

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT5265773

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
CLAIRE MARIE FIGEUREU	12/03/2018
ERIC PIERRE GEORGES LEMARECHAL	12/03/2018
BENJAMIN BULOT	12/03/2018
MATHIEU SIMON PAUL GRUBER	12/03/2018
RAPHAEL BARRIER	12/03/2018
CYRIL POLACSEK	12/03/2018
RECEIVING PARTY DATA	
Name:	SAFRAN AIRCRAFT ENGINES
Street Address:	2 BOULEVARD DU GENERAL MARTIAL VALIN
City:	PARIS
State/Country:	FRANCE
Postal Code:	75015
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	16174553
CORRESPONDENCE DATA	
Fax Number:	(703)413-2220
<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>	
Phone:	(703) 413-3000
Email:	agilliland@oblon.com
Correspondent Name:	OBLON, ET AL.
Address Line 1:	1940 DUKE STREET
Address Line 4:	ALEXANDRIA, VIRGINIA 22314
ATTORNEY DOCKET NUMBER:	517856US
NAME OF SUBMITTER:	ABBY GILLILAND
SIGNATURE:	/Abby Gilliland/
DATE SIGNED:	12/04/2018
This document serves as an Oath/Declaration (37 CFR 1.63).	

Total Attachments: 6

source=517856USAssign#page1.tif

source=517856USAssign#page2.tif

source=517856USAssign#page3.tif

source=517856USAssign#page4.tif

source=517856USAssign#page5.tif

source=517856USAssign#page6.tif

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
FIGEUREU, Claire Marie	c/o Safran Aircraft Engines Pl (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)
Modulation of time and sensations
Title of Invention (in French)
Modulation des sensations en extrémité d'Aide

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

Country	Filing Date	Serial Number
France	10/30/2017	1760212

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

(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
December 3, 2018	Viñanache	FIGEUREU, Claire Marie	BEAUSTARD, Antoine Jean-Michel

**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
LEMARECHAL, Eric Pierre Georges	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)
Modulation of Vane End Serrations
Title of Invention (In French)
Modulation des serrations on extrémité d'Aude.

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

Country	Filing Date	Serial Number
France	10/30/2017	1760212

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

(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
December 3, 2018	Villaroche	LEMARECHAL, Eric Pierre Georges 	Pouget, Arnaud 

**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
BULOT, Benjamin	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)
Modulation of Vane end Serrations
Title of Invention (In French)
Modulation des serrations en extrémité d'aube.

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

Country	Filing Date	Serial Number
France	10/30/2017	1760212

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

(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
December 3, 2018	Roche la Moine	BULOT, Benjamin 	GUILLOU, Albert 

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
GRUBER, Mathieu Simon Paul	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)
Modulation of Vane End Serrations
Title of Invention (in French)
Modulation des serrations en extrémité d'Aube

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

Country	Filing Date	Serial Number
France	10/30/2017	1760212

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

(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;

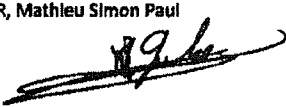

AND, I HEREBY covenant that I have the full right to convey the interest assigned by this Assignment, and I have not executed and will not execute any agreement in conflict with this Assignment;

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
December 3, 2018	Villaroche	GRUBER, Mathieu Simon Paul 	LAFITTE, Anthony Bernard Gernan 

**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

<i>Inventor Name</i>	<i>Complete Address</i>
BARRIER, Raphaël	89 rue Pascal 75013 PARIS FRANCE

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

<i>Title of invention (in English)</i>
Modulation of Vane end Serrations
<i>Title of invention (in French)</i>
Modulation des serrations en extrémité d'Aube.

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

<i>Country</i>	<i>Filing Date</i>	<i>Serial Number</i>
France	10/30/2017	1760212

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,

<i>Corporation Name</i>	<i>Complete Address</i>
SAFRAN AIRCRAFT ENGINES	2 Boulevard Du General Martial Valin 75015 Paris 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:

<i>Date</i>	<i>Place</i>	<i>Inventor Name & Signature</i>	<i>Witness Name & Signature</i>
December 3, 2018	Onera, 8 Rue des Vertugadins, 92190 MEUDON FRANCE	BARRIER, Raphaël	LE PAPE, Arnaud

**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

<i>Inventor Name</i>	<i>Complete Address</i>
POLACSEK, Cyril	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:

<i>Title of Invention (in English)</i>
Modulation of Vane end Sections
<i>Title of Invention (in French)</i>
Modulation des sections on extrémité d'Aube.

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

<i>Country</i>	<i>Filing Date</i>	<i>Serial Number</i>
France	10/30/2017	1760212

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,

<i>Corporation Name</i>	<i>Complete Address</i>
SAFRAN AIRCRAFT ENGINES	2 Boulevard Du General Martial Valin 75015 Paris 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:

<i>Date</i>	<i>Place</i>	<i>Inventor Name & Signature</i>	<i>Witness Name & Signature</i>
December 3, 2018	ONEGA Châtillon	POLACSEK, Cyril 	MANOTTA Eric 

PATENT

RECORDED: 12/04/2018

REEL: 047670 FRAME: 0453