

PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT																										
NATURE OF CONVEYANCE:	ASSIGNMENT																										
CONVEYING PARTY DATA																											
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;">Name</th> <th style="width: 30%;">Execution Date</th> </tr> </thead> <tbody> <tr><td>James H. Adair</td><td>08/18/2008</td></tr> <tr><td>Mary Frecker</td><td>08/13/2008</td></tr> <tr><td>Christopher Muhlstein</td><td>08/22/2008</td></tr> <tr><td>Eric Mockenstrum</td><td>10/23/2008</td></tr> <tr><td>Harriet Black Nembhard</td><td>10/22/2008</td></tr> <tr><td>Randy S. Haluck</td><td>08/14/2008</td></tr> <tr><td>Abraham Mathew</td><td>08/14/2008</td></tr> <tr><td>Nicholas Antolino</td><td>08/13/2008</td></tr> <tr><td>Gregory Hayes</td><td>08/13/2008</td></tr> <tr><td>Milton Aguirre</td><td>10/29/2008</td></tr> <tr><td>Rebecca Kirkpatrick</td><td>10/21/2008</td></tr> <tr><td>Chumpol Yuangyai</td><td>08/19/2008</td></tr> </tbody> </table>		Name	Execution Date	James H. Adair	08/18/2008	Mary Frecker	08/13/2008	Christopher Muhlstein	08/22/2008	Eric Mockenstrum	10/23/2008	Harriet Black Nembhard	10/22/2008	Randy S. Haluck	08/14/2008	Abraham Mathew	08/14/2008	Nicholas Antolino	08/13/2008	Gregory Hayes	08/13/2008	Milton Aguirre	10/29/2008	Rebecca Kirkpatrick	10/21/2008	Chumpol Yuangyai	08/19/2008
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<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 20%;">Name:</td><td>The Penn State Research Foundation</td></tr> <tr><td>Street Address:</td><td>304 Old Main</td></tr> <tr><td>City:</td><td>University Park</td></tr> <tr><td>State/Country:</td><td>PENNSYLVANIA</td></tr> <tr><td>Postal Code:</td><td>16802</td></tr> </table>		Name:	The Penn State Research Foundation	Street Address:	304 Old Main	City:	University Park	State/Country:	PENNSYLVANIA	Postal Code:	16802																
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CORRESPONDENCE DATA																											
<p>Fax Number: (248)647-5210</p> <p><i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 248-647-6000</p> <p>Email: docket@patlaw.com</p>																											

OP \$40.00 12534329

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PATENT
REEL: 023429 FRAME: 0183

Correspondent Name: Avery N. Goldstein, Ph.D.
Address Line 1: P.O. Box 7021
Address Line 4: Troy, MICHIGAN 48007-7021

ATTORNEY DOCKET NUMBER: PST-42302/36

NAME OF SUBMITTER: Avery N. Goldstein, Ph.D.

Total Attachments: 12

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ASSIGNMENT BY INVENTORS

THIS ASSIGNMENT, made this _____ day of _____, 2008, by James H. Adair; Mary Frecker; Christopher Muhlstein; Eric Mockenstrum; Harriet Black Nembhard; Randy S. Haluck; Abraham Mathew; Nicholas Antolino; Greg Hayes; Milton Aguirre; Rebecca Kirkpatrick; and Chumbol Yuangal (hereinafter referred to as Assignors), residing at 2377 Sagamore Drive, State College, Pennsylvania 16803; 2632 Acacia Dr., State College, Pennsylvania 16803; 2494 MRL Building, University Park, Pennsylvania 16802; 2494 MRL Building, University Park, Pennsylvania 16802; 2494 MRL Building, University Park, Pennsylvania 16802; 54 Oakhill Dr., Lititz, Pennsylvania 17543; 929 Beech Avenue, Hershey, Pennsylvania 17033; 0226 Materials Research Lab, University Park, Pennsylvania 16802; 0226 Materials Research Lab, University Park, Pennsylvania 16802; 0226 Materials Research Lab, University Park, Pennsylvania 16802; 0226 Materials Research Lab, University Park, Pennsylvania 16802; and 0226 Materials Research Lab, University Park, Pennsylvania 16802, respectively;

WHEREAS, Assignors have invented certain new and useful improvements in LOST MOLD RAPID INFILTRATION FORMING IN THE MANUFACTURE OF NANOPARTICULATE ENABLED MESOSCALE DEVICES INCLUDING SURGICAL INSTRUMENTS, set forth in a Provisional application for Letters Patent of the United States, already filed on August 1, 2008 as U.S. Application No. 61/085,506; and

WHEREAS, The Penn State Research Foundation, a non-profit organization having its principal place of business at 304 Old Main, University Park, Pennsylvania 16802 (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to said inventions and said Application for Letters Patent of the United States, and in and to any Letters Patent of the United States to be obtained therefore and thereon.

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and sufficient consideration, the receipt of which is hereby acknowledged, Assignors have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto Assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions and application for Letters Patent, and in and

to any and all direct and indirect divisions, continuations and continuations-in-part of said application, and any and all Letters Patent in the United States and all foreign countries which may be granted therefor and thereon, and reissues, reexaminations and extensions of said Letters Patent, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by Assignee, for its own use and benefit and the use and benefit of its successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent may be granted and/or extended, as fully and entirely as the same would have been held and enjoyed by Assignors, had this sale and assignment not been made.

AND for the same consideration, Assignors hereby represent and warrant to Assignee, its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, except for any rights, titles and/or interests that have arisen to Assignee under law or that have already been transferred to Assignee, Assignors are the sole and lawful owners of the entire right, title and interest in and to the said inventions and application for Letters Patent above-mentioned, and that the same are unencumbered and that Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth.

AND for the same consideration, Assignors hereby covenant and agree to and with Assignee, its successors, legal representatives and assigns, that Assignors will sign all papers and documents, take all lawful oaths and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of any Letters Patent and applications for Letters Patent for said inventions, without charge to Assignee, its successors, legal representatives and assigns, whenever counsel of Assignee, or counsel of its successors, legal representatives and assigns, shall advise: that any proceeding in connection with said inventions, or said Provisional application for Letters Patent, or any proceeding in connection with any Letters Patent or applications for Letters Patent for said inventions in any country, including but not limited to interference proceedings, is lawful and desirable; or, that any division, continuation or continuation-in-part of any application for Letters Patent, or any reissue, reexamination or extension of any Letters Patent, to be obtained thereon, is lawful and desirable.

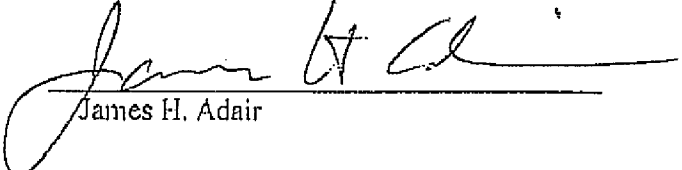
AND Assignors hereby request the Commissioner of Patent and Trademarks to issue said Letters Patent of the United States to Assignee, as Assignee of said inventions and the Letters Patent to be issued thereon, for the sole use and benefit of Assignee, its successors, legal representatives and assigns.

AND Assignors hereby grant the following individuals the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document:

GIFFORD, KRASS, SPRINKLE, ANDERSON & CITKOWSKI, P.C.

All practitioners at Customer Number 25006

AND Assignors acknowledge an obligation of assignment of this invention to Assignee at the time the invention was made.

Date: 18 Aug 2008 Signature: 
James H. Adair

Date: _____ Signature: _____
Mary Frecker

Date: _____ Signature: _____
Christopher Muhlstein

Date: _____ Signature: _____
Eric Mockenstrum

Date: _____ Signature: _____
Harriet Black Nembhard

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Date: _____ Signature: _____
James H. Adair

Date: 8/13/08 Signature: Mary Frecker
Mary Frecker

Date: _____ Signature: _____
Christopher Muhlstein

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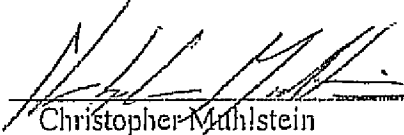
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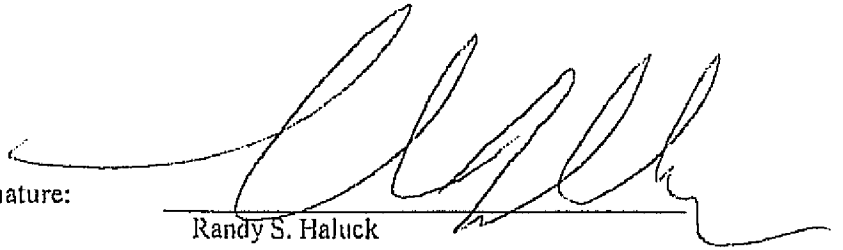
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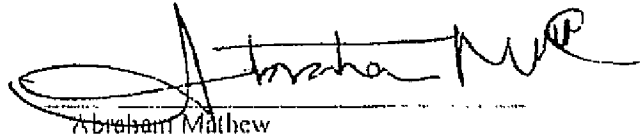
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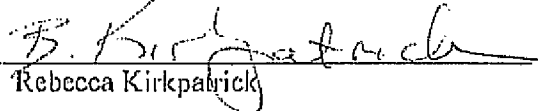
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Nicholas Antolino

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Greg Hayes

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Milton Aguirre

Date: Oct 21, 2008 Signature: 
Rebecca Kirkpatrick

Date: _____ Signature: _____
Chumbol Yuangal