

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Ariel Anbar</td> <td>12/21/2012</td> </tr> <tr> <td>Joseph Skulan</td> <td>12/19/2012</td> </tr> <tr> <td>Gwyneth Gordon</td> <td>12/17/2012</td> </tr> <tr> <td>Jennifer Morgan</td> <td>12/17/2012</td> </tr> </tbody> </table>		Name	Execution Date	Ariel Anbar	12/21/2012	Joseph Skulan	12/19/2012	Gwyneth Gordon	12/17/2012	Jennifer Morgan	12/17/2012
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Ariel Anbar	12/21/2012										
Joseph Skulan	12/19/2012										
Gwyneth Gordon	12/17/2012										
Jennifer Morgan	12/17/2012										
RECEIVING PARTY DATA											
Name:	Arizona Board of Regents, a body corporate of the State of Arizona Acting for and on behalf of Arizona State University										
Street Address:	1475 North Scottsdale Road, Suite 200										
City:	Scottsdale										
State/Country:	ARIZONA										
Postal Code:	85257										
PROPERTY NUMBERS Total: 1											
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13703103</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13703103						
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Application Number:	13703103										
CORRESPONDENCE DATA											
Fax Number:	5207702237										
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>											
Phone:	520-770-8700										
Email:	alice.vanicek@quarles.com										
Correspondent Name:	Gavin Milczarek-Desai/Quarles & Brady										
Address Line 1:	ONE SOUTH CHURCH AVENUE, SUITE 1700										
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ATTORNEY DOCKET NUMBER:	112624.00350										
NAME OF SUBMITTER:	Gavin J. Milczarek-Desai										
Total Attachments: 4 source=Assignment#page1.tif source=Assignment#page2.tif source=Assignment#page3.tif source=Assignment#page4.tif											

CH \$40.00 13703103

ASSIGNMENT AND AGREEMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, I, ARIEL ANBAR, (Assignor) of Phoenix, Arizona, have sold, assigned, and transferred, and do hereby sell, assign, and transfer unto ARIZONA BOARD OF REGENTS, a body corporate of the State of Arizona Acting for and on behalf of Arizona State University (Assignee), a non-profit organization of the State of Arizona, having its principal office in Scottsdale, State of Arizona, United States of America, and its successors, assigns, and legal representatives, the entire right, title, and interest in and to certain invention(s) entitled ISOTOPIC BIOMARKERS FOR RAPID ASSESSMENT OF BONE MINERAL BALANCE IN BIOMEDICAL APPLICATIONS, which is described, illustrated, and claimed in an application for Letters Patent of the United States of America, Application No. 13/703,103, filed on December 10, 2012, claiming the benefit of U.S. Patent Application No. 61/353,267, filed June 10, 2010, and International Patent Application No. PCT/US2011/039780, filed June 9, 2011, together with the entire right, title and interest in and to any Letters Patent which may be issued upon said application, and in and to any continuation, division, reissue, reexamination, extension, renewal, or substitute thereof, and in and to any patent which may grant from such application.

I hereby authorize and request all government authorities in any country to issue patent(s) upon the aforesaid application, continuation, division, reissue, reexamination, extension, renewal, or substitute, to Assignee, for the sole use and behalf of Assignee, its successors, assigns, and legal representatives, to the full end of the term for which the patent(s) may be granted, the same as they would have been held and enjoyed by me had this assignment not been made.

I agree that, when requested, I will, without charge to Assignee, but at its expense, sign all papers, take all rightful oaths, and do all acts which may be necessary, desirable, or convenient for securing and maintaining patents for the invention(s) in any and all countries and for vesting title thereto in Assignee, its successors, assigns, and legal representatives or nominees.

I covenant with Assignee, its successors, assigns, and legal representatives, that the interest and property hereby conveyed is free from all prior assignment, grant, mortgage, license, or other encumbrance.

Ariel Anbar
Signature by: Ariel Anbar

12/21/12
Date

STATE OF ARIZONA)
COUNTY OF Maricopa)

I, Inna Thomas, a Notary Public in and for the County and State aforesaid, do hereby certify that ARIEL ANBAR, whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he/she signed, sealed and delivered the instrument as his/her free and voluntary act and deed for the uses and purposes therein set forth.

Given under my hand and notarial seal this 21 day of December, 2012.

Inna Thomas
Signature of Notary



INNA THOMAS
Notary Public—Arizona
Maricopa County
Expires 12/14/2014

AzTE M10-102L

ASSIGNMENT AND AGREEMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, I, JOSEPH SKULAN, (Assignor) of Lodi, Wisconsin, have sold, assigned, and transferred, and do hereby sell, assign, and transfer unto ARIZONA BOARD OF REGENTS, a body corporate of the State of Arizona Acting for and on behalf of Arizona State University (Assignee), a non-profit organization of the State of Arizona, having its principal office in Scottsdale, State of Arizona, United States of America, and its successors, assigns, and legal representatives, the entire right, title, and interest in and to certain invention(s) entitled ISOTOPIC BIOMARKERS FOR RAPID ASSESSMENT OF BONE MINERAL BALANCE IN BIOMEDICAL APPLICATIONS, which is described, illustrated, and claimed in an application for Letters Patent of the United States of America, Application No. 13/703,103 filed on December 10, 2012, claiming the benefit of U.S. Patent Application No. 61/353,267, filed June 10, 2010, and International Patent Application No. PCT/US2011/039780, filed June 9, 2011, together with the entire right, title and interest in and to any Letters Patent which may be issued upon said application, and in and to any continuation, division, reissue, reexamination, extension, renewal, or substitute thereof, and in and to any patent which may grant from such application.

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I agree that, when requested, I will, without charge to Assignee, but at its expense, sign all papers, take all rightful oaths, and do all acts which may be necessary, desirable, or convenient for securing and maintaining patents for the invention(s) in any and all countries and for vesting title thereto in Assignee, its successors, assigns, and legal representatives or nominees.

I covenant with Assignee, its successors, assigns, and legal representatives, that the interest and property hereby conveyed is free from all prior assignment, grant, mortgage, license, or other encumbrance.

Signature by: Joseph Skulan

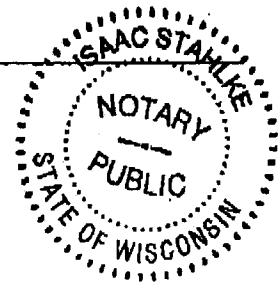
Date: 12/19/2012

STATE OF WISCONSIN }
COUNTY OF DANE }

I, Isaac Stahlke, a Notary Public in and for the County and State aforesaid, do hereby certify that JOSEPH SKULAN, whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he/she signed, sealed and delivered the instrument as his/her free and voluntary act and deed for the uses and purposes therein set forth.

Given under my hand and notarial seal this 19 day of December, 2012.

Signature of Notary



AzTE M10-102L

ASSIGNMENT AND AGREEMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, I, **GWYNETH GORDON**, (Assignor) of Phoenix, Arizona, have sold, assigned, and transferred, and do hereby sell, assign, and transfer unto **ARIZONA BOARD OF REGENTS, a body corporate of the State of Arizona Acting for and on behalf of Arizona State University (Assignee)**, a non-profit organization of the State of Arizona, having its principal office in Scottsdale, State of Arizona, United States of America, and its successors, assigns, and legal representatives, the entire right, title, and interest in and to certain invention(s) entitled **ISOTOPIC BIOMARKERS FOR RAPID ASSESSMENT OF BONE MINERAL BALANCE IN BIOMEDICAL APPLICATIONS**, which is described, illustrated, and claimed in an application for Letters Patent of the United States of America, Application No. 13/703,103, filed on December 10, 2012, claiming the benefit of U.S. Patent Application No. 61/353,267, filed June 10, 2010, and International Patent Application No. PCT/US2011/039780, filed June 9, 2011, together with the entire right, title and interest in and to any Letters Patent which may be issued upon said application, and in and to any continuation, division, reissue, reexamination, extension, renewal, or substitute thereof, and in and to any patent which may grant from such application.

I hereby authorize and request all government authorities in any country to issue patent(s) upon the aforesaid application, continuation, division, reissue, reexamination, extension, renewal, or substitute, to Assignee, for the sole use and behalf of Assignee, its successors, assigns, and legal representatives, to the full end of the term for which the patent(s) may be granted, the same as they would have been held and enjoyed by me had this assignment not been made.

I agree that, when requested, I will, without charge to Assignee, but at its expense, sign all papers, take all rightful oaths, and do all acts which may be necessary, desirable, or convenient for securing and maintaining patents for the invention(s) in any and all countries and for vesting title thereto in Assignee, its successors, assigns, and legal representatives or nominees.

I covenant with Assignee, its successors, assigns, and legal representatives, that the interest and property hereby conveyed is free from all prior assignment, grant, mortgage, license, or other encumbrance.

Gwyneth Gordon
Signature by: Gwyneth Gordon

12/17/2012
Date

STATE OF ARIZONA)
COUNTY OF Maricopa)

I, Elizabeth Jean Thompson, a Notary Public in and for the County and State aforesaid, do hereby certify that GWYNETH GORDON, whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he/she signed, sealed and delivered the instrument as his/her free and voluntary act and deed for the uses and purposes therein set forth.

Given under my hand and notarial seal this 17th day of December, 2012.



Elizabeth Jean Thompson
Signature of Notary

ASSIGNMENT AND AGREEMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, I, **JENNIFER MORGAN**, (Assignor) of Phoenix, Arizona, have sold, assigned, and transferred, and do hereby sell, assign, and transfer unto **ARIZONA BOARD OF REGENTS, a body corporate of the State of Arizona Acting for and on behalf of Arizona State University** (Assignee), a non-profit organization of the State of Arizona, having its principal office in Scottsdale, State of Arizona, United States of America, and its successors, assigns, and legal representatives, the entire right, title, and interest in and to certain invention(s) entitled **ISOTOPIC BIOMARKERS FOR RAPID ASSESSMENT OF BONE MINERAL BALANCE IN BIOMEDICAL APPLICATIONS**, which is described, illustrated, and claimed in an application for Letters Patent of the United States of America, Application No. 13/703,103, filed on December 10, 2012, claiming the benefit of U.S. Patent Application No. 61/353,267, filed June 10, 2010, and International Patent Application No. PCT/US2011/039780, filed June 9, 2011, together with the entire right, title and interest in and to any Letters Patent which may be issued upon said application, and in and to any continuation, division, reissue, reexamination, extension, renewal, or substitute thereof, and in and to any patent which may grant from such application.

I hereby authorize and request all government authorities in any country to issue patent(s) upon the aforesaid application, continuation, division, reissue, reexamination, extension, renewal, or substitute, to Assignee, for the sole use and behalf of Assignee, its successors, assigns, and legal representatives, to the full end of the term for which the patent(s) may be granted, the same as they would have been held and enjoyed by me had this assignment not been made.

I agree that, when requested, I will, without charge to Assignee, but at its expense, sign all papers, take all rightful oaths, and do all acts which may be necessary, desirable, or convenient for securing and maintaining patents for the invention(s) in any and all countries and for vesting title thereto in Assignee, its successors, assigns, and legal representatives or nominees.

I covenant with Assignee, its successors, assigns, and legal representatives, that the interest and property hereby conveyed is free from all prior assignment, grant, mortgage, license, or other encumbrance.

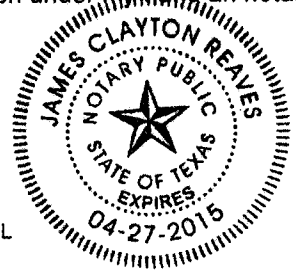
[Signature]
Signature by: Jennifer Morgan

12/17/12
Date

STATE OF ARIZONA Texas)
COUNTY OF Harris)

I, James C. Reaves, a Notary Public in and for the County and State aforesaid, do hereby certify that JENNIFER MORGAN, whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he/she signed, sealed and delivered the instrument as his/her free and voluntary act and deed for the uses and purposes therein set forth.

Given under my hand and an notarial seal this 17th day of December, 2012.



[Signature]
Signature of Notary

AzTE M10-102L