

PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT4512022

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
LIZY K. JOHN	07/19/2017
JEE HO RYOO	07/18/2017
NAGENDRA GULUR	07/15/2017
RECEIVING PARTY DATA	
Name:	BOARD OF REGENTS, THE UNIVERSITY OF TEXAS SYSTEM
Street Address:	201 WEST 7TH STREET
City:	AUSTIN
State/Country:	TEXAS
Postal Code:	78701
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	15654828
CORRESPONDENCE DATA	
Fax Number:	(512)370-2850
<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>	
Phone:	512-370-2832
Email:	rvoigt@winstead.com
Correspondent Name:	WINSTEAD PC
Address Line 1:	P.O. BOX 131851
Address Line 4:	DALLAS, TEXAS 75313-1851
ATTORNEY DOCKET NUMBER:	22084-P165US
NAME OF SUBMITTER:	ROBERT A. VOIGT, JR.
SIGNATURE:	/Robert A. Voigt, Jr./
DATE SIGNED:	07/20/2017
Total Attachments: 15	
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ASSIGNMENT

WHEREAS, the undersigned inventor(s), hereinafter called the "Assignor", has invented a new and useful invention entitled:

**PROCESSOR USING A LEVEL 3 TRANSLATION LOOKASIDE BUFFER
IMPLEMENTED IN OFF-CHIP OR DIE-STACKED DYNAMIC RANDOM-ACCESS
MEMORY**

 X for which reference a full description is here made in an application for Letters Patent of the United States filed herewith.

 for which reference a full description is here made in an application for Letters Patent of the United States Serial No. filed .

WHEREAS, BOARD OF REGENTS, THE UNIVERSITY OF TEXAS SYSTEM, a Texas University, having a principal office and place of business at 201 West 7th Street, Austin, Texas 78701 (hereinafter called the "Assignee"), is desirous of acquiring the entire right, title and interest in and to said invention, the application above identified, and in, to and under Letters Patent which may be obtained for said invention, as hereinafter more fully set forth;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN, be it known that for valuable and legally sufficient consideration, the receipt of which by the Assignor from the Assignee is hereby acknowledged, the Assignor has sold, assigned and transferred, and by these presents does sell, assign and transfer unto the Assignee, its successors and assigns, the entire right, title and interest in and to the invention and the application herein above identified, and all Letters Patents that may issue for the said invention, and all divisions, reissues, substitutions, continuations, and extensions thereof, to have and to hold for the sole and exclusive use and benefit of the Assignee, its successors and assigns to the full end of the term for which any and all of said Letters Patents for the said invention may issue.

FURTHER, be it known that the Assignor has sold, assigned and transferred, and by these presents does sell, assign and transfer unto the Assignee, its successors and assigns, the entire foreign rights to the invention disclosed in said application, in all countries of the world, including the right to file applications and obtain patents under the terms of the International Convention for the Protection of Industrial Property, and of the European Patent Convention, and further agrees to execute any and all patent applications, assignments, affidavits, and any other papers in connection therewith necessary to perfect such patent rights.

And the Assignor does hereby covenant and agree, for himself and his legal representatives, that they will assist the Assignee in the prosecution of the application herein identified; in the making and prosecution of any other applications for Letters Patent that the Assignee may elect to make covering the invention herein identified, as herein before set forth, including any application for reissue, application for reexamination, application for foreign patent rights, or any proceeding in the United States Patent and Trademark Office affecting the invention, investing in the Assignee exclusive title in and to all such other applications and

Letters Patent; and in the prosecution of any interference which may arise involving said invention, or any application or Letters Patents herein contemplated; that they will promptly execute and deliver to the Assignee any and all additional papers and make all lawful oaths which may be requested by the Assignee to fully carry out the terms of this assignment; and further that they will communicate to Assignee, or to its successors, assigns, and legal representatives, any facts known respecting said invention, and at the expense of the Assignee, testify in any legal proceedings, and generally do everything possible to aid the Assignee, its successors, assigns and nominees to obtain and enforce proper patent protection for said invention in all countries.

And the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all Letters Patent to the Assignee in accordance with the terms of the assignment.

IN TESTIMONY WHEREOF, the Assignor has hereunto set his hands on the date indicated below.

LIZY K. JOHN

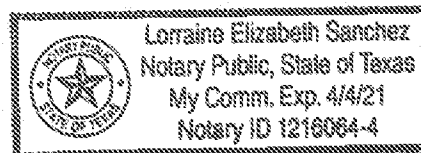
Date: 07/19/17

Lizy K. John

On July 19, 2017, before me, Lorraine E. Sanchez (print notary name) personally appeared Lizy K. John personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is(are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Lorraine E. Sanchez
SIGNATURE OF NOTARY



Notary Without Bond

JEE HO RYOO

Date: _____

On _____, 2017, before me, _____ (print notary name) personally appeared Jee Ho Ryoo personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is(are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

SIGNATURE OF NOTARY

NAGENDRA GULUR

Date: _____

On _____, 2017, before me, _____ (print notary name) personally appeared Nagendra Gulur personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is(are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

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NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN, be it known that for valuable and legally sufficient consideration, the receipt of which by the Assignor from the Assignee is hereby acknowledged, the Assignor has sold, assigned and transferred, and by these presents does sell, assign and transfer unto the Assignee, its successors and assigns, the entire right, title and interest in and to the invention and the application herein above identified, and all Letters Patents that may issue for the said invention, and all divisions, reissues, substitutions, continuations, and extensions thereof, to have and to hold for the sole and exclusive use and benefit of the Assignee, its successors and assigns to the full end of the term for which any and all of said Letters Patents for the said invention may issue.

FURTHER, be it known that the Assignor has sold, assigned and transferred, and by these presents does sell, assign and transfer unto the Assignee, its successors and assigns, the entire foreign rights to the invention disclosed in said application, in all countries of the world, including the right to file applications and obtain patents under the terms of the International Convention for the Protection of Industrial Property, and of the European Patent Convention, and further agrees to execute any and all patent applications, assignments, affidavits, and any other papers in connection therewith necessary to perfect such patent rights.

And the Assignor does hereby covenant and agree, for himself and his legal representatives, that they will assist the Assignee in the prosecution of the application herein identified; in the making and prosecution of any other applications for Letters Patent that the Assignee may elect to make covering the invention herein identified, as herein before set forth, including any application for reissue, application for reexamination, application for foreign patent rights, or any proceeding in the United States Patent and Trademark Office affecting the invention, investing in the Assignee exclusive title in and to all such other applications and

Letters Patent; and in the prosecution of any interference which may arise involving said invention, or any application or Letters Patents herein contemplated; that they will promptly execute and deliver to the Assignee any and all additional papers and make all lawful oaths which may be requested by the Assignee to fully carry out the terms of this assignment; and further that they will communicate to Assignee, or to its successors, assigns, and legal representatives, any facts known respecting said invention, and at the expense of the Assignee, testify in any legal proceedings, and generally do everything possible to aid the Assignee, its successors, assigns and nominees to obtain and enforce proper patent protection for said invention in all countries.

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IN TESTIMONY WHEREOF, the Assignor has hereunto set his hands on the date indicated below.

LIZY K. JOHN

Date: _____

On _____, 2017, before me, _____ (print notary name) personally appeared Lizy K. John personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is(are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

SIGNATURE OF NOTARY

JEE HO RYOO

Date: July 18, 2017

Jee Ho Ryoo

On July 18, 2017, before me, P. Kaur (print notary name) personally appeared Jee Ho Ryoo personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) (is) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in (his)/her/their authorized capacity(ies), and that by (his)/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

P. Kaur
SIGNATURE OF NOTARY



NAGENDRA GULUR

Date: _____

On _____, 2017, before me, _____ (print notary name) personally appeared Nagendra Gulur personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is(are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

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IN TESTIMONY WHEREOF, the Assignor has hereunto set his hands on the date indicated below.

LIZY K. JOHN

Date: _____

On _____, 2017, before me, _____ (print notary name) personally appeared Lizy K. John personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is(are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

SIGNATURE OF NOTARY

JEE HO RYOO

Date: _____

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WITNESS my hand and official seal.

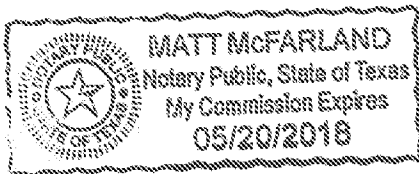
SIGNATURE OF NOTARY

NAGENDRA GULUR

Date: 7/15/2017

G. Gulur

On 7/15/17, 2017, before me, ~~Matt McFarland~~ ^{MMA} Matt McFarland (print notary name) personally appeared Nagendra Gulur personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is(are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.



WITNESS my hand and official seal.

[Signature]
SIGNATURE OF NOTARY