506342350 11/06/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6389104

		NEW ASSIGNMENT	NEW ASSIGNMENT				
NATURE OF CONVEYAN	ICE:	ASSIGNMENT					
CONVEYING PARTY DA	ATA						
		Name	Execution Date				
SATTWIK BASU			10/29/2020				
JEFFREY CHARLES TA	CKETT		10/29/2020				
DAVID TRUMPY			10/27/2020				
JAMES MAY			11/06/2020				
TODD EDWARD TOUS	GNANT		10/29/2020				
RECEIVING PARTY DA	ТА						
Name:	HARMA	N INTERNATIONAL INDUSTRIES, IN	CORPORATED				
Street Address:	400 ATL	ANTIC STREET					
City:	STAMF	ORD					
State/Country:	CONNE	CTICUT					
Postal Code:	06901						
	Totol: 1						
PROPERTY NUMBERS Property Type		Number					
		Number 17091449					
Property Type Application Number: CORRESPONDENCE D Fax Number: Correspondence will be	ATA (e sent to	17091449 248)358-3351 the e-mail address first; if that is u					
Property Type Application Number: CORRESPONDENCE D Fax Number: Correspondence will be using a fax number, if p	ATA (e sent to provided	17091449 248)358-3351 the e-mail address first; if that is un ; if that is unsuccessful, it will be se					
Property Type Application Number: CORRESPONDENCE D Fax Number: <i>Correspondence will be</i> <i>using a fax number, if p</i> Phone:	ATA (e sent to provided	17091449 248)358-3351 the e-mail address first; if that is u ; if that is unsuccessful, it will be se 248-358-4400					
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Property Type Application Number: CORRESPONDENCE D Fax Number: Correspondence will be using a fax number, if p Phone: Email: Correspondent Name: Address Line 1:	ATA e sent to provided	17091449 (248)358-3351 <i>the e-mail address first; if that is un</i> <i>; if that is unsuccessful, it will be se</i> 248-358-4400 cdara@brookskushman.com 3ROOKS KUSHMAN P.C./HARMAN 1000 TOWN CENTER					
Property Type Application Number: CORRESPONDENCE D Fax Number: Correspondence will be using a fax number, if p Phone: Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 4:	ATA (e sent to provided) 2 6	17091449 248)358-3351 the e-mail address first; if that is un ; if that is unsuccessful, it will be se 248-358-4400 cdara@brookskushman.com BROOKS KUSHMAN P.C./HARMAN 1000 TOWN CENTER TWENTY SECOND FLOOR					
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Property Type Application Number: CORRESPONDENCE D Fax Number: Correspondence will be using a fax number, if p Phone: Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 4:	ATA (e sent to provided) 2 6	248)358-3351 the e-mail address first; if that is un ; if that is unsuccessful, it will be se 248-358-4400 cdara@brookskushman.com BROOKS KUSHMAN P.C./HARMAN 1000 TOWN CENTER TWENTY SECOND FLOOR SOUTHFIELD, MICHIGAN 48075 HARM0766PUS					
Property Type Application Number: CORRESPONDENCE DA Fax Number: Correspondence will be using a fax number, if p Phone: Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 2: Address Line 4: ATTORNEY DOCKET NU	ATA (e sent to provided) 2 6	248)358-3351 the e-mail address first; if that is un ; if that is unsuccessful, it will be se 248-358-4400 cdara@brookskushman.com BROOKS KUSHMAN P.C./HARMAN 1000 TOWN CENTER TWENTY SECOND FLOOR SOUTHFIELD, MICHIGAN 48075 HARM0766PUS MICHAEL D. CUSHION					

Total Attachments: 8	
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Attorney Docket Number HARM0766PUS P200119US

ASSIGNMENT AND DECLARATION (37 C.F.R. 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 C.F.R. 1.76)

Title of Invention VIRTUAL LOCATION NOISE SIGNAL ESTIMATION FOR ENGINE ORDER CANCELLATION						
As a below named inventor. I hereby declare that:						
This declaration is directed to:						
□ The attached application, or						
United States application or PCT international application number <u>17/091,449</u> filed on <u>November 6, 2020</u> . (I hereby authorize the insertion of the application filing date and number when they become known.)						
The above-identified application was 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.						
I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims.						
I am aware of the duty to disclose to the U.S. Patent and Trademark Office all information known to me to be material to patentability as defined in 37 C.P.R. § 1.56.						
NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, I do hereby assign, sell and set over to <u>Harman International Industries</u> , <u>Incorporated</u> , a corporation organized and existing under the laws of the state or country of the United States, and having a place of business at <u>400 Atlantic Street</u> , <u>15th Floor</u> , <u>Stamford</u> , <u>CT 06901</u> , hereinafter referred to as the ASSIGNEE, its successors, assigns or other legal representatives, my entire right, title and interest, domestic and foreign, in and to the inventions and discoveries in the above-identified application including the right of said ASSIGNEE, its successors, assigns or other legal representatives to make applications and to receive Letters Patent for said inventions and discoveries in any and all foreign countries in its or their own name or names, or in my name, at its or their election, and I hereby assign, sell and set over to said ASSIGNEE, its successors, assigns or other legal representatives, assigns or other legal representatives and discoveries in all countries, including all rights of priority, including any provisional applications, in and to said inventions and discoveries in all countries, including all applications claiming benefit of the filing date hereof, continuations, continuations-in-part, divisionals, reexaminations and reissue applications.						
And I hereby agree for myself, my heirs, successors, assigns or other legal representatives to execute any and all papers, including applications for Letters Patent of any and all kinds and in any and all countries and to perform any and all acts which said ASSIGNEE, its successors, assigns or other legal representatives may deem necessary to secure thereto the rights herein assigned, sold and set over.						
And I hereby represent and warrant that I have not granted any rights inconsistent with the rights granted herein.						
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 100) by fine or imprisonment of not more than five (5) years or both.						
LEGAL NAME OF INVENTOR						
Invenior: Saitwik Basu Date: 18 29 20						
Signature:						
Page 1 of 2 (Supplemental Sheet with Additional Joint Inventors is attached if necessary)						
Note: An Application Data Shert (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form.						

Attorney Docket Number	HARM0766PUS
-	P200119US

Additional Inventors Page 2 of 2

SUPPLEMENTAL SHEET FOR ASSIGNMENT AND DECLARATION (37 C.F.R. 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 C.F.R. 1.76)

Title of Invention	VIRTUAL	LOCATION	NOISE	SIGNAL	ESTIMATION	FOR	ENGINE	ORDER
	CANCELL	ATION						

Legal Na	ne of Additional Joint Inventor:		
Inventor:	Jeffrey Charles Tackett	Date:	10/29/2020
Signature:	Jeffrey Charles Tackett		
Legal Na	me of Additional Joint Inventor:		
Inventor:	David Trumpy	Date:	
Signature:			
Legal Na	ne of Additional Joint Inventor:		
Inventor:	James May	Date:	
Signature:			
Legal Na	me of Additional Joint Inventor:		
Inventor:	Todd Edward Tousignant	Date:	
Signature:	·		

Attorney Docket Number

HARM0766PUS P200119US

ASSIGNMENT AND DECLARATION (37 C.F.R. 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 C.F.R. 1.76)

Title of Invention	VIRTUAL	LOCATION	NOISE	SIGNAL	ESTIMATION	FOR	ENGINE	ORDER
	CANCELL	ATION						

As a below named inventor, I hereby declare that:

This declaration is directed to:

The attached application, or

United States application or PCT international application number <u>17/091,449</u> filed on <u>November 6, 2020</u>. (I hereby authorize the insertion of the application filing date and number when they become known.)

The above-identified application was 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.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims.

I am aware of the duty to disclose to the U.S. Patent and Trademark Office all information known to me to be material to patentability as defined in 37 C.F.R. § 1.56.

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, I do hereby assign, sell and set over to <u>Harman International Industries</u>. Incorporated , a corporation organized and existing under the laws of the state or country of the United States , and having a place of business at <u>400 Atlantic Street</u>. 15th Floor, Stamford, CT 06901 , hereinafter referred to as the ASSIGNEE, its successors, assigns or other legal representatives, my entire right, title and interest, domestic and foreign, in and to the inventions and discoveries in the above-identified application including the right of said ASSIGNEE, its successors, assigns or other legal representatives and to receive Letters Patent for said inventions and discoveries in its or their own name or names, or in my name, at its or their election, and I hereby assign, sell and set over to said ASSIGNEE, its successors, assigns or other legal representatives, all rights of priority, including any provisional applications, in and to said inventions and discoveries in all countries, including all applications claiming benefit of the filing date hereof, continuations, continuations-in-part, divisionals, reexaminations and reissue applications.

And I hereby agree for myself, my heirs, successors, assigns or other legal representatives to execute any and all papers, including applications for Letters Patent of any and all kinds and in any and all countries and to perform any and all acts which said ASSIGNEE, its successors, assigns or other legal representatives may deem necessary to secure thereto the rights herein assigned, sold and set over.

And I hereby represent and warrant that I have not granted any rights inconsistent with the rights granted herein.

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.

LEGAL NAME OF INVENTOR

Inventor: Sattwik Basu

Date:

Signature:

Page 1 of 2 (Supplemental Sheet with Additional Joint Inventors is attached if necessary)

Note: An Application Data Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form.

Title of Invention	VIRTUAL LOCATION CANCELLATION	NOISE SIGNAL	ESTIMATION FO	R ENGINE ORDI
	litional Joint Inventor:			
Inventor: Jeffrey (Signature:	Tharles Tackett		Date:	
	litional Joint Inventor:		Date: 10/79/7	~>0
Inventor: David The Signature:	amps A		Date: <u>191777</u>	
Legal Name of Add	litional Joint Inventor:			
Inventor: <u>James M</u>	lay		Date:	
Signature:				
Legal Name of Add	litional Joint Inventor:			
Inventor: <u>Todd Ed</u>	ward Tousienant		Date:	
Signature:				

Attorney Docket Number

HARM0766PUS P200119US

ASSIGNMENT AND DECLARATION (37 C.F.R. 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 C.F.R. 1.76)

Title of Invention	VIRTUAL	LOCATION	NOISE	SIGNAL	ESTIMATION	FOR	ENGINE	ORDER
	CANCELL	ATION						

As a below named inventor, I hereby declare that:

This declaration is directed to:

The attached application, or

United States application or PCT international application number <u>17/091,449</u> filed on <u>November 6, 2020</u> (I hereby authorize the insertion of the application filing date and number when they become known.)

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

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And I hereby agree for myself, my heirs, successors, assigns or other legal representatives to execute any and all papers, including applications for Letters Patent of any and all kinds and in any and all countries and to perform any and all acts which said ASSIGNEE, its successors, assigns or other legal representatives may deem necessary to secure thereto the rights herein assigned, sold and set over.

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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.

LEGAL NAME OF INVENTOR

Inventor: Sattwik Basu

Date:

Signature:

Page 1 of 2 (Supplemental Sheet with Additional Joint Inventors is attached if necessary)

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Attorney Docket Number

HARM0766PUS P200119US

SUPPLEMENTAL SHEET FOR ASSIGNMENT AND DECLARATION (37 C.F.R. 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 C.F.R. 1.76)

Additional Inventors

Page 2 of 2

Title of Invention	VIRTUAL CANCELL	LOCATION	NOISE	SIGNAL	ESTIMATION	FOR	ENGINE	ORDER
	LANIQUESES.	~~ 8 8 8 9 1 9						

Legal Na	me of Additional Joint Inventor:		······································
4.			
Inventor:	Jeffrey Charles Tackett	Date:	
Signature:			······
Legal Na	me of Additional Joint Inventor:		
Inventor:	David Trumpy	Date:	
Signature:			
Legal Na	ne of Additional Joint Inventor:		
			······
Inventor:	James May	Date:	11/6/2020
Signature:			1
Legal Na	ne of Additional Joint Inventor:		
Inventor:	Todd Edward Tousignant	Date:	
Signature:			

ASSIGNMENT AND DECLARATION (37 C.F.R. 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 C.F.R. 1.76)

Title of Invention	VIRTUAL LOCATION NOISE SIGNAL ESTIMATION FOR ENGINE ORDER CANCELLATION						
As a below named inven	As a below named inventor, I hereby declare that:						
This declaration is direct	ed to:						
☐ The at	□ The attached application, or						
United States application or PCT international application number <u>17/091,449</u> filed on <u>November 6, 2020</u> . (I hereby authorize the insertion of the application filing date and number when they become known.)							
The above-identified app	lication was made or authorized to be made by me.						
I believe that I am the or	iginal inventor or an original joint inventor of a claimed invention in the application.						
I hereby state that I have	reviewed and understand the contents of the above-identified specification, including the claims.						
	I am aware of the duty to disclose to the U.S. Patent and Trademark Office all information known to me to be material to patentability as defined in 37 C.F.R. § 1.56.						
set over to <u>Harman In</u> country of the United Si referred to as the ASSIC foreign, in and to the it successors, assigns or o discoveries in any and a assign, sell and set over i provisional applications,	or good and valuable consideration, receipt of which is hereby acknowledged. I do hereby assign, sell and <u>ternational Industries, Incorporated</u> , a corporation organized and existing under the laws of the state or <u>ates</u> , and having a place of business at <u>400 Atlantic Street, 15th Floor, Stamford, CT 06901</u> , hereinafter INEE, its successors, assigns or other legal representatives, my entire right, title and interest, domestic and inventions and discoveries in the above-identified application including the right of said ASSIGNEE, its other legal representatives to make applications and to receive Letters Patent for said inventions and I hereby to said ASSIGNEE, its successors, assigns or other legal representatives, all rights of priority, including any in and to said inventions and discoveries in all countries, including all applications claiming benefit of the uations, continuations-in-part, divisionals, reexaminations and reissue applications.						
And I hereby agree for myself, my heirs, successors, assigns or other legal representatives to execute any and all papers, including applications for Letters Patent of any and all kinds and in any and all countries and to perform any and all acts which said ASSIGNEE, its successors, assigns or other legal representatives may deem necessary to secure thereto the rights herein assigned sold and set over.							
And I hereby represent a	nd warrant that I have not granted any rights inconsistent with the rights granted herein.						
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.							
LEGAL NAME OF INV	ENTOR						
Inventor: <u>Sattwik F</u>	Date:						
Signature:							
Page 1 of 2 (Supplement	al Sheet with Additional Joint Inventors is attached if necessary)						
Note: An Application Data Sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form.							

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SUPPLEMENTAL SHEET FOR ASSIGNMENT AND DECLARATION (37 C.F.R. 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 C.F.R. 1.76)		DR DESIGN	Additional Inventors Page 2 of 2		
Title of Invention	VIRTUAL LOCATION NO CANCELLATION	ISE SIGNAL E	STIMATION	FOR ENGIN	ie order
Legal Name of Ac	ditional Joint Inventor:				
	Charles Tackett	Da	ie:		
Signature:					
Legal Name of Ac	Iditional Joint Inventor:				
					Anaras ana salaha
Inventor: <u>David</u>	<u>Frampy</u>	Da	te:		
Signature:					•••••
Lonal Name of Ar	Mitianal Joint Inventor:				
Legal Name of Ac	Iditional Joint Inventor:				
		Da	le:		
Inventor: <u>James</u>		Da	ie:		
		Da	ie:		
Inventor: <u>James</u> Signature:	May	Da	88:		
Inventor: <u>James</u> Signature:		Ds	ie:		
Inventor: <u>James</u> Signature: Legal Name of At	May Iditional Joint Inventor:				
Inventor: James Signature: Legal Name of Au Inventor:	May May Iditional Joint Inventor:	Ds			
Inventor: <u>James</u> Signature: Legal Name of At	May Iditional Joint Inventor:			29/30	
Inventor: James Signature: Legal Name of Au Inventor:	May Iditional Joint Inventor:				
Inventor: James Signature: Legal Name of At Inventor: Todd I	May Iditional Joint Inventor:				
Inventor: <u>James</u> Signature: Legal Name of Ad Inventor: <u>Todd I</u>	May Iditional Joint Inventor:				
Inventor: James Signature: Legal Name of Au Inventor:	May Iditional Joint Inventor:			29/20	
Inventor: James Signature: Legal Name of Au Inventor:	May Iditional Joint Inventor:				
Inventor: <u>James</u> Signature: Legal Name of Ad Inventor: <u>Todd I</u>	May Iditional Joint Inventor:			429/3.0	
Inventor: James Signature: Legal Name of At Inventor:	May Iditional Joint Inventor:			429/3.0	
Inventor: <u>James</u> Signature: Legal Name of Ad Inventor: <u>Todd I</u>	May Iditional Joint Inventor:			429/3.0	
Inventor: <u>James</u> Signature: Legal Name of Ad Inventor: <u>Todd I</u>	May Iditional Joint Inventor:			<u>**?/3.0</u>	

RECORDED: 11/06/2020