PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7776786

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ARAVINTHANE TAMIZHMANI	02/01/2023
SANDEEP PAI	02/02/2023

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:	18163784

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 LLP/BANK OF AMERICA CORPORATION

Address Line 1: 2001 ROSS AVENUE

Address Line 2: SUITE 900

Address Line 4: DALLAS, TEXAS 75201

ATTORNEY DOCKET NUMBER:	015444.2038
NAME OF SUBMITTER:	DONNA FORBIT
SIGNATURE:	/Donna Forbit/
DATE SIGNED:	02/02/2023
This document serves as an Oath/Declaration (37 CFR 1.63).	

Total Attachments: 6

source=2038 Assignment#page1.tif source=2038 Assignment#page2.tif

PATENT 507729641 REEL: 062577 FRAME: 0294



PATENT REEL: 062577 FRAME: 0295

P13907US01

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	Reducing a number of units in a data population based on predefined constraints	
As the below	named inventor, I hereby declare that:	
This declarati	The attached application, or	
	United States application or PCT international application number filed on	
The above-ide	entified 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.	
	owledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or tof not more than five (5) years, or both.	
	ASSIGNMENT	
State/Province application nu contemporan	Aravinthane Tamizhmani (Name), a citizen of India (Country), residing in Chennai, Tamil Nadu (City, e) have invented the invention(s) described in the patent application identified above and having the umber and filing date listed below. (If the following lines are blank, the application identified above was filed eously with this Assignment, and I hereby authorize Assignee (identified below) and/or its representatives to blication number and filing date below after they become known.)	
	U.S. Application No, filed	
Delaware, and	NK OF AMERICA CORPORATION ("Assignee"), a corporation duly organized under the laws of the State of d having its offices and principal place of business at Charlotte, North Carolina, desires to acquire the entire d interest in and to the above-identified invention(s) and all patent applications, utility models, and patents	
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.		
jurisdiction, to	orize and request the Commissioner for Patents, and any other official whose duty it is to issue patents in any o issue patents on said invention(s) or resulting therefrom to Assignee, or its successors and assigns, as see entire right, title and interest in said patents.	
I represent ar	d warrant that I have full right to agree to, execute, and deliver this assignment.	
assigns, or no all non-provis	will, without further consideration but at the expense of Assignee, communicate to Assignee, or its successors, minees, any and all facts known to me regarding said inventions whenever requested, and that I will execute ional, divisional, reissue, reexamination, continuation and continuation-in-part applications, testify in any legal sign all lawful papers, make all rightful oaths, and do anything else necessary or reasonably desirable for	

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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.

<u> </u>	
LEGAL NAME OF INVENTOR	
	February 1, 2023
Inventor: Aravinthane Tamizhmani DocuSigned by:	Date:
Signature: _/B966F2F609CB47D	1

P13907US01

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.

P13907US01

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	Reducing a number of units in a data population based on predefined constraints	
As the below	named inventor, I hereby declare that:	
This declarati	The attached application, or	
	United States application or PCT international application number	
The above-ide	entified 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.	
	owledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or to fine the five (5) years, or both.	
	ASSIGNMENT	
WHEREAS, I, Sandeep Pai (Name), a citizen of the United States (Country), residing in Chicago, IL (City, State/Province) have invented the invention(s) described in the patent application identified above and having the application number and filing date listed below. (If the following lines are blank, the application identified above was filed contemporaneously with this Assignment, and I hereby authorize Assignee (identified below) and/or its representatives to insert the application number and filing date below after they become known.)		
	U.S. Application No, filed, filed	
Delaware, and	ANK OF AMERICA CORPORATION ("Assignee"), a corporation duly organized under the laws of the State of d having its offices and principal place of business at Charlotte, North Carolina, desires to acquire the entire d interest in and to the above-identified invention(s) and all patent applications, utility models, and patents	
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.		
jurisdiction, to	orize and request the Commissioner for Patents, and any other official whose duty it is to issue patents in any o issue patents on said invention(s) or resulting therefrom to Assignee, or its successors and assigns, as ne entire right, title and interest in said patents.	
I represent ar	nd 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 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 do anything else necessary or reasonably desirable for		

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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.

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			*
LEGAL NAME OF INVENTOR			
Inventor: Sandeep Pai	DocuSigned by:	Date:	February 2, 2023
Signature: _/	Docusigned by: Sandup Pai 34CB22429A544F2		

RECORDED: 02/02/2023

Firm No.: 015444.2038

P13907US01

Privacy Act Statement

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- 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.
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- 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).
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- 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)).
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