PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT6023138

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ALESSANDRA DI TULLIO	10/25/2019
ROBIN LUCIA	03/17/2020
ANUJA NAIR	10/25/2019
NIKHIL SREEDHAR RAJGURU	10/29/2019
YVONNE GILLIS	10/25/2019

RECEIVING PARTY DATA

Name:	VOLCANO CORPORATION	
Street Address:	3721 VALLEY CENTRE DRIVE	
Internal Address:	SUITE 500	
City:	SAN DIEGO	
State/Country:	CALIFORNIA	
Postal Code:	92130	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16662847

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	2018P01116US02
NAME OF SUBMITTER:	PATTI DEMICHELE
SIGNATURE:	/Patti DeMichele/
DATE SIGNED:	03/19/2020
	This document serves as an Oath/Declaration (37 CFR 1.63).

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Total Attachments: 5

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PATENT REEL: 052171 FRAME: 0507

Date:

Signature:

Yvonne GILLIS

For good and valuable consideration, of which I/we acknowledge receipt, I/we as a below-named Assignor(s) or Inventor. hereby sell, and assign, and transfer the entire and exclusive right, title, and interest in the following to VOLCANO CORPORATION, having a place of business at 3721 Valley Centre Drive, Suite 500, San Diego, CA 92130, its successors, assigns, and legal representatives, including any nominees (collectively "the Assignee") my/our invention "SPEED DETERMINATION FOR INTRALUMINAL ULTRASOUND IMAGING AND ASSOCIATED DEVICES, SYSTEMS, AND METHODS", for which an application: is executed concurrently herewith 🖾 was filed on October 24, 2019, having a United States Application No. 16/662,847 was filed on , having an International Application No. and all rights in and to said application, and all other United States, foreign and international patent applications associated therewith, based thereon, or claiming priority therefrom including, but not limited to, any and all provisionals, non-provisionals divisions, continuations, continuations-in-part, re-examinations, reissues, and extensions thereof, and the right to claim priority thereto, and the entire and exclusive right, title, and interest in and to any and all patents granted on these applications. I/We authorize and request that the Patent Office officials in the United States and in any and all foreign countries to issue any and all Letters Patent when granted, solely to the Assignee(s), for its sole use, and that of its successors, assigns, and legal representatives. I/We will provide my/our cooperation to enable the Assignee to enjoy the foregoing right, title, and interest to the fullest extent. Upon request at the expense of the Assignee, I/we agree to execute all papers, take all rightful paths, testify in all legal proceedings including patent prosecution actions and infringement actions, and do all other such acts which may be necessary, desirable, or convenient for securing and maintaining patents on the foregoing invention or for perfecting title thereto in the Assignee. I/We certify that I/we have the full right to convey the above rights. As a below-named inventor, I hereby declare that the above-identified application was made or authorized to be made by me, and that 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. Signature: Alessandra Di TULUO, Assignor/Inventor Date: 10/25/2019 Signature: _ _____, Assignor/Inventor Robin LUCIA 25°0406ev)19 Signature: __ Signature: __ . Assignor/Inventor Nikhii Sreedhar RAJGURU

> PATENT REEL: 052171 FRAME: 0508

_____, Assignor/Inventor

For good and valuable consideration, of which I/we acknowledge receipt, I/we as a below-named Assignor(s) or Inventor,

hereby sell, and assign, and transfer the entire and exclusive right, title, and interest in the following to VOLCANO CORPORATION, having a place of business at 3721 Valley Centre Drive, Suite 500, San Diego, CA 92130, its successors, assigns, and legal representatives, including any nominees (collectively "the Assignee") my/our invention "SPEED DETERMINATION FOR INTRALUMINAL ULTRASOUND IMAGING AND ASSOCIATED DEVICES, SYSTEMS, AND METHODS", for which an application: is executed concurrently herewith x was filed on October 24, 2019, having a United States Application No. 16/662,847 Mas filed on , having an International Application No. and all rights in and to said application, and all other United States, foreign and international patent applications associated therewith, based thereon, or claiming priority therefrom including, but not limited to, any and all provisionals, non-provisionals divisions, continuations, continuations-in-part, re-examinations, reissues, and extensions thereof, and the right to claim priority thereto, and the entire and exclusive right, title, and interest in and to any and all patents granted on these applications. I/We authorize and request that the Patent Office officials in the United States and in any and all foreign countries to issue any and all Letters Patent when granted, solely to the Assignee(s), for its sole use, and that of its successors, assigns, and legal representatives. I/We will provide my/our cooperation to enable the Assignee to enjoy the foregoing right, title, and interest to the fullest extent. Upon request at the expense of the Assignee, I/we agree to execute all papers, take all rightful oaths, testify in all legal proceedings including patent prosecution actions and infringement actions, and do all other such acts which may be necessary, desirable, or convenient for securing and maintaining patents on the foregoing invention or for perfecting title thereto in the Assignee. I/We certify that I/we have the full right to convey the above rights. As a below-named Inventor, I hereby declare that the above-identified application was made or authorized to be made by me, and that 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. Date: _____ . Assignor/Inventor Alessandra DI TULLIO Date: Signature: __ , Assignor/Inventor Robin LUCIA Signature: _ Anuja NAIR Date: 10/29/2019 Signature: Date: _____ _____, Assignor/inventor

Signature: ____

Yvonne GILLIS

PATENT REEL: 052171 FRAME: 0509

ASSIGNMENT & DECLARATION

Docket No. 2018P01116US02

For good and valuable consideration, of which I/we acknowledge receipt, I/we as a below-named Assignor(s) or Inventor, hereby sell, and assign, and transfer the entire and exclusive right, title, and interest in the following to VOLCANO CORPORATION, having a place of business at 3721 Valley Centre Drive, Suite 500, San Diego, CA 92130, its successors, assigns, and legal representatives, including any nominees (collectively "the Assignee") my/our invention "SPEED DETERMINATION FOR INTRALUMINAL ULTRASOUND IMAGING AND ASSOCIATED DEVICES, SYSTEMS, AND METHODS", for which an application:

☐ is executed concurren ☐ was filed on October 2 ☐ was filed on	ntly herewith 24, 2019, having a United States Applic , having an International Application I	·	
therewith, based thereon, divisions, continuations, co	d application, and all other United Stat or claiming priority therefrom including ontinuations-in-part, re-examinations, r d exclusive right, title, and interest in ar	g, but not limited to, any and all p reissues, and extensions thereof	rovisionals, non-provisionals , and the right to claim priority

I/We authorize and request that the Patent Office officials in the United States and in any and all foreign countries to issue any and all Letters Patent when granted, solely to the Assignee(s), for its sole use, and that of its successors, assigns, and legal representatives.

I/We will provide my/our cooperation to enable the Assignee to enjoy the foregoing right, title, and interest to the fullest extent. Upon request at the expense of the Assignee, I/we agree to execute all papers, take all rightful oaths, testify in all legal proceedings including patent prosecution actions and infringement actions, and do all other such acts which may be necessary, desirable, or convenient for securing and maintaining patents on the foregoing invention or for perfecting title thereto in the Assignee.

I/We certify that I/we have the full right to convey the above rights.

As a below-named Inventor, I hereby declare that the above-identified application was made or authorized to be made by me, and that 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.

Date:	Signature: _		, Assignor/Inventor
		Alessandra DI TULLIO	
Date:	Signature: _		, Assignor/Inventor
		Robin LUCIA	
Date:	Signature:		, Assignor/Inventor
-		Anuja NAIR	
Date:	Signature:		, Assignor/Inventor
		Nikhil Sreedhar RAJGURU	,
Date: Oct 25th, 2	2019 Signature:	U alles	, Assignor/Inventor
		Yvonne GILLIS	,

PATENT REEL: 052171 FRAME: 0510 Document Description: Oath or declaration filed

PTO/AIA/02 (07-13)

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Title of Invention SPEED DETERMINATION FOR INTRALUMINAL ULTRASOUND IMAGING AND ASSOCIATED DEVICES, SYSTEMS, AND METHODS				
OR United S	ent is directed to: ached application, States application or PCT international		5/662,847 _{filed or}	October 24, 2019
	ME of inventor to whom this su	_	-	
	Name (first and middle (if any)) and F	family Name or Surname)		
Robin L				
Residence (6	except for a deceased or legally incapa	acitated inventor):		
_{city} SAN	1 DIEGO	State CA	Country	
Mailing Address (except for a deceased or legally incapacitated inventor): VIA DEL CAMPO 17150				
_{City} SAN	N DIEGO	_{State} CA	_{Zip} 92127	_{Country} US
I believe the above-named inventor or joint inventor to be the original inventor or an original joint inventor of a claimed invention in the application.				
The above-i	dentified application was made or auth	horized to be made by me	€.	
I hereby acknowledge that any willful false statement made in this statement is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.				
Relationship to the inventor to whom this substitute statement applies:				
Legal Representative (for deceased or legally incapacitated inventor only),				
	ssignee,	-g,p		
	erson to whom the inventor is under ar	n obligation to assign,		
Person who otherwise shows a sufficient proprietary interest in the matter (petition under 37 CFR 1.46 is required), or				
	int Inventor.		v	. ,

[Page 1 of 2]

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1 minute to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Circumstances permitting execution of this substitu	ite statement:		
Inventor is deceased,			
Inventor is under legal incapacity,			
Inventor cannot be found or reached after	r diligent effort, or		
Inventor has refused to execute the oath	or declaration under 37 CF	R 1.63.	
If there are joint inventors, please check the appro	priate box below:		
An application data sheet under 37 CFR or is currently submitted.	1.76 (PTO/AIA/14 or equiva	alent) naming the entir	e inventive entity has been
OR			
An application data sheet under 37 CFR Statement Supplemental Sheet (PTO/AIA information is attached. See 37 CFR 1.64	V11 or equivalent) naming		
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PERSON EXECUTING THIS SUBSTITUTE STATE	MENT:		
Name: Joseph Innamorati 03/17/2020 Date (Optional):			
Signature: Joseph Innamorate	•		
APPLICANT NAME AND TITLE OF PERSON EXE			
If the applicant is a juristic entity, list the applicant na	_	ner:	
VOLCANO CORPORATION Applicant Name:			
Title of Person Executing This Substitute Statement: Authorized SIGNATORY			
This Substitute Statement: Addition 253 STOTATE STOTATE TO THE signer, whose title is supplied above, is authorized to act on behalf of the applicant.			
Residence of the signer (unless provided in an a	pplication data sheet, P1	O/AIA/14 or equivale	ent):
•		Country US	
Mailing Address of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent) 1600 SUMMER STREET			
city STAMFORD star		_{Zip} 06905	Country US
Note: Use an additional PTO/AIA/02 form for each inventor who is deceased, legally incapacitated, cannot be found or reached after diligent effort, or has refused to execute the oath or declaration under 37 CFR 1.63.			

[Page 2 of 2]

RECORDED: 03/19/2020