PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT6949590

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
LEICA MICROSYSTEMS INC.	07/09/2021

RECEIVING PARTY DATA

Name:	LEICA MICROSYSTEMS CMS GMBH
Street Address:	ERNST-LEITZ-STRASSE 17-37
City:	WETZLAR
State/Country:	GERMANY
Postal Code:	35578

PROPERTY NUMBERS Total: 48

Property Type	Number
Patent Number:	6456741
Patent Number:	6463175
Patent Number:	6507675
Patent Number:	6678404
Patent Number:	6829382
Patent Number:	6859550
Patent Number:	6941288
Patent Number:	7031948
Patent Number:	7076093
Patent Number:	7096207
Patent Number:	7139764
Patent Number:	7203360
Patent Number:	7233931
Patent Number:	7263509
Patent Number:	7293000
Patent Number:	7430320
Patent Number:	7466872
Patent Number:	7574454
Patent Number:	7580556
Patent Number:	7697755

Property Type	Number
Patent Number:	7813580
Patent Number:	7849024
Patent Number:	7856136
Patent Number:	7974456
Patent Number:	7974464
Patent Number:	8014590
Patent Number:	8045783
Patent Number:	9122951
Patent Number:	9123120
Patent Number:	9152884
Patent Number:	9173909
Patent Number:	9196038
Patent Number:	9286681
Patent Number:	10691978
Patent Number:	10719780
Patent Number:	10769432
Patent Number:	10891523
Application Number:	15609000
Application Number:	16010597
Application Number:	16164672
Application Number:	16416115
Application Number:	16435430
Application Number:	16702294
Application Number:	16990828
Application Number:	16990848
Application Number:	16894708
Application Number:	17000174
PCT Number:	US2021035066

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	LMS

NAME OF SUBMITTER:	YONG BEOM HWANG
SIGNATURE:	/Yong Beom Hwang/
DATE SIGNED:	10/04/2021

Total Attachments: 9
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PATENT ASSIGNMENT AGREEMENT

This PATENT ASSIGNMENT AGREEMENT (this "Patent Assignment") dated as of July 9, 2021, is made by Leica Microsystems Inc., a Delaware corporation ("Assignor"), in favor of Leica Microsystems CMS GmbH, a German limited liability company ("Assignee"). Capitalized terms used and not otherwise defined herein shall have the meanings ascribed to them in the Intellectual Property Transfer Agreement, dated as of the date hereof (the "Purchase Agreement"), by and among Assignor and Assignee.

WHEREAS, Assignor is the owner of the entire right, title and interest in and to the Patents and Patent Applications (the "Patents") listed on the attached Schedule A and the inventions claimed therein (the "Inventions"); and

WHEREAS, pursuant to the Purchase Agreement, Assignor has sold, assigned, conveyed, transferred and delivered to Assignee among other assets, the Inventions, Patents, and all documents and things relating to the conception, reduction to practice and/or practice of the Invention (the "Related Documents") and has agreed to execute and deliver this Patent Assignment for recording with the United States Patent and Trademark Office and corresponding entities or agencies in any applicable jurisdictions.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree as follows:

1.   Assignment. Assignor hereby irrevocably sells, assigns, convey, transfers and delivers to Assignee, and Assignee does hereby accept, all of Assignor's worldwide right, title and interest in and to the following:

(a)   the Inventions and Related Documents in the United States and its territorial possessions and in all foreign countries, and the entire right, title and interest in and to the Patents and any and all Letters Patent which may be granted therefor in the United States and its territorial possession and in any and all foreign countries and in and to any and all divisions, continuations, substitutions, renewals, re-examination, extension and reissues thereof;

(b)   all rights of any kind whatsoever of Assignor accruing under the Inventions and Assignments provided by applicable Law of any jurisdiction, by international treaties and conventions, and otherwise throughout the world;

(c)   any and all royalties, fees, income, payments, and other proceeds now or hereafter due or payable with respect to any of the Inventions and Assignments; and

(d)   any and all claims and causes of action with respect to any of the Inventions and Assignments, whether accruing before, on, or after the date hereof, including all rights to and claims for damages, restitution, and injunctive and other legal and equitable relief for past, present, and future infringement, dilution, misappropriation, violation, misuse,

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breach, or default, with the right but no obligation to sue for such legal and equitable relief and to collect, or otherwise recover, any such damages.

2. Recordation and Further Actions. Assignor hereby authorizes the Patent Office Officials in the United States Patent and Trademark Office and the officials of corresponding entities or agencies in any applicable jurisdictions to record and register this Patent Assignment upon request by Assignee. Following the date hereof, upon Assignee's reasonable request, and at Assignee's sole cost and expense, Assignor shall take such steps and actions, and provide such cooperation and assistance to Assignee and its successors, assigns, and legal representatives, including the execution and delivery of any affidavits, declarations, oaths, exhibits, assignments, powers of attorney, or other documents, as may be reasonably necessary to effect, evidence, or perfect the assignment of the Patents to Assignee, or any assignee or successor thereto.

3. Terms of the Purchase Agreement. The parties hereto acknowledge and agree that this Patent Assignment is entered into pursuant to the Purchase Agreement, to which reference is made for a further statement of the rights and obligations of Assignor and Assignee with respect to the Inventions and Patents. The representations, warranties, covenants, agreements, and indemnities contained in the Purchase Agreement shall not be superseded, modified, replaced, amended, changed, rescinded, waived, exceeded, expanded, enlarged or in any way affected hereby but shall remain in full force and effect to the full extent provided therein. In the event of any conflict or inconsistency between the terms of the Purchase Agreement and the terms hereof, the terms of the Purchase Agreement shall govern.

4. Counterparts. This Patent Assignment may be executed in counterparts, each of which shall be deemed an original, but all of which, together, shall constitute one and the same instrument. A copy transmitted via e-mail as a portable document format (.pdf) of this Patent Assignment, bearing the signature of any party hereto shall be deemed to be of the same legal force and effect as an original of this Patent Assignment bearing such signature(s) as originally written of such one or more parties hereto.

5. Successors and Assigns. This Patent Assignment shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns.

6. Governing Law. The validity, interpretation and effect of this Patent Assignment shall be governed exclusively by the Laws of the State of Delaware, excluding the "conflict of laws" rules thereof.

[Signature Page Follows]

IN WITNESS WHEREOF, the parties have duly executed and delivered this Patent Assignment as of the date first written above.

ASSIGNOR:

Leica Microsystems Inc.

By: FRANK T. MCFADEN

Name: Frank McFaden

Title: Vice President & Treasurer

ASSIGNEE:

Leica Microsystems CMS GmbH

By: _____

Name: Melanie Hammerschmidt-Broman

Title: Director

By: _____

Name: Markus Lusser

Title: Director

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IN WITNESS WHEREOF, the parties have duly executed and delivered this Patent Assignment as of the date first written above.
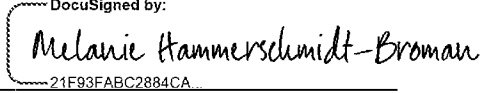
<u>**ASSIGNOR:**</u>

Leica Microsystems Inc.

By: _____

Name: Frank McFaden

Title: Vice President & Treasurer

<u>**ASSIGNEE:**</u>

Leica Microsystems CMS GmbH

By: _____

Name: Melanie Hammerschmidt-Broman

Title: Director

By: _____

Name: Markus Lusser

Title: Director

IN WITNESS WHEREOF, the parties have duly executed and delivered this Patent Assignment as of the date first written above.

ASSIGNOR:

Leica Microsystems Inc.

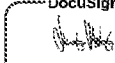By: _____

Name: Frank McFaden

Title: Vice President & Treasurer

ASSIGNEE:

Leica Microsystems CMS GmbH

By: _____

Name: Melanie Hammerschmidt-Broman

Title: Director

By: _____
DocuSigned by:
99651CB6351D43C

Name: Markus Lusser

Title: Director

**PATENT
REEL: 057697 FRAME: 0447**

SCHEDULE A

Assigned Inventions and Patents

US Patent No.	Patent title	Filing or Reg. No.	Jurisdiction	Date of Filing
6,456,741	Structure-guided image measurement method	09/739,084	United States	December 15, 2000
6,463,175	Structure-guided image processing and image feature enhancement	09/738,846	United States	December 15, 2000
6,507,675	Structure-guided automatic learning for image feature enhancement	09/815,466	United States	March 23, 2001
6,678,404	Automatic referencing for computer vision applications	09/703,018	United States	31-Oct-00
6,829,382	Structure-guided automatic alignment for image processing	09/882,734	United States	13-Jun-01
6,859,550	Robust method for image feature estimation	09/871,991	United States	31-May-01
6,941,288	Online learning method in a decision system	10/118,553	United States	8-Apr-02
7,031,948	Regulation of hierarchic decisions in intelligent systems	09/972,057	United States	5-Oct-01
7,076,093	Structure-guided image inspection	10/247,723	United States	16-Sep-02
7,096,207	Accelerated learning in machine vision using artificially implanted defects	10/104,647	United States	22-Mar-02
7,139,764	Dynamic learning and knowledge representation for data mining	10/609,490	United States	25-Jun-03
7,203,360	Learnable object segmentation	10/410,063	United States	9-Apr-03
7,233,931	Feature regulation for hierarchical decision learning	10/746,169	United States	26-Dec-03
7,263,509	Intelligent spatial reasoning	10/411,437	United States	9-Apr-03
7,293,000	Information integration method for decision regulation in hierarchic decision systems	10/081,441	United States	22-Feb-02

US Patent No.	Patent title	Filing or Reg. No.	Jurisdiction	Date of Filing
7,430,320	Region-guided boundary refinement method	10/998,282	United States	15-Nov-04
7,466,872	Object based boundary refinement method	11/165,561	United States	20-Jun-05
7,574,454	Dynamic learning and knowledge representation for data mining	11/454,277	United States	16-Jun-06
7,580,556	Image region partitioning using pre-labeled regions	10/767,530	United States	26-Jan-04
7,697,755	Method for robust analysis of biological activity in microscopy images	10/952,579	United States	29-Sep-04
7,813,580	Method for adaptive image region partition and morphologic processing	11/973,055	United States	4-Oct-07
7,849,024	Imaging system for producing recipes using an integrated human-computer interface (HCI) for image recognition, and learning algorithms	11/506,081	United States	16-Aug-06
7,856,136	Analysis of patterns among objects of a plurality of classes	10/828,629	United States	14-Apr-04
7,974,456	Spatial-temporal regulation method for robust model estimation	11/516,351	United States	5-Sep-06
7,974,464	Method of directed pattern enhancement for flexible recognition	12/587,157	United States	2-Oct-09
8,014,590	Method of directed pattern enhancement **for** flexible recognition	11/301,292	United States	7-Dec-05
8,045,783	Method for moving cell detection from temporal image sequence model estimation	11/595,611	United States	9-Nov-06

US Patent No.	Patent title	Filing or Reg. No.	Jurisdiction	Date of Filing
9,122,951	Teachable object contour mapping for biology image region partition	12/925,874	United States	1-Nov-10
9,123,120	Progressive decision for cellular process selection	13/573,136	United States	24-Aug-12
9,152,884	Teachable pattern scoring method	13/507,115	United States	5-Jun-12
9,173,909	Image guided protocol for cell generation	13/901,553	United States	23-May-13
9,196,038	Recipe based method for time-lapse image analysis	14/222,657	United States	23-Mar-14
9,286,681	Edit guided processing method for time-lapse image analysis	14/297,103	United States	5-Jun-14
10,691,978	Optimal and efficient machine learning method for deep semantic segmentation	16/010,593	United States	18-Jun-18
10,719,780	Efficient machine learning method	15/475,611	United States	31-Mar-17
10,769,432	Automated parameterization image pattern recognition method	16/156,814	United States	10-Oct-18
10,891,523	Optimal and efficient machine learning method for deep semantic segmentation	16/851,119	United States	17-Apr-20
Pending	Prediction guided sequential data learning method	15/609000	United States	30-May-17
Pending	Robust methods for deep image transformation, integration and prediction	16/010597	United States	18-Jun-18

US Patent No.	Patent title	Filing or Reg. No.	Jurisdiction	Date of Filing
Pending	Automated hyper-parameterization for image-based deep model learning	16/164672	United States	18-Oct-18
Pending	Deep model matching methods for image transformation	16/416115	United States	17-May-19
Pending	Artifact regulation methods in deep model training for image transformation.	16/435430	United States	7-Jun-19
Pending	Domain matching methods for Transportable imaging applications	16/702294	United States	3-Dec-19
Pending	Robust methods for deep image transformation, integration and prediction	16/990828	United States	18-Jun-18
Pending	Robust methods for deep image transformation, integration and prediction	16/990848	United States	18-Jun-18
Pending	Image and data analytics model compatibility regulation methods	16/894708	United States	5-Jun-20
Pending	Data processing management methods for imaging applications	17/000174	United States	21-Aug-20
Pending	Image and data analytics model compatibility regulation methods	PCT/US21/35066	International	31-May-21