506971635 11/10/2021

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7018473

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MATTHEW I. COBB	08/30/2019
MELISSA A. FRASER	08/29/2019
ARJUN THIMMAREDDY	08/19/2019
KIMBERLY S. SMITH	08/27/2019

RECEIVING PARTY DATA

Name:	BANK OF AMERICA CORPORATION
Street Address:	MAILCODE: NC1-028-29-04
Internal Address:	ONE BANK OF AMERICA CENTER, 150 NORTH COLLEGE ST.
City:	CHARLOTTE
State/Country:	NORTH CAROLINA
Postal Code:	28255

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17454440

CORRESPONDENCE DATA

Fax Number:

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: 2149536759

Email: ptomail1@bakerbotts.com

Correspondent Name: BAKER BOTTS LLP/BANK OF AMERICA CORPORAT

Address Line 1: 2001 ROSS AVENUE

Address Line 2: SUITE 900

Address Line 4: DALLAS, TEXAS 75201

Total Attachments 0	
DATE SIGNED:	11/10/2021
SIGNATURE:	/Latoya Jenkins/
NAME OF SUBMITTER:	LATOYA JENKINS
ATTORNEY DOCKET NUMBER:	015444.1904

Total Attachments: 8

PATENT REEL: 058078 FRAME: 0269

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PATENT REEL: 058078 FRAME: 0270

Firm No.: 015444.1462 P: P9114-US

COMBINED DECLARATION (37 CFR 1.63) AND ASSIGNMENT FOR UTILITY OR DESIGNAPPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

Title of	CLASSIFYING AND GROUPING SENTENCES USING MACHINE LEARNING		
Invention			
As the below name	As the below named inventor, I hereby declare that:		
This declaration is			
directed to:	⊠ The attached application, or		
	United States application or PCT international application number		
The above-identific	ed application was made or authorized to be made by me.		
Ibelieve that I am	the original inventor or an original joint inventor of a claimed invention in the application.		
•	dge that any willful false statement made in this declaration is punishable under 18 U.S.C. or someone of not more than five (5) years, or both.		
_	ASSIGNMENT		
Hunterville, Nor are blank, the ab for recordal of thi	atthew I. Cobb ("Assignor"), a citizen of the United States (Country), residing in th Corolina (City, State/Province) have invented the above invention. If the following lines ove application was filed on even date herewith, otherwise, to comply with 37 C.F.R. §3.21 is assignment, I an assignor below, hereby authorize the attorneys for Bank of America to attempt and application number below after they become known and prior to filing the		
U.S. Application N	No, filed, filed		
WHEREAS, BANK OF AMERICA CORPORATION ("Assignee"), a Corporation duly organized under the laws of the State of Delaware, and having its offices and place of business at Charlotte, North Carolina, is desirous of acquiring the entire right, title and interest in and to the aforesaid inventions and in and to all applications and Letters Patent therefor granted in the United States of America, and in any and all countries foreign thereto:			
including salary or which is hereby a Assignee, its succ the territory of the in space, {including	RE, TO WHOM IT MAY CONCERN, be it known that, for good and valuable consideration, a payment for the making of inventions, or employee benefits, the receipt and sufficiency of cknowledged, I said Assignor, by these presents do sell, assign and transfer unto said sessors, assigns and legal representatives, the full and exclusive right, title and interest for united States of America and all countries foreign thereto, and throughout the world and ago the right to apply for Letters Patent in foreign countries in its own name and to claim any such foreign applications to which such applications are		

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entitled under international conventions, treaties, or otherwise), in and to said inventions and in and to all applications and Letters Patent granted therefor, and all non-provisionals, divisionals, reissues, reexaminations, continuations, continuation-in-parts and extensions thereof, and in and to all copyrights, trademarks with their associated goodwill, trade secrets, confidential information, and compilations, necessary or useful to make, use, or sell the inventions. I hereby authorize and request the Commissioner of Patents, and any official whose duty it is to issue patents, to issue all Letters Patent on said inventions or resulting therefrom to said Assignee, or its successors and assigns, as assignee of the entire right, title and interest. I represent and warrant that I have full right to agree to, execute, and deliver this assignment. I agree that I will without further consideration, but at the expense of Assignee, communicate to said Assignee, or its successors, assigns, or nominees, any and all facts known to me regarding said inventions whenever requested, and that I will execute all non-provisional, divisional, reissue, reexamination, continuation and continuation-in-part applications, testify in any legal proceedings, sign all lawful papers, make all rightful oaths, and generally do everything reasonable for said Assignee, its successors, assigns, and nominees, to obtain and enforce proper patent protection for said inventions in all countries.

WARNING

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PT0-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PT0-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

	LEGAL NAME OF INVENTOR	
Inventor: Matthew I. Cobb		Date: 08/30/2019
Signature: / Matthew I. Cobb		

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COMBINED DECLARATION (37 CFR 1.63) AND ASSIGNMENT FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

Title of Invention	CLASSIFYING AND GROUPING SENTENCES USING MACHINE LEARNING		
As the below name	As the below named inventor, I hereby declare that:		
This declaration is			
directed to:	□ The attached application, or		
	☐ United States application or PCT international application numberfiled on		
The above-identifie	d application was made or authorized to be made by me.		
I believe that I am t	he original inventor or an original joint inventor of a claimed invention in the application.		
•	ge that any willful false statement made in this declaration is punishable under 18 U.S.C. risonment of not more than five (5) years, or both.		
	ASSIGNMENT		
Mill, South Caro blank, the above recordal of this as	elissa A. Fraser ("Assignor"), a citizen of the United States (Country), residing in Fort lina (City, State/Province) have invented the above invention. If the following lines are application was filed on even date herewith, otherwise, to comply with 37 C.F.R. §3.21 for ssignment, I an assignor below, hereby authorize the attorneys for Bank of America to te and application number below after they become known and prior to filing the		
U.S. Application N	o17/454,440, filed —11/10/2021		
WHEREAS, BANK OF AMERICA CORPORATION ("Assignee"), a Corporation duly organized under the laws of the State of Delaware, and having its offices and place of business at Charlotte, North Carolina, is desirous of acquiring the entire right, title and interest in and to the aforesaid inventions and in and to all applications and Letters Patent therefor granted in the United States of America, and in any and all countries foreign thereto:			
including salary or which is hereby a Assignee, its succeeding the territory of the in space, {including	RE, TO WHOM IT MAY CONCERN, be it known that, for good and valuable consideration, payment for the making of inventions, or employee benefits, the receipt and sufficiency of cknowledged, I said Assignor, by these presents do sell, assign and transfer unto said essors, assigns and legal representatives, the full and exclusive right, title and interest for United States of America and all countries foreign thereto, and throughout the world and g the right to apply for Letters Patent in foreign countries in its own name and to claim any such foreign applications to which such applications are		

entitled under international conventions, treaties, or otherwise), in and to said inventions and in and to all applications and Letters Patent granted therefor, and all non-provisionals, divisionals, reissues, reexaminations, continuations, continuation-in-parts and extensions thereof, and in and to all copyrights, trademarks with their associated goodwill, trade secrets, confidential information, and compilations, necessary or useful to make, use, or sell the inventions. I hereby authorize and request the Commissioner of Patents, and any official whose duty it is to issue patents, to issue all Letters Patent on said inventions or resulting therefrom to said Assignee, or its successors and assigns, as assignee of the entire right, title and interest. I represent and warrant that I have full right to agree to, execute, and deliver this assignment. I agree that I will without further consideration, but at the expense of Assignee, communicate to said Assignee, or its successors, assigns, or nominees, any and all facts known to me regarding said inventions whenever requested, and that I will execute all non-provisional, divisional, reissue, reexamination, continuation and continuation-in-part applications, testify in any legal proceedings, sign all lawful papers, make all rightful oaths, and generally do everything reasonable for said Assignee, its successors, assigns, and nominees, to obtain and enforce proper patent protection for said inventions in all countries.

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LEGAL NAME OF INVENTOR

Inventor: Melissa A. Fraser

Signature: /

Date: 8/29/19

P: P9114-US

COMBINED DECLARATION (37 CFR 1.63) AND ASSIGNMENT FOR UTILITY OR DESIGNAPPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

Title Of	CLASSIFYING AND GROUPING SENTENCES USING MACHINE LEARNING
Invention	
As the below name	ed inventor, Ihereby declare that:
This declaration is	
directed to:	⊠ The attached application, or
	☐ United States application or PCT international application number filed on
The above-identific	ed 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.
	dge that any willful false statement made in this declaration is punishable under 18 U.S.C. prisonment of not more than five (5) years, or both.
	ASSIGNMENT
Carolina (City, Sabove application	rjun Thimmareddy ("Assignor"), a citizen of India (Country), residing in Charlotte, North State/Province) have invented the above invention. If the following lines are blank, the n was filed on even date herewith, otherwise, to comply with 37 C.F.R. §3.21 for recordal of I an assignor below, hereby authorize the attorneys for Bank of America to insert the filing tion number below after they become known and prior to filing the recordation.
U.S. Application	No, filed, filed
WHEREAS, BAN the State of Delaw acquiring the ent Letters Patent th	IK OF AMERICA CORPORATION ("Assignee"), a Corporation duly organized under the laws of ware, and having its offices and place of business at Charlotte, North Carolina, is desirous of ire right, title and interest in and to the aforesaid inventions and in and to all applications and herefor granted in the United States of America, and in any and all countries foreign thereto:
including salary of which is hereby Assignee, its such the territory of the in space, {includ	ORE, TO WHOM IT MAY CONCERN, be it known that, for good and valuable consideration, or payment for the making of inventions, or employee benefits, the receipt and sufficiency of acknowledged, I said Assignor, by these presents do sell, assign and transfer unto said accessors, assigns and legal representatives, the full and exclusive right, title and interest for the United States of America and all countries foreign thereto, and throughout the world and ting the right to apply for Letters Patent in foreign countries in its own name and to claim any such foreign applications to which such applications are

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entitled under international conventions, treaties, or otherwise), in and to said inventions and in and to all applications and Letters Patent granted therefor, and all non-provisionals, divisionals, reissues, reexaminations, continuations, continuation-in-parts and extensions thereof, and in and to all copyrights, trademarks with their associated goodwill, trade secrets, confidential information, and compilations, necessary or useful to make, use, or sell the inventions. I hereby authorize and request the Commissioner of Patents, and any official whose duty it is to issue patents, to issue all Letters Patent on said inventions or resulting therefrom to said Assignee, or its successors and assigns, as assignee of the entire right, title and interest. I represent and warrant that I have full right to agree to, execute, and deliver this assignment. I agree that I will without further consideration, but at the expense of Assignee, communicate to said Assignee, or its successors, assigns, or nominees, any and all facts known to me regarding said inventions whenever requested, and that I will execute all non-provisional, divisional, reissue, reexamination, continuation and continuation-in-part applications, testify in any legal proceedings, sign all lawful papers, make all rightful oaths, and generally do everything reasonable for said Assignee, its successors, assigns, and nominees, to obtain and enforce proper patent protection for said inventions in all countries.

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retained in the application life and therefore are not publicly available.		
LEGAL NAME OF INVENTOR		
Inventor: Arjun Thimmareddy	Date:	08/19/2019
Signature: Arjun Thimmareddy		

P: P9114-US

COMBINED DECLARATION (37 CFR 1.63) AND ASSIGNMENT FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

Title of	CLASSIFYING AND GROUPING SENTENCES USING MACHINE LEARNING	
Invention		
As the below name	ed inventor, I hereby declare that:	
This declaration is		
directed to:	oxtimes The attached application, or	
	☐ United States application or PCT international application number filed on	
The above-identifie	ed application was made or authorized to be made by me.	
Ibelieve that I am t	the original inventor or an original joint inventor of a claimed invention in the application.	
•	dge that any willful false statement made in this declaration is punishable under 18 U.S.C. prisonment of not more than five (5) years, or both.	
	ASSIGNMENT	
Charlotte, North are blank, the ab- for recordal of thi	imberly S. Smith ("Assignor"), a citizen of the United States (Country), residing in Corolina (City, State/Province) have invented the above invention. If the following lines ove application was filed on even date herewith, otherwise, to comply with 37 C.F.R. §3.21 is assignment, I an assignor below, hereby authorize the attorneys for Bank of America to attend application number below after they become known and prior to filing the	
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WHEREAS, BANK OF AMERICA CORPORATION ("Assignee"), a Corporation duly organized under the laws of the State of Delaware, and having its offices and place of business at Charlotte, North Carolina, is desirous of acquiring the entire right, title and interest in and to the aforesaid inventions and in and to all applications and Letters Patent therefor granted in the United States of America, and in any and all countries foreign thereto:		
including salary or which is hereby a Assignee, its succ the territory of the in space, {includir	RE, TO WHOM IT MAY CONCERN, be it known that, for good and valuable consideration, in payment for the making of inventions, or employee benefits, the receipt and sufficiency of acknowledged, I said Assignor, by these presents do sell, assign and transfer unto said deessors, assigns and legal representatives, the full and exclusive right, title and interest for the United States of America and all countries foreign thereto, and throughout the world and and the right to apply for Letters Patent in foreign countries in its own name and to claim any such foreign applications to which such applications are	

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entitled under international conventions, treaties, or otherwise), in and to said inventions and in and to all applications and Letters Patent granted therefor, and all non-provisionals, divisionals, reissues, reexaminations, continuations, continuation-in-parts and extensions thereof, and in and to all copyrights, trademarks with their associated goodwill, trade secrets, confidential information, and compilations, necessary or useful to make, use, or sell the inventions. I hereby authorize and request the Commissioner of Patents, and any official whose duty it is to issue patents, to issue all Letters Patent on said inventions or resulting therefrom to said Assignee, or its successors and assigns, as assignee of the entire right, title and interest. I represent and warrant that I have full right to agree to, execute, and deliver this assignment. I agree that I will without further consideration, but at the expense of Assignee, communicate to said Assignee, or its successors, assigns, or nominees, any and all facts known to me regarding said inventions whenever requested, and that I will execute all non-provisional, divisional, reissue, reexamination, continuation and continuation-in-part applications, testify in any legal proceedings, sign all lawful papers, make all rightful oaths, and generally do everything reasonable for said Assignee, its successors, assigns, and nominees, to obtain and enforce proper patent protection for said inventions in all countries.

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LEGAL NAME OF INVENTOR		
Inventor: Kimberly S. Smith	Date: _	08/27/2019
Signature: 1 Kimberly Smith 1		

PATENT REEL: 058078 FRAME: 0278

RECORDED: 11/10/2021