503399538 07/20/2015

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3446163

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
KARTIK AUDHKHASI	07/20/2015
BART KOSKO	07/20/2015
OSONDE OSOBA	07/20/2015

RECEIVING PARTY DATA

Name:	UNIVERSITY OF SOUTHERN CALIFORNIA
Street Address:	USC STEVENS CENTER FOR INNOVATION
Internal Address:	1150 SOUTH OLIVE STREET, SUITE 2300
City:	LOS ANGELES
State/Country:	CALIFORNIA
Postal Code:	90015

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14803797

CORRESPONDENCE DATA

Fax Number: (310)277-4730

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: (310) 788-1569

Email: uspto33401@mwe.com
Correspondent Name: MARC E. BROWN

Address Line 1: MCDERMOTT WILL & EMERY LLP

Address Line 2: 2049 CENTURY PARK EAST, SUITE 3800

Address Line 4: LOS ANGELES, CALIFORNIA 90067

ATTORNEY DOCKET NUMBER: 094852-0109

NAME OF SUBMITTER: MARC E. BROWN

SIGNATURE: /Marc E. Brown/

DATE SIGNED: 07/20/2015

Total Attachments: 4

source=109Assignment#page1.tif source=109Assignment#page2.tif

PATENT 503399538 REEL: 036136 FRAME: 0553

source=109Assignment#page3.tif source=109Assignment#page4.tif

> PATENT REEL: 036136 FRAME: 0554

ASSIGNMENT

(Joint Inventors)

WHEREAS, we, Kartik Audhkhasi, Bart Kosko, and Osonde Osoba ("ASSIGNORS") have invented "Noise-Boosted Convolutional Neural Networks" ("Invention") for which a application for patent ("Application") is being filed herewith in the United States; and which claims priority to and incorporates by reference U.S. Provisional Application No. 62/026,359, filed July 18, 2014;

WHEREAS, we are the joint inventors of the Invention;

WHEREAS, the University of Southern California, (ASSIGNEE) is a corporation organized and existing under the laws of California having a place of business at USC Stevens Center for Innovation, 1150 South Olive Street, Suite 2300, Los Angeles, California 90015;

WHEREAS, ASSIGNEE desires to acquire the entire right, title and interest in and to the Invention and Application and to all patents based on the Application;

NOW, THEREFORE, for valuable consideration, the receipt and legal sufficiency of which ASSIGNORS acknowledge, ASSIGNORS have and hereby do assign and transfer to ASSIGNEE, its successors and assigns, the entire right, title and interest in and to:

- 1. The Invention;
- 2. The Application;
- 3. All applications based on or claiming priority from the Application, including all U.S. utility patent applications, divisionals and continuations ("Application Family");
- 4. All patents which may be granted on the Invention, Application and Application Family by the United States of America, its territories and possessions, and by all foreign countries, including all priority rights and all reissues thereof ("Patents"); and
- 5. The right to sue for past infringement of the Invention, Application, Application Family and Patents.

ASSIGNORS agree, at the request of ASSIGNEE, to sign any and all papers reasonably needed to file and prosecute the Application and Application Family, to obtain the Patents, and to perfect and vest in ASSIGNEE the entire right, title and interest in the Invention, Application, Application Family and Patents. ASSIGNORS also agree to provide assistance that is reasonably needed to prepare and prosecute the Application and Application Family.

ASSIGNORS authorize and empower ASSIGNEE, its successors and assigns, to apply for and obtain, in its own name, the Application, Application Family and Patents before competent International Authorities, including the World Intellectual Property Organization and

in any and all foreign countries in whobtained.	hich applications for patents can be made or patents
Dated: 20 TVLY , 2015	Name: KARTIK AUDHKHASI Address: 68 Lake Street, Apt. 105 White Plains, New York 10603
I certify that I am over the age of 18 in my presence.	8 and that the individual named above signed this document
ABHINAV SETHY (Print) Name	Signature of Witness Date
310 North Greeley Av	
Chappagua	
Ny -10514 Witness Address (Print or Type)	
Dated:, 2015	Name: BART KOSKO Address: Department of Electrical Engineering Systems Signal and Image Processing Institute Viterbi School of Engineering University of Southern California Los Angeles, California 90089-2564
I certify that I am over the age of 18 in my presence.	3 and that the individual named above signed this document
(Print) Name	Signature of Witness Date
Witness Address (Print or Type)	

-2-

in any and all foreign countries in woobtained.	which applications for patents can be made or p	atents
Dated:, 2015	Name: KARTIK AUDHKHASI Address: 68 Lake Street, Apt. 105 White Plains, New York 10603	
I certify that I am over the age of I in my presence.	8 and that the individual named above signed	I this document
(Print) Name	Signature of Witness	Date
Witness Address (Print or Type)		
Dated: July 20, 2015	Name: BART KOSKO Address: Department of Electrical En Systems Signal and Image Processing Viterbi School of Engineering University of Southern California Los Angeles, California 90089-2564	
I certify that I am over the age of I in my presence.	8 and that the individual named above signed	I this document
(Print) Name	Signature of Witness	Date
Witness Address (Print or Type)		
DM_US 62630816-1.094852.0109	-2-	

094852-0109 USC 2014-330-02

Dated: 20 - July , 2015

Name: OSONDE OSOBA

Address: Electrical Engineering Department

3740 Mc Clintock Avenue, EEB 400 University of Southern California Los Angeles, California 90089

I certify that I am over the age of 18 and that the individual named above signed this document

in my presence.

(Print) Name

Signature of Witness

Date

Santa Monica C

Witness Address (Print or Type)

RECORDED: 07/20/2015