

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT4326516

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	RELEASE OF SECURITY INTEREST
CONVEYING PARTY DATA	
Name	Execution Date
PACIFIC WESTERN BANK, AS SUCCESSOR IN INTEREST TO SQUARE 1 BANK	03/15/2017
RECEIVING PARTY DATA	
Name:	INVISAGE TECHNOLOGIES, INC.
Street Address:	7979 GATEWAY BLVD.
Internal Address:	SUITE 240
City:	NEWARK
State/Country:	CALIFORNIA
Postal Code:	94560
PROPERTY NUMBERS Total: 55	
Property Type	Number
Application Number:	13217047
Application Number:	13217103
Application Number:	13217125
Application Number:	13218364
Application Number:	13218693
Application Number:	13209264
Application Number:	13214898
Application Number:	12914480
Application Number:	11108900
Application Number:	11327655
Application Number:	13368747
Application Number:	11510510
Application Number:	12852328
Application Number:	13323387
Application Number:	13612103
Application Number:	11509318
Application Number:	12395592
Application Number:	12780026
Application Number:	13242397

PATENT

Property Type	Number
Application Number:	11510263
Application Number:	12780420
Application Number:	13226533
Application Number:	13235134
Application Number:	13235159
Application Number:	13217026
Application Number:	13218802
Application Number:	13218937
Application Number:	12106256
Application Number:	12728184
Application Number:	12728181
Application Number:	13213932
Application Number:	13214582
Application Number:	13214711
Application Number:	13214835
Application Number:	12506233
Application Number:	12506236
Application Number:	13887895
Application Number:	13218401
Application Number:	13218761
Application Number:	13473020
Application Number:	13051983
Application Number:	13051320
Application Number:	13099903
Application Number:	13156235
Application Number:	13648721
Application Number:	61702688
Application Number:	61704862
Application Number:	61831026
Application Number:	61720889
Application Number:	61735405
Application Number:	13894184
Application Number:	61832767
Application Number:	13848449
Application Number:	13228197
Application Number:	13235185

CORRESPONDENCE DATA

Fax Number: (919)354-1278

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: 919-314-3086

Email: diligencereview@square1bank.com

Correspondent Name: PACIFIC WESTERN BANK

Address Line 1: 406 BLACKWELL STREET

Address Line 2: SUITE 240

Address Line 4: DURHAM, NORTH CAROLINA 27701

NAME OF SUBMITTER:	NICHOLAS NANCE
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SIGNATURE:	/NICHOLASNANCE-TKF/
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DATE SIGNED:	03/20/2017
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Total Attachments: 9

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RELEASE OF SECURITY INTEREST

This Release of Security Interest is made as of March 15, 2017, by **PACIFIC WESTERN BANK** (as successor in interest by merger to Square 1 Bank) ("Lender") in favor of **INVISAGE TECHNOLOGIES, INC.**, a Delaware corporation ("Company") with its principal place of business located at 7979 Gateway Blvd., Suite 240, Newark, CA 94560.

Recitals

WHEREAS Company granted to Lender a security interest in its copyrights, patents and trademarks, including without limitation, the patents and trademarks described on Exhibits A and B attached hereto, respectively, (collectively, the "Intellectual Property") under an Intellectual Property Security Agreement dated as of August 30, 2013 (the "Security Agreement"), and recorded with the US Patent and Trademark Office as set forth on Exhibits A and B.

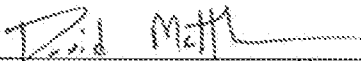
WHEREAS Company has no outstanding obligations to Lender under the terms of the Security Agreement, Lender agrees to release its security interest in the Intellectual Property.

Agreement

Now therefore, Lender agrees that it terminates and releases its security interest in the Intellectual Property and reassigns to Company, without warranty or recourse, all interest of Lender in the Intellectual Property.

LENDER:

PACIFIC WESTERN BANK


Name: David Matthews
Title: VP

406 Blackwell Street
Suite 240
Durham, NC 27701

EXHIBIT A

Patents

Lender's security interest in the following patents was recorded at the US Patent and Trademark Office on **September 3, 2013** at Reel and Frame Number **031160/0411**:

Description	Country	Registration OR/ Serial Number	Registration OR Filing Date
MATERIALS, SYSTEMS AND METHODS FOR OPTOELECTRONIC DEVICES	United States of America	13/217,047	08/24/2011
MATERIALS, SYSTEMS AND METHODS FOR OPTOELECTRONIC DEVICES	United States of America	13/217,103	08/24/2011
MATERIALS, SYSTEMS AND METHODS FOR OPTOELECTRONIC DEVICES	United States of America	13/217,125	08/24/2011
MATERIALS, SYSTEMS AND METHODS FOR OPTOELECTRONIC DEVICES	United States of America	13/218,364	08/25/2011
MATERIALS, SYSTEMS AND METHODS FOR OPTOELECTRONIC DEVICES	United States of America	13/218,693	08/26/2011
MATERIALS, SYSTEMS AND METHODS FOR OPTOELECTRONIC DEVICES	United States of America	13/209,264	08/12/2011
MATERIALS, SYSTEMS AND METHODS FOR OPTOELECTRONIC DEVICES	United States of America	13/214,898	08/22/2011
SYSTEMS AND METHODS FOR COLOR BINNING	United States of America	12/914,480	10/28/2010
OPTICALLY-REGULATED OPTICAL EMISSION USING COLLOIDAL QUANTUM DOT NANOCRYSTALS	United States of America	11/108,900	04/19/2005
THREE-DIMENSIONAL BICONTINUOUS HETEROSTRUCTURES, A METHOD OF MAKING THEM, AND THEIR APPLICATION IN QUANTUM DOT-POLYMER NANOCOMPOSITE PHOTODETECTORS AND PHOTOVOLTAICS	United States of America	11/327,655	01/09/2006

THREE-DIMENSIONAL BICONTINUOUS HETEROSTRUCTURES, METHOD OF MAKING, AND THEIR APPLICATION IN QUANTUM DOT-POLYMER NANOCOMPOSITE PHOTODETECTORS AND PHOTOVOLTAICS	United States of America	13/368,747	02/08/2012
QUANTUM DOT OPTICAL DEVICES WITH ENHANCED GAIN AND SENSITIVITY	China	200680036992.7	
QUANTUM DOT OPTICAL DEVICES WITH ENHANCED GAIN AND SENSITIVITY AND METHODS OF MAKING SAME	China	201010622600.3	
QUANTUM DOT OPTICAL DEVICES WITH ENHANCED GAIN AND SENSITIVITY AND METHODS OF MAKING SAME	Germany	068495027	
QUANTUM DOT OPTICAL DEVICES WITH ENHANCED GAIN AND SENSITIVITY AND METHODS OF MAKING SAME	European Patent Office	06849502.7	
QUANTUM DOT OPTICAL DEVICES WITH ENHANCED GAIN AND SENSITIVITY AND METHODS OF MAKING SAME	France	068495027	
QUANTUM DOT OPTICAL DEVICES WITH ENHANCED GAIN AND SENSITIVITY AND METHODS OF MAKING SAME	United Kingdom	068495027	
QUANTUM DOT OPTICAL DEVICES WITH ENHANCED GAIN AND SENSITIVITY AND METHODS OF MAKING SAME	United States of America	11/510,510	08/24/2006
QUANTUM DOT OPTICAL DEVICES WITH ENHANCED GAIN AND SENSITIVITY AND METHODS OF MAKING SAME	United States of America	12/852,328	08/06/2010
QUANTUM DOT OPTICAL DEVICES WITH ENHANCED GAIN AND SENSITIVITY AND METHODS OF MAKING SAME	United States of America	13/323,387	12/12/2011
QUANTUM DOT OPTICAL DEVICES WITH ENHANCED GAIN AND SENSITIVITY AND METHODS OF MAKING SAME	United States of America	13/612,103	09/12/2012

METHODS OF MAKING QUANTUM DOT FILMS	United States of America	11/509,318	08/24/2006
METHODS OF MAKING QUANTUM DOT FILMS	United States of America	12/395,592	02/27/2009
METHODS OF MAKING QUANTUM DOT FILMS	United States of America	12/780,026	05/14/2010
METHODS OF MAKING QUANTUM DOT FILMS	United States of America	13/242,397	09/23/2011
ELECTRONIC AND OPTOELECTRONIC DEVICES WITH QUANTUM DOT FILMS	United States of America	11/510,263	08/24/2006
ELECTRONIC AND OPTOELECTRONIC DEVICES WITH QUANTUM DOT FILMS	United States of America	12/780,420	05/14/2010
ELECTRONIC AND OPTOELECTRONIC DEVICES WITH QUANTUM DOT FILMS	United States of America	13/226,533	09/07/2011
MATERIALS FOR ELECTRONIC AND OPTOELECTRONIC DEVICES HAVING ENHANCED CHARGE TRANSFER (As Amended)	United States of America	13/235,134	09/16/2011
COLLOIDAL NANOPARTICLE MATERIALS FOR PHOTODETECTORS AND PHOTOVOLTAICS (As Amended)	United States of America	13/235,159	09/16/2011
MATERIALS, SYSTEMS AND METHODS FOR OPTOELECTRONIC DEVICES	United States of America	13/217,026	08/24/2011
MATERIALS, SYSTEMS AND METHODS FOR OPTOELECTRONIC DEVICES	United States of America	13/218,802	08/24/2011
MATERIALS, SYSTEMS AND METHODS FOR OPTOELECTRONIC DEVICES	United States of America	13/218,937	08/24/2011
MATERIALS, SYSTEMS AND METHODS FOR OPTOELECTRONIC DEVICES	United States of America	12/106,256	04/18/2008
MATERIALS, SYSTEMS AND METHODS FOR OPTOELECTRONIC DEVICES	United States of America	12/728,184	03/19/2010
MATERIALS, SYSTEMS AND METHODS FOR OPTOELECTRONIC DEVICES	United States of America	12/728,181	03/19/2010
MATERIALS, SYSTEMS AND METHODS FOR OPTOELECTRONIC DEVICES	United States of America	13/213,932	08/19/2011

MATERIALS, SYSTEMS AND METHODS FOR OPTOELECTRONIC DEVICES	United States of America	13/214,582	08/22/2011
MATERIALS, SYSTEMS AND METHODS FOR OPTOELECTRONIC DEVICES	United States of America	13/214,711	08/22/2011
MATERIALS, SYSTEMS AND METHODS FOR OPTOELECTRONIC DEVICES	United States of America	13/214,835	08/22/2011
MATERIALS, FABRICATION EQUIPMENT, AND METHODS FOR STABLE, SENSITIVE PHOTODETECTORS AND IMAGE SENSORS MADE THEREFROM	United States of America	12/506,233	07/20/2009
MATERIALS, FABRICATION EQUIPMENT, AND METHODS FOR STABLE, SENSITIVE PHOTODETECTORS AND IMAGE SENSORS MADE THEREFROM	United States of America	12/506,236	07/20/2009
THREE-DIMENSIONAL BICONTINUOUS HETEROSTRUCTURES, METHOD OF MAKING, AND THEIR APPLICATION IN QUANTUM DOT-POLYMER NANOCOMPOSITE PHOTODETECTORS AND PHOTOVOLTAICS	United States of America	13/887,895	
QUANTUM DOT OPTICAL DEVICES WITH ENHANCED GAIN AND SENSITIVITY AND METHODS OF MAKING SAME	Taiwan R.O.C.	095131458	
QUANTUM DOT OPTICAL DEVICES WITH ENHANCED GAIN AND SENSITIVITY AND METHODS OF MAKING SAME	United States of America	13/848,449	
PHOTODETECTORS AND PHOTOVOLTAICS BASED ON SEMICONDUCTOR NANOCRYSTALS	United States of America	13/228,197	09/08/2011
SCHOTTKY-QUANTUM DOT PHOTODETECTORS AND PHOTOVOLTAICS (As Amended)	United States of America	13/235,185	09/16/2011
MATERIALS SYSTEMS AND METHODS FOR OPTOELECTRONIC DEVICES	China	200880020973.4	
MATERIALS SYSTEMS AND METHODS FOR OPTOELECTRONIC DEVICES	European Patent Office		
MATERIALS, SYSTEMS AND METHODS FOR OPTOELECTRONIC DEVICES	United States of America	13/218,401	08/25/2011

MATERIALS, SYSTEMS AND METHODS FOR OPTOELECTRONIC DEVICES	United States of America	13/218,761	08/26/2011
SYSTEMS AND METHODS FOR COLOR BINNING	PCT	PCT/US2010/054518	10/28/2010
MATERIALS, FABRICATION EQUIPMENT AND METHODS FOR STABLE, SENSITIVE PHOTODETECTORS AND IMAGE SENSORS MADE THEREFROM	China	200980135898.0	
MATERIALS, FABRICATION EQUIPMENT AND METHODS FOR STABLE, SENSITIVE PHOTODETECTORS AND IMAGE SENSORS MADE THEREFROM	Japan	2011-520124	
MATERIALS, FABRICATION EQUIPMENT AND METHODS FOR STABLE, SENSITIVE PHOTODETECTORS AND IMAGE SENSORS MADE THEREFROM	Taiwan R.O.C.	098124420	
MATERIALS, FABRICATION EQUIPMENT AND METHODS FOR STABLE, SENSITIVE PHOTODETECTORS AND IMAGE SENSORS MADE THEREFROM	PCT	PCT/US2009/051186	07/20/2009
MATERIALS, FABRICATION EQUIPMENT, AND METHODS FOR STABLE, SENSITIVE PHOTODETECTORS AND IMAGE SENSORS MADE THEREFROM	United States of America	13/473,020	05/16/2012
DARK CURRENT REDUCTION IN IMAGE SENSORS VIA DYNAMIC ELECTRICAL BIASING	United States of America	13/051,983	03/18/2011
DARK CURRENT REDUCTION IN IMAGE SENSORS VIA DYNAMIC ELECTRICAL BIASING	PCT	PCT/US2011/029082	03/18/2011
IMAGE SENSORS EMPLOYING SENSITIZED SEMICONDUCTOR DIODES	Japan	2013-501331	
IMAGE SENSORS EMPLOYING SENSITIZED SEMICONDUCTOR DIODES	Republic of Korea	10-2012-7027192	
IMAGE SENSORS EMPLOYING SENSITIZED PINNED PHOTODIODES	Taiwan R.O.C.	100109336	

IMAGE SENSORS EMPLOYING SENSITIZED SEMICONDUCTOR DIODES	United States of America	13/051,320	03/18/2011
IMAGE SENSORS EMPLOYING SENSITIZED SEMICONDUCTOR DIODES	PCT	PCT/US2011/028962	03/18/2011
DEVICES AND METHODS FOR HIGH-RESOLUTION IMAGE AND VIDEO CAPTURE	European Patent Office	11796119.3	
DEVICES AND METHODS FOR HIGH-RESOLUTION IMAGE AND VIDEO CAPTURE	Taiwan R.O.C.	100115447	
DEVICES AND METHODS FOR HIGH-RESOLUTION IMAGE AND VIDEO CAPTURE	United States of America	13/099,903	05/03/2011
STABLE, SENSITIVE PHOTODETECTORS AND IMAGE SENSORS MADE THEREFROM INCLUDING CIRCUITS, PROCESSES, AND MATERIALS FOR ENHANCED IMAGING PERFORMANCE	United States of America	13/156,235	06/08/2011
STABLE, SENSITIVE PHOTODETECTORS AND IMAGE SENSORS INCLUDING CIRCUITS, PROCESSES, AND MATERIALS FOR ENHANCED IMAGING PERFORMANCE	PCT	PCT/US2011/039655	06/08/2011
SENSORS AND SYSTEMS FOR THE CAPTURE OF SCENES AND EVENTS IN SPACE AND TIME	United States of America	13/648,721	10/10/2012
CAPTURE OF EVENTS IN SPACE AND TIME	PCT	PCT/US2012/059527	10/10/2012
SYSTEMS AND METHODS FOR OPTICAL COMMUNICATION ON AND OFF AN INTEGRATED ELECTRONIC CIRCUIT	United States of America	61/702,688	
EQUIPMENT AND METHOD OF MANUFACTURING FOR LIQUID PROCESSING IN A CONTROLLED ATMOSPHERIC AMBIENT	United States of America	61/704,862	
EQUIPMENT AND METHOD OF MANUFACTURING FOR LIQUID PROCESSING IN A CONTROLLED ATMOSPHERIC AMBIENT	United States of America	61/831,026	

INVISAGE	United States of America	85/751,564	
DEVICES, METHODS, AND SYSTEMS FOR EXPANDED-FIELD-OF-VIEW IMAGE AND VIDEO CAPTURE	United States of America	61/720,889	
SENSORS AND SYSTEMS FOR THE CAPTURE OF SCENES AND EVENTS IN SPACE AND TIME	United States of America	61/735,405	
DEVICES AND METHODS FOR HIGH-RESOLUTION IMAGE AND VIDEO CAPTURE	United States of America	13/894,184	
IMAGE SENSOR WITH NOISE REDUCTION	United States of America	61/832,767	

EXHIBIT B

Trademarks

Lender's security interest in the following trademarks was recorded at the US Patent and Trademark Office on **September 3, 2013** at Reel and Frame Number **5102/0738**:

<u>Description</u>	Registration/Serial Number	Registration/ Application Date
INVISAGE	4621686	10/14/2014
	85751564	10/11/2012