

PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT5958444

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
ELIZABETH K. COLE	01/12/2020
SHREYAS S. VASANAWALA	01/12/2020
FRANK ONG	01/12/2020
JOHN M. PAULY	01/12/2020
RECEIVING PARTY DATA	
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State/Country:	CALIFORNIA
Postal Code:	94305-2038
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	16740655
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<i>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.</i>	
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ATTORNEY DOCKET NUMBER:	S19-464/US
NAME OF SUBMITTER:	THOMAS J. MCFARLANE
SIGNATURE:	/Thomas J. McFarlane/
DATE SIGNED:	02/12/2020
Total Attachments: 4	

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PATENT

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ASSIGNMENT OF INVENTION AND PATENT

This Assignment of Invention and Patent (the "Assignment") is made and effective as of **January 12, 2020**, by and between **Elizabeth K. Cole**, an individual residing in **Stanford, CA, US**, (the "Assignor") and **The Board of Trustees of the Leland Stanford Junior University**, an entity whose address is **Office of the General Counsel, Building 170, 3rd Flr, Main Quad PO Box 20386, Stanford, CA 94305-2038, USA** (the "Assignee").

1) For good and valuable consideration, the receipt of which is hereby acknowledged, Assignor hereby sells, assigns and transfers to Assignee and the successors, assigns, and legal representatives of Assignee, all of its right, title and interest in and to (i) the invention or inventions described in any US patent application filed under case reference **S19-464** relating to **MRI image reconstruction from undersampled data using adversarially trained generative neural network** and listing the above named person as an inventor (the "Application") naming Assignor as an inventor, (ii) any and all patent applications (whether provisional or non-provisional) relating to said invention(s), including all continuations, continuations-in-part, divisions, substitutes, reissues or renewals thereof, in any and all countries, (iii) any and all patents relating to such invention(s) in any and all countries that may be granted on any such application(s), including all reissues or extensions of any such patents and (iv) any and all domestic and foreign rights of priority resulting from the filing of the Application.

2) Assignor hereby agrees that no assignment, sale, agreement or encumbrance has been or will be made or entered into by Assignor which would conflict with this Assignment. Assignor represents and warrants to Assignee that at the time of the execution and delivery of this Assignment, Assignor solely owns (or jointly owns, if the invention(s) were jointly made) the entire right, title and interest in and to said invention(s).

3) Assignor agrees that Assignee may apply for foreign patents relating to said invention(s) and irrevocably authorizes Assignee and grants Assignee the right to do so.

4) Assignor agrees, on request and without further consideration, but at the expense of Assignee, to sign all lawful papers, make all rightful oaths, and give any required testimony in any legal proceedings relating to said invention(s), and to generally aid Assignee, or its successors or assigns to obtain and enforce patent protection for said invention(s) in any and all countries.

5) Assignor authorizes and requests any official whose duty it is to issue patents to issue any patent on said invention(s) to Assignee, as fully and entirely as the same would have been held by Assignor had this assignment and sale not been made.

6) This Assignment shall bind and inure to the benefit of the successors, assigns and personal representatives of the respective parties.

Assignor has executed this Assignment as of the Effective Date of **January 12, 2020**.

Signature: *Elizabeth K. Cole*
Assignor: **Elizabeth K. Cole**

Lumen Ref.: S19-464/US
PID: 27156 IID: 7020

ASSIGNMENT OF INVENTION AND PATENT

This Assignment of Invention and Patent (the "Assignment") is made and effective as of **January 12, 2020**, by and between **Frank Ong**, an individual residing in **Los Altos, CA, US**, (the "Assignor") and **The Board of Trustees of the Leland Stanford Junior University**, an entity whose address is **Office of the General Counsel, BLDG 170, 3rd FL, Main Quad PO Box 20386, Stanford, CA 94305-2038, USA** (the "Assignee").

1) For good and valuable consideration, the receipt of which is hereby acknowledged, Assignor hereby sells, assigns and transfers to Assignee and the successors, assigns, and legal representatives of Assignee, all of its right, title and interest in and to (i) the invention or inventions described in US patent application **16/740655** filed **1/13/2020** entitled **MRI image reconstruction from undersampled data using adversarially trained generative neural network** (the "Application") naming Assignor as an inventor, (ii) any and all patent applications (whether provisional or non-provisional) relating to said invention(s), including all continuations, continuations-in-part, divisions, substitutes, reissues or renewals thereof, in any and all countries, (iii) any and all patents relating to such invention(s) in any and all countries that may be granted on any such application(s), including all reissues or extensions of any such patents and (iv) any and all domestic and foreign rights of priority resulting from the filing of the Application.

2) Assignor hereby agrees that no assignment, sale, agreement or encumbrance has been or will be made or entered into by Assignor which would conflict with this Assignment. Assignor represents and warrants to Assignee that at the time of the execution and delivery of this Assignment, Assignor solely owns (or jointly owns, if the invention(s) were jointly made) the entire right, title and interest in and to said invention(s).

3) Assignor agrees that Assignee may apply for foreign patents relating to said invention(s) and irrevocably authorizes Assignee and grants Assignee the right to do so.

4) Assignor agrees, on request and without further consideration, but at the expense of Assignee, to sign all lawful papers, make all rightful oaths, and give any required testimony in any legal proceedings relating to said invention(s), and to generally aid Assignee, or its successors or assigns to obtain and enforce patent protection for said invention(s) in any and all countries.

5) Assignor authorizes and requests any official whose duty it is to issue patents to issue any patent on said invention(s) to Assignee, as fully and entirely as the same would have been held by Assignor had this assignment and sale not been made.

6) This Assignment shall bind and inure to the benefit of the successors, assigns and personal representatives of the respective parties.

Assignor has executed this Assignment as of the Effective Date of **January 12, 2020**.

Signature: _____

Assignor: **Frank Ong**



Lumen Ref.: S19-464/US
PID: 27157 IID: 7021

ASSIGNMENT OF INVENTION AND PATENT

This Assignment of Invention and Patent (the "Assignment") is made and effective as of **January 12, 2020**, by and between **Shreyas S. Vasanawala**, an individual residing in **Stanford, CA, US**, (the "Assignor") and **The Board of Trustees of the Leland Stanford Junior University**, an entity whose address is **Office of the General Counsel, BLDG 170, 3rd FL, Main Quad PO Box 20386, Stanford, CA 94305-2038, USA** (the "Assignee").

1) For good and valuable consideration, the receipt of which is hereby acknowledged, Assignor hereby sells, assigns and transfers to Assignee and the successors, assigns, and legal representatives of Assignee, all of its right, title and interest in and to (i) the invention or inventions described in US patent application **16/740655** filed **1/13/2020** entitled **MRI image reconstruction from undersampled data using adversarially trained generative neural network** (the "Application") naming Assignor as an inventor, (ii) any and all patent applications (whether provisional or non-provisional) relating to said invention(s), including all continuations, continuations-in-part, divisions, substitutes, reissues or renewals thereof, in any and all countries, (iii) any and all patents relating to such invention(s) in any and all countries that may be granted on any such application(s), including all reissues or extensions of any such patents and (iv) any and all domestic and foreign rights of priority resulting from the filing of the Application.

2) Assignor hereby agrees that no assignment, sale, agreement or encumbrance has been or will be made or entered into by Assignor which would conflict with this Assignment. Assignor represents and warrants to Assignee that at the time of the execution and delivery of this Assignment, Assignor solely owns (or jointly owns, if the invention(s) were jointly made) the entire right, title and interest in and to said invention(s).

3) Assignor agrees that Assignee may apply for foreign patents relating to said invention(s) and irrevocably authorizes Assignee and grants Assignee the right to do so.

4) Assignor agrees, on request and without further consideration, but at the expense of Assignee, to sign all lawful papers, make all rightful oaths, and give any required testimony in any legal proceedings relating to said invention(s), and to generally aid Assignee, or its successors or assigns to obtain and enforce patent protection for said invention(s) in any and all countries.

5) Assignor authorizes and requests any official whose duty it is to issue patents to issue any patent on said invention(s) to Assignee, as fully and entirely as the same would have been held by Assignor had this assignment and sale not been made.

6) This Assignment shall bind and inure to the benefit of the successors, assigns and personal representatives of the respective parties.

Assignor has executed this Assignment as of the Effective Date of **January 12, 2020**.

Signature: 
Assignor: **Shreyas S. Vasanawala**

Lumen Ref.: S19-464/US
PID: 27157 IID: 4406

ASSIGNMENT OF INVENTION AND PATENT

This Assignment of Invention and Patent (the "Assignment") is made and effective as of **January 12, 2020**, by and between **John M. Pauly**, an individual residing in **Stanford, CA, US**, (the "Assignor") and **The Board of Trustees of the Leland Stanford Junior University**, an entity whose address is **Office of the General Counsel, BLDG 170, 3rd FL, Main Quad PO Box 20386, Stanford, CA 94305-2038, USA** (the "Assignee").

1) For good and valuable consideration, the receipt of which is hereby acknowledged, Assignor hereby sells, assigns and transfers to Assignee and the successors, assigns, and legal representatives of Assignee, all of its right, title and interest in and to (i) the invention or inventions described in US patent application **16/740655** filed **1/13/2020** entitled **MRI image reconstruction from undersampled data using adversarially trained generative neural network** (the "Application") naming Assignor as an inventor, (ii) any and all patent applications (whether provisional or non-provisional) relating to said invention(s), including all continuations, continuations-in-part, divisions, substitutes, reissues or renewals thereof, in any and all countries, (iii) any and all patents relating to such invention(s) in any and all countries that may be granted on any such application(s), including all reissues or extensions of any such patents and (iv) any and all domestic and foreign rights of priority resulting from the filing of the Application.

2) Assignor hereby agrees that no assignment, sale, agreement or encumbrance has been or will be made or entered into by Assignor which would conflict with this Assignment. Assignor represents and warrants to Assignee that at the time of the execution and delivery of this Assignment, Assignor solely owns (or jointly owns, if the invention(s) were jointly made) the entire right, title and interest in and to said invention(s).

3) Assignor agrees that Assignee may apply for foreign patents relating to said invention(s) and irrevocably authorizes Assignee and grants Assignee the right to do so.

4) Assignor agrees, on request and without further consideration, but at the expense of Assignee, to sign all lawful papers, make all rightful oaths, and give any required testimony in any legal proceedings relating to said invention(s), and to generally aid Assignee, or its successors or assigns to obtain and enforce patent protection for said invention(s) in any and all countries.

5) Assignor authorizes and requests any official whose duty it is to issue patents to issue any patent on said invention(s) to Assignee, as fully and entirely as the same would have been held by Assignor had this assignment and sale not been made.

6) This Assignment shall bind and inure to the benefit of the successors, assigns and personal representatives of the respective parties.

Assignor has executed this Assignment as of the Effective Date of **January 12, 2020**.

Signature: 
Assignor: **John M. Pauly**

Lumen Ref.: S19-464/US
PID: 27157 IID: 633