# 506286123 10/02/2020

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6332871

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
JÚLIO CESAR GRAVES	09/11/2019
YASSER MAHMUD ABDALLAH	09/12/2019
LEANDRO GUIMARÃES MAIA	09/13/2019
CARLOS EDUARDO VIEIRA DE SOUZA	09/12/2019
LUIZ FELIPE RIBEIRO VALENTINI	09/11/2019

### **RECEIVING PARTY DATA**

Name:	EMBRAER S.A.
Street Address:	AV. BRIGADEIRO FARIA LIMA, 2170
City:	SAO JOSE DOS CAMPOS - SP
State/Country:	BRAZIL
Postal Code:	12227-901

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

Property Type	Number
Application Number:	16564350

### **CORRESPONDENCE DATA**

**Fax Number:** (703)816-4100

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:** 7038164000

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Correspondent Name: BRYAN H. DAVIDSON

Address Line 1: NIXON & VANDERHYE P.C.

Address Line 2: 901 NORTH GLEBE ROAD, 11TH FLOOR

Address Line 4: ARLINGTON, VIRGINIA 22203

ATTORNEY DOCKET NUMBER:	BHD-4439-0335
NAME OF SUBMITTER:	BRYAN H. DAVIDSON
SIGNATURE:	/Bryan H. Davidson/
DATE SIGNED:	10/02/2020
	This document serves as an Oath/Declaration (37 CFR 1.63).

PATENT REEL: 053959 FRAME: 0232

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# Total Attachments: 5 source=10-02-2020\_Combined\_Dec\_and\_Assign#page1.tif source=10-02-2020\_Combined\_Dec\_and\_Assign#page2.tif source=10-02-2020\_Combined\_Dec\_and\_Assign#page3.tif source=10-02-2020\_Combined\_Dec\_and\_Assign#page4.tif source=10-02-2020\_Combined\_Dec\_and\_Assign#page5.tif

PATENT REEL: 053959 FRAME: 0233 Doc code: Oath Document Description: Oath or declaration filed Attorney Docket Number BHD-4439-335 First Named Inventor GRAVES, Julio Cesar INVENTOR'S DECLARATION AND ASSIGNMENT FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63) USING AN APPLICATION DATA SHEET (37 CFR 1.76) Declaration Submitted With Initial Filing OR Declaration Submitted After Initial Filing (surcharge (37 C.F.R. § 1.16(f)) required) VERTICAL TAKE-OFF AND LANDING (VTOL) AIRCRAFT WITH CRUISE ROTOR POSITIONING CONTROL FOR MINIMUM DRAG (Title of the Invention) As a below named inventor, I hereby declare that: This declaration is directed to: the attached application, or United States Application Number 16/564,350 filed September 9, 2019, or PCT International application number filed on The above-identified application was made or authorized to be made by me. Thelieve I am the original inventor or an original joint inventor of a claimed invention in the application. Thereby 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. WHEREAS, the undersigned (hereinafter ASSIGNOR), has made an invention in the Application identified above. WHEREAS, EMBRAER S.A. (hereinafter ASSIGNEE), an entity, having an office and place of business at Av. Brigadeiro Faria Lima, 2170, São José dos Campos - SP, BRAZIL 12227-901, is desirous of acquiring an interest therein, NOW. THEREFORE, in consideration of Ten Dollars (\$16,00) and/or other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the said ASSIGNOR by these presents hereby sells, assigns, and transfers unto the said ASSIGNEE, its successors, assigns, and legal representatives, ASSIGNOR'S entire right, title and interest in the United States of America and all foreign countries, in and to the invention as described in the aforesaid application, and to the said application and to all subsequent applications based thereon including any and all continuations, divisions, reissues, and substitutes of said application, and all resulting patents, together with the right of priority under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and the ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue said Letters Patent to ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns, and legal representatives. It is understood and agreed that ASSIGNEE'S attorneys Nixon & Vanderhye P.C. have represented only ASSIGNEE and will continue to represent only ASSIGNEE with respect to this invention; ASSIGNOR hereby agrees to transfer a like interest upon request of said ASSIGNEE, its successors, assigns, and legal representatives, and without further remuneration, in and to any improvements, and applications for patents based thereon, growing out of or related to the said invention; ASSIGNOR hereby agrees to execute any papers by ASSIGNEE, its successors, assigns, and legal representatives, deemed essential to ASSIGNEE'S full protection and title in and to the invention hereby transferred; and ASSIGNOR hereby agrees, upon request of ASSIGNEE, and without further remuneration, to execute any and all papers desired by ASSIGNEE, for the filing and granting of foreign applications and the perfecting of title thereto in ASSIGNEE.

I/We acknowledge the duty to disclose information which is material to the patentability of this application as defined in 37 CFR §1.56.

Date

AGREED and executed as noted below: LEGAL NAME OF INVENTOR/JOINT INVENTOR:

Inventor's Signature

(E.g., Given Name (first and middle (if any)) and Family Name or Surname)

Doc code: Oath	·····
Document Description: Oath or declaration filed	Attorney Docket Number BHD-4439-335
	First Named Inventor GRAVES, Julio Cesar
INVENTOR'S DECLARATION AND ASSIGNMENT FOR U	TILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63) DATA SHEET (37 CFR 1.76)
Declaration Submitted With Initial Filing OR	
Declaration Submitted After Initial Filing (surcharge (37 C	
VERTICAL TAKE-OFF AND LANDING (VTOL) AIRCR FOR MININ	AFT WITH CRUISE ROTOR POSITIONING CONTROL NUM DRAG
(Title of the	š (nverition)
As a below named inventor, I hereby declare that	
This declaration is directed to:  ☐ the attached application, or ☐ United States Application Number 16/564,350 filed Septe ☐ PCT International application number filed on	<u>mber 9, 2019,</u> ar
The above-identified application was made or authorized to be mad	e by me:
t believe I am the original inventor or an original joint inventor of a c	laimed invention in the application
I hereby acknowledge that any willful false statement made in this d by fine or imprisonment of not more than five (5) years, or both.	lectaration is punishable under 18 U.S.C. 1001
	The second secon
WHEREAS, the undersigned (hereinafter ASSIGNOR), has made a	in invention in the Application identified above.
WHEREAS, EMBRAER S.A. (hereinafter ASSIGNEE), an entity, he 2170, São José dos Campos - SP, BRAZIL 12227-901, is desirous	DI SCHRUNG SEE HIS GALLERE
of which are hereby acknowledged, the said ASSIGNOR by these to ASSIGNEE, its successors, assigns, and legal representatives, AS America and all foreign countries, in and to the invention as describ subsequent applications based thereon including any and all continual resulting patents, together with the right of priority under the Interiorican Convention Relating to Patents, Designs and Industrial National American America adheres, and the ASSIGNOR hereby authorizes said Letters Patent to ASSIGNEE, for its interest as ASSIGNEE, its agreed that ASSIGNEE's attorneys Nixon & Vanderhye P.C. have ASSIGNEE with respect to this invention:	SIGNOR'S entire right, title and interest in the Critical clates of ped in the aforesaid application, and to the said application and to all qualitions, divisions, reissues, and substitutes of said application, and simulational Convention for the Protection of Industrial Properly, Interfloidels, and any other international agreements to which the United and requests the Commissioner of Patents and Trademarks to issues successors, assigns, and legal representatives. It is understood and represented only ASSIGNEE and will continue to represent only
of or related to the said invention:	provements, and applications to patients added the same
to ASSIGNEE'S full protection and title in and to the invention here	its successors, assigns, and legal representatives, deemed essential by transferred; and
ASSIGNOR hereby agrees, upon request of ASSIGNEE, and without ASSIGNEE, for the filing and granting of foreign applications and to	out further remuneration, to execute any and all papers desired by he perfecting of title thereto in ASSIGNEE.
AGREED and executed as noted below:	
Legal Name of Additional Joint Inventor, if any: (E.g., Given Name (first and middle (if any)) and Family Name or S	Surname)
(E.g., Given Name (instant mode (in any)) and name where we have a Yasser Mahmud	
Inventor's Signature:	Date:

I/We acknowledge the duty to disclose information which is material to the patentability of this application as defined in 37 CFR §1.56.

Doc code: Oath Document Description: Cath or declaration filed Attorney Cocket Number BHO-4439-335 First Named Inventor GRAVES, Julio Cesar INVENTOR'S DECLARATION AND ASSIGNMENT FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63) USING AN APPLICATION DATA SHEET (37 CFR 1.76) Declaration Submitted With Initial Filing Declaration Submitted After Initial Filling (surcharge (37 C.F.R. § 1.10(f)) required) VERTICAL TAKE-OFF AND LANDING (VTOL) AIRCRAFT WITH CRUISE ROTOR POSITIONING CONTROL FOR MINIMUM DRAG (Title of the Invention) As a below named inventor, I hereby declare that: This declaration is directed to: the attached application, or United States Application Number 16/564,350 filed September 9, 2019, or PCT International application number filed on The above-identified application was made or suthorized to be made by me. Thelieve I am the original inventor or an original joint inventor of a district invention in the application Thereby acknowledge that any willful talse statement made in this declaration is punishable under 18 U.S.C. 1801 by fine or imposonment of not more than five (5) years, or both. WHEREAS, the undersigned (hereinalter ASSIGNOR), has made an invention in the Application identified shove. WHEREAS, EMBRAER S.A. (heminafter ASSIGNEE), an entity, having an office and place of business of Av. Brigadeiro Faria Lima: 2170, São José dos Campos - SP, BRAZIL 12227-901, is desirous of acquiring an interest therein. NOW, THEREFORE, in consideration of Ten Golfars (\$10.00) and/or other good and valuable consideration, the receipt and sufficiently

NOW, THEREFORE, in consideration of Ten Golfars (\$10.00) and/or other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the said ASSIGNOR by these presents hereby selfs, analges, and transfers unto the said ASSIGNEE, its successors, assigns, and legal representatives. ASSIGNOR'S entire right, title and interest in the United States of America and all foreign countries, in and to the invention as described in the aforesaid application, and to the said application and to subsequent applications based thereon including any and all continuations, divisions, retissues, and autostitutes of said application, and all resulting patients together with the right of priority under the International Convention for the Protection of Industrial Property. International Convention Relating to Patients, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and the ASSIGNOR hereby authorizes and requests the Commissionar of Patients and Trademarks to assist said Letters Patient to ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns, and legal representatives. It is understood agreed that ASSIGNEE's altorneys Nizon & Vanderbye P.C. have represented only ASSIGNEE and will currence to represent only ASSIGNEE with respect to this invention.

ASSIGNOR hereby agrees to transfer a like interest upon request of said ASSIGNEE, its successors, assigns, and legal representatives, and without further remuneration, in and to any improvements, and applications for patients based suseon, growing out of or related to the said invention;

ASSIGNOR hereby agrees to execute any papers by ASSIGNEE, its successors, assigns, and legal representatives, documed exsented to ASSIGNEE'S full protection and title in and to the invention hereby transferred; and

ASSIGNOR hereby agrees, upon request of ASSIGNEE, and without further remuneration, to execute any and all papers desired by ASSIGNEE, for the filing and granting of foreign applications and the perfecting of little thereto in ASSIGNEE.

## AGREED and executed as noted below:

AGISELU MIU CACUTOU NA IVANO ATTA	
Legal Name of Additional Joint Inventor, if any	
(E.g., Given Name (first and middle (if any)) and Family Name or Sumane)	
Leander	GUMARAES MAIA
Inventor's Signature	

INVertible wedge the duty to displace information which is marked to the patientability of this application as discussed in CVR & 250.

Doc code: Oath Document Description: Oath or declaration filed BHD-4439-335 Attorney Docket Number First Named Inventor GRAVES, Julio Cesar INVENTOR'S DECLARATION AND ASSIGNMENT FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63) USING AN APPLICATION DATA SHEET (37 CFR 1.76) Declaration Submitted With Initial Filing OR Declaration Submitted After Initial Filing (surcharge (37 C.F.R. § 1.16(f)) required) VERTICAL TAKE-OFF AND LANDING (VTOL) AIRCRAFT WITH CRUISE ROTOR POSITIONING CONTROL FOR MINIMUM DRAG (Title of the Invention) As a below named inventor, I hereby declare that: This declaration is directed to: The attached application, or United States Application Number 16/564,350 filed September 9, 2019, or PCT International application number filed on The above-identified application was made or authorized to be made by me. I believe I am the original inventor or an original joint inventor of a claimed invention in the application, I 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. WHEREAS, the undersigned (hereinafter ASSIGNOR), has made an invention in the Application identified above. WHEREAS, EMBRAER S.A. (hereinafter ASSIGNEE), an entity, having an office and place of business at Av. Brigadeiro Faria Lima, 2170. São José dos Campos - SP, BRAZIL 12227-901, is desirous of acquiring an interest therein; NOW, THEREFORE, in consideration of Ten Dollars (\$10.00) and/or other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the said ASSIGNOR by these presents hereby sells, assigns, and transfers unto the said

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### AGREED and executed as noted below:

Legal Name of Additional .	Joint Inventor, if any	<i>(</i> ;		annonnannan i
(E.g., Given Name (first and midste (if any)) and Family Name or Surname)				
Carlos	A strange and	Eduardo	VIEIRA DE SOUZA	j
Inventor's Signature	A (		Date:	
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Doc code: Oath

Inventor's Signature:

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Attorney Docket Number BHD-4439-335 First Named Inventor GRAVES, Julio Cesar INVENTOR'S DECLARATION AND ASSIGNMENT FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63) USING AN APPLICATION DATA SHEET (37 CFR 1.76) Declaration Submitted With Initial Filing OR Declaration Submitted After Initial Filing (surcharge (37 C.F.R. § 1.16(f)) required) VERTICAL TAKE-OFF AND LANDING (VTOL) AIRCRAFT WITH CRUISE ROTOR POSITIONING CONTROL FOR MINIMUM DRAG (Title of the invention) As a below named inventor, I hereby declare that: This declaration is directed to: the attached application, or United States Application Number 16/564,350 filed September 9, 2019, or PCT International application number filed on The above-identified application was made or authorized to be made by me. I believe I am the original inventor or an original joint inventor of a claimed invention in the application. I 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. WHEREAS, the undersigned (hereinafter ASSIGNOR), has made an invention in the Application identified above. WHEREAS, EMBRAER S.A. (hereinafter ASSIGNEE), an entity, having an office and place of business at Av. Brigadeiro Faria Lima. 2170, São José dos Campos - SP, BRAZIL 12227-901, is desirous of acquiring an interest therein; NOW, THEREFORE, in consideration of Ten Dollars (\$10.00) and/or other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the said ASSIGNOR by these presents hereby sells, assigns, and transfers unto the said ASSIGNEE, its successors, assigns, and legal representatives, ASSIGNOR'S entire right, title and interest in the United States of America and all foreign countries, in and to the invention as described in the aforesaid application, and to the said application and to all subsequent applications based thereon including any and all continuations, divisions, reissues, and substitutes of said application, and all resulting patents, together with the right of priority under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and the ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue said Letters Patent to ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns, and legal representatives. It is understood and agreed that ASSIGNEE'S attorneys Nixon & Vanderhye P.C. have represented only ASSIGNEE and will continue to represent only ASSIGNEE with respect to this invention; ASSIGNOR hereby agrees to transfer a like interest upon request of said ASSIGNEE, its successors, assigns, and legal representatives, and without further remuneration, in and to any improvements, and applications for patents based thereon, growing out of or related to the said invention: ASSIGNOR hereby agrees to execute any papers by ASSIGNEE, its successors, assigns, and legal representatives, deemed essential to ASSIGNEE'S full protection and title in and to the invention hereby transferred; and ASSIGNOR hereby agrees, upon request of ASSIGNEE, and without further remuneration, to execute any and all papers desired by ASSIGNEE, for the filing and granting of foreign applications and the perfecting of title thereto in ASSIGNEE. AGREED and executed as noted below: Legal Name of Additional Joint Inventor, if any: (E.g., Given Name (first and middle (if any)) and Family Name or Surname) Felipe Ribeiro VALENTINI

I/We acknowledge the duty to disclose information which is material to the patentability of this application as defined in 37 CFR §1.56.

Date

**RECORDED: 10/02/2020** REEL: 053959 FRAME: 0238