### 506016099 04/15/2020

### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6062812

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
ERIC BOUILLON	10/25/2019
ARNAUD DELEHOUZE	10/25/2019
AMANDINE LORRIAUX	08/21/2019
LAURENCE MAILLE	10/25/2019

#### **RECEIVING PARTY DATA**

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Street Address:	3 RUE MICHEL ANGE
City:	PARIS
State/Country:	FRANCE
Postal Code:	75016
Name:	SAFRAN CERAMICS
Street Address:	RUE DE TOUBAN, LES CINQ CHEMINS
City:	LE HAILLAN
State/Country:	FRANCE
Postal Code:	33815

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

Property Type	Number
Application Number:	16756335

#### **CORRESPONDENCE DATA**

**Fax Number:** (703)770-7901

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

**Phone:** 703-770-7900

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Correspondent Name: PILLSBURY WINTHROP SHAW PITTMAN, LLP

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ATTORNEY DOCKET NUMBER:012350-0511447NAME OF SUBMITTER:MARGARET BARHAM

PATENT 506016099 REEL: 052406 FRAME: 0211

SIGNATURE:	/Margaret Barham/	
DATE SIGNED:	04/15/2020	
Total Attachments: 4		
source=012350-0511447_Declaration_Assignment#page1.tif		
source=012350-0511447_Declaration_Assignment#page2.tif		
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source=012350-0511447_Declaration_Assignment#page4.tif		

Ref. SABAO134332

## Worldwide Assignment & US Declaration (37 CFR 1.63) for utility or design application using an application data sheet (37 CFR 1.76)

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

inventor Name	Complete Address
BOUILLON, Eric	c/o Safran Aircraft Engines PI (AII) , rond-Point René Ravaud – Réau 77550 MOISSY-CRAMAYEL FRANCE

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

-	Title of Invention (in English)
	PROCESS FOR MANUFACTURING A COMPOSITE FRICTION COMPONENT
-	Title of invention (in French)
-	
-	

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

Country	Filing Date	Serial Number
France	 10/19/2017	1759873

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

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

AND, WHEREAS,

Corporation Name	Complete Address
CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE	3, Rue Michel Ange 75016 Paris France
300000	
SAFRAN CERAMICS	Bue de Touban les Cinq Chemins, 33185 Le Haillan, 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 filled for 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 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
October 25, 2019	k Hailles	BOUILLON, Eric	Berborer Soukh Disubje
Table 1			

Ref. SNM012432

## Worldwide Assignment & US Declaration (37 CFR 1.63) for utility or design application using an application data sheet (37 CFR 1.76)

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

inventor Name	Complete Address
DELEHOUZE, Arnaud	c/o Safran Aircraft Engines PI (AJI) , rond-Point René Ravaud – Réau 77550 MOISSY-CRAMAYEL FRANCE

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

Title of Invention (in English)	
DROGEGO FOR MANUELACTURINO A COMPOSITE ERICTION COMPONENT	
PROCESS FOR MANUFACTURING A COMPOSITE FRICTION COMPONENT	
Title of Invention (in French)	

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

Country	Filing Date	Serial Number
France	10/19/2017	1759873

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	
CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE	3, Rue Michel Ange 75016 Paris France	
SAFRAN CERAMICS	Rue de Touban les Cinq Chemins, 33185 Le Haillan, 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.

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IN TESTIMONY WHEREOF, I HAVE SIGNED:

Date	Place	inventor Name & Signature	Witness Name & Signature
October 25, 2019	Le Huillan	DELEHOUZE, Arnaud	CLEABAT Retuch

Ret. SREMOTERASE

## Worldwide Assignment & US Declaration (37 CFR 1.63) for utility or design application using an application data sheet (37 CFR 1.76)

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

inventor Name	Complete Address
LORRIAUX, Amandine	92 cours de l' Argonne 33000 Bordeaux France

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

Title of Invention (in English)	
PROCESS FOR MANUFACTURING A COMPOSITE FRICTION COMPONENT	
Title of Invention (in Franch)	

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

-	Country	Filing Date	Serial Number
	France	10/19/2017	1759873

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
CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE	3, flue Michel Ange 75016 Paris France
SAFRAN CERAMICS	Rue de Touban les Cinq Chemins, 33185 Le Haillan, France

(HareInafter 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 reissues thereof, 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 (S) years, or both.

IN TESTIMONY WHEREOF, I HAVE SIGNED:

	Date	Place	inventor Name & Signature	Witness Name & Signature
	2/108/2013	Safran Sa	LORRIAUX, Amandine	AGIER, Alico Fichio Lydio
		PFX 2. Geomocillic		- CHA
į			A STATE OF THE STA	

Ref. SNM012432

# Worldwide Assignment & US Declaration (37 CFR 1.63) for utility or design application using an application data sheet (37 CFR 1.76)

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

inventor Name	Complete Address
MAILLE, Laurence	38 allée des Seychelles 33600 Pessac France

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

Title of Invention (in English)	
PROCESS FOR MANUFACTURING A COMPOSITE FRICTION COMPONENT	
Title of Invention (in French)	

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

Country	Filing Date	Serial Number
France	10/19/2017	1759873

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
CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE	3, Rue Michel Ange 75016 Paris France
SAFRAN CERAMICS	Rue de Touban les Cinq Chemins, 33185 Le Haillan, 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;

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IN TESTIMONY WHEREOF, I HAVE SIGNED:

Date	Place	inventor Name & Signature	Witness Name & Signature
October 25, 2019	Universite	MAILLE, Laurence	DAVID, Gris
	ole	2.16-	and
	Borcleans	Sail	

PATENT

REEL: 052406 FRAME: 0216