504462431 07/18/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4509133

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SRINIVAS CHUKKA	08/14/2013
OLCAY SERTEL	08/14/2013
ANINDYA SARKAR	08/14/2013
BIKASH SABATA	08/14/2013
SUHAS H. PATIL	08/23/2013
SUJIT SIDDHESHWAR CHIVATE	08/23/2013

RECEIVING PARTY DATA

Name:	VENTANA MEDICAL SYSTEMS, INC.	
Street Address:	1910 E. INNOVATION PARK DRIVE	
City:	TUCSON	
State/Country:	ARIZONA	
Postal Code:	85755	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14776571

CORRESPONDENCE DATA

Fax Number: (925)225-1128

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.

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Email: erica.layman@contractors.roche.com

Correspondent Name: ERICA LAYMAN

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Address Line 2: PATENTS

Address Line 4: PLEASANTON, CALIFORNIA 94588

ATTORNEY DOCKET NUMBER:	31616-US1
NAME OF SUBMITTER:	OLGA KAY
SIGNATURE:	/Olga Kay/
DATE SIGNED:	07/18/2017

PATENT 504462431 REEL: 043036 FRAME: 0921

Total Attachments: 9 source=31616-US1 Assign Inv to VMSI from parent_complete#page1.tif source=31616-US1 Assign Inv to VMSI from parent_complete#page2.tif source=31616-US1 Assign Inv to VMSI from parent_complete#page3.tif source=31616-US1 Assign Inv to VMSI from parent_complete#page4.tif source=31616-US1 Assign Inv to VMSI from parent_complete#page5.tif source=31616-US1 Assign Inv to VMSI from parent_complete#page6.tif source=31616-US1 Assign Inv to VMSI from parent_complete#page7.tif source=31616-US1 Assign Inv to VMSI from parent_complete#page7.tif

source=31616-US1 Assign Inv to VMSI from parent complete#page9.tif

PATENT REEL: 043036 FRAME: 0922

ASSIGNMENT BY INVENTORS

This Assignment is by the following individuals (the "Assignors"):

- Olcay Sertel having a mailing address of 1000 Escalon Ave. Apt. 207, Sunnyvale, California 94085;
- Anindya Sarkar having a mailing address of 655 S Fair Oaks Ave, Apt. I 209, Sunnyvale, California 94086;
- Bikash Sabata having a mailing address of 10535 San Felipe Rd., Cupertino,
 California 95014;
- Suhas H. Patil having a mailing address of F-202, Wonder City,, Katraj-Dehuroad Bypass, Katraj, Pune-411046, INDIA;
- Sujit Siddheshwar Chivate having a mailing address of 19/B, Abasaheb Raikar Nagar, Dhareshwar Hsg. Soci. Flat No-17. Dhayari, Pune-411041, INDIA.

The Assignors invented one or more certain inventions (the "Invention(s)") described in an application for Letters Patent of the United States titled TISSUE OBJECT-BASED MACHINE LEARNING SYSTEM FOR AUTOMATED SCORING OF DIGITAL WHOLE SLIDES, and filed on March 15, 2013 as U.S. Application No. 61/802,239 (the "Application").

Ventana Medical Systems, Inc., a Corporation of Delaware having its principal place of business at 1910 E. Innovation Park Drive, Tucson, Arizona 85755 (the "Assignee"), desire to acquire the entire right, title and interest in and to the Invention(s) and the Application, and in and to any patents (collectively, "Patents") that may be granted for the Invention(s) in the United States or in any foreign countries.

For valuable consideration, the receipt and sufficiency of which Assignors acknowledge, Assignors hereby sell, assign, and transfer to Assignee, its successors,

Title: TISSUE OBJECT-BASED MACHINE LEARNING SYSTEM FOR AUTOMATED SCORING OF DIGITAL WHOLE SLIDES U.S. Application No. 61/802,239 79687-8030.US00/LEGAL26626948.1

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legal representatives and assigns, the entire right, title and interest in and to: the Invention(s), the Application, and any Patents; any divisions, continuations, and continuations-in-part of the Application and any other application claiming priority rights from the Application; any reissues, reexaminations, or extensions of any and all Patents; the right to file foreign applications directly in the name of Assignee; and the right to claim priority rights deriving from the Application (collectively, the "Rights"). Assignors warrant that Assignors own the Rights, and that the Rights are unencumbered. Assignors also agree to not sign any writing or do any act conflicting with this assignment, and, without further compensation, sign all documents and do such additional acts as Assignee deem necessary or desirable to: perfect Assignee's enjoyment of the Rights; conduct proceedings regarding the Rights, including any litigation or interference proceedings; or perfect or defend title to the Rights. Assignors request the Commissioner of Patents to issue any Patent of the United States that may be issued on the Invention(s) to Assignee. This Assignment may be executed in counterparts.

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Title: TISSUE OBJECT-BASED MACHINE LEARNING SYSTEM FOR AUTOMATED SCORING OF DIGITAL WHOLE SLIDES. U.S. Application No. 61/802,239 79687-8030.US00/LEGAL26626948.1

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For Ventana Medical Systems, Inc.:

Date: <u>4 - Sຊະຊດເຮ</u>

Signature

Authorized Signer

Authorized Signer – Printed Name

Se Parent + Transmer Counse L.
Authorized Signer – Title

Title: TISSUE OBJECT-BASED MACHINE LEARNING SYSTEM FOR AUTOMATED SCORING OF DIGITAL WHOLE SLIDES U.S. Application No. 61/802,239 79687-8030.US00/LEGAL26626948.1

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		,	Srinivas	Chukka
Date: Aug	wt 14th 2013	3		>
United States of Ame	erica)		
State of	CANEDWA	SS.:		
County of	NOT)		
On this	day of Malage	\$	2013	, before me
personally came	Srinivas Chukk	a. ,	to me known	to be the individual
described in and who	executed the forego	ing instrum	ent, and ackn	owledged execution
of the same.	•		8	
		Notary I	Publik /	
1 2000	CATHY M. WONG			
5/24/3	COMM. #1888578 2 Notary Public - California 3			
Z (Warter)	Santa Clara County Comm. Expires June 4, 2014		J.ii	
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Title: TISSUE OBJECT-BASED MACHINE LEARNING SYSTEM FOR AUTOMATED SCORING OF DIGITAL WHOLE SLIDES U.S. Application No. 61/802,239 79687-8030,US00/LEGAL26626948.1

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	executed the foregoing instru	iment, and acknowledged execution
of the same.		Carra Carra
Some Committee Street		ry Public
Nota Si	ATHY M. WONG DMM, #1888578 ITY Public - California So anta Clara County ITM Expires June 4, 2014	

Title: TISSUE OBJECT-BASED MACHINE LEARNING SYSTEM FOR AUTOMATED SCORING OF DIGITAL WHOLE SLIDES U.S. Application No. 61/802,239 79687-8030.US00/LEGAL26626948.1

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	Anindya Sarkaz
	Anindya Sarkar
Date: Aufust 1415 2013	
United States of America)	
State of <u>VALATRAMA</u>) ss	S.C
County of <u>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</u>	
On this day ofAviation	, 262, before me
	, to me known to be the individual
described in and who executed the foregoing of the same.	instrument, and acknowledged execution
Of the Same.	
	Notary Public
CATHY M. WONG COMM. #1888578 Notary Public - California Santa Clara County My Comm. Expires June 4, 2014	

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Title: TISSUE OBJECT-BASED MACHINE LEARNING SYSTEM FOR AUTOMATED SCORING OF DIGITAL WHOLE SLIDES U.S. Application No. 61/802,239 79687-8030.US00/LEGAL26626948.1

Date: 8/14	4/2013			,
United States of Amo	erica)			
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County of	N. (M.)			
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of the same.	•	•	•	
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Title: TISSUE OBJECT-BASED MACHINE LEARNING SYSTEM FOR AUTOMATED SCORING OF DIGITAL WHOLE SLIDES U.S. Application No. 61/802,239 79687-8030.US00/LEGAL26626948.1

	Sharpatil
•	Suhas H. Patil
Date: 23 August, 2013 .	
United States of America State of Maharashtra) ss. County of INDIA	
On this 23 rd day of August personally came Suhas H. Patil described in and who executed the foregoing i of the same.	, 2013, before me , to me known to be the individual nstrument, and acknowledged execution
•	Notary Public 🕝 🔿
PRINCE SOLUTION OF	PRADEEP J. DESHMUKIN 1812 NOTARY GOVI OF NOIA PUNE DISTRICT
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PATENT REEL: 043036 FRAME: 0930

	Sujit Siddheshwar Chivate
Date: 23 August 2013	<u>s</u>
United States of America State of Maharashtro County of エルショム・) (3) ss.:
personally came Sujit Siddhes	Agいった 2013 , before me shwar Chivate , to me known to be the individual foregoing instrument, and acknowledged execution
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PATENT REEL: 043036 FRAME: 0931

RECORDED: 07/18/2017