PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT8222187

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SUNNY BHATTACHARJEE	03/13/2022
RAKESH JAIN	03/09/2022
ADI NARAYANA RAO GARAGA	03/14/2022
SIDHAN PONNANAKKAL	07/28/2023

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	18487348

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: 12149536561

Email: ptomail1@bakerbotts.com

Correspondent Name: BAKER BOTTS L.L.P./ BANK OF AMERICA

Address Line 1: 2001 ROSS AVENUE

Address Line 2: SUITE 900

Address Line 4: DALLAS, TEXAS 75201

Total Attackments O	•
DATE SIGNED:	10/16/2023
SIGNATURE:	/Donna Forbit/
NAME OF SUBMITTER:	DONNA FORBIT
ATTORNEY DOCKET NUMBER:	015444.2190

Total Attachments: 9

PATENT REEL: 065232 FRAME: 0001

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P: P13211US01

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 COMPUTER NETWORK TROUBLESHOOTING AND DIAGNOSTICS USING METADATA		
As the below named inventor, I hereby declare that:		
This declaration is		
directed to:		
☐ United States application or PCT international application number filed on		
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 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.		
ASSIGNMENT		
WHEREAS, I Sunny Bhattacharjee ("Assignor"), a citizen of India (Country), residing in Uttam Nagar West, India (City, State/Province) have invented the above invention. If the following lines are blank, the above application was filed on even date herewith, otherwise, to comply with 37 C.F.R. §3.21 for recordal of this assignment, I an assignor below, hereby authorize the attorneys for Bank of America to insert the filing date and application number below after they become known and prior to filing the recordation. U.S. Application No. 17/705,341 , filed 03/27/2022 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: NOW, THEREFORE, TO WHOM IT MAY CONCERN, be it known that, for good and valuable consideration, including salary or payment for the making of inventions, or employee benefits, the receipt and sufficiency of which is hereby acknowledged, I said Assignor, by these presents do sell, assign and transfer unto said Assignee, its successors, assigns and legal representatives, the full and exclusive right, title and interest for the territory of the United States of America and all countries foreign thereto, and throughout the world and in space, {including the right to apply for Letters Patent in foreign countries in its own name and to claim any priority rights for such foreign applications to which such applications are		

Firm No.: 015444.1948 P: P13211US01

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: Sunny Bhattacharjee	Date:March 13, 2022		
Signature: /			

P: P13211US01

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

Title of	COMPUTER NETWORK TROUBLESHOOTING AND DIAGNOSTICS USING
Invention	METADATA
As the below nam	ed inventor, I hereby declare that:
This declaration is	
directed to:	☑ The attached application, or
	☐ United States application or PCT international application number filed on
The above-identifi	ied 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.
•	edge 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
was filed on eve an assignor be	have invented the above invention. If the following lines are blank, the above application in date herewith, otherwise, to comply with 37 C.F.R. §3.21 for recordal of this assignment, I low, hereby authorize the attorneys for Bank of America to insert the filing date and ber below after they become known and prior to filing the recordation.
U.S. Application	No. 17/705,341 , filed 03/27/2022
the State of Delar acquiring the ent Letters Patent the NOW, THEREFO including salary of which is hereby Assignee, its suc the territory of the in space, {including	NK 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: 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 ing 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 incompliance 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 I	NAME OF INVENTOR
Inventor: Rakesh Jain	Date: 9 March 2022
Signature: /	

P: P13211US01

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	COMPUTER NETWORK TROUBLESHOOTING AND DIAGNOSTICS USING METADATA
As the below nam	ed inventor, I hereby declare that:
This declaration is directed to:	☑ The attached application, or
	☐ United States application or PCT international application number filed on
The above-identif	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.
•	edge 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.
India (City, Stat application was assignment, I ar and application	di Narayana Rao Garaga ("Assignor"), a citizen of India (Country), residing in Hyderabad, e/Province) have invented the above invention. If the following lines are blank, the above filed on even date herewith, otherwise, to comply with 37 C.F.R. §3.21 for recordal of this assignor below, hereby authorize the attorneys for Bank of America to insert the filing date number below after they become known and prior to filing the recordation.
WHEREAS, BAN the State of Dela acquiring the ent Letters Patent th NOW, THEREFO including salary of which is hereby Assignee, its suc the territory of th in space, {including	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 re right, title and interest in and to the aforesaid inventions and in and to all applications and erefor granted in the United States of America, and in any and all countries foreign thereto: 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 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

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LEGAL NAME OF INVENTOR			
Inventor: Adi Narayana Rao Garaga		Date:	March 14, 2022
Signature: /			

P13211US02

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 COMPUTER NETWORK TROUBLESHOOTING AND METADATA	DIAGNOSTICS USING	
As the below named inventor, I hereby declare that:		
This declaration The attached application, or is directed to:		
United States application or PCT international application number filed on $01/12/2023$.	er <u>18/153,920</u>	
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 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.		
ASSIGNMENT		
WHEREAS, I, Sidhan Ponnanakkal (Name), a citizen of INDIA (Country), residing in Hyderak State/Province) have invented the invention(s) described in the patent application identific application number and filing date listed below. (If the following lines are blank, the applic contemporaneously with this Assignment, and I hereby authorize Assignee (identified belo insert the application number and filing date below after they become known.)	ed above and having the ation identified above was filed	
U.S. Application No, filed, filed, filed,		
WHEREAS, BANK OF AMERICA CORPORATION ("Assignee"), a corporation duly organized understand the principal place of business at Charlotte, North Carolina right, title and interest in and to the above-identified invention(s) and all patent application therefor.	a, desires to acquire the entire	
NOW, THEREFORE, for good and valuable consideration (including salary, employee benefits, and/or other compensation), the receipt and sufficiency of which is hereby acknowledged, I do hereby assign and transfer (or confirm the assignment and transfer to the extent already effected by operation or law, contract, and/or the fulfillment of any and all legal requirements regarding the transfer of employee inventions in my country of employment) unto Assignee, the full and exclusive right, title, and interest in and to said invention(s) and all patent applications, utility models, and patents therefor (including all divisional, continuation, continuation-in-part, and reissue applications and patents claiming priority thereto) in any country in the world, including all rights and remedies associated therewith including the right to sue for and recover past damages and to recover under 35 U.S.C. §154(d) or any other law permitting remedies for infringement prior to the issuance of a patent.		
I hereby authorize and request the Commissioner for Patents, and any other official whose jurisdiction, to issue patents on said invention(s) or resulting therefrom to Assignee, or its assignee of the entire right, title and interest in said patents.		
I represent and warrant that I have full right to agree to, execute, and deliver this assignment	ent.	
I agree that I will, without further consideration but at the expense of Assignee, communic assigns, or nominees, any and all facts known to me regarding said inventions whenever reall non-provisional, divisional, reissue, reexamination, continuation and continuation-in-paproceedings, sign all lawful papers, make all rightful oaths, and do anything else necessary	quested, and that I will execute rt applications, testify in any legal	

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Assignee, its successors, assigns, and/or nominees, to obtain and enforce proper patent protection for said invention(s) in all countries.

Should any provision of this Assignment be deemed invalid or unenforceable by reason of any law, statute, regulation, or judgment, existing now or in the future in any jurisdiction, such provision shall be modified in such jurisdiction so as to nearly approximate the intent of the parties. If this cannot be done, such invalid or unenforceable provision shall be divisible and be deleted in any such jurisdiction, and all other provisions shall remain in full force and effect. The modification or deletion of any provision in one jurisdiction shall have no effect on this Assignment in any other jurisdiction.

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 PTO-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 PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

LEGAL NAME OF INVENTOR		
Inventor: Sidhan Ponnanakkal DocuSigned by:	Date:	July 28, 2023
Signature: _/	/	

P13211US02

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- The information on this form will be treated confidentially to the extent allowed under the Freedom of Information
 Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the
 Department of Justice to determine whether disclosure of these records is required by the Freedom of Information
 Act.
- 2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
- 3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- 5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- 6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- 9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

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