed by Assignee for its own use and enjoyment, and for the use and enjoyment of its successors, assigns or other legal representatives, to the end of the term or terms for which letters patent are or may be granted or reissued as fully and entirely to the same extent as the same would have been held and enjoyed by Assignor, if this assignment had not been made; together with all claims for damages or injunctive relief by reason of infringements of such letters patent resulting from the Patents and

Patent Applications, with the right to sue for past infringement, and collect the same for its own use and behalf and for the use and behalf of its successors, assigns or other legal representatives.

- 2. <u>Issuance of Patents</u>. Assignor hereby authorizes and requests the Commissioner of Patents and Trademarks of the United States, and any officer of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of intellectual property protection or applications as aforeseaid, to issue any and all letters patents on such inventions resulting from the Patents and Patent Applications, or any continuations-in-part, continuations, divisions, substitutes, reissues or extensions thereof, to Assignee, as assignee of Assignor's entire interest therein.
- 3. <u>Assistance</u>. Assignor agrees that upon request by Assignee, or its successors, assigns or other legal representatives that Assignor or its successors, assigns or other legal representatives shall do all other legal acts reasonably necessary to carry out the intent of this Assignment at the Assignee's expense and request as well as provide such other material, information, or assistance as Assignee or its successors, assigns or other legal representatives may consider necessary.
- 4. Relation to Asset Purchase Agreement. This Assignment is intended only to effect the transfer of the Patents and Patent Applications, including the rights therein as provided in Section 1 of this Assignment, and nothing contained herein shall in any way supersede, modify, replace, amend, change, rescind, waive, exceed, expand, enlarge or in any way affect the provisions, including the warranties, covenants, agreements, conditions, representations or, in general any of the rights and remedies, and any of the obligations and indemnifications of any party set forth in the Asset Purchase Agreement. 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.
- 5. Representations & Warranties. Assignor represents, warrants, and covenants that (a) Assignor has the full power and authority to make this Assignment; (b) the individual identified below is authorized to sign this Assignment on behalf of the Assignor, and (c) Assignor owns, and by this document assigns to Assignee free and clear of any and all claims, pledges, liens, or encumbrances, all right, title, and interest in and to the Patents and Patent Applications.

6. General.

- a. <u>Amendment</u>. This Assignment may not be amended or modified other than by an instrument in writing signed by the parties hereto.
- b. <u>Successors and Assigns</u>. This Assignment shall be binding upon and inure solely to the benefit of the parties hereto and their respective successors and permitted assigns, and nothing herein, expressed or implied, shall give or be construed to give any person or entity, other than the parties hereto and such successors and assigns, any legal or equitable rights hereunder.

- Governing Law. This Assignment shall be construed and interpreted in accordance with and governed by the laws of the State of Rhode Island, without regard to the conflict or choice of law provisions thereof.
- Counterparts. This Assignment may be executed simultaneously in two or d. more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Facsimile signatures and signatures delivered electronically (e.g. via pdf file) shall be deemed to be the equivalent of original signatures for purposes of this Assignment and any amendments hereto.

IN WITNESS WHEREOF, the parties hereto have caused this Assignment to be duly executed as of the day and year first above written.

Signature:	p & E i		
Name:	Brion E. Callori		
Title:	President		
FACTORY MUTUAL INSURANCE COMPANY			
Signature:	Militara		
Name:	Jonathan I. Mishara		
Title:	Senior Vice President		

FM GLOBAL TECHNOLOGIES LLC

Exhibit A

#	Country	Patent No.	Title
1	United States	6,971,792	Device and Method For Measuring Absorbed Heat Flux In A Fire Apparatus
2	Great Britain	2431236	Device and Method For Measuring Absorbed Heat Flux In A Fire Apparatus
3	United States	7,210,995	Roof Air Make-up for Exhaust of Fire Smoke
4	United States	7,363,813	Temperature and Moisture Probe
5	United States	7,131,238	Method of Testing Seismic Braces
6	United States	7,134,507	Method and Apparatus for Detecting a Sprinkler Actuation Event
7	United States	7,458,618	Fixed Flange Spray Deflector
8	United States	6,779,413	Clean Room Fire Simulation
9	United States	6,085,585	Sprinkler Performance Evaluation System
10	United States	6,367,560	Wet Sprinkler System for Cold Environments
11	Australia	759186	Wet Sprinkler System for Cold Environments
12	Germany	60032132	Wet Sprinkler System for Cold Environments
13	Canada	2371775	Wet Sprinkler System for Cold Environments
14	United States	6,499,357	Heat Flux Measurement Pipe And Method For
			Determining Sprinkler Water Delivery Requirement
15	Germany	60236799.9	Heat Flux Measurement Pipe And Method For Determining Sprinkler Water Delivery Requirement
16	United States	6 962 041	Heat Flux Measurement Pipe And Method For
10	United States	6,862,941	Determining Sprinkler Water Delivery Requirement
17	Cl: DD	0000005	Lie of Flory Management Bing And Mathod For
17	China P.R.	2809835.8	Heat Flux Measurement Pipe And Method For
	6 1	1.400007	Determining Sprinkler Water Delivery Requirement
18	Sweden	1409987	Heat Flux Measurement Pipe And Method For
			Determining Sprinkler Water Delivery Requirement
19	United States	7,181,952	Characterization of Mist Sprays Using a Phase-doppler
			Particle Analyzer and an Iso-kinetic Sampling Probe
20	Canada	2509974	Characterization of Mist Sprays Using a Phase-doppler
			Particle Analyzer and an Iso-kinetic Sampling Probe