#### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT4957403

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
VINCENT RAGOT	12/08/2016
DAMIEN CARRE	12/06/2016
PHILIPPE ULLAH	11/22/2016
ALAIN BOUTEILLOUX	11/22/2016
NICOLAS BIGOURIE	12/15/2016

#### **RECEIVING PARTY DATA**

Name:	SAFRAN ELECTRONICS & DEFENSE
Street Address:	18-20 QUAI DU POINT DU JOUR
City:	BOULOGNE BILLANCOURT
State/Country:	FRANCE
Postal Code:	92100

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	15775116

#### **CORRESPONDENCE DATA**

Fax Number: (703)621-7155

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: 7036217140

Email: mailroom@mg-ip.com, arc@mg-ip.com **Correspondent Name:** MUNCY, GEISSLER, OLDS & LOWE, PC

4000 LEGATO RD., SUITE 310 Address Line 1: FAIRFAX, VIRGINIA 22033 Address Line 4:

ATTORNEY DOCKET NUMBER:	<b>CKET NUMBER:</b> 4005/0690PUS1	
NAME OF SUBMITTER:	JOE MCKINNEY MUNCY	
SIGNATURE:	/Joe McKinney Muncy/	
DATE SIGNED:	05/11/2018	

**Total Attachments: 5** 

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**PATENT REEL: 045778 FRAME: 0427** 

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As a below named inventor, I hereby declare that, I

- 1			
	Inventor Name	Complete Address	
	Vincent RAGOT	c/o SAFRAN ELECTRONICS & DEFENSE 18-20 Quai du Foint du Jour, 92100 BOULOGNE-BILLANCOURT - FRANCE	

(Hereinafter referred to as the Assignor) have made an invention entitled:

Title of Invention (in English)	
MEMS PENDULUM ACCELEROMETER HAVING TWO MEASUREM	IENT RANGES
Title of Invention (in French)	
Capteur accélérométrique pendulaire de type MEMS à deux plages de mesure	

for which an application for Letters Patent has been filed in the following country:

Country	Filing Date	Serial Number	
FRANCE	November 16 2015	15 02386	

The above-identified application(s) was/were made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

AND, WHEREAS,

r	
Corporation Name	Complete Address
Safran Electronics & Defense	18-29 Quai du Point du Jour, 92100 BOULOGNE-BILLANCOURT - FRANCE

(Hereinafter referred to as the Assignee(s)) is/are desirous of securing the entire right, title, and interest in and to this invention in all countries throughout the world, and in and to the aforementioned applications for Letters Patent on this invention and the Letters Patent to be issued upon these applications;

NOW THEREFORE, be it known that for and in consideration of One EURO (€1.00) and other good and valuable consideration, the receipt and sufficiency of which from the Assignee[s] is hereby acknowledged, by these presents, I, the Assignor, have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer and set over unto the Assignee[s], its/their lawful successors and assigns, my entire right, title, and interest in and to this invention and these applications, and all divisions, and continuations thereof, and all Letters Patent that may be granted thereon, and all reissues thereof, and all reissues thereof, and all reissues thereof, and all tetters Patent that may hereafter be filed for this invention in any country and all tetters Patent that may be granted on this invention in any country, and all extensions, renewals, and reissues thereof; and I hereby authorize and request the Commissioners of Patents (or other appropriate official whose duty is to issue patents) of the United States, Canada, and any other country, to issue Letters Patent for this invention to the Assignee[s], its/their successors and assigns, in accordance with the terms of this Assignment;

AND, I HEREBY covenant that I have the full right to convey the interest assigned by this Assignment, and I have not executed and will not execute any agreement in conflict with this Assignment;

AND, I HEREBY further covenant and agree that I will communicate with the Assignee(s), its/their successors and assigns, any facts known to me respecting this invention, testify in any legal proceedings, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said Assignee(s), its/their successors or assigns, execute all divisional, continuation, reissue, and reexamination applications, make all rightful paths and generally do everything possible to aid the Assignee(s), its/their successors and assigns, to obtain and enforce proper patent protection for this invention in any country, it being understood that, irrespective of whether I am in the employ of the Assignee(s) or its/their affiliates, any expense incident to the performance of the obligations of the present paragraph shall be borne by the Assignee(s), its/their successors, and assigns.

This Assignment agreement is effective as of the earliest filing date mentioned above.

AND, I/WE HEREBY acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

IN TESTIMONY WHEREOF, I HAVE SIGNED:

Date	Place	Inventor Name & Signature	Witness Name & Signature
08/12/26	H Fague	Vincent RAGOT	François DUFRESNE de VIREL Intellectual Property Director
		VV	DATENT



As a below named inventor, I hereby declare that, I

Inventor Name	Complete Address
Damien CARRE	c/o safran electronics & defense 18-20 Quai du Point du Jour, 92100 Boulogne-Billancourt - France

(Hereinafter referred to as the Assignor) have made an invention entitled:

Title of Invention (in English)

MEMS PENDULUM ACCELEROMETER HAVING TWO MEASUREMENT RANGES

Title of Invention (in French)

Capteur accélérométrique pendulaire de type MEMS à deux plages de mesure

for which an application for Letters Patent has been filed in the following country:

Country	Filing Date	Serial Number	
FRANCE	November 16 2015	15 02386	

The above-identified application(s) was/were made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

AND, WHEREAS,

Corporation Name	Complete Address	
SAFRAN ELECTRONICS & DEFENSE	18-26 Quai du Point du Jour, 92100 BOULOGNE-BILLANCOURT - FRANCE	

(Hereinafter referred to as the Assignee(si) is/are desirous of securing the entire right, title, and interest in and to this invention in all countries throughout the world, and in and to the aforementioned applications for Letters Patent on this invention and the Letters Patent to be issued upon these applications;

NOW THEREFORE, be it known that for and in consideration of One EURO (€1.00) and other good and valuable consideration, the receipt and sufficiency of which from the Assignee[s] is hereby acknowledged, by these presents, I, the Assignor, have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer and set over unto the Assignee[s], its/their lawful successors and assigns, my entire right, title, and interest in and to this invention and these applications, and all divisions, and continuations thereof, and all Letters Patent that may be granted thereon, and all reissues thereof, and all rights to claim priority on these of such applications, and all applications for Letters Patent that may hereafter be filed for this invention in any country and all Letters Patent that may be granted on this invention in any country, and all extensions, renewals, and reissues thereof; and I hereby authorize and request the Commissioners of Patents (or other appropriate official whose duty is to issue patents) of the United States, Canada, and any other country, to issue Letters Patent for this invention to the Assignee[s], its/their successors and assigns, in accordance with the terms of this Assignment;

AND, I HEREBY covenant that I have the full right to convey the interest assigned by this Assignment, and I have not executed and will not execute any agreement in conflict with this Assignment;

AND, I MEREBY further covenant and agree that I will communicate with the Assignee[s], its/their successors and assigns, any facts known to me respecting this invention, testify in any legal proceedings, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said Assignee[s], its/their successors or assigns, execute all divisional, continuation, reissue, and re-examination applications, make all rightful oaths and generally do everything possible to aid the Assignee[s], its/their successors and assigns, to obtain and enforce proper patent protection for this invention in any country, it being understood that, irrespective of whether I am in the employ of the Assignee[s] or its/their successors, and assigns:

This Assignment agreement is effective as of the earliest filing date mentioned above.

AND, I/WE HEREBY acknowledge that any willful false statement made in this declaration is punishable under 18 0.5.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

IN TESTIMONY WHEREOF, I HAVE SIGNED:

Date	Place	Inventor Name & Signature	Witness Name & Signature
%, IL 2016	ERAGIN	Damien CARRE	François DUFRESNE de VIREL Intellectual Property Director

As a below named inventor, I hereby declare that, I

inventor Name	Complete Address
	c/o SAFRAN ELECTRONICS & DEFENSE 18-20 Quai du Point du Jour, 92100 BOULOGNE-BILLANCOURT - FRANCE

(Hereinafter referred to as the Assignor) have made an invention entitled:

Title of invention (in English)	
MEMS PENDULUM ACCELEROMETER HAVING TWO MEASUREMENT RANGES	
Title of invention (in French)	
Capteur accéléromètrique pendulaire de type MEMS à deux plages de mesure	

for which an application for Letters Patent has been filed in the following country:

Country	Filing Date	Serial Number	
FRANCE	November 16 2015	15 02386	
			į

The above-identified application(s) was/were made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

AND, WHEREAS,

P	
Corporation Name	Complete Address
SAFRAN ELECTRONICS & DEFENSE	18-20 Quai du Point du Jour, 92100 BOULOGNE-BILLANCOURT - FRANCE

[Hereinafter referred to as the Assignee(s]) is/are desirous of securing the entire right, title, and interest in and to this invention in all countries throughout the world, and in and to the aforementioned applications for Letters Patent on this invention and the Letters Patent to be issued upon these applications;

NOW THEREFORE, be it known that for and in consideration of One EURO [€1.00] and other good and valuable consideration, the receipt and sufficiency of which from the Assignee[s] is hereby acknowledged, by these presents, I, the Assignor, have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer and set over unto the Assignee[s], its/their lawful successors and assigns, my entire right, title, and interest in and to this invention and these applications, and all divisions, and continuations thereof, and all Letters Patent that may be granted thereon, and all reissues thereof, and all rights to claim priority on these of such applications, and all applications for Letters Patent that may hereafter be filed for this invention in any country and all Letters Patent that may be granted on this invention in any country, and all extensions, renewals, and reissues thereof; and I hereby authorize and request the Commissioners of Patents (or other appropriate official whose duty is to issue patents) of the United States, Canada, and any other country, to issue Letters Patent for this invention to the Assignee[s], its/their successors and assigns, in accordance with the terms of this Assignment;

AND, I HEREBY covenant that I have the full right to convey the interest assigned by this Assignment, and I have not executed and will not execute any agreement in conflict with this Assignment:

AND, I HEREBY further covenant and agree that I will communicate with the Assignee[s], its/their successors and assigns, any facts known to me respecting this invention, testify in any legal proceedings, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said Assignee[s], its/their successors or assigns, execute all divisional, continuation, reissue, and re-examination applications, make all rightful oaths and generally do everything possible to aid the Assignee[s], its/their successors and assigns, to obtain and enforce proper patent protection for this invention in any country, it being understood that, irrespective of whether I am in the employ of the Assignee[s] or its/their affiliates, any expense incident to the performance of the obligations of the present paragraph shall be borne by the Assignee[s], its/their successors, and assigns.

This Assignment agreement is effective as of the earliest filing date mentioned above.

AND, I/WE HEREBY acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

IN TESTIMONY WHEREOF, I HAVE SIGNED:

Date	Place	Inventor Name & Signature	Witness Name & Signature
22/11/2016	Enagray	Philippe ULIAH	François DUFRESNE de VIREL Intellectual Property Director

As a below named inventor, I hereby declare that, I

Inventor Name	Complete Address
Alain BOUTEILLOUX	c/o safran electronics & defense 18-20 Quai du Point du Jour, 92100 Boulogne-Billancourt - France

(Hereinafter referred to as the Assignor) have made an invention entitled:

	Title of Invention (in English)
	MEMS PENDULUM ACCELEROMETER HAVING TWO MEASUREMENT RANGES
*	Title of Invention (in French)
	Capteur accélérométrique pendulaire de type MEMS à deux plages de mesure

for which an application for Letters Patent has been filed in the following country:

Country	Filing Date	Serial Number
FRANCE	November 16 2015	15 02396

The above-identified application(s) was/were made or authorized to be made by me.

I believe that I am the original inventor or an original Joint Inventor of a claimed invention in the application.

AND, WHEREAS,

Carporation Name	Complete Address
SAFRAN ELECTRONICS & DEFENSE	18-20 Quai du Point du Jour, 92100 BOULOGNE-BILLANCOURT - FRANCE

(Hereinafter referred to as the Assignee[s]) is/are desirous of securing the entire right, title, and interest in and to this invention in all countries throughout the world, and in and to the aforementioned applications for Letters Patent on this invention and the Letters Patent to be issued upon these applications;

NOW THEREFORE, be it known that for and in consideration of One EURO (£1.00) and other good and valuable consideration, the receipt and sufficiency of which from the Assignee[s] is hereby acknowledged, by these presents, I, the Assignor, have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer and set over unto the Assignee[s], its/their lawful successors and assigns, my entire right, title, and interest in and to this invention and these applications, and all divisions, and continuations thereof, and all Letters Patent that may be granted thereon, and all reissues thereof, and all rights to claim priority on these of such applications, and all applications for Letters Patent that may hereafter be filed for this invention in any country and all Letters Patent that may be granted on this invention in any country, and all extensions, renewals, and reissues thereof; and I hereby authorize and request the Commissioners of Patents (or other appropriate official whose duty is to issue patents) of the United States, Canada, and any other country, to issue Letters Patent for this invention to the Assignee[s], its/their successors and assigns, in accordance with the terms of this Assignment;

AND, I HEREBY covenant that I have the full right to convey the interest assigned by this Assignment, and I have not executed and will not execute any agreement in conflict with this Assignment:

AND, I MEREBY further covenant and agree that I will communicate with the Assignee(s), its/their successors and assigns, any facts known to me respecting this invention, testify in any legal proceedings, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said Assignee(s), its/their successors or assigns, execute all divisional, continuation, reissue, and re-examination applications, make all rightful oaths and generally do everything possible to aid the Assignee(s), its/their successors and assigns, to obtain and enforce proper patent protection for this invention in any country, it being understood that, irrespective of whether Lam in the employ of the Assignee(s) or its/their affiliates, any expense incident to the performance of the obligations of the present paragraph shall be borne by the Assignee(s), its/their successors, and assigns.

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IN TESTIMONY WHEREOF, I HAVE SIGNED:

Date	Place	Inventor Name & Signature	Witness Name & Signature
22/11/2016	ERAGNY	Alain BOUTEILLOUX	François DUFRESNE de VIREL Intellectual Property Director (16 5.6M/05

As a below named inventor, I hereby declare that, I

Inventor Name	Complete Address	
BIGOURIE Nicolas	c/o safran electronics & defense 18-20 Quai du Point du Jour, 92100 Boulogne-Billancourt - France	

(Hereinafter referred to as the Assignor) have made an invention entitled:

Title of Invention (in English)	
MEMS PENDULUM ACCELEROMETER HAV	VING TWO MEASUREMENT RANGES
Title of Invention (in French)	
Capteur accélérométrique pendulaire de type MEMS à d	eux plages de mesure

for which an application for Letters Patent has been filed in the following country:

Country	Filing Date	Serial Number
	November 16 2015	15 02386

The above-identified application(s) was/were made or authorized to be made by me.

I believe that I am the original inventor or an original Joint inventor of a claimed invention in the application.

AND, WHEREAS,

Corporation Name	Complete Address
SAFRAN ELECTRONICS & DEFENSE	18-20 Quai du Point du Jour, 92100 BOULOGNE-BILLANCOURT - FRANCE

(Hereinafter referred to as the Assignee(s)) is/are desirous of securing the entire right, title, and interest in and to this invention in all countries throughout the world, and in and to the aforementioned applications for Letters Patent on this invention and the Letters Patent to be issued upon these applications;

NOW THEREFORE, be it known that for and in consideration of One EURO (£1.00) and other good and valuable consideration, the receipt and sufficiency of which from the Assignee[s] is hereby acknowledged, by these presents, it, the Assignor, have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer and set over unto the Assignee[s], its/their lawful successors and assigns, my entire right, title, and interest in and to this invention and these applications, and all divisions, and continuations thereof, and all Letters Patent that may be granted thereon, and all reissues thereof, and all reistues thereof, and all reistues thereof, and all letters Patent that may be granted on this invention in any country and all Letters Patent that may be granted on this invention in any country, and all extensions, renewals, and reissues thereof; and I hereby authorize and request the Commissioners of Patents (or other appropriate official whose duty is to Issue patents) of the United States, Canada, and any other country, to issue Letters Patent for this invention to the Assignee[s], its/their successors and assigns, in accordance with the terms of this Assignment;

AND, I HEREBY covenant that I have the full right to convey the interest assigned by this Assignment, and I have not executed and will not execute any agreement in conflict with this Assignment;

AND, I HEREBY further covenant and agree that I will communicate with the Assignee(s), its/their successors and assigns, any facts known to me respecting this invention, testify in any legal proceedings, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said Assignee(s), its/their successors or assigns, execute all divisional, continuation, reissue, and reexamination applications, make all rightful oaths and generally do everything possible to aid the Assignee(s), its/their successors and assigns, to obtain and enforce proper patent protection for this invention in any country, it being understood that, irrespective of whether I am in the employ of the Assignee(s) or its/their stiliates, any expense incident to the performance of the obligations of the present paragraph shall be borne by the Assignee(s), its/their successors, and assigns.

This Assignment agreement is effective as of the earliest filing date mentioned above.

AND, I/WE HEREBY acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

IN TESTIMONY WHEREOF, I HAVE SIGNED:

Date	Place	Inventor Name & Signature	Witness Name & Signature
15 12 2016	i Enagay	BIGOURIE Nicolas	François DUFRESNE de VIREL Intellectual Property Director
		and the second s	po J. LAWERIE
			January 1

PATENT REEL: 045778 FRAME: 0433

**RECORDED: 05/11/2018**