### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4889156

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
PRANJAL SINGH	04/26/2017
SOUMYAJYOTI BANERJEE	04/26/2017

#### **RECEIVING PARTY DATA**

Name:	VISA INTERNATIONAL SERVICE ASSOCIATION
Street Address:	PO BOX 8999
City:	SAN FRANCISCO
State/Country:	CALIFORNIA
Postal Code:	94128

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	15493833

#### CORRESPONDENCE DATA

**Fax Number:** (415)576-0300

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using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

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Address Line 4: SAN FRANCISCO, CALIFORNIA 94111

ATTORNEY DOCKET NUMBER:	TTORNEY DOCKET NUMBER: 079900-1036978(2146US01)	
NAME OF SUBMITTER: NARISSA M. BESADA (DBR)		
SIGNATURE:	/Narissa M. Besada/	
DATE SIGNED:	03/28/2018	

#### **Total Attachments: 2**

source=2018-03-28\_SIGNED\_SINGH\_BANERJEE\_OATH\_ASSIGNMENT\_079900-1036978\_2146us01\_a#page1.ti

PATENT 504842419 REEL: 045379 FRAME: 0509

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

Title of Invention	HYBRID APPROACH TO APPROXIMATE STRING MATCHING USING MACHINE LEARNING	
likku tii iirvuiselejee		
Docket Number	2146US01	
As the below named in	eventor, I hereby declare that:	
This declaration	The attached application, or	
is directed to:	United States application or PCT international application number  15/493,833 filed on _21-Apr-2017	
The above-identified a	pplication 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.		
WHEREAS,	Visa International Service Association	
	as "ASSIGNEE") having a place of business at: incisco, CA, 94128, United States of America	
desires to acquire the entire right, title and interest in said invention and the above-identified United States patent application;		
NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I hereby assign to the ASSIGNEE, the entire right, title and interest in said invention and in the above-identified United States patent application and in all divisions, continuations and continuations-in-part of said application, and reissues, extensions and renewals of Letters Patent granted thereon, and in all corresponding patent applications filed in countries foreign to the United States ("foreign countries") and corresponding international patent applications, and in all Letters Patents issuing on any such patent applications in the United States and foreign countries;		
I hereby assign to the ASSIGNEE the right to file patent applications in foreign countries on said invention in its own name and the right to claim priority to the above-identified United States patent application under the terms of the International Convention and any other relevant treaties;		
I hereby authorize and request the United States Patent & Trademark Office and officials in patent offices in foreign countries to issue any and all of said Letters Patent to the ASSIGNEE as the assignee of my entire right, title and interest in and to the same, for the sole use and behoof of the ASSIGNEE, its successors, assigns, and legal representatives, to the full end of the term for which said Letters Patent may be granted; and		
Further, I agree that, without further consideration, I will communicate to the ASSIGNEE any facts known to me respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, continuation-in-part, substitute, renewal and reissue applications, execute all necessary assignment papers to cause said Letters Patent to be issued to the ASSIGNEE, make all rightful oaths, and, perform all lawful acts to aid the ASSIGNEE, its successors and assigns, to obtain and enforce Letters Patent for said invention in the United States and foreign countries.		
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LEGAL NAME OF	INVENTOR	
Inventor: Pranjal Sing	Jh Date: 26 - Apy - 2017	
Signature:	J. Singh	

PATENT REEL: 045379 FRAME: 0510

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

***************************************	<del></del>	
Title of Invention	HYBRID APPROACH TO APPROXIMATE STRING MATCHING USING MACHINE LEARNING	
Docket Number	2146US01	
As the below named in	eventor, I hereby declare that:	
This declaration is directed to:	The attached application, or	
	United States application or PCT international application number  15/493,833 filed on 21-Apr-2017	
The above-identified a	pplication 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.	
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WHEREAS,	Visa International Service Association	
	as "ASSIGNEE") having a place of business at: ncisco, CA, 94128, United States of America	
desires to acquire the application;	entire right, title and interest in said invention and the above-identified United States patent	
acknowledged, I heret identified United State and reissues, extension in countries foreign to	EFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby by assign to the ASSIGNEE, the entire right, title and interest in said invention and in the aboves patent application and in all divisions, continuations and continuations-in-part of said application, as and renewals of Letters Patent granted thereon, and in all corresponding patent applications filed the United States ("foreign countries") and corresponding international patent applications, and in any such patent applications in the United States and foreign countries;	
I hereby assign to the ASSIGNEE the right to file patent applications in foreign countries on said invention in its own name and the right to claim priority to the above-identified United States patent application under the terms of the International Convention and any other relevant treaties:		
foreign countries to is interest in and to the	orize and request the United States Patent & Trademark Office and officials in patent offices in sue any and all of said Letters Patent to the ASSIGNEE as the assignee of my entire right, title and se same, for the sole use and behoof of the ASSIGNEE, its successors, assigns, and legal full end of the term for which said Letters Patent may be granted; and	
Further, I agree that, without further consideration, I will communicate to the ASSIGNEE any facts known to me respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, continuation-in-part, substitute, renewal and reissue applications, execute all necessary assignment papers to cause said Letters Patent to be issued to the ASSIGNEE, make all rightful oaths, and, perform all lawful acts to aid the ASSIGNEE, its successors and assigns, to obtain and enforce Letters Patent for said invention in the United States and foreign countries.		
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LEGAL NAME OF INVENTOR		
Inventor: Soumyajyot	BanerjeeDate:Date:Date:Date:Date:	
Signature:	zust' Senze.	

PATENT REEL: 045379 FRAME: 0511

**RECORDED: 03/28/2018**