

## PATENT ASSIGNMENT COVER SHEET

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Stylesheet Version v1.2

EPAS ID: PAT6463310

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
SHANHU LI	12/17/2020
GUOYU LIN	12/19/2020
JEFFREY R. BEISHEIM	12/21/2020
RAJANIKANTH JAYASEELAN	12/15/2020
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	ANSYS, INC.
<b>Street Address:</b>	2600 ANSYS DRIVE
<b>City:</b>	CANONSBURG
<b>State/Country:</b>	PENNSYLVANIA
<b>Postal Code:</b>	15317
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	17130019
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(212)755-7306
<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>	
<b>Phone:</b>	412-394-9524
<b>Email:</b>	japarker@jonesday.com, erosenfelder@jonesday.com
<b>Correspondent Name:</b>	JONES DAY FOR ANSYS
<b>Address Line 1:</b>	901 LAKESIDE AVENUE
<b>Address Line 2:</b>	NORTH POINT
<b>Address Line 4:</b>	CLEVELAND, OHIO 44114
<b>ATTORNEY DOCKET NUMBER:</b>	406672-625315
<b>NAME OF SUBMITTER:</b>	MATTHEW W. JOHNSON
<b>SIGNATURE:</b>	/Matthew W. Johnson/
<b>DATE SIGNED:</b>	12/22/2020
<b>Total Attachments: 6</b>	
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ASSIGNMENT

WHEREAS, WE, SHANHU LI, having a mailing address of 2600 Ansys Drive, Canonsburg, PA, 15317 residing at 1876 Pioneer Dr., Sewickley, PA, USA, 15143, GUOYU LIN, having a mailing address of 2600 Ansys Drive, Canonsburg, PA, 15317 residing at \_\_\_\_\_, JEFF BEISHEIM, having a mailing address of 2600 Ansys Drive, Canonsburg, PA, 15317 residing at \_\_\_\_\_ and RAJANIKANTH JAYASEELAN, having a mailing address of 2600 Ansys Drive, Canonsburg, PA, 15317 residing at \_\_\_\_\_, ASSIGNORS, are the inventors of the invention in SYSTEMS AND METHODS FOR DISTRIBUTED FRACTURE SIMULATION for which an application for a Patent of the United States has been filed.

- which is executed on  even date herewith or  [DATE]
- which is identified by Jones Day docket no. 406672-625315
- which was filed on, Application No.
- We hereby authorize and request attorney(s) Matthew Johnson at Jones Day, to insert here in parentheses (Application number 17/130,019, filed 22 December 2020) the filing date and application number of said application when known.

and WHEREAS, ANSYS, INC., a corporation organized and existing under the laws of the state of DELAWARE, and having an office for the transaction of business at 2600 Ansys Drive, Canonsburg, PA, 15317, US, ASSIGNEE, is desirous of obtaining our entire right, title and interest in, to and under the said invention and the said application:

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, we, the said ASSIGNORS, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, our entire right, title and interest in, to and under the said invention, and the said United States application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof; and all right to sue for infringement including past infringement.

AND WE HEREBY authorize and request the Commissioner for Patents and any Official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant and agree that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.

AND WE HEREBY further covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.

IN TESTIMONY WHEREOF, We hereunto set our hands and seals the day and year set opposite our respective signatures.

Date 12/17, 2020 /Shanhu LI/ L.S.  
SHANHU LI

Date \_\_\_\_\_, 2020 \_\_\_\_\_ L.S.  
GUOYU LIN

Date \_\_\_\_\_, 2020 \_\_\_\_\_ L.S.  
JEFF BEISHEIM

U.S. Application No. 17/130,019

Date \_\_\_\_\_, 2020

RAJANIKANTH JAYASEELAN

L.S.

ASSIGNMENT

WHEREAS, WE, SHANHU LI, having a mailing address of 2600 Ansys Drive, Canonsburg, PA, 15317 residing at \_Pittsburgh, PA\_, GUOYU LIN, having a mailing address of 2600 Ansys Drive, Canonsburg, PA, 15317 residing at \_\_\_\_\_, JEFF BEISHEIM, having a mailing address of 2600 Ansys Drive, Canonsburg, PA, 15317 residing at \_\_\_\_\_ and RAJANIKANTH JAYASEELAN, having a mailing address of 2600 Ansys Drive, Canonsburg, PA, 15317 residing at \_\_\_\_\_, ASSIGNORS, are the inventors of the invention in SYSTEMS AND METHODS FOR DISTRIBUTED FRACTURE SIMULATION for which an application for a Patent of the United States has been filed.

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NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, we, the said ASSIGNORS, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, our entire right, title and interest in, to and under the said invention, and the said United States application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof; and all right to sue for infringement including past infringement.

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Date \_\_\_\_\_, 2020 \_\_\_\_\_ L.S.  
SHANHU LI

Date 12/19/2020 \_\_\_\_\_, 2020  \_\_\_\_\_ L.S.  
GUOYU LIN

Date \_\_\_\_\_, 2020 \_\_\_\_\_ L.S.  
JEFF BEISHEIM

Date \_\_\_\_\_, 2020 \_\_\_\_\_ L.S.  
RAJANIKANTH JAYASEELAN

## ASSIGNMENT

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NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, we, the said ASSIGNORS, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, our entire right, title and interest in, to and under the said invention, and the said United States application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof; and all right to sue for infringement including past infringement.

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IN TESTIMONY WHEREOF, We hereunto set our hands and seals the day and year set opposite our respective signatures.

Date \_\_\_\_\_, 2020 \_\_\_\_\_ L.S.  
SHANHU LI

Date \_\_\_\_\_, 2020 \_\_\_\_\_ L.S.  
GUOYU LIN

Date December 21<sup>st</sup>, 2020 \_\_\_\_\_ L.S.  
JEFFREY R/ BEISHEIM

Date \_\_\_\_\_, 2020

RAJANIKANTH JAYASEELAN

\_\_\_\_\_  
L.S.

ASSIGNMENT

WHEREAS, WE, SHANHUI LI, having a mailing address of 2600 Ansys Drive, Canonsburg, PA, 15317 residing at \_\_\_\_\_, GUOYU LIN, having a mailing address of 2600 Ansys Drive, Canonsburg, PA, 15317 residing at \_\_\_\_\_, JEFF BEISHEIM, having a mailing address of 2600 Ansys Drive, Canonsburg, PA, 15317 residing at \_\_\_\_\_ and RAJANIKANTH JAYASEELAN, having a mailing address of 2600 Ansys Drive, Canonsburg, PA, 15317 residing at Bridgeville, PA, USA, ASSIGNORS, are the inventors of the invention in SYSTEMS AND METHODS FOR DISTRIBUTED FRACTURE SIMULATION for which an application for a Patent of the United States has been filed.

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NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, we, the said ASSIGNORS, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, our entire right, title and interest in, to and under the said invention, and the said United States application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof, and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof; and all right to sue for infringement including past infringement.

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Date \_\_\_\_\_, 2020 \_\_\_\_\_ L.S.  
SHANHUI LI

Date \_\_\_\_\_, 2020 \_\_\_\_\_ L.S.  
GUOYU LIN

Date \_\_\_\_\_, 2020 \_\_\_\_\_ L.S.  
JEFF BEISHEIM

Date December 15, 2020 \_\_\_\_\_ L.S.  
RAJANIKANTH JAYASEELAN