PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5518210

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
NATURE OF CONVEYANCE:	Corrective Assignment to correct the TRANSPOSITION OF THE APPLICATION NUMBER AND FILING DATE IN THE ASSIGNMENT previously recorded on Reel 046932 Frame 0426. Assignor(s) hereby confirms the CORRECT APPLICATION NUMBER AND FILING DATE ARE LISTED.

CONVEYING PARTY DATA

Name	Execution Date
DAVID DUANE BETTGER	09/20/2018

RECEIVING PARTY DATA

Name:	SECURE OPEN SYSTEMS, INC.
Street Address:	1910-A GATES AVENUE
City:	REDONDO BEACH
State/Country:	CALIFORNIA
Postal Code:	90278

PROPERTY NUMBERS Total: 2

Property Type	Number
Application Number:	16059966
Application Number:	62544598

CORRESPONDENCE DATA

Fax Number: (949)760-9502

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: (949)760-0404
Email: efiling@knobbe.com

Correspondent Name: KNOBBE, MARTENS, OLSON & BEAR, LLP

Address Line 1: 2040 MAIN STREET

Address Line 2: 14TH FLOOR

Address Line 4: IRVINE, CALIFORNIA 92614

NAME OF SUBMITTER:VIKAS BHARGAVASIGNATURE:/Vikas Bhargava/DATE SIGNED:05/10/2019

Total Attachments: 5

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PATENT REEL: 049236 FRAME: 0685

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COMBINED DECLARATION & ASSIGNMENT (37 CFR 1.63(e))

Application Data Sheet filed previously or concurrently

Docket No.: SOSYS.002A

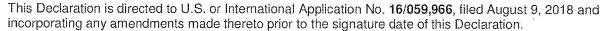
Title: HASH-BASED DATA VERIFICATION SYSTEM

Inventors: David Duane Bettger

Page 1 of 3

AMM

Declaration



As a named inventor, I declare that:

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 USC 1001 by fine or imprisonment of not more than five (5) years, or both.

I have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56.

Assignment from Inventors

WHEREAS, above-identified inventors (individual(s) hereinafter "ASSIGNOR") invented certain new and useful improvements, technology, inventions, developments, ideas, ornamental designs, or discoveries, and hereby assign or are under an obligation to assign to the below identified Assignee the above-titled application (collectively hereinafter referred to as the "Work") for which an application for Letters Patent in the United States (identified above) has been prepared for filing with the United States Patent and Trademark Office (hereinafter the "Application").

AND WHEREAS, **Secure Open Systems**, **Inc.**, with its principal place of business at 1910-A Gates Avenue, Redondo Beach, CA 90278 (hereinafter the "ASSIGNEE"), desires to acquire the entire right, title, and interest in and to the Application and the Work.

NOW, THEREFORE, for good and valuable consideration of which receipt is hereby acknowledged, ASSIGNOR hereby acknowledges that ASSIGNOR has sold, assigned, transferred and set over, and by these presents does hereby sell, assign, transfer and set over, unto said ASSIGNEE, its successors, legal representatives and assigns, the entire right, title, and interest throughout the world in the Application and the Work, including all Patent Properties filed or issued upon the Application and the Work; where "Patent Properties" include, but are not limited to:

all provisional applications relating thereto (including but not limited to U.S. Provisional Application No(s). 62/544,598, filed August 11, 2017);

all nonprovisional applications claiming priority to aforementioned provisional(s) and/or the present Application, including, all divisions, continuations, continuations-in-part, and reissues, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof; and

all rights of priority under International Conventions and any related Letters Patent which may hereafter be granted or filed in any country or countries foreign to the United States, all extensions, renewals and reissues thereof.

ASSIGNOR hereby acknowledges the ASSIGNEE as the Applicant for all aforementioned Patent Properties, and authorizes and requests the Commissioner of Patents of the United States, and any

COMBINED DECLARATION & ASSIGNMENT (37 CFR 1.63(e))

Application Data Sheet filed previously or concurrently

Docket No.: SOSYS.002A Page 2 of 3

Title: HASH-BASED DATA VERIFICATION SYSTEM

Inventors: David Duane Bettger

Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all related Letters Patent to the ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND ASSIGNOR DOES HEREBY sell, assign, transfer, and convey to ASSIGNEE, its successors, legal representatives, and assigns all claims for damages and all remedies arising out of any violation of the rights assigned hereby that may have accrued prior to the date of assignment to ASSIGNEE, or may accrue hereafter, including, but not limited to, the right to sue for, collect, and retain damages for past infringements of said Letters Patent before or after issuance.

AND ASSIGNOR DOES HEREBY covenant and agree that ASSIGNOR will communicate to said ASSIGNEE, its successors, legal representatives and assigns, any facts known to ASSIGNOR respecting the Work, and testify in any legal proceeding, assist in the preparation of any other Patent Property relating to the Application and the Work or any improvements made thereto, sign/execute all lawful papers, authorize the filing of and execute and make all rightful oaths and/or declarations in connection with the Application and the Work including any improvements made thereto, any patent applications filed therefrom, and any continuing application filed from any of the aforementioned applications, and generally do everything possible to aid the ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for the Work in all countries.



COMBINED DECLARATION & ASSIGNMENT (37 CFR 1.63(e)) Application Data Sheet filed previously or concurrently
Docket No.: SOSYS.002A Page 3 of 3
Title: HASH-BASED DATA VERIFICATION SYSTEM
Inventors: David Duane Bettger
Legal Name of inventor: David Duane Bettger IN TESTIMONY WHEREOF, I hereunto set pry/pand and seal this
20 13. Signature:
Signature before a Notary is desirable but not required.
A NOTARY PUBLIC OR OTHER OFFICER COMPLETING THIS CERTIFICATE VERIFIES ONLY THE IDENTITY OF THE INDIVIDUAL WHO SIGNED THE DOCUMENT TO WHICH THIS CERTIFICATE IS ATTACHED, AND NOT THE TRUTHFULNESS, ACCURACY, OR VALIDITY OF THAT DOCUMENT.
STATE OF CALIFORNIA ss.
On, before me,
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.
WITNESS my hand and official seal.
Notary Signature [SEAL]

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UNITED STATES PATENT AND TRADEMARK OFFICE

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

SEPTEMBER 21, 2018

PTAS

KNOBBE, MARTENS, OLSON & BEAR, LLP 2040 MAIN STREET 14TH FLOOR IRVINE, CA 92614

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UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT RECORDATION BRANCH OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE ASSIGNMENT RECORDATION BRANCH AT 571-272-3350. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, MAIL STOP: ASSIGNMENT RECORDATION BRANCH, P.O. BOX 1450, ALEXANDRIA, VA 22313.

REEL/FRAME: 046932/0426 RECORDATION DATE: 09/20/2018

NUMBER OF PAGES: 4

BRIEF: ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

BETTGER, DAVID DUANE DOC DATE: 09/20/2018

ASSIGNEE:

SECURE OPEN SYSTEMS, INC. 1910-A GATES AVENUE

REDONDO BEACH, CALIFORNIA 90278

APPLICATION NUMBER: 16059966 FILING DATE: 08/09/2018

PATENT NUMBER: ISSUE DATE:

TITLE: HASH-BASED DATA VERIFICATION SYSTEM

APPLICATION NUMBER: 62544598 FILING DATE: 08/11/2017

PATENT NUMBER:

TITLE: HASH-BASED DATA VERIFICATION SYSTEM

ASSIGNMENT RECORDATION BRANCH PUBLIC RECORDS DIVISION

> **PATENT** P.O. Box 1450, Alexandria, Virginia 22313-1450 - WWW.USPTO.GOV

REEL: 049236 FRAME: 0690

505104716 09/20/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5151475

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
DAVID DUANE BETTGER	09/20/2018

RECEIVING PARTY DATA

Name:	SECURE OPEN SYSTEMS, INC.
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NAME OF SUBMITTER:	VIKAS BHARGAVA
SIGNATURE:	/Vikas Bhargava/
DATE SIGNED:	09/20/2018

Total Attachments: 3

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PATENT
RECORDED: 05/10/2019 REEL: 049236 FRAME: 0691