505361030 03/06/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5407819

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JAMES RYAN REEPMEYER	02/27/2019
JOHAN MICHAEL REIMANN	02/25/2019
GAGAN ADIBHATLA	03/04/2019
EVIN NATHANIEL BARBER	02/26/2019
STEFAN JOSEPH CAFARO	02/27/2019
RAHIM PANJWANI	02/28/2019
FREDERICK JOHN MENDITTO III	03/01/2019
AARON JAMES SCHMITZ	02/26/2019
SUCHOT KONGSOMBOONVECH	02/28/2019
RICHARD ANTHONY ZELINSKI	02/26/2019

RECEIVING PARTY DATA

Name:	GENERAL ELECTRIC COMPANY
Street Address:	1 RIVER ROAD
City:	SCHENECTADY
State/Country:	NEW YORK
Postal Code:	12345

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16294358

CORRESPONDENCE DATA

Fax Number: (864)233-7342

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: 864-271-1592

Email: usdocketing@dority-manning.com,tsomers@dority-manning.com

DORITY & MANNING, P.A. AND GEC-AVIATION Correspondent Name:

Address Line 1: POST OFFICE BOX 1449

Address Line 4: GREENVILLE, SOUTH CAROLINA 29602-1449

ATTORNEY DOCKET NUMBER: 326947-US-1/GECV-883

> PATENT **REEL: 048520 FRAME: 0280**

NAME OF SUBMITTER:	J. SCOTT MARTIN
SIGNATURE:	/j. scott martin 72,850/
DATE SIGNED:	03/06/2019
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 12

source=326947-US-1_True_and_Accurate_Copy_Dec_Assignment_GECV883_06MAR2019#page1.tif source=326947-US-1_True_and_Accurate_Copy_Dec_Assignment_GECV883_06MAR2019#page2.tif source=326947-US-1_True_and_Accurate_Copy_Dec_Assignment_GECV883_06MAR2019#page3.tif source=326947-US-1_True_and_Accurate_Copy_Dec_Assignment_GECV883_06MAR2019#page4.tif source=326947-US-1_True_and_Accurate_Copy_Dec_Assignment_GECV883_06MAR2019#page5.tif source=326947-US-1_True_and_Accurate_Copy_Dec_Assignment_GECV883_06MAR2019#page7.tif source=326947-US-1_True_and_Accurate_Copy_Dec_Assignment_GECV883_06MAR2019#page8.tif source=326947-US-1_True_and_Accurate_Copy_Dec_Assignment_GECV883_06MAR2019#page8.tif source=326947-US-1_True_and_Accurate_Copy_Dec_Assignment_GECV883_06MAR2019#page9.tif source=326947-US-1_True_and_Accurate_Copy_Dec_Assignment_GECV883_06MAR2019#page10.tif source=326947-US-1_True_and_Accurate_Copy_Dec_Assignment_GECV883_06MAR2019#page11.tif source=326947-US-1_True_and_Accurate_Copy_Dec_Assignment_GECV883_06MAR2019#page11.tif source=326947-US-1_True_and_Accurate_Copy_Dec_Assignment_GECV883_06MAR2019#page11.tif source=326947-US-1_True_and_Accurate_Copy_Dec_Assignment_GECV883_06MAR2019#page12.tif

PATENT REEL: 048520 FRAME: 0281

COMBINED DECLARATION AND GLOBAL ASSIGNMENT FOR UTILITY OR DESIGN PATENT APPLICATION

As the below named inventor(s), I/we hereby declare that:

This declaration and assignment are directed to:

APPLICATION OF MACHINE LEARNING TO PROCESS HIGH-FREQUENCY SENSOR SIGNALS OF A TURBINE ENGINE

	the specification	of which is attached hereto OR
X	United States ap	oplication or PCT international application number
	16/294,358	filed on March 6, 2019 as
	amended on [da	ite] (if applicable).
	(We hereby author	prize and request the Company or its delegated attorneys or agents to
	insert above the a	pplication number and filing date of the application when known.)

The above-identified application was made or authorized to be made by us.

We believe that we are original joint inventors of a claimed invention in the application.

We hereby acknowledge that any willful false statement made in this declaration is punishable under 18 USC § 1001 by fine or imprisonment of not more than five (5) years, or both.

We have reviewed and understand the contents of the above-identified application. including the claims, as amended by any amendment referred to above.

We acknowledge the duty to disclose information which is material to the patentability of this application as defined in 37 CFR § 1.56, including, for continuation-in-part applications, material information which became available between the filing date of the prior application and the filing date of the continuation-in-part application.

In accordance with our obligation(s) under an Employee Innovation and Proprietary Information Agreement or (as applicable) arising out of other agreements (such as, but not limited to, the Services Agreement between General Electric Company, a New York corporation, and our employers), and/or for other good and valuable consideration of which we acknowledge receipt, I/we,

Inventor First Name	Inventor Middle Name	Inventor Last Name		Residence Town	Residence State	Residence Country
James	Ryan	Reepmeyer	of	Cincinnati	Ohio	USA
Johan	Michael	Reimann	of	Ballston Spa	New York	USA
Gagan		Adibhatla	of	Cincinnati	Ohio	USA
Evin	Nathaniel	Barber	of	Cincinnati	Ohio	USA
Stefan	Joseph	Cafaro	of	Maineville	Ohio	USA
Rahim		Panjwani	of	Cincinnati	Ohio	USA

Frederick	John	Menditto, III	of	Maineville	Ohio	USA
Aaron	James	Schmitz	of	Cincinnati	Ohio	USA
Suchot		Kongsomboonvech	of	Mason	Ohio	USA
Richard	Anthony	Zelinski	of	Cincinnati	Ohio	USA

hereby sell and assign to:

Name of Company: General Electric Company
Entity Type (optional): New York corporation
Address: 1 River Road, Schenectady, New York 12345 USA

herein referred to as "Company", its successors and assigns our entire respective rights, titles and interests in and to the invention and improvements made or conceived by us described in the application(s) listed above and in the following table:

Country of Filing	Type of Filing	Application Number	Filing Date	Title

(We hereby authorize and request the Company or its delegated attorneys or agents to insert above the application number and filing date of the application(s) when known.)

and any and all applications for patent and patents therefrom in any and all countries, including all divisions, continuations, continuations-in-part, reexaminations, renewals, and reissues thereof, and all rights of priority resulting from the filing of the application(s), and authorize and request any official whose duty it is to issue patents, to issue any patent on the inventions and improvements resulting therefrom to the Company, or its successors or assigns, and agree that on request and without further consideration, we will communicate to the Company or its representatives or nominees any facts known to us respecting the inventions and improvements and testify in any legal proceeding, make all rightful oaths, sign all lawful papers and execute all instruments or documents required or requested for the making and prosecution of any applications of any type for patent, utility model, or other similar rights in all countries including, but not limited to, any provisional, non-provisional, continuation, continuation-in-part, divisional, renewal or substitute thereof, for any derivation proceedings relating thereto, and, as to any patents that issue from such applications, for any supplemental examination, derivation proceeding, opposition, post grant review, reissue, re-examination, inter partes review, or extension thereof, and generally do everything possible to aid the Company, its successors, assigns, and nominees to obtain and enforce proper patent protection for the invention and its improvements in all countries.

Remuneration claims of the inventor(s)/assignor(s) potentially arising from German Law on Employee Inventions, or any other respective country law, remain unaffected by this assignment.

INVENTOR 1	
Signature: James Ryan Reepmeyer	Date: 2/27/2d9
Witnessed by: Projection Signature	Date: <u>2/27/2019</u>
Printed Name of Witness	
Witnessed by: Signature Signature Printed Name of Witness	Date: <u>2/22/20/</u> #
SECTION BELOW IS FOR USE ONLY IF SIGI	NING IN PRESENCE OF A NOTARY ate:
James Ryan Reepmeyer	
STATE OF ss. COUNTY OF	
This day of, James Rvan Reepmeyer, to me personally know assignment, who acknowledged to me that he/sh the purposes therein set forth.	vn as the individual who executed the foregoing
Seal	
	(Notary Public)

HVENTOR:			
Signature Johan Michael Rein	Da mann	te <u>27/200</u>	<u>//9_</u>
Witnessed by Signature	Da	te <u>*2 /25/</u>	1
Witnessed by	<u>Yaury</u> Da	te <u>727</u> 5	717_
SECTION BELOW IS FOR USE O	PNLY IF SIGNING IN I	PRESENCE OF /	NOTARY
Johan Michael Reimann	Date:		
STATEOF	9		
COUNTY OF			
day of Johan Michael Reimann, to me per susignment, who acknowledged to make purposes therein, set forth	SONBliv known as mo	makerine com .	ne the above super ecuted the foregoing Viser own tras will for
568			
		(Notary Public)	

4

REEL: 048520 FRAME: 0285

INVENTURS	
Signature: <u>/ / oqow</u> G\(\frac{\text{Gapan}(\text{Atlibhatla})}{\text{Company}(\text{Atlibhatla})}	Date: Mar/04/2019
Witnessed by: Zall Signature	Date: Mar/04/2019
Russel L. Ruhl Printed Name of Witness	
Witnessed by: <u>邓从杰 士、总谕心</u> Signature	Date: Mar/04/2019
Nathan L. Sims Printed Name of Witness	
SECTION BELOW IS FOR USE ONLY IF SIG	NING IN PRESENCE OF A NOTARY
D	date:
Gagan Adibhatla	
STATE OF SS.	
This day of <u>Gagan Adibhatia</u> , to me personally known a assignment, who acknowledged to me that he/sh the purposes therein set forth.	before me personally came the above-named is the individual who executed the foregoing executed the same of his/her own free will for
Seal	
	(Notary Public)

INVENTOR 4	
Signature: Evin Nathaniel Barber	Date: 2/26/2019
Witnessed by: <u>Zillas (Moil</u> Signature	Date:
Nickolas J. Marik Printed Name of Witness	
Witnessed by: Signature	Date:
Printed Name of Witness	
SECTION BELOW IS FOR USE ONLY IF SIGNING	IN PRESENCE OF A NOTARY
Date: Date:	
STATE OF	
ss. COUNTY OF	
This day of, befo <u>Evin Nathaniel Barber</u> , to me personally known as t assignment, who acknowledged to me that he/she exe the purposes therein set forth.	ne maividual who executed the foredoind
Seal	
	(Notary Public)

PATENT [©] REEL: 048520 FRAME: 0287

INVENTOR 5	
Signature: Stefan Joseph Cafaro	Date: 62/27/2019
Witnessed by: Signature	Date: 04/27/2019
Kevin Davis Printed Name of Witness	
Witnessed by: Signature	Date: <u>2/27/2019</u>
Printed Name of Witness	
SECTION BELOW IS FOR USE ONLY IF SIG	INING IN PRESENCE OF A NOTARY
	Date:
Stefan Joseph Cafaro	×410.
STATE OF ss.	
COUNTY OF	
This day of, <u>Stefan Joseph Cafaro</u> , to me personally know assignment, who acknowledged to me that he/s the purposes therein set forth.	before me personally came the above-named on as the individual who executed the foregoing he executed the same of his/her own free will for
Seal	
	(Notany Public)

INVENTOR 6
Signature: Date: 02/25/19 Rahim Panjwani
Witnessed by: Signature Date: 45/2019
Printed Name of Witness
Witnessed by: Date: 2/24/19 Signature
<u>Kaymond F Martell</u> Printed Name of Witness
SECTION BELOW IS FOR USE ONLY IF SIGNING IN PRESENCE OF A NOTARY
Date:
Rahim Panjwani
STATE OF ss.
COUNTY OF
This day of, before me personally came the above-named <u>Rahim Paniwani</u> , to me personally known as the individual who executed the foregoing assignment, who acknowledged to me that he/she executed the same of his/her own free will for the purposes therein set forth.
Seal
(Notary Public)

INVENTOR 7	
Signature: Frederick John Menditto, III	Date: <u>3/1/19</u>
Witnessed by: <u>UUUSSeyFaft</u> Signature	Date: <u>3/1/19</u>
Walter Desin Debate Printed Name of Witness	in the state
Witnessed by: Signature Reagan Amojan Sson	Date: <u>03/0 /14</u>
Printed Name of Witness	
SECTION BELOW IS FOR USE ONLY IF SIGNING DATE TO SECTION BELOW IS FOR USE ONLY IF SIGNING DATE OF THE SECTION BELOW IS FOR USE ONLY IF SIGNING DATE OF THE SECTION BELOW IS FOR USE ONLY IF SIGNING DATE OF THE SECTION BELOW IS FOR USE ONLY IF SIGNING DATE OF THE SECTION BELOW IS FOR USE ONLY IF SIGNING DATE OF THE SECTION BELOW IS FOR USE ONLY IF SIGNING DATE OF THE SECTION BELOW IS FOR USE ONLY IF SIGNING DATE OF THE SECTION BELOW IS FOR USE ONLY IF SIGNING DATE OF THE SECTION BELOW IS FOR USE ONLY IF SIGNING DATE OF THE SECTION BELOW IS FOR USE ONLY IF SIGNING DATE OF THE SECTION BELOW IS FOR USE ONLY IF SIGNING DATE OF THE SECTION BELOW IS FOR USE ONLY IF SIGNING DATE OF THE SECTION BELOW IS FOR USE ONLY IF SIGNING DATE OF THE SECTION BELOW IS FOR USE ONLY IF SIGNING DATE OF THE SECTION BELOW IS FOR USE ONLY IF SIGNING DATE OF THE SECTION BELOW IS FOR USE OF THE SECTION BELOW IS F	
STATE OF	
COUNTY OF	
This day of, be rederick John Menditto, III, to me personally foregoing assignment, who acknowledged to me the free will for the purposes therein set forth.	known as the individual who executed the
Seal	
	(Notary Public)

PATENT ⁹ REEL: 048520 FRAME: 0290

INVENTOR 8	
Signature: Aaron James Schmitz	Date: 2/26/2019
Witnessed by: Signature	Date: <u>20/1-Fe5-26</u>
Javid T. Josse	
Printed Name of Witness	
Witnessed by: Signature	Date: 2/26/2019
C has stopping Sarvand C Printed Name of Witness	
SECTION BELOW IS FOR USE ONLY IF SIGNING	
Aaron James Schmitz	
Adjult battles comme	
STATE OF	
SS	
COUNTY OF	
This day of beld	the individual with executed the injections
Seal	
	(Notary Public)

INVENTOR 9	
Signature:	
Witnessed by: Uhan WM Date: 2/28/19 Charles Welsh	
<u>Charles Welsh</u> Printed Name of Witness	
Witnessed by: Grade Grade Date: 3/23/19 Signature Jolene Grathel Printed Name of Witness SECTION BELOW IS FOR USE ONLY IF SIGNING IN PRESENCE OF A NOTARY	
Suchot Kongsomboonvech	
STATE OF SS. COUNTY OF	
This day of, before me personally came the above-named <u>Suchot Kongsomboonvech</u> , to me personally known as the individual who executed the foregoing assignment, who acknowledged to me that he/she executed the same of his/her own free will for the purposes therein set forth.	
Seal	
(Notary Public)	

11 **PATENT REEL: 048520 FRAME: 0292**

INVENTOR 10	
Signature: Achil Months Richard Anthony Zelia	July Date: 2/26/2019 Skil
Witnessed by: Java Well Signature ANKA ACHT Printed Name of Witness	L Date: 2/26/2019
Witnessed by: <u>‡abella于客。</u> Signature ISabella Palacio	
Printed Name of Witness	
SECTION BELOW IS FOR USE ON	ILY IF SIGNING IN PRESENCE OF A NOTARY
	Date:
Richard Anthony Zelinski	vais.
STATE OF S	s.
This day of	, before me personally came the above-named sonally known as the individual who executed the foregoing that he/she executed the same of his/her own free will for
Seal	
	(Notary Public)

12

PATENT

REEL: 048520 FRAME: 0293