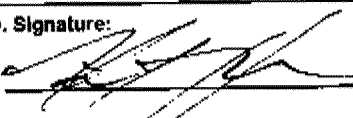


Form PTO-1595 (Rev. 03-11)
OMB No. 0851-0027 (exp. 03/31/2015)

U.S. DEPARTMENT OF COMMERCE
United States Patent and Trademark Office

RECORDATION FORM COVER SHEET PATENTS ONLY

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

<p>1. Name of conveying party(ies): Cyprian Emeka Uzoh (03/07/2012), Charles G. Woychik (03/07/2012), Terrence Caskey (03/01/2012), Belgacem Haba (01/17/2012). Additional name(s) of conveying party(ies) attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>2. Name and address of receiving party(ies) Name: <u>Invensas Corporation</u> Internal Address: _____ Street Address: _____ 2702 Orchard Parkway City: <u>San Jose</u> State: <u>California</u> Country: <u>United States of America</u> Zip: <u>95134</u> Additional name(s) & address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>3. Nature of conveyance/Execution Date(s): Execution Date(s): <u>in parentheses after inventor name</u> <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Change of Name <input type="checkbox"/> Security Agreement <input type="checkbox"/> Joint Research Agreement <input type="checkbox"/> Government Interest Assignment <input type="checkbox"/> Executive Order 9424, Confirmatory License <input type="checkbox"/> Other _____</p>	<p>4. Application or patent number(s): <input type="checkbox"/> This document is being filed together with a new application. A. Patent Application No.(s) <u>13/293,698</u> B. Patent No.(s) Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>5. Name and address to whom correspondence concerning document should be mailed: Name: <u>Michael T. Hages LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK, LLP</u> Internal Address: <u>Atty. Dkt.: TIPI 3.0-742 (TIPI,2212)</u> Street Address: <u>600 South Avenue West</u> City: <u>Westfield</u> State: <u>NJ</u> Zip: <u>07090</u> Phone Number: <u>908-654-5000</u> Fax Number: <u>908-654-7866</u> Email Address: <u>ataylor@ldlkm.com</u></p>	<p>6. Total number of applications and patents involved: 1</p> <p>7. Total fee (37 CFR 1.21(h) & 3.41) \$ <u>40.00</u> <input checked="" type="checkbox"/> Authorized to be charged to deposit account <input type="checkbox"/> Enclosed <input type="checkbox"/> None required (government interest not affecting title)</p>
<p>9. Signature:  _____ Signature <u>Michael T. Hages - 57,110</u> Name of Person Signing</p>	<p>8. Payment Information Deposit Account Number <u>12-1095</u> Authorized User Name <u>Michael T. Hages</u></p> <p style="text-align: right;">Date <u>September 28, 2012</u></p> <p>Total number of pages including cover sheet, attachments, and documents: 8</p>

CH \$40.00 121095 13293698

**RECORDATION FORM COVER SHEET (PTO-1595)
(supplemental sheet)**

Additional Conveying Party(ies)/Execution Date(s) (1. Continued):

Hiroaki Sato (08/30/2012), and Philip Damberg (03/07/2012)

Additional Assignees (2. Continued):

Assignee Name: _____

Internal Address: _____

Street Address: _____

City: _____ State: _____ Country: _____ Zip: _____

Assignee Name: _____

Internal Address: _____

Street Address: _____

City: _____ State: _____ Country: _____ Zip: _____

Assignee Name: _____

Internal Address: _____

Street Address: _____

City: _____ State: _____ Country: _____ Zip: _____

Additional Applications and/or Patents (4. Continued):

Additional Patent Application Numbers
4A. Continued:

Additional Patent Numbers
4B. Continued:

Additional numbers attached?

Yes

No

former FTO/SB/16 (8-00) Modified LDLK&M

ASSIGNMENT OF UTILITY APPLICATION	Docket Number (Optional) TIPI 3.0-742
--	--

Emelca cu 3/7/2012

Whereas, I, Cyprian Uzoh of c/o Invensas Corporation; 2702 Orchard Parkway; San Jose, California 95134 hereafter referred to as assignor, have with others invented certain new and useful improvements in HIGH STRENGTH THROUGH-SUBSTRATE VIAS for which an application for a United States Letters Patent was filed on November 10, 2011 Application Number 13/293,698 for which an application for a United States Letters Patent was executed by me on _____ and

Whereas, Invensas Corporation a corporation of Delaware herein referred to as "assignee" whose mailing address is 2702 Orchard Parkway; San Jose, California 95134 is desirous of acquiring the entire right, title and interest in the same;

NOW, THEREFORE, in consideration of the sum of one dollars (\$ 1.00), the receipt whereof is acknowledged, and other good and valuable consideration, I as assignor hereby sell, assign and set over to said assignee my entire right, title and interest for the United States of America and all other countries in and to said invention and the aforesaid utility patent application and all original, divisional, continuation, continuation-in-part, substitute or reissue applications and patents applied for or granted therefor in the United States of America and all other countries, for said invention, including without limitation all applications and patents for said invention claiming priority or benefit of the aforesaid utility application pursuant to any law or treaty, and including the right to claim such priority or benefit and the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all patents on said improvements or resulting therefrom to said assignee herein, as assignee of the entire interest therein; and the undersigned for me and my legal representatives, heirs and assigns do hereby agree and covenant without further remuneration, to execute and deliver all original, divisional, continuation, reissue and other applications for Letters Patent on said improvements and all assignments thereof to said assignee or its assigns, to communicate to said assignee or its representatives all facts known to the undersigned respecting said improvements, whenever requested, to testify in any interferences or other legal proceedings in which any of said applications or patents may become involved, to sign all lawful papers, make all rightful oaths, and to do generally everything necessary to aid assignee, its successors, assigns and nominees to obtain patent protection for said improvements in all countries, the expenses incident to said applications to be borne and paid by said assignee.

And I do hereby authorize my attorneys to insert on this deed the filing date and application number of said application when known.

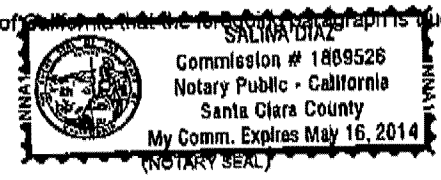
March 7, 2012 (Date) Cyprian E. Uzoh (Signature)

State of California) SS:
County of Santa Clara)

On 3/7/2012 before me, Salina Diaz, Notary Public personally appeared Cyprian Uzoh, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that ~~he~~^{she} executed the same in ~~his~~^{her} authorized capacity, and that by ~~his~~^{her} signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

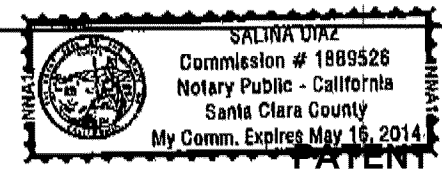
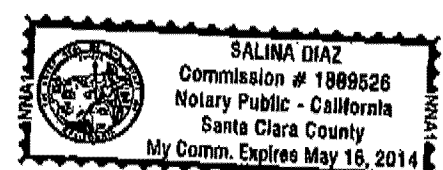
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraphs are true and correct.

WITNESS my hand and official seal
Salina Diaz
(Notary Public)



*Total of 5 forms are submitted.

1.D-527A



former PTO/SB/15 (8-00) Modified LDLKSM

ASSIGNMENT OF UTILITY APPLICATION	Docket Number (Optional) TIPI 3.0-742
--	---

Whereas, I, Charles G. Woychik of c/o Invensas Corporation; 2702 Orchard Parkway; San Jose, California 95134

hereafter referred to as assignor, have with others invented certain new and useful improvements in HIGH STRENGTH THROUGH-SUBSTRATE VIAS

- for which an application for a United States Letters Patent was filed on November 10, 2011
Application Number 13/293,698
- for which an application for a United States Letters Patent was executed by me on _____
and _____

Whereas, Invensas Corporation
a corporation of Delaware herein referred to as "assignee" whose mailing address is 2702 Orchard Parkway; San Jose, California 95134

is desirous of acquiring the entire right, title and interest in the same;

NOW, THEREFORE, in consideration of the sum of one dollars (\$ 1.00), the receipt whereof is acknowledged, and other good and valuable consideration, I as assignor hereby sell, assign and set over to said assignee my entire right, title and interest for the United States of America and all other countries in and to said invention and the aforesaid utility patent application and all original, divisional, continuation, continuation-in-part, substitute or reissue applications and patents applied for or granted therefor in the United States of America and all other countries, for said invention, including without limitation all applications and patents for said invention claiming priority or benefit of the aforesaid utility application pursuant to any law or treaty, and including the right to claim such priority or benefit and the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all patents on said improvements or resulting therefrom to said assignee herein, as assignee of the entire interest therein; and the undersigned for me and my legal representatives, heirs and assigns do hereby agree and covenant without further remuneration, to execute and deliver all original, divisional, continuation, reissue and other applications for Letters Patent on said improvements and all assignments thereof to said assignee or its assigns, to communicate to said assignee or its representatives all facts known to the undersigned respecting said improvements, wherever requested, to testify in any interferences or other legal proceedings in which any of said applications or patents may become involved, to sign all lawful papers, make all rightful oaths, and to do generally everything necessary to aid assignee, its successors, assigns and nominees to obtain patent protection for said improvements in all countries, the expenses incident to said applications to be borne and paid by said assignee.

And I do hereby authorize my attorneys to insert on this deed the filing date and application number of said application when known.

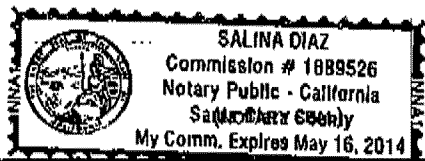
3-7-2012 (Date) Charles G. Woychik (Signature)

State of California) SS:
County of Santa Clara)

On 3/7/2012 before me, Salina Diaz, Notary Public personally appeared Charles G. Woychik, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that ~~he~~ she executed the same in ~~his~~ her authorized capacity, and that by ~~his~~ her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.
Salina Diaz
(Notary Public)



*Total of 5 forms are submitted.

former PTO/SB/15 (8-00) Modified LDLKGM

ASSIGNMENT OF UTILITY APPLICATION	Docket Number (Optional) TIPI 3.0-742
--	---

Whereas, I, Terrence Caskey of c/o Invensas Corporation; 2702 Orchard Parkway; San Jose, California 95134

hereafter referred to as assignor, have with others invented certain new and useful improvements in

HIGH STRENGTH THROUGH-SUBSTRATE VIAS

for which an application for a United States Letters Patent was filed on November 10, 2011

Application Number 13/293,698

for which an application for a United States Letters Patent was executed by me on _____ and _____

Whereas, Invensas Corporation a corporation of Delaware herein referred to as "assignee" whose mailing address is 2702 Orchard Parkway; San Jose, California 95134

is desirous of acquiring the entire right, title and interest in the same;

NOW, THEREFORE, in consideration of the sum of one dollars (\$ 1.00), the receipt whereof is acknowledged, and other good and valuable consideration, I as assignor hereby sell, assign and set over to said assignee my entire right, title and interest for the United States of America and all other countries in and to said invention and the aforesaid utility patent application and all original, divisional, continuation, continuation-in-part, substitute or reissue applications and patents applied for or granted therefor in the United States of America and all other countries, for said invention, including without limitation all applications and patents for said invention claiming priority or benefit of the aforesaid utility application pursuant to any law or treaty, and including the right to claim such priority or benefit and the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all patents on said improvements or resulting therefrom to said assignee herein, as assignee of the entire interest therein; and the undersigned for me and my legal representatives, heirs and assigns do hereby agree and covenant without further remuneration, to execute and deliver all original, divisional, continuation, reissue and other applications for Letters Patent on said improvements and all assignments thereof to said assignee or its assigns, to communicate to said assignee or its representatives all facts known to the undersigned respecting said improvements, whenever requested, to testify in any interferences or other legal proceedings in which any of said applications or patents may become involved, to sign all lawful papers, make all rightful oaths, and to do generally everything necessary to aid assignee, its successors, assigns and nominees to obtain patent protection for said improvements in all countries, the expenses incident to said applications to be borne and paid by said assignee.

And I do hereby authorize my attorneys to insert on this deed the filing date and application number of said application when known.

3/11/2012
(Date)

Terrence Caskey
(Signature)

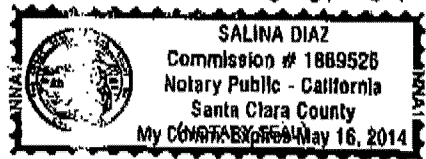
State of California) SS:
County of Santa Clara)

Salina Diaz, Notary Public

On 3/11/2012 before me, _____ personally appeared Terrence Caskey, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal:
Salina Diaz
(Notary Public)



*Total of 5 forms are submitted.

former PTO/SB/15 (8-00) Modified LDLKMM

ASSIGNMENT OF UTILITY APPLICATION	Docket Number (Optional) TIP1 3.0-742
--	---

Whereas, I, Belgacem Haba of
c/o Invenas Corporation; 2702 Orchard Parkway; San Jose, California 95134

hereafter referred to as assignor, have with others invented certain new and useful improvements in
HIGH STRENGTH THROUGH-SUBSTRATE VIAS

- for which an application for a United States Letters Patent was filed on November 10, 2011
 Application Number 13/293,698
- for which an application for a United States Letters Patent was executed by me on _____
 and _____

Whereas, Invenas Corporation
 a corporation of Delaware herein referred to as "assignee" whose mailing address is
2702 Orchard Parkway; San Jose, California 95134

is desirous of acquiring the entire right, title and interest in the same:

NOW, THEREFORE, in consideration of the sum of one dollars (\$ 1.00), the receipt whereof is acknowledged, and other good and valuable consideration, I as assignor hereby sell, assign and set over to said assignee my entire right, title and interest for the United States of America and all other countries in and to said invention and the aforesaid utility patent application and all original, divisional, continuation, continuation-in-part, substitute or reissue applications and patents applied for or granted therefor in the United States of America and all other countries, for said invention, including without limitation all applications and patents for said invention claiming priority or benefit of the aforesaid utility application pursuant to any law or treaty, and including the right to claim such priority or benefit and the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all patents on said improvements or resulting therefrom to said assignee herein, as assignee of the entire interest therein; and the undersigned for me and my legal representatives, heirs and assigns do hereby agree and covenant without further remuneration, to execute and deliver all original, divisional, continuation, reissue and other applications for Letters Patent on said improvements and all assignments thereof to said assignee or its assigns, to communicate to said assignee or its representatives all facts known to the undersigned respecting said improvements, whenever requested, to testify in any interferences or other legal proceedings in which any of said applications or patents may become involved, to sign all lawful papers, make all rightful oaths, and to do generally everything necessary to aid assignee, its successors, assigns and nominees to obtain patent protection for said improvements in all countries, the expenses incident to said applications to be borne and paid by said assignee.

And I do hereby authorize my attorneys to insert on this deed the filing date and application number of said application when known.

1/17/2012
 (Date)

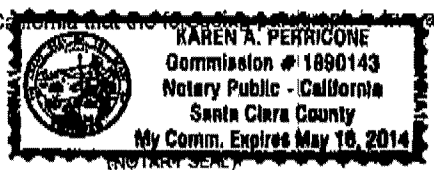
Belgacem Haba
 (Signature)

State of California) SS:
 County of Santa Clara)

On January 17, 2012, before me, Karen A. Perricone, Notary Public, personally appeared Belgacem Haba, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing is true and correct.

WITNESS my hand and official seal,
Karen A. Perricone
 (Notary Public)



*Total of 5 forms are submitted.

former PTO SBM 6 (8-00) Modified LDLKM

ASSIGNMENT OF UTILITY APPLICATION	Docket Number (Optional) TIPI 3.0-742
--	---

Whereas, I, Hiroaki Sato of 50-29 Shikimidai, Asahi-ku, Yokohama, Kanagawa 241-0025 JAPAN hereafter referred to as assignor, have invented certain new and useful improvements in HIGH STRENGTH THROUGH-SUBSTRATE VIAS

for which an application for a United States Letters Patent was filed on November 10, 2011
Application Number 13/293,698

for which an application for a United States Letters Patent was executed by me on _____

for which an International Application was filed on _____, as _____, designating the United States.


And

Whereas, Invensas Corporation a corporation of Delaware herein referred to as "assignee" whose mailing address is 2702 Orchard Parkway, San Jose, California 95134 is desirous of acquiring the entire right, title and interest in the same;

NOW, THEREFORE, in consideration of the sum of one dollar (\$ 1.00), the receipt whereof is acknowledged, and other good and valuable consideration, I as assignor hereby sell, assign and set over to said assignee the entire right, title and interest for the United States of America and all other countries in and to said invention and the aforesaid utility patent application and all original, divisional, continuation, substitute or reissue applications and patents applied for or granted therefor in the United States of America and all other countries, for said invention, including without limitation all applications and patents for said invention claiming priority or benefit of the aforesaid utility application pursuant to any law or treaty, and including the right to claim such priority or benefit and the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all patents on said improvements or resulting therefrom to said assignee herein, as assignee of the entire interest therein; and the undersigned for me and my legal representatives, heirs and assigns do hereby agree and covenant without further remuneration, to execute and deliver all original, divisional, continuation, reissue and other applications for Letters Patent on said improvements and all assignments thereof to said assignee or its assigns, to communicate to said assignee or its representatives all facts known to the undersigned respecting said improvements, whenever requested, to testify in any interferences or other legal proceedings in which any of said applications or patents may become involved, to sign all lawful papers, make all rightful oaths, and to do generally everything necessary to aid assignee, its successors, assigns and nominees to obtain patent protection for said improvements in all countries, the expenses incident to said applications to be borne and paid by said assignee.

And I do hereby authorize my attorneys to insert on this deed the filing date and application number of said application when known.

8/30/12
Date


Hiroaki Sato

Hiroko
Witness

HIROKO SATO
Printed Name of Witness

former PTO/SB/15 (8-00) Modified LDLKM

ASSIGNMENT OF UTILITY APPLICATION	Docket Number (Optional)
	TIPI 3.0-742

Whereas, I, Philip Damberg of c/o Invensas Corporation; 2702 Orchard Parkway; San Jose, California 95134

hereafter referred to as assignor, have with others invented certain new and useful improvements in

HIGH STRENGTH THROUGH-SUBSTRATE VIAS

for which an application for a United States Letters Patent was filed on November 10, 2011
Application Number 13/293,898

for which an application for a United States Letters Patent was executed by me on _____
and _____

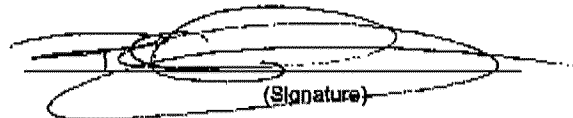
Whereas, Invensas Corporation
a corporation of Delaware herein referred to as "assignee" whose mailing address is
2702 Orchard Parkway; San Jose, California 95134

is desirous of acquiring the entire right, title and interest in the same;

NOW, THEREFORE, in consideration of the sum of one dollars (\$ 1.00), the receipt whereof is acknowledged, and other good and valuable consideration, I as assignor hereby sell, assign and set over to said assignee my entire right, title and interest for the United States of America and all other countries in and to said invention and the aforesaid utility patent application and all original, divisional, continuation, continuation-in-part, substitute or reissue applications and patents applied for or granted therefor in the United States of America and all other countries, for said invention, including without limitation all applications and patents for said invention claiming priority or benefit of the aforesaid utility application pursuant to any law or treaty, and including the right to claim such priority or benefit and the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all patents on said improvements or resulting therefrom to said assignee herein, as assignee of the entire interest therein; and the undersigned for me and my legal representatives, heirs and assigns do hereby agree and covenant without further remuneration, to execute and deliver all original, divisional, continuation, reissue and other applications for Letters Patent on said improvements and all assignments thereof to said assignee or its assigns, to communicate to said assignee or its representatives all facts known to the undersigned respecting said improvements, whenever requested, to testify in any interferences or other legal proceedings in which any of said applications or patents may become involved, to sign all lawful papers, make all rightful oaths, and to do generally everything necessary to aid assignee, its successors, assigns and nominees to obtain patent protection for said improvements in all countries, the expenses incident to said applications to be borne and paid by said assignee.

And I do hereby authorize my attorneys to insert on this deed the filing date and application number of said application when known.

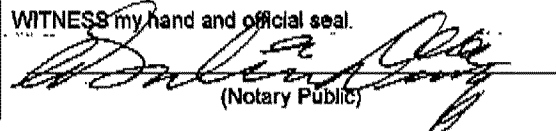
3/7/12
(Date)

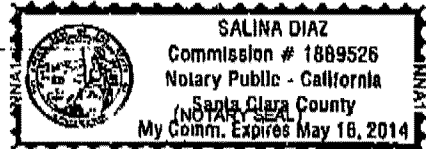

(Signature)

State of California) SS:
County of Santa Clara)

On 3/7/2012 before me, Salina Diaz, Notary Public personally appeared Philip Damberg, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his own authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

(Notary Public)



Total of 5 forms are submitted.

LD-527A
1540550_1.DOC

PATENT