506642217 05/03/2021

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6689027

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MARIEM MSAKNI MALOUCHE	03/12/2019
JANVIER LECOMTE	01/06/2020
MICKAEL RANCIC	01/06/2020
NICOLAS STEIN	01/06/2020
CLOTILDE BOULANGER	01/06/2020

RECEIVING PARTY DATA

Name:	SAFRAN AIRCRAFT ENGINES
Street Address:	2 BOULEVARD DU GÉNÉRAL MARTIAL VALIN
City: PARIS	
State/Country:	FRANCE
Postal Code: 75015	
Name:	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE
Street Address:	3, RUE MICHEL ANGE
City: PARIS	
State/Country: FRANCE	
Postal Code: 75016	
Name:	UNIVERSITE DE LORRAINE
Street Address: 34 COURS LÉOPOLD CS 25233	
City:	NANCY CEDEX
State/Country:	FRANCE
Postal Code:	54052

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17290936

CORRESPONDENCE DATA

Fax Number: (703)770-7901

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: 703-770-7900

> PAIENI REEL: 056117 FRAME: 0099

506642217

Email: maggie.barham@pillsburylaw.com

Correspondent Name: PILLSBURY WINTHROP SHAW PITTMAN, LLP

Address Line 1: PO BOX 10500

Address Line 4: MCLEAN, VIRGINIA 22102

ATTORNEY DOCKET NUMBER:	012350-0561159
NAME OF SUBMITTER:	MARGARET BARHAM
SIGNATURE:	/Margaret Barham/
DATE SIGNED:	05/03/2021

Total Attachments: 5

source=012350-0561159_Declaration_Assignment#page1.tif source=012350-0561159_Declaration_Assignment#page2.tif source=012350-0561159_Declaration_Assignment#page3.tif source=012350-0561159_Declaration_Assignment#page4.tif source=012350-0561159_Declaration_Assignment#page5.tif

PATENT REEL: 056117 FRAME: 0100

Ref. B-020939

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

Complete Address

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

MSAKNI MALOUCHE, Mariem	c/o SAFRAN AIRCRAFT ENGINES PI (AJI), Rond-Point René Ravaud-Réau 77550 MOISSY-CRAMAYEL FRANCE
(Hereinafter referred to as the Assignor) ha	
Title of Invention (in English)	
ELECTROLYTE FOR ELECTROCHEMIC	CAL MACHINING OF GAMMA-GAMMA PRIME NICKEL-BASED SUPERALLOYS
Title of Invention (in French)	
or which an application for Letters Patent	has been filed in the following country:
Country	Filing Date Serial Number

18 73037

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.

12/17/2018

AND, WHEREAS,

Scance

inventor Name

Complete Address	
2 Boulevard Du General Martial Valin 75015 Paris France	
3, Rue Michel Ange, 75016 Paris, France	
Universite De Lorraine34 Cours Leopold54052 Nancy - France, 54052, Nancy Cedex, 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 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 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
03/14/18	Corbeil -	MSAKNI MALOUCHE, Mariem	JERENIE COTINOT
1 '	Essames		
·			

Ref. B-020939

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

Complete Address

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

LECOWITE, Janvier	c/o SAFRAN AIRCRAFT ENGINES PI (AJI), Rond-Point René Ravaud-Réau 77550 MOISSY-CRAMAYEL FRANCE
(Hereinafter referred to as the Assign	
Title of Invention (in English)	
ELECTROLYTE FOR ELECTROCHE	MICAL MACHINING OF GAMMA-GAMMA PRIME NICKEL-BASED SUPERALLOYS
Title of Invention (in French)	

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

			Serial Number
	France	12/17/2018	18 73037
- 5000			

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,

inventor Name

ECOMITE In-

Corporation Name	Complete Address		
SAFRAN AIRCRAFT ENGINES	2 Boulevard Du General Martial Valin 75015 Paris France		
CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE	3, Rue Michel Ange, 75016 Paris, France		
UNIVERSITE DE LORRAINE	Universite De Lorraine34 Cours Leopold54052 Nancy - France, 54052, Nancy Cedex, 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 continuations thereof, and all Letters Patent that may be granted thereon, and all reissues thereof, and all rights to claim 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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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
January 6, 2020	Corbeil	LECOMTE, Janvier	noranicais, Amélie Genevier madelaina

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

Complete Address

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

Commence of the Commence of th	(C)D SAFRAN AIRCRAFT ENGINES PT (AII), ROIID-POINT RETE RAVAUD-REAU 77550 MICHST-CRAMATEL FRANCE
(Hereinafter referred to as the Assig	nor) have made an invention entitled:
Title of Invention (in English)	
ELECTROLYTE FOR ELECTROC	HEMICAL MACHINING OF GAMMA-GAMMA PRIME NICKEL-BASED SUPERALLOYS
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	12/17/2018	18 73037	
999. m. 1999. m. 199			

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,

inventor Name

RANCIC Mickael

Corporation Name	Complete Address
SAFRAN AIRCRAFT ENGINES	2 Boulevard Du General Martial Valin 75015 Paris France
CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE	3, Rue Michel Ange, 75016 Paris, France
UNIVERSITE DE LORRAINE	Universite De Lorraine34 Cours Leopold54052 Nancy - France, 54052, Nancy Cedex, 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 continuations thereof, and all Letters Patent that may be granted thereon, and all reissues thereof, and all rights to claim 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

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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	The state of the s	Witness Nome & Signature
January 6, 2020	Evry-Corbin	DANCIC States	BREITTMANCK, ELLIOTI AKCHIBALO
		- Millian Com	
		, Santia (1900)	American I

PATENT REEL: 056117 FRAME: 0103

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		
STEIN, Nicolas	10 rue Lançon, 57000 METZ, F	RANCE	
(Hereinafter referred to as the Assignor) h	ave made an invention entitled:		<u> </u>
Title of Invention (in English)			
	AL MACHINING OF GAMMA-GAMMA		LOYS
Title of Invention (in French)			

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

	Country	Filina Date	Serial Number
-	France	12/17/2018	18 73037

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 AIRCRAFT ENGINES	2 Boulevard Du General Martial Valin 75015 Paris France
CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE	3, Rue Michel Ange, 75016 Paris, France
UNIVERSITE DE LORRAINE	Universite De Lorraine34 Cours Leopold54052 Nancy - France, 54052, Nancy Cedex, 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

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 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
January 6, 2020	MET2	STEIN, Nicolas	COMEL, Julien
	, -, -	<i>/</i> }	
		/ <u>u</u> 2	
learne and the contract of the	4	300000°	

Ref. B-020939

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	
BOULANGER, Clotilde	14 rue du Cimetière, 57420 Co	
(Hereinafter referred to as the Assign	or) have made an invention entitled:	
Title of Invention (in English)		
	MICAL MACHINING OF GAMMA-GAMMA	PRIME NICKEL-BASED SUPERALLOYS
Title of Invention (in French)		
or which an application for Letters Pa	atent has been filed in the following country:	
Country	Filing Date	Serial Number
France	12/17/2018	18 73037

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 AIRCRAFT ENGINES	2 Boulevard Du General Martial Valin 75015 Paris France
CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE	3, Rue Michel Ange, 75016 Paris, France
UNIVERSITE DE LORRAINE	Universite De Lorraine34 Cours Leopold54052 Nancy - France, 54052, Nancy Cedex, 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 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 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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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
January 6, 2020	MEIZ	BOULANGER, Clotilde	MEUX, Enc Jen
	- 8		

PATENT REEL: 056117 FRAME: 0105

RECORDED: 05/03/2021