505422472 04/11/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT5469263

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
TARA L. SAUER	04/03/2019
MARTHOM DAETZ	04/03/2019

RECEIVING PARTY DATA

Name:	MASTERCARD INTERNATIONAL INCORPORATED	
Street Address:	2000 PURCHASE STREET	
City:	PURCHASE	
State/Country:	NEW YORK	
Postal Code:	10577	

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	16379923	

CORRESPONDENCE DATA

Fax Number: (913)647-9057

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.

913-647-9050 Phone:

Email: cdw@hoveywilliams.com

Correspondent Name: ANDREW G. COLOMBO/HOVEY WILLIAMS LLP

Address Line 1: 10801 MASTIN BLVD.

Address Line 2: **SUITE 1000**

Address Line 4: OVERLAND PARK, KANSAS 66210

ATTORNEY DOCKET NUMBER:	51477
NAME OF SUBMITTER:	ANDREW G. COLOMBO
SIGNATURE:	/Andrew G. Colombo/
DATE SIGNED:	04/10/2019

Total Attachments: 3

source=PTO_Assignment_51477_1281013-1#page1.tif source=PTO Assignment 51477 1281013-1#page2.tif source=PTO_Assignment_51477_1281013-1#page3.tif

PATENT REEL: 048857 FRAME: 0119 505422472

WORLDWIDE ASSIGNMENT

WHEREAS, WE,

Tara L. Sauer, a citizen of the United States, having a residence address at 631 Hawk Run Drive, O'Fallon, MO, 63368,

Marthom Daetz, a citizen of the United States, having a residence address at 631 Hawk Run Drive, O'Fallon, MO, 63368,

(hereinafte	r individually a	nd collectively "Assignor"), have made an inv	ention entitled
"SYSTEM	I AND METHO	DDS FOR GENERATING AND AUTHEN	TICATING DYNAMIC
USERNAI	MES REPLICA	ATION" as set forth and described in U.S. Ap	oplication No.
	, filed	; International Application No.	, filed
	; United	States Provisional Application No.	, filed
÷	; and		

WHEREAS, MASTERCARD INTERNATIONAL INCORPORATED, having its principal place of business at 2000 Purchase Street, Purchase, NY 10577, hereinafter referred to as Assignee, is desirous of acquiring the whole right, title and interest therein:

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy whereof is hereby acknowledged, Assignor hereby confirms any prior assignment to Assignee, and to the extent that Assignor has not already done so, agrees to assign, and hereby does, sell, assign and transfer unto Assignee and its successors in interest, the full and exclusive right, title and interest in the United States of America and throughout the world, including the right to claim priority under the laws of the United States, the Paris Convention, and any foreign countries, to the inventions as described in the aforesaid application, to the aforesaid application itself, and all divisions, continuations, continuations-in-part, or other applications claiming priority directly or indirectly from the aforesaid application, and any United States or foreign Letters Patent, utility model, or other similar rights which may be granted thereon, including reissues, reexaminations and extensions thereof, and all copyright rights throughout the world in the aforesaid application and the subject matter disclosed therein, these rights, title and interest to be held and enjoyed by Assignee to the full end of the term for which the Letters Patent, utility model, or other similar rights, are granted and any extensions thereof as fully and entirely as the same would have been held by Assignor had this assignment and sale not been made, and the right to sue for, and recover for past infringements of, or liabilities for, any of the rights relating to any of the applications, patents, utility models, or other similar rights, resulting therefrom, and the copyright rights.

Assignor hereby covenants and agrees to execute all instruments or documents required or requested for the making and prosecution of any applications of any type for patent, utility model, or other similar rights, and for copyright, in the United States and in all foreign countries including, but not limited to, any provisional, continuation, continuation-in-part, divisional, renewal or substitute thereof, any derivation proceedings relating thereto, and as to Letters Patent any supplemental examination, derivation proceeding, opposition, post grant review, reissue, reexamination, inter partes review, or extension thereof, and for litigation regarding, or for the purpose of defending the validity of or protecting title to the said invention, the United States

application for patent, or Letters Patent therefor, and to testify in support thereof, for the benefit of Assignee and its successors in interest without further or other compensation than that above set forth.

Assignor hereby covenants that no assignment, sale, license, agreement or encumbrance has been or will be entered into which would conflict with this Assignment. Assignor further covenants not to challenge, or assist or participate in any third party challenge to, the assigned inventions, or any patent application or patent thereon, whether by litigation, post grant review, inter partes review, covered business method review, reexamination, or otherwise.

Assignor hereby requests the United States Patent and Trademark Office to issue the Letters Patent of the United States of America to Assignee, and requests that any official of any country or countries foreign to the United States, whose duty it is to issue or grant patents and applications as aforesaid, to issue the Letters Patent, Utility Model Registration or other similar right to Assignee.

The undersigned hereby authorize the attorneys of <u>Hovey Williams LLP</u> the power to insert in the spaces provided above the title of the invention, filing date, application number, and attorney's docket number of said application when known.

IN WITNESS WHEREOF, I, the said ASSIGNOR have executed this Assignment this 30d day of april 2019.

Witness Signature

Travis Brooks

3 rp day of 4pr: 1	, the said ASSIGNOR have executed this Assignmen, 201
	Marthom Daetz
	\mathcal{A}
	hust
	Timothy 246
	Witness Name

Agreed and accepted this 3rd day of April, 2019.

MASTERCARD INTERNATIONAL INCORPORATED

By. Man C Jary Co.

Title: Juan C. Gonzalez - Senior Vice President and Senior IP Counsel