

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT2809228

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
SEBASTIEN CONGRATEL	03/20/2014
RAPHAEL DUPEYRE	03/20/2014
GUILLAUME KLEIN	03/20/2014
DAVID MATHIEU	03/20/2014
BA-PHUC TANG	03/20/2014
DENIS GABRIEL TRAHOT	03/21/2014
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	SNECMA
<b>Street Address:</b>	2 BOULEVARD DU GENERAL MARTIAL VALIN
<b>City:</b>	PARIS
<b>State/Country:</b>	FRANCE
<b>Postal Code:</b>	75015
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	14249851
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(703)770-7901
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>	
<b>Phone:</b>	703-770-7900
<b>Email:</b>	jennifer.sallee@pillsburylaw.com
<b>Correspondent Name:</b>	PILLSBURY WINTHROP SHAW PITTMAN LLP
<b>Address Line 1:</b>	P.O. BOX 10500
<b>Address Line 4:</b>	MCLEAN, VIRGINIA 22102
<b>ATTORNEY DOCKET NUMBER:</b>	022044-0431327
<b>NAME OF SUBMITTER:</b>	JENNIFER E. SALLEE
<b>SIGNATURE:</b>	/Jennifer E. Sallee/
<b>DATE SIGNED:</b>	04/10/2014
<b>Total Attachments: 6</b>	
source=0431327_Assignment#page1.tif	

PATENT

source=0431327\_Assignment#page2.tif  
source=0431327\_Assignment#page3.tif  
source=0431327\_Assignment#page4.tif  
source=0431327\_Assignment#page5.tif  
source=0431327\_Assignment#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

<i>Inventor Name</i>	<i>Complete Address</i>
CONGRATEL Sébastien	36 route de Chevinols 77940 LA BROUSSE MONTCEAUX FRANCE

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

<i>Title of Invention (In French)</i>
AUBE DE TURBOMACHINE COOPERANT AVEC UN DISQUE DE RETENTION D'AUBES
<i>Title of Invention (In English)</i>

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	APR-11-2013	1353309

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>
SNECMA	SNECMA 2 Boulevard du Général 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 &amp; Signature</i>	<i>Witness Name &amp; Signature</i>
MARCH 20 <sup>th</sup> 2014	GENNEVILLE	CONGRATEL SEBASTIEN	PETER JEREMY

# 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
DUPEYRE Raphaël	20bis rue Aristide Briand 92300 LEVALLOIS-PERRET FRANCE

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

Title of Invention (in French)
AUBE DE TURBOMACHINE COOPERANT AVEC UN DISQUE DE RETENTION D'AUBES
Title of Invention (in English)

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

Country	Filing Date	Serial Number
FRANCE	APR-11-2013	1353309

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
SNECMA	SNECMA 2 Boulevard du Général 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;

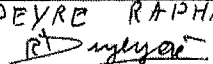

AND, I HEREBY covenant that I have the full right to convey the interest assigned by this Assignment, and I have not executed and will not execute any agreement in conflict with this Assignment;

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/WHEREBY 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
March 25 <sup>th</sup> 2014	COLOMBES	DUPEYRE RAPHAEL 	Jean-Charles COETARD 

# 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
KLEIN Guillaume	42 avenue Vincent Van Gogh 95540 MERY SUR OISE FRANCE

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

Title of Invention (in French)
AUBE DE TURBOMACHINE COOPERANT AVEC UN DISQUE DE RETENTION D'AUBES
Title of Invention (in English)

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

Country	Filing Date	Serial Number
FRANCE	APR-11-2013	1353309

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
SNECMA	SNECMA 2 Boulevard du Général 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;

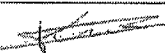

AND, I HEREBY covenant that I have the full right to convey the interest assigned by this Assignment, and I have not executed and will not execute any agreement in conflict with this Assignment;

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
March 20 <sup>th</sup> 2014	COLOMBES	KLEIN GUILLAUME 	Sulien REINGPACH 

# 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>
MATHIEU David	12 rue du Chêne Tordu 77500 CHELLES FRANCE

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

<i>Title of Invention (in French)</i>
AUBE DE TURBOMACHINE COOPERANT AVEC UN DISQUE DE RETENTION D'AUBES
<i>Title of Invention (in English)</i>

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	APR-11-2013	1353309

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>
SNECMA	SNECMA 2 Boulevard du Général 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;

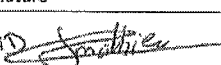
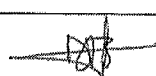
AND, I HEREBY covenant that I have the full right to convey the interest assigned by this Assignment, and I have not executed and will not execute any agreement in conflict with this Assignment;

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 &amp; Signature</i>	<i>Witness Name &amp; Signature</i>
March 20th, 2014	COLOMBES	MATHIEU DAVID 	AYDIN BENIS 

# 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
TANG Ba-Phuc	1 Impasse des Rougettes 95800 CERGY SAINT CHRISTOPHE FRANCE

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

Title of Invention (in French)
AUBE DE TURBOMACHINE COOPERANT AVEC UN DISQUE DE RETENTION D'AUBES
Title of Invention (in English)

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

Country	Filing Date	Serial Number
FRANCE	APR-11-2013	1353309

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
SNECMA	SNECMA 2 Boulevard du Général 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;

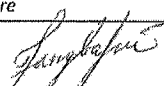

AND, I HEREBY covenant that I have the full right to convey the interest assigned by this Assignment, and I have not executed and will not execute any agreement in conflict with this Assignment;

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
March 20 <sup>th</sup> 2014	COLOMBES	TANG BA PHUC 	ERIC DELBOIS 

# 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
TRAHOT Denis, Gabriel	9 rue du Tartrogon 95220 HERBLAY FRANCE

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

Title of Invention (in French)
AUBE DE TURBOMACHINE COOPERANT AVEC UN DISQUE DE RETENTION D'AUBES
Title of Invention (in English)

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

Country	Filing Date	Serial Number
FRANCE	APR-11-2013	1353309

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
SNECMA	SNECMA 2 Boulevard du Général 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
MARCH 21TH 2014	COLONNES	DENIS TRAHOT 	

PATENT

RECORDED: 04/10/2014

REEL: 032648 FRAME: 0584