

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT3895696

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT	
<b>NATURE OF CONVEYANCE:</b>	SECURITY INTEREST	
<b>CONVEYING PARTY DATA</b>		
<b>Name</b>		<b>Execution Date</b>
VIDEOMINING CORPORATION		05/19/2016
<b>RECEIVING PARTY DATA</b>		
<b>Name:</b>	AMERISERV FINANCIAL BANK	
<b>Street Address:</b>	216 FRANKLIN STREET	
<b>City:</b>	JOHNSTOWN	
<b>State/Country:</b>	PENNSYLVANIA	
<b>Postal Code:</b>	15901	
<b>PROPERTY NUMBERS Total: 31</b>		
<b>Property Type</b>	<b>Number</b>	
Patent Number:	7319779	
Patent Number:	8098888	
Patent Number:	8380558	
Patent Number:	7987111	
Patent Number:	8189926	
Patent Number:	7848548	
Patent Number:	8520906	
Patent Number:	8351647	
Patent Number:	8027521	
Patent Number:	8009863	
Patent Number:	8379937	
Patent Number:	8577705	
Patent Number:	8254633	
Patent Number:	8010402	
Patent Number:	8812344	
Patent Number:	8325982	
Application Number:	11818554	
Application Number:	12283606	
Application Number:	12220076	
Application Number:	12228409	

PATENT

Property Type	Number
Application Number:	12313459
Application Number:	12386655
Application Number:	12459281
Application Number:	13999280
Application Number:	14513696
Application Number:	14692446
Application Number:	14986386
Application Number:	14984180
Application Number:	15004457
Application Number:	15011442
Application Number:	15051629

#### CORRESPONDENCE DATA

**Fax Number:** (412)471-4094

*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:** 4124718815

**Email:** assignments@webblaw.com

**Correspondent Name:** THE WEBB LAW FIRM

**Address Line 1:** ONE GATEWAY CENTER

**Address Line 2:** 420 FT. DUQUESNE BLVD. SUITE 1200

**Address Line 4:** PITTSBURGH, PENNSYLVANIA 15222

<b>ATTORNEY DOCKET NUMBER:</b>	8111-1602058
<b>NAME OF SUBMITTER:</b>	ANTHONY W. BROOKS
<b>SIGNATURE:</b>	/Anthony W Brooks/
<b>DATE SIGNED:</b>	05/31/2016

#### Total Attachments: 9

source=SecurityAgreementRecordation#page1.tif

source=SecurityAgreementRecordation#page2.tif

source=SecurityAgreementRecordation#page3.tif

source=SecurityAgreementRecordation#page4.tif

source=SecurityAgreementRecordation#page5.tif

source=SecurityAgreementRecordation#page6.tif

source=SecurityAgreementRecordation#page7.tif

source=SecurityAgreementRecordation#page8.tif

source=SecurityAgreementRecordation#page9.tif

**RECORDATION FORM COVER SHEET**  
**PATENTS ONLY**

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

**1. Name of conveying party(ies)**

VideoMining Corporation

**2. Name and address of receiving party(ies)**

Name: AmeriServ Financial Bank

Internal Address: \_\_\_\_\_

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

**3. Nature of conveyance/Execution Date(s):**

Execution Date(s) May 19, 2016

- ☐ Assignment ☐ Merger  
☒ Security Agreement ☐ Change of Name  
☐ Joint Research Agreement  
☐ Government Interest Assignment  
☐ Executive Order 9424, Confirmatory License  
☐ Other \_\_\_\_\_

Street Address: 216 Franklin Street

City: Johnstown

State: Pennsylvania

Country: US Zip: 15901

Additional name(s) & address(es) attached? ☐ Yes ☒ No

**4. Application or patent number(s):**

☐ This document serves as an Oath/Declaration (37 CFR 1.63).

**A. Patent Application No.(s)**

11818554 12283606 12220076 12228409  
12313459 12386655 12459281 13999280  
14513696 14692446 14986386 14984180

**B. Patent No.(s)**

7319779 8098888 8380558 7987111  
8189926 7848548 8520906 8351647  
8027521 8009863 8379937 8577705

Additional numbers attached? ☒ Yes ☐ No

**5. Name and address to whom correspondence concerning document should be mailed:**

Name: Anthony W. Brooks

Internal Address: The Webb Law Firm

Street Address: One Gateway Center  
420 Ft. Duquesne Blvd., Ste 1200

City: Pittsburgh

State: PA Zip: 15222

Phone Number: 412-471-8815

Docket Number: 7970 - 1600958

Email Address: assignments@webblaw.com

**6. Total number of applications and patents involved: 31**

**7. Total fee (37 CFR 1.21(h) & 3.41) \$0.00**

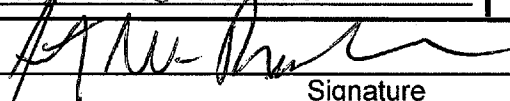
- ☐ Authorized to be charged to deposit account  
☐ Enclosed  
☐ None required (government interest not affecting title)

**8. Payment Information**

Deposit Account Number \_\_\_\_\_

Authorized User Name \_\_\_\_\_

**9. Signature:**



Signature

May 31, 2016

Date

Anthony W. Brooks

Name of Person Signing

Total number of pages including cover sheet, attachments, and documents:

9

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:  
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

**RECORDATION FORM COVER SHEET**  
**PATENTS ONLY**

**Page 2**

**Additional Information (continued from Page 1)**

**4. Application or patent number(s) Continued:**

A. Patent Application No. (s)

15004457

15011442

15051629

B. Patent No. (s)

8254633

8010402

8812344

8325982

## **PATENT SECURITY AGREEMENT**

This Patent Security Agreement ("Agreement") is entered into on this 19th day of May, 2016 between VideoMining Corporation, having an address at 403 S. Allen Street, Suite 101, State College, Pennsylvania 16801 ("Grantor"), and AmeriServ Financial Bank, having an address at 216 Franklin Street, Johnstown, Pennsylvania 15901 ("Secured Party").

### **RECITALS:**

- A. WHEREAS**, Grantor is the owner of the U.S. patents and patent applications listed on the attached Schedule A (collectively the "Patents")
- B. WHEREAS**, Grantor and the Secured Party are parties to a Commercial Security Agreement, dated May 19, 2016, ("the Commercial Security Agreement") in favor of the Secured Party pursuant to which Grantor is required to execute and deliver this Patent Security Agreement;
- C. WHEREAS**, pursuant to the terms and conditions of the Commercial Security Agreement, Grantor has granted to the Secured Party a security interest in collateral, including, without limitation, Grantor's entire, right, title, and interest, in, to and under the Patents, in exchange for extending a loan to the Grantor, repayment of which is evidenced by a Note; and
- D. WHEREAS**, Grantor and the Secured Party by this instrument seek to confirm and make a record of the grant of a security interest in the Patents.

**NOW, THEREFORE**, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Grantor hereby grants to the Secured Party a lien and continuing security interest in Grantor's entire right, title, and interest in, to, and under the following, whether presently existing or hereafter created or acquired:

1. The U.S. patents and patent applications listed on the attached Schedule A (collectively the "Patents"), together with any reissues, continuations, divisions, modifications, substitutions or extensions thereof.
2. All products and proceeds of the foregoing including, without limitation, any claim by Grantor against third parties for past, present, or future infringement of any of the Patents (or of any Patent issuing from an application listed on Schedule A).

The security interest granted herein pursuant to this Patent Security Agreement is granted in conjunction with the security interest granted to the Secured Party pursuant to the Commercial Security Agreement. Grantor hereby acknowledges and affirms that the rights and remedies of the Secured Party with respect to the liens and security interests granted herein are more fully set forth in the Commercial Security Agreement, dated May 19, 2016, the terms and provisions of which are incorporated by reference herein as if fully set forth herein.

IN WITNESS WHEREOF, the parties have caused this Agreement to be duly executed by its duly authorized officers as of the date written above.

**GRANTOR**

**SECURED PARTY**

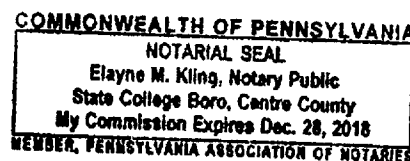
By: [Signature]  
Name: RAJEEV SHARMA  
Title: CEO

By: [Signature]  
Name: John M. Infield  
Title: Regional President

STATE OF PA )  
 ) SS:  
COUNTY OF Centre )

Subscribed and sworn to before me by Rajeev Sharma (Grantor)  
and John M. Infield (Secured Party) this 19<sup>th</sup> day of May, 2016.

[Signature]  
NOTARY PUBLIC



# Schedule A



### Issued Patents Owned By VideoMining (16)

U.S. Patent Number	Title	Date Issued	Docket Number
7,319,779	"CLASSIFICATION OF HUMANS INTO MULTIPLE AGE CATEGORIES FROM DIGITAL IMAGES"	1/15/2008	AI-0021-MUL
8,098,888	"METHOD AND SYSTEM FOR AUTOMATIC ANALYSIS OF THE TRIP OF PEOPLE IN A RETAIL SPACE USING MULTIPLE CAMERAS"	01/17/2012	VM-0028-MTR
8,380,558	"METHOD AND SYSTEM FOR ANALYZING SHOPPING BEHAVIOR IN A STORE BY ASSOCIATING RFID DATA WITH VIDEO-BASED BEHAVIOR AND SEGMENTATION DATA"	2/19/2013	VM-0032-BRS
7,987,111	"METHOD AND SYSTEM FOR CHARACTERIZING PHYSICAL RETAIL SPACES BY DETERMINING THE DEMOGRAPHIC COMPOSITION OF PEOPLE IN THE PHYSICAL RETAIL SPACES UTILIZING VIDEO IMAGE ANALYSIS"	7/26/2011	VM-0030-DBR
8,189,926	"METHOD AND SYSTEM FOR AUTOMATICALLY ANALYZING CATEGORIES IN A PHYSICAL SPACE BASED ON THE VISUAL CHARACTERIZATION OF PEOPLE"	5/29/2012	VM-0033-BBC
7,848,548	"METHOD AND SYSTEM FOR ROBUST DEMOGRAPHIC CLASSIFICATION USING POSE INDEPENDENT MODEL FROM SEQUENCE OF FACE IMAGES"	12/7/2010	VM-0038-DPM
8,520,906	"METHOD AND SYSTEM FOR AGE ESTIMATION BASED ON RELATIVE AGES OF PAIRWISE FACIAL IMAGES OF PEOPLE"	8/27/2013	VM-0040-DAP
8,351,647	"AUTOMATIC DETECTION AND AGGREGATION OF DEMOGRAPHICS AND BEHAVIOR OF PEOPLE"	1/8/2013	VM-0042-FIN-CIP
8,027,521	"METHOD AND SYSTEM FOR ROBUST HUMAN GENDER RECOGNITION USING FACIAL FEATURE LOCALIZATION"	9/27/2011	VM-0044-DGC
8,009,863	"METHOD AND SYSTEM FOR ANALYZING SHOPPING BEHAVIOR USING MULTIPLE SENSOR TRACKING"	8/30/2011	VM-0051-MBA
8,379,937	"METHOD AND SYSTEM FOR ROBUST HUMAN ETHNICITY RECOGNITION USING IMAGE FEATURE-BASED PROBABILISTIC GRAPHICAL MODELS"	2/19/2013	VM-0056-DEG
8,577,705	"METHOD AND SYSTEM FOR RATING THE ROLE OF A PRODUCT CATEGORY IN THE PERFORMANCE OF A STORE AREA"	11/5/2013	VM-0061-CSR
8,254,633	"METHOD AND SYSTEM FOR FINDING CORRESPONDENCE BETWEEN FACE CAMERA VIEWS AND BEHAVIOR CAMERA VIEWS"	8/28/2012	VM-0063-BFA



8,010,402	"METHOD FOR AUGMENTING TRANSACTION DATA WITH VISUALLY EXTRACTED DEMOGRAPHICS OF PEOPLE USING COMPUTER VISION"	8/30/2011	VM-0065-PIN-CIP
8,812,344	"METHOD AND SYSTEM FOR DETERMINING THE IMPACT OF CROWDING ON RETAIL PERFORMANCE"	8/19/2014	VM-0066-ACI
8,325,982	"METHOD AND SYSTEM FOR DETECTING AND TRACKING SHOPPING CARTS FROM VIDEOS"	12/4/2012	VM-0071-CRT



### Pending Patents Owned By VideoMining (15)

U.S. App. Patent Number	Title	Original Filing Date	Docket Number
11/818,554	"METHOD AND SYSTEM FOR MEASURING VIEWERSHIP OF PEOPLE FOR DISPLAYED OBJECT"	6/16/2006	VM-0027-IMP
12/283,606	"METHOD AND SYSTEM FOR MEASURING EFFECTIVENESS OF A MARKETING CAMPAIGN ON DIGITAL SIGNAGE"	9/12/2008	VM-0039-MCR
12/220,076	"METHOD AND SYSTEM FOR COLLECTING SHOPPER RESPONSE DATA TIED TO MARKETING AND MERCHANDISING ELEMENTS"	7/21/2008	VM-0052-SMD
12/228,409	"METHOD AND SYSTEM FOR RATING THE STRENGTH OF A BRAND IN ATTRACTING SHOPPERS RELATIVE TO A PRODUCT CATEGORY"	8/12/2008	VM-0054-BSR
12/313,459	"METHOD AND SYSTEM FOR EVALUATING CONTENT FOR DIGITAL DISPLAYS BY MEASURING VIEWER RESPONSES BY DEMOGRAPHIC SEGMENTS"	11/20/2008	VM-0058-MCE
12/386,655	"METHOD AND SYSTEM FOR RATING IN-STORE MEDIA ELEMENTS"	4/21/2009	VM-0064-RIM
12/459,281	"METHOD AND SYSTEM FOR DETECTING SHOPPING GROUPS BASED ON TRAJECTORY DYNAMICS"	6/29/2009	VM-0069-BBG
13/999,280	"METHOD AND SYSTEM FOR MEASURING IN-STORE LOCATION EFFECTIVENESS BASED ON SHOPPER RESPONSE AND BEHAVIOR ANALYSIS"	2/5/2014	VM-0074-BLE-CIP
14/513,696	"METHOD AND SYSTEM FOR ROBUST PERSON TRACKING USING MOBILE SIGNAL AND VIDEO ANALYTICS"	10/14/2014	VM-0076-MVT
14/692,446	"METHOD AND SYSTEM FOR IN-STORE SHOPPER BEHAVIOR ANALYSIS WITH MULTI-MODAL SENSOR FUSION"	4/21/2015	VM-0077-MMB
14/986,386	"METHOD AND SYSTEM FOR FINDING CORRESPONDENCE BETWEEN POINT-OF-SALE DATA AND CUSTOMER BEHAVIOR DATA"	12/31/2015	VM-0078-BPA
14/984,180	"METHOD AND SYSTEM FOR FINDING CORRESPONDENCE BETWEEN POINT-OF-SALE DATA AND CUSTOMER BEHAVIOR DATA"	12/30/2015	VM-0079-APC
15/004,457	"METHOD AND SYSTEM FOR MEASURING THE EFFECTIVENESS OF IN-STORE MARKETING CAMPAIGN"	1/22/2016	VM-0080-RCR



15/011,442	"CROSS-CHANNEL IN-STORE SHOPPER BEHAVIOR ANALYSIS"	1/29/2016	VM-0081-MCT
15/051,629	"PERSONALIZED DECISION TREE BASED ON IN-STORE BEHAVIOR ANALYSIS"	2/23/2016	VM-0082-PDT