

<b>PATENT ASSIGNMENT COVER SHEET</b>
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Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT5126519

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
DARYL LEE GIBSON	08/31/2018
WILLIAM MARK O'BRIEN	08/31/2018
BRUCE ROBERTSON	08/31/2018
VALENTIN MIRCEA BURTEA	09/04/2018
KEVIN ADAM LAVEN	08/31/2018
SEBASTIEN PERRIER	08/31/2018
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	MUELLER INTERNATIONAL, LLC
<b>Street Address:</b>	1200 ABERNATHY ROAD, SUITE 1200
<b>City:</b>	ATLANTA
<b>State/Country:</b>	GEORGIA
<b>Postal Code:</b>	30339
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	16121136
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(770)434-7376
<i>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.</i>	
<b>Phone:</b>	770-434-6868
<b>Email:</b>	tjames@taylorenghish.com,docketing@taylorenghish.com
<b>Correspondent Name:</b>	RUSSELL B. DUNLAP
<b>Address Line 1:</b>	1600 PARKWOOD CIRCLE, SUITE 200
<b>Address Line 4:</b>	ATLANTA, GEORGIA 30339
<b>ATTORNEY DOCKET NUMBER:</b>	191373-1730
<b>NAME OF SUBMITTER:</b>	RUSSELL B. DUNLAP
<b>SIGNATURE:</b>	/rbd/
<b>DATE SIGNED:</b>	09/06/2018
<b>Total Attachments: 12</b>	

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## PATENT ASSIGNMENT

WHEREAS, I, Daryl Lee Gibson, a citizen of the United States of America residing at 3350 Dockery Street SE, Cleveland, TN 37323, in the United States of America, have invented certain inventions and improvements disclosed in the Patent Application for United States Patent entitled HYDRANT CAP LEAK DETECTOR WITH ORIENTED SENSOR, filed in the United States Patent and Trademark Office on Sep. 4, 2018, bearing Serial No. 16/121,136, and listing as inventor(s): **Daryl Lee Gibson, William Mark O'Brien, Bruce Robertson, Valentin Mircea Burtea, Kevin Adam Laven, Sebastien Perrier;**

WHEREAS, **Mueller International, LLC**, a Limited Liability Company of the State of Delaware, having its principal place of business at **1200 Abernathy Road, Suite 1200, Atlanta, Georgia 30328** is desirous of acquiring an interest in the same;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, Daryl Lee Gibson, by these presents do sell, assign and transfer unto **Mueller International, LLC**, the full, exclusive and entire right, title and interest: (i) in and to all inventions and improvements disclosed and described in said application, (ii) in and to said application, (iii) in and to any divisional, continuation, and continuation-in-part applications describing in whole or in part said inventions and improvements, preparatory to obtaining Patents of the United States therefore, (iv) in and to any reissues of the aforementioned, (v) in and to any provisional patent applications filed in the United States describing in whole or in part the said inventions and improvements, from which priority may be claimed under Title 35 of the United States Code, and (vi) in and to the right to claim any applicable foreign and domestic priority rights arising from such provisional patent applications; I also hereby acknowledge that an obligation for this assignment and for the assignment of all related subject matter arose before the making of the invention and improvements disclosed and described in said application; and I hereby request the Commissioner of Patents to issue any and all Patents of the United States resulting from said application, or from a division, continuation, continuation-in-part, or reissue thereof, to **Mueller International, LLC** as Assignee, for his or her interest and for his or her

sole use and behoof of his or her assigns and legal representatives;

For the same consideration, I, by these presents do sell, assign and transfer to **Mueller International, LLC** the full, exclusive and entire right, title and interest in and to any foreign application or applications corresponding to said application, in whole or in part, in countries other than the United States, in and to any Patents and similar protective rights granted on said foreign application, and in and to the right to claim any applicable priority rights arising from or required for said foreign application under the terms of any applicable conventions, treaties, statutes, or regulations; said foreign applications to be filed and issued in the name of **Mueller International, LLC** and or his or her respective designees, insofar as permitted by applicable law;

AND, for the same consideration, I agree to sign all lawful papers, execute all divisional, continuation, continuation-in-part, reissue and other applications, make all assignments and rightful oaths, and generally do everything possible to aid **Mueller International, LLC** and his or her successors, assigns, and nominees to obtain and enforce proper protection for all said inventions and improvements in all countries throughout the world; and

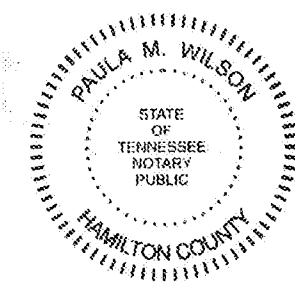
for the same consideration, I hereby authorize the insertion of the filing date and serial number above.

8/31/18  
Date

Daryl Lee Gibson  
Daryl Lee Gibson

STATE OF Tennessee COUNTY OF Hamilton

Before me, a Notary Public in and for the State of Tennessee, on this 31<sup>st</sup> day of August, 2018, personally appeared Daryl Lee Gibson, who being duly sworn, signed and acknowledged the foregoing Assignment as his or her free act and deed.



Paula M. Wilson  
NOTARY PUBLIC  
My Commission Expires: December 8 2018

Ko2  
8/31/18

**PATENT ASSIGNMENT**

WHEREAS, I, William Mark O'Brien, a citizen of Canada, residing at 692 Glencairn Avenue, Toronto, Ontario M6B 1Z7, in Canada, have invented certain inventions and improvements disclosed in the Patent Application for United States Patent entitled HYDRANT CAP LEAK DETECTOR WITH ORIENTED SENSOR, filed in the United States Patent and Trademark Office on Sep. 4, 2018, bearing Serial No. 16/121,136, and listing as inventor(s): Daryl Lee Gibson, William Mark O'Brien, Bruce Robertson, Valentin Mircea Burtea, Kevin Adam Laven, Sebastien Perrier;

WHEREAS, Mueller International, LLC, a Limited Liability Company of the State of Delaware, having its principal place of business at 1200 Abernathy Road, Suite 1200, Atlanta, Georgia 30328 is desirous of acquiring an interest in the same;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, William Mark O'Brien, by these presents do sell, assign and transfer unto Mueller International, LLC, the full, exclusive and entire right, title and interest: (i) in and to all inventions and improvements disclosed and described in said application, (ii) in and to said application, (iii) in and to any divisional, continuation, and continuation-in-part applications describing in whole or in part said inventions and improvements, preparatory to obtaining Patents of the United States therefore, (iv) in and to any reissues of the aforementioned, (v) in and to any provisional patent applications filed in the United States describing in whole or in part the said inventions and improvements, from which priority may be claimed under Title 35 of the United States Code, and (vi) in and to the right to claim any applicable foreign and domestic priority rights arising from such provisional patent applications; I also hereby acknowledge that an obligation for this assignment and for the assignment of all related subject matter arose before the making of the invention and improvements disclosed and described in said application; and I hereby request the Commissioner of Patents to issue any and all Patents of the United States resulting from said application, or from a division, continuation, continuation-in-part, or reissue thereof, to Mueller International, LLC as Assignee, for his or her interest

and for his or her sole use and behoof of his or her assigns and legal representatives;

For the same consideration, I, by these presents do sell, assign and transfer to **Mueller International, LLC** the full, exclusive and entire right, title and interest in and to any foreign application or applications corresponding to said application, in whole or in part, in countries other than the United States, in and to any Patents and similar protective rights granted on said foreign application, and in and to the right to claim any applicable priority rights arising from or required for said foreign application under the terms of any applicable conventions, treaties, statutes, or regulations; said foreign applications to be filed and issued in the name of **Mueller International, LLC** and or his or her respective designees, insofar as permitted by applicable law;

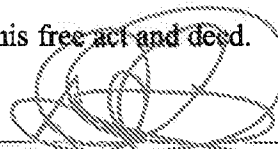
AND, for the same consideration, I agree to sign all lawful papers, execute all divisional, continuation, continuation-in-part, reissue and other applications, make all assignments and rightful oaths, and generally do everything possible to aid **Mueller International, LLC** and his or her successors, assigns, and nominees to obtain and enforce proper protection for all said inventions and improvements in all countries throughout the world; and

for the same consideration, I hereby authorize the insertion of the filing date and serial number above.

Aug 31, 2018  
Date

  
William Mark O'Brien

Witnessed before me, Domen G. Teasdale (*printed name of witnesses*), on this 31<sup>st</sup> day of August, 2018 personally appeared William Mark O'Brien, who signed and acknowledged the foregoing Assignment as his free act and deed.

  
Signature of Witness

## PATENT ASSIGNMENT

WHEREAS, I, Bruce Robertson, a citizen of Canada, residing at 671-38 Stadium Road, Toronto, Ontario M5V 3P4, in Canada, have invented certain inventions and improvements disclosed in the Patent Application for United States Patent entitled HYDRANT CAP LEAK DETECTOR WITH ORIENTED SENSOR, filed in the United States Patent and Trademark Office on Sep. 4, 2018, bearing Serial No. 16/121,136, and listing as inventor(s): **Daryl Lee Gibson, William Mark O'Brien, Bruce Robertson, Valentin Mircea Burtea, Kevin Adam Laven, Sebastien Perrier;**

WHEREAS, **Mueller International, LLC**, a Limited Liability Company of the State of **Delaware**, having its principal place of business at **1200 Abernathy Road, Suite 1200, Atlanta, Georgia 30328** is desirous of acquiring an interest in the same;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, Bruce Robertson, by these presents do sell, assign and transfer unto **Mueller International, LLC**, the full, exclusive and entire right, title and interest: (i) in and to all inventions and improvements disclosed and described in said application, (ii) in and to said application, (iii) in and to any divisional, continuation, and continuation-in-part applications describing in whole or in part said inventions and improvements, preparatory to obtaining Patents of the United States therefore, (iv) in and to any reissues of the aforementioned, (v) in and to any provisional patent applications filed in the United States describing in whole or in part the said inventions and improvements, from which priority may be claimed under Title 35 of the United States Code, and (vi) in and to the right to claim any applicable foreign and domestic priority rights arising from such provisional patent applications; I also hereby acknowledge that an obligation for this assignment and for the assignment of all related subject matter arose before the making of the invention and improvements disclosed and described in said application; and I hereby request the Commissioner of Patents to issue any and all Patents of the United States resulting from said application, or from a division, continuation, continuation-in-part, or reissue thereof, to **Mueller International, LLC** as Assignee, for his or her interest and for his or her

sole use and behoof of his or her assigns and legal representatives;

For the same consideration, I, by these presents do sell, assign and transfer to **Mueller International, LLC** the full, exclusive and entire right, title and interest in and to any foreign application or applications corresponding to said application, in whole or in part, in countries other than the United States, in and to any Patents and similar protective rights granted on said foreign application, and in and to the right to claim any applicable priority rights arising from or required for said foreign application under the terms of any applicable conventions, treaties, statutes, or regulations; said foreign applications to be filed and issued in the name of **Mueller International, LLC** and or his or her respective designees, insofar as permitted by applicable law;

AND, for the same consideration, I agree to sign all lawful papers, execute all divisional, continuation, continuation-in-part, reissue and other applications, make all assignments and rightful oaths, and generally do everything possible to aid **Mueller International, LLC** and his or her successors, assigns, and nominees to obtain and enforce proper protection for all said inventions and improvements in all countries throughout the world; and

for the same consideration, I hereby authorize the insertion of the filing date and serial number above.

August 31, 2018  
Date

Bruce Robertson  
Bruce Robertson

Witnessed before me, Hannah Hindsberg (*printed name of witnesses*), on this 31 day of August, 2018 personally appeared Bruce Robertson, who signed and acknowledged the foregoing Assignment as his free act and deed.

Hannah Hindsberg  
Signature of Witness



## PATENT ASSIGNMENT

WHEREAS, I, Valentin Mircea Burtea, a citizen of Canada, residing at 86 Humberview Road, Toronto, Ontario M6S 1X1, in Canada, have invented certain inventions and improvements disclosed in the Patent Application for United States Patent entitled HYDRANT CAP LEAK DETECTOR WITH ORIENTED SENSOR, filed in the United States Patent and Trademark Office on Sep. 4, 2018, bearing Serial No. 16/121,136, and listing as inventor(s): **Daryl Lee Gibson, William Mark O'Brien, Bruce Robertson, Valentin Mircea Burtea, Kevin Adam Laven, Sebastien Perrier;**

WHEREAS, **Mueller International, LLC**, a Limited Liability Company of the State of **Delaware**, having its principal place of business at **1200 Abernathy Road, Suite 1200, Atlanta, Georgia 30328** is desirous of acquiring an interest in the same;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, Valentin Mircea Burtea, by these presents do sell, assign and transfer unto **Mueller International, LLC**, the full, exclusive and entire right, title and interest: (i) in and to all inventions and improvements disclosed and described in said application, (ii) in and to said application, (iii) in and to any divisional, continuation, and continuation-in-part applications describing in whole or in part said inventions and improvements, preparatory to obtaining Patents of the United States therefore, (iv) in and to any reissues of the aforementioned, (v) in and to any provisional patent applications filed in the United States describing in whole or in part the said inventions and improvements, from which priority may be claimed under Title 35 of the United States Code, and (vi) in and to the right to claim any applicable foreign and domestic priority rights arising from such provisional patent applications; I also hereby acknowledge that an obligation for this assignment and for the assignment of all related subject matter arose before the making of the invention and improvements disclosed and described in said application; and I hereby request the Commissioner of Patents to issue any and all Patents of the United States resulting from said application, or from a division, continuation, continuation-in-part, or reissue thereof, to **Mueller International, LLC** as Assignee, for his or her interest

and for his or her sole use and behoof of his or her assigns and legal representatives;

For the same consideration, I, by these presents do sell, assign and transfer to **Mueller International, LLC** the full, exclusive and entire right, title and interest in and to any foreign application or applications corresponding to said application, in whole or in part, in countries other than the United States, in and to any Patents and similar protective rights granted on said foreign application, and in and to the right to claim any applicable priority rights arising from or required for said foreign application under the terms of any applicable conventions, treaties, statutes, or regulations; said foreign applications to be filed and issued in the name of **Mueller International, LLC** and or his or her respective designees, insofar as permitted by applicable law;

AND, for the same consideration, I agree to sign all lawful papers, execute all divisional, continuation, continuation-in-part, reissue and other applications, make all assignments and rightful oaths, and generally do everything possible to aid **Mueller International, LLC** and his or her successors, assigns, and nominees to obtain and enforce proper protection for all said inventions and improvements in all countries throughout the world; and

for the same consideration, I hereby authorize the insertion of the filing date and serial number above.

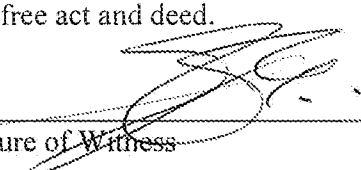
Sept 4<sup>th</sup>, 2018

Date

Burtea V.

Valentin Mircea Burtea

Witnessed before me, Boyana Koteharov (*printed name of witnesses*), on this 4<sup>th</sup> day of September, 2018, personally appeared Valentin Mircea Burtea, who signed and acknowledged the foregoing Assignment as his free act and deed.

  
Signature of Witness

PATENT ASSIGNMENT

X 2

Canada

WHEREAS, I, Kevin Adam Laven, a citizen of ~~France~~, residing at 43 Glenroy Avenue, Toronto, Ontario M8Y 2M3, in Canada, have invented certain inventions and improvements disclosed in the Patent Application for United States Patent entitled HYDRANT CAP LEAK DETECTOR WITH ORIENTED SENSOR, filed in the United States Patent and Trademark Office on Sep. 4, 2018, bearing Serial No. 16/121,136, and listing as inventor(s): Daryl Lee Gibson, William Mark O'Brien, Bruce Robertson, Valentin Mircea Burtea, Kevin Adam Laven, Sebastien Perrier;

WHEREAS, Mueller International, LLC, a Limited Liability Company of the State of Delaware, having its principal place of business at 1200 Abernathy Road, Suite 1200, Atlanta, Georgia 30328 is desirous of acquiring an interest in the same;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, Kevin Adam Laven, by these presents do sell, assign and transfer unto Mueller International, LLC, the full, exclusive and entire right, title and interest: (i) in and to all inventions and improvements disclosed and described in said application, (ii) in and to said application, (iii) in and to any divisional, continuation, and continuation-in-part applications describing in whole or in part said inventions and improvements, preparatory to obtaining Patents of the United States therefore, (iv) in and to any reissues of the aforementioned, (v) in and to any provisional patent applications filed in the United States describing in whole or in part the said inventions and improvements, from which priority may be claimed under Title 35 of the United States Code, and (vi) in and to the right to claim any applicable foreign and domestic priority rights arising from such provisional patent applications; I also hereby acknowledge that an obligation for this assignment and for the assignment of all related subject matter arose before the making of the invention and improvements disclosed and described in said application; and I hereby request the Commissioner of Patents to issue any and all Patents of the United States resulting from said application, or from a division, continuation, continuation-in-part, or reissue thereof, to Mueller International, LLC as Assignee, for his or her interest and for his or her

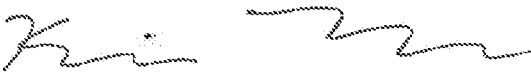
sole use and behoof of his or her assigns and legal representatives;

For the same consideration, I, by these presents do sell, assign and transfer to **Mueller International, LLC** the full, exclusive and entire right, title and interest in and to any foreign application or applications corresponding to said application, in whole or in part, in countries other than the United States, in and to any Patents and similar protective rights granted on said foreign application, and in and to the right to claim any applicable priority rights arising from or required for said foreign application under the terms of any applicable conventions, treaties, statutes, or regulations; said foreign applications to be filed and issued in the name of **Mueller International, LLC** and or his or her respective designees, insofar as permitted by applicable law;

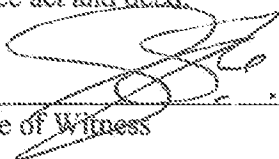
AND, for the same consideration, I agree to sign all lawful papers, execute all divisional, continuation, continuation-in-part, reissue and other applications, make all assignments and rightful oaths, and generally do everything possible to aid **Mueller International, LLC** and his or her successors, assigns, and nominees to obtain and enforce proper protection for all said inventions and improvements in all countries throughout the world; and

for the same consideration, I hereby authorize the insertion of the filing date and serial number above.

Aug. 31, 2018  
Date

  
Kevin Adam Laven

Witnessed before me, Boyana Katcharova (printed name of witnesses), on this 31 day of August, 2018, personally appeared Kevin Adam Laven, who signed and acknowledged the foregoing Assignment as his free act and deed.

  
Signature of Witness

PATENT ASSIGNMENT

165 Legion Road N, Apt 207  
Toronto, Ontario, M8Y 0B3

WHEREAS, I, Sebastien Perrier, a citizen of France, residing at ~~35 High Park Avenue, Apt. 503, Toronto, Ontario M6P 2R6~~, in Canada, have invented certain inventions and improvements disclosed in the Patent Application for United States Patent entitled HYDRANT CAP LEAK DETECTOR WITH ORIENTED SENSOR, filed in the United States Patent and Trademark Office on Sep. 4, 2018, bearing Serial No. 16/121,136, and listing as inventor(s): **Daryl Lee Gibson, William Mark O'Brien, Bruce Robertson, Valentin Mircea Burtea, Kevin Adam Laven, Sebastien Perrier;**

WHEREAS, **Mueller International, LLC**, a Limited Liability Company of the State of Delaware, having its principal place of business at **1200 Abernathy Road, Suite 1200, Atlanta, Georgia 30328** is desirous of acquiring an interest in the same;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, Sebastien Perrier, by these presents do sell, assign and transfer unto **Mueller International, LLC**, the full, exclusive and entire right, title and interest: (i) in and to all inventions and improvements disclosed and described in said application, (ii) in and to said application, (iii) in and to any divisional, continuation, and continuation-in-part applications describing in whole or in part said inventions and improvements, preparatory to obtaining Patents of the United States therefore, (iv) in and to any reissues of the aforementioned, (v) in and to any provisional patent applications filed in the United States describing in whole or in part the said inventions and improvements, from which priority may be claimed under Title 35 of the United States Code, and (vi) in and to the right to claim any applicable foreign and domestic priority rights arising from such provisional patent applications; I also hereby acknowledge that an obligation for this assignment and for the assignment of all related subject matter arose before the making of the invention and improvements disclosed and described in said application; and I hereby request the Commissioner of Patents to issue any and all Patents of the United States resulting from said application, or from a division, continuation, continuation-in-part, or reissue thereof, to **Mueller International, LLC** as Assignee, for his or her interest and for his or her

sole use and behoof of his or her assigns and legal representatives;

For the same consideration, I, by these presents do sell, assign and transfer to **Mueller International, LLC** the full, exclusive and entire right, title and interest in and to any foreign application or applications corresponding to said application, in whole or in part, in countries other than the United States, in and to any Patents and similar protective rights granted on said foreign application, and in and to the right to claim any applicable priority rights arising from or required for said foreign application under the terms of any applicable conventions, treaties, statutes, or regulations; said foreign applications to be filed and issued in the name of **Mueller International, LLC** and or his or her respective designees, insofar as permitted by applicable law;

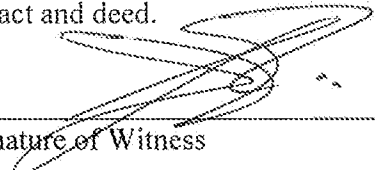
AND, for the same consideration, I agree to sign all lawful papers, execute all divisional, continuation, continuation-in-part, reissue and other applications, make all assignments and rightful oaths, and generally do everything possible to aid **Mueller International, LLC** and his or her successors, assigns, and nominees to obtain and enforce proper protection for all said inventions and improvements in all countries throughout the world; and

for the same consideration, I hereby authorize the insertion of the filing date and serial number above.

Aug. 31 2018  
Date

  
Sebastien Perrier

Witnessed before me Armen Katcharov (printed name of witnesses), on this 31 day of August, 2018, personally appeared Sebastien Perrier, who signed and acknowledged the foregoing Assignment as his free act and deed.

  
Signature of Witness