

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT3353763

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
CYPRIAN EMEKA UZOH	06/03/2013
CHARLES G. WOYCHIK	05/31/2013
MICHAEL NEWMAN	05/30/2013
PEZHMAN MONADGEMI	06/06/2013
TERRENCE CASKEY	07/08/2013
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	INVENSAS CORPORATION
<b>Street Address:</b>	3025 ORCHARD PARKWAY
<b>City:</b>	SAN JOSE
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	95134
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	14627252
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(908)654-7866
<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>	(908) 518-6396
<b>Email:</b>	Assignment@ldlkm.com
<b>Correspondent Name:</b>	LDLK&M
<b>Address Line 1:</b>	600 SOUTH AVENUE WEST
<b>Address Line 4:</b>	WESTFIELD, NEW JERSEY 07090
<b>ATTORNEY DOCKET NUMBER:</b>	TIPI 3.0F-883 DIV
<b>NAME OF SUBMITTER:</b>	DARYL K. NEFF
<b>SIGNATURE:</b>	/Daryl K. Neff/
<b>DATE SIGNED:</b>	05/14/2015
<b>Total Attachments: 5</b>	
source=TIPI 3.0F-883 DIV (E) () Assignments#page1.tif	

source=TIPI 3.0F-883 DIV (E) () Assignments#page2.tif  
source=TIPI 3.0F-883 DIV (E) () Assignments#page3.tif  
source=TIPI 3.0F-883 DIV (E) () Assignments#page4.tif  
source=TIPI 3.0F-883 DIV (E) () Assignments#page5.tif

<b>ASSIGNMENT OF UTILITY APPLICATION</b>	Docket Number (Optional) TIP 3.0-883
--	---

Whereas, I, Cyprian Emeka Uzoh of  
2702 Orchard Parkway, San Jose, California 95134  
hereafter referred to as assignor, have with others invented certain new and useful improvements in  
METAL PVD-FREE CONDUCTING STRUCTURES  
☒ for which an application for a United States Letters Patent was filed on May 20, 2013  
Application Number 13/897,956  
☐ 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.

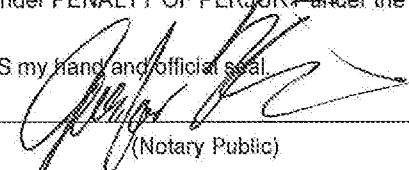
6-3-2013 (Date)                      Cyprian E. Uzoh (Signature)

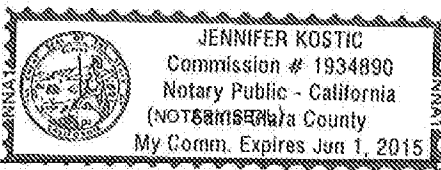
State of California ) SS:  
County of Santa Clara )

On June 3, 2013, before me, Jennifer Kostic Notary Public personally appeared Cyprian Emeka 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 paragraph is true and correct.

WITNESS my hand and official seal.

  
\_\_\_\_\_  
(Notary Public)



☒ \*Total of 5 forms are submitted.

## ASSIGNMENT OF UTILITY APPLICATION

Docket Number (Optional)

TIP1 3.0-883

Whereas, I, Charles G. Woychik of  
2702 Orchard Parkway; San Jose, California 95134

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

METAL PVD-FREE CONDUCTING STRUCTURES

☒ for which an application for a United States Letters Patent was filed on May 20, 2013  
 Application Number 13/897,956

☐ 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.

5/31/2013  
 (Date)

Charles G. Woychik  
 (Signature)

State of California ) SS:

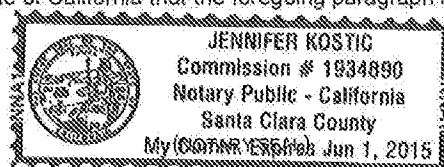
County of Santa Clara )

On May 31, 2013, before me, Jennifer Kostic, 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.

Jennifer Kostic  
 (Notary Public)



☒ Total of 5 forms are submitted.

LD-527A

<b>ASSIGNMENT OF UTILITY APPLICATION</b>	Docket Number (Optional) TIP 3.0-883
--	---

Whereas, I, Michael Newman of  
2702 Orchard Parkway; San Jose, California 95134  
hereafter referred to as assignor, have with others invented certain new and useful improvements in  
METAL PVD-FREE CONDUCTING STRUCTURES  
☒ for which an application for a United States Letters Patent was filed on May 20, 2013  
Application Number 13/697,956  
☐ 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.

5/30/13 (Date)                      Michael Newman (Signature)


State of California ) SS:  
County of Santa Clara )

On May 30, 2013 before me, Jennifer Kostic, Notary Public personally appeared Michael Newman, 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.

Jennifer Kostic  
(Notary Public)



**JENNIFER KOSTIC**  
Commission # 1934880  
Notary Public - California  
(Santa Clara County)  
My Comm. Expires Jun 1, 2015

<input checked="" type="checkbox"/>	Total of <u>5</u> forms are submitted.
-------------------------------------	--

## ASSIGNMENT OF UTILITY APPLICATION

Docket Number (Optional)

TIP1 3.0-883

Whereas, I, Pezhman Monadgemi of  
39993 Fremont Blvd., Apt. 110, Fremont, California 94538

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

METAL PVD-FREE CONDUCTING STRUCTURES

☒ for which an application for a United States Letters Patent was filed on May 20, 2013  
 Application Number 13/897,956

☐ 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.

6/6/13  
 (Date)

[Signature]  
 (Signature)

State of California ) SS:

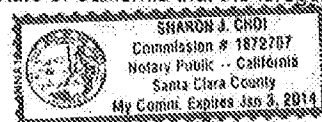
County of Santa Clara )

On June 6, 2013, before me, Sharon J. Choi, Notary Public personally appeared Pezhman Monadgemi, 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.

[Signature]  
 (Notary Public)



(NOTARY SEAL)

☒ \*Total of 5 forms are submitted.

## ASSIGNMENT OF UTILITY APPLICATION

Docket Number (Optional)

TIP1 3.0-883

Whereas, I, Terrence Caskey of  
236 Swift Street; Santa Cruz, California 95062

hereafter referred to as assignor, have with others invented certain new and useful improvements in  
METAL PVD-FREE CONDUCTING STRUCTURES

☒ for which an application for a United States Letters Patent was filed on May 20, 2013  
 Application Number 13/897,956

☐ 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.

7/8/13  
 (Date)

Terrence Caskey  
 (Signature)

State of California ) SS:

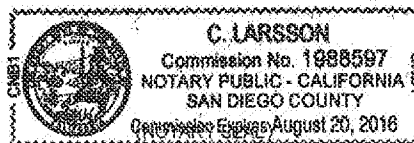
County of San Diego )

On 7/8/2013, before me, Charsson Notary Public 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:

[Signature]  
 (Notary Public)



☒ \*Total of 5 forms are submitted.

LD-527A

PATENT

RECORDED: 05/14/2015

REEL: 035640 FRAME: 0438