

PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Robert A. Apel</td> <td>08/29/2011</td> </tr> <tr> <td>Jeffrey Wu</td> <td>08/17/2011</td> </tr> <tr> <td>James Zhan</td> <td>08/17/2011</td> </tr> </tbody> </table>		Name	Execution Date	Robert A. Apel	08/29/2011	Jeffrey Wu	08/17/2011	James Zhan	08/17/2011		
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James Zhan	08/17/2011										
RECEIVING PARTY DATA											
<table border="1"> <tr> <td>Name:</td> <td>Mine Safety Appliances Company</td> </tr> <tr> <td>Street Address:</td> <td>1000 Cranberry Woods Drive</td> </tr> <tr> <td>City:</td> <td>Cranberry Twp.</td> </tr> <tr> <td>State/Country:</td> <td>PENNSYLVANIA</td> </tr> <tr> <td>Postal Code:</td> <td>16066</td> </tr> </table>		Name:	Mine Safety Appliances Company	Street Address:	1000 Cranberry Woods Drive	City:	Cranberry Twp.	State/Country:	PENNSYLVANIA	Postal Code:	16066
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PROPERTY NUMBERS Total: 3											
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>61506368</td> </tr> <tr> <td>Application Number:</td> <td>13223524</td> </tr> <tr> <td>PCT Number:</td> <td>US1223420</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	61506368	Application Number:	13223524	PCT Number:	US1223420		
Property Type	Number										
Application Number:	61506368										
Application Number:	13223524										
PCT Number:	US1223420										
CORRESPONDENCE DATA											
Fax Number:	(412)945-5933										
Phone:	412-471-8815										
Email:	assignments@webblaw.com										
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>											
Correspondent Name:	The Webb Law Firm										
Address Line 1:	420 Ft. Duquesne Blvd										
Address Line 2:	One Gateway Center, Suite 1200										
Address Line 4:	Pittsburgh, PENNSYLVANIA 15222										
ATTORNEY DOCKET NUMBER:	2934-112561										

NAME OF SUBMITTER:

Nathan J. Prepelka

Total Attachments: 4

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PATENT

REEL: 027658 FRAME: 0880

**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)

Robert A. Apel
Jeffrey Wu
James Zhan

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

3. Nature of conveyance/Execution Date(s):

Execution Date(s) August 29, 2011; August 17, 2011

- ☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Joint Research Agreement
☐ Government Interest Assignment
☐ Executive Order 9424, Confirmatory License
☐ Other _____

2. Name and address of receiving party(ies)

Name: Mine Safety Appliances Company

Internal Address: _____

Street Address: 1000 Cranberry Woods Drive

City: Cranberry Twp.

State: PA

Country: US Zip: 16066

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

4. Application or patent number(s):

☐ This document is being filed together with a new application.

A. Patent Application No.(s)

61/506,368
13/223,524
PCT/US12/23420

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

5. Name and address to whom correspondence concerning document should be mailed:

Name: Richard L. Byrne

Internal Address: The Webb Law Firm

Street Address: One Gateway Center
420 Ft. Duquesne Blvd., Ste 1200

City: Pittsburgh

State: PA Zip: 15222

Phone Number: 412-471-8815

Fax Number: 412-945-5933

Email Address: assignments@webblaw.com

6. Total number of applications and patents involved: _____

7. Total fee (37 CFR 1.21(h) & 3.41) \$ 120

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

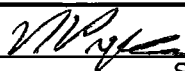
8. Payment Information

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

b. Deposit Account Number 23-0650

Authorized User Name _____

9. Signature:



Signature

February 6, 2012

Date

Nathan J. Prepelka, Reg. No. 43,016

Name of Person Signing

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

4

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

Atty. No. 2934-112561

**PATENT
REEL: 027658 FRAME: 0881**

DOMESTIC

Application No. _____

Attorney Docket No. 2934-112561

ASSIGNMENT

WHEREAS, as a below named inventor, I have invented certain new and useful improvements in

**PERSONAL FALL LIMITER ARRANGEMENT
AND USER CONNECTION ARRANGEMENT THEREFOR**

(Invention Title)

☒ for which a United States Provisional Patent application was filed on 07/11/2011 (mm/dd/yyyy) and bears Application Number 61/506,368 (hereinafter "said application").

AND/OR

☐ for which I have this day executed an application for a United States Patent (hereinafter "said application").

AND/OR

☒ for which an application for a United States Patent was filed on _____ (mm/dd/yyyy) and bears Application Number _____ (hereinafter "said application").

AND/OR

☒ for which an international patent application was filed under the Patent Cooperation Treaty on _____ (mm/dd/yyyy), bearing Application No. _____ (hereinafter "said application").

AND, WHEREAS, Mine Safety Appliances Company, a corporation of Pennsylvania, having a place of business at 1000 Cranberry Woods Drive, Cranberry Township, PA 16066,, hereinafter called the "assignee", is desirous of acquiring the entire right, title, and interest in and to said application and the inventions and improvements therein disclosed.

NOW, THEREFORE, for good and valuable consideration paid to me by said assignee, the receipt of which is hereby acknowledged, I as the inventor or as one of the inventors, hereinafter the assignor(s), do hereby assign, sell and transfer unto said assignee the full and exclusive right, title and interest in and to said application and the inventions and improvements therein disclosed for the United States and all foreign countries and any Letters Patent which may issue therefor in the United States and all foreign countries and all divisions, reissues, continuations, continuations-in-part, renewals and/or extensions thereof. Such assignment extends to the full ends of the terms of these applications and patents as fully and entirely as the same would have been held and enjoyed by me had this Assignment not been made.

I hereby authorize and request any attorney associated with The Webb Law Firm, Customer No. 28289, to insert here in parentheses (Application No. 13/223,524, filed 9/1/2011) the filing date and application number of said U.S. application when known.

DOMESTIC

Application No. _____

Attorney Docket No. 2934-112561

I hereby authorize and request any attorney associated with The Webb Law Firm, Customer No. 28289, to insert here in parentheses (Application No. PCT/21512/23420 filed 2/1/2012) the filing date and application number of said PCT application when known.

I covenant that I am the lawful owner(s) of said application, inventions and improvements, that the same are unencumbered, that no license has been granted to make, use or vend the said inventions or improvements or any of them, and that I have the full right to make this Assignment.

And for the consideration aforesaid, I agree individually and, if applicable, jointly that I will communicate to said assignee or the representatives thereof any facts known to me respecting said inventions and improvements, and will, upon request but without expense to me, testify in any legal proceedings, sign all lawful papers, execute all divisional, reissue, continuation, continuation-in-part, renewal and/or extension applications, make all rightful oaths, and generally do all other and further lawful acts deemed necessary or expedient by said assignee or by counsel for said assignee to assist or enable said assignee to obtain and enforce full benefits from the rights and interests herein assigned. This Assignment shall be binding upon my heirs, executors, administrators and/or assigns, and shall inure to the benefit of the heirs, executors, administrators, successors and/or assigns, as the case may be, of said assignee.

1. FULL NAME OF ASSIGNOR:

Robert A. Apel

RESIDENCE:

Cranberry Township, PA

EXECUTED this 29th day of Aug, 2011


SIGNATURE

STATE of Pennsylvania

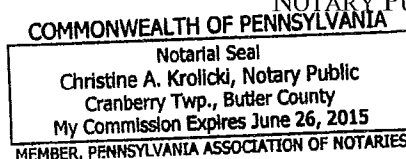
COUNTY of Butler

On this 29th day of August, in the year 2011, before me Christine A. Krolicki,
DAY MONTH YEAR NOTARY PUBLIC NAME

a notary public, personally appeared Robert A. Apel,
NAME OF DOCUMENT SIGNER

proved on the basis of satisfactory evidence to be the person whose name is subscribed to this instrument, and acknowledged he/she executed the same. Witness my hand and official seal.

Christine A. Krolicki
NOTARY PUBLIC



S
E
A
L



Checked Box indicates 1 additional page(s) for inventor signatures.

DOMESTIC

Application No. _____

Attorney Docket No. 2934-112561

2. FULL NAME OF ASSIGNOR:

Jeffrey Wu

RESIDENCE:

Jiangsu, China

EXECUTED this 17 day of Aug., 2011

Jeffrey Wu
SIGNATURE

WITNESS:

Ralph Willis

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3. FULL NAME OF ASSIGNOR:

James Zhan

RESIDENCE:

Jiangsu, China

EXECUTED this 17 day of August, 2011

James Zhan

SIGNATURE

WITNESS:

Ralph Willis

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