

PATENT ASSIGNMENT

Electronic Version v1.1

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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>James H. Arps</td><td>05/24/2007</td></tr><tr><td>Kent E. Coulter</td><td>06/26/2007</td></tr></tbody></table>	Name	Execution Date	James H. Arps	05/24/2007	Kent E. Coulter	06/26/2007	
Name	Execution Date						
James H. Arps	05/24/2007						
Kent E. Coulter	06/26/2007						
RECEIVING PARTY DATA							
Name:	Southwest Research Institute						
Street Address:	6220 Culebra Road						
City:	San Antonio						
State/Country:	TEXAS						
Postal Code:	78238-5166						
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>11736800</td></tr></tbody></table>	Property Type	Number	Application Number:	11736800			
Property Type	Number						
Application Number:	11736800						
CORRESPONDENCE DATA							
Fax Number:	(603)668-2970						
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>							
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Correspondent Name:	Jessica Boisvert						
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ATTORNEY DOCKET NUMBER:	SWR3185						
NAME OF SUBMITTER:	Steven J. Grossman						
Total Attachments: 5 source=SWR3185_ExecutedAssignment_As_Filed_070907#page1.tif source=SWR3185_ExecutedAssignment_As_Filed_070907#page2.tif source=SWR3185_ExecutedAssignment_As_Filed_070907#page3.tif							

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PATENT

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PATENT

REEL: 019531 FRAME: 0819

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of
James H. Arps, et al.

Serial No.: 11/736,800

Filed: April 18, 2007

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Action: Assignment

Title: Two-Dimensional Composite Particle Adapted for Use as a
Catalyst and Method of Making Same

**TO: Commissioner of Patents
and Trademarks
Washington, DC 20231**

WHEREAS, I, JAMES H. ARPS, a citizen of the United States, residing at 741 Sierra Trail, Chanhassen, Minnesota, together with KENT E. COULTER, am a joint inventor of new and useful improvements in *TWO-DIMENSIONAL COMPOSITE PARTICLE ADAPTED FOR USE AS A CATALYST AND METHOD OF MAKING SAME* for which we have executed an application for Letters Patent which was filed on April 18, 2007;

WHEREAS, I represent that we are joint owners of said invention and application for Letters Patent; and,

WHEREAS, SOUTHWEST RESEARCH INSTITUTE, hereinafter called "ASSIGNEE," a Texas Corporation having its principal office at 6220 Culebra Road, San Antonio, Bexar County, Texas 78238-5166, is desirous of acquiring my right, title and interest in and to the said application and the invention therein described and claimed and any Letters Patent that may be issued upon said application or for the invention therein contained;

NOW, THEREFORE, for and in consideration of the sum of Sixty-Five Dollars (\$65.00), lawful money of the United States, and other valuable consideration, to me in hand paid, the receipt and sufficiency whereof I hereby acknowledge, I, the said JAMES H. ARPS, hereinafter called "ASSIGNOR" have sold, assigned and transferred, and do hereby sell, assign and transfer unto the said ASSIGNEE, its successors and assigns, my entire right, title and interest in and to (a) said invention and worldwide rights therein, including the right to claim the priority date of said application and all other rights arising under the International Convention for the Protection of

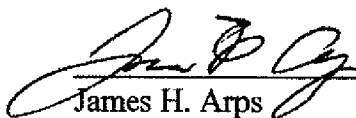
Industrial Property; (b) said application, including all divisions, continuations, continuations-in-part and substitutions thereof; and (c) all United States and foreign patents which shall issue on said invention, including all reissues, renewals, divisions and extensions thereof, for the United States, its territories and possessions and all foreign countries, including the right to file applications for Letters Patent on said invention in any and all foreign countries, the same to be held and enjoyed by said ASSIGNEE, its assigns and successors, as fully and entirely as the same would have been held and enjoyed by me, had this Assignment and sale not been made.

I request that any and all such Letters Patent for said invention be issued to ASSIGNEE, its successors, assigns and legal representatives, or to such nominees as it may designate.

I covenant and agree that I and my executors or administrators will, at any time upon the request and at the expense of said ASSIGNEE, execute and deliver any and all papers and perform all lawful acts that may be necessary or desirable, in the opinion of said ASSIGNEE, to enable and assist said ASSIGNEE to (a) obtain Letters Patent, both domestic and foreign, on said invention; (b) establish, maintain and secure title in said ASSIGNEE, its successors and assigns, to said invention, application and Letters Patent, including making such title of lawful public record; and (c) defend, establish or otherwise preserve the validity of said Letters Patent against any and all infringers, and perform such other acts as are necessary to give full force and effect to this Assignment.

ASSIGNOR further covenants with ASSIGNEE that the rights and property herein conveyed are free and clear of any encumbrances, and that ASSIGNOR has the full right to convey the same as herein expressed.

IN TESTIMONY WHEREOF, I have fully executed this Assignment this 24th day of May, 2007.


James H. Arps

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of
James H. Arps, et al.

Serial No.: 11/736,800

Filed: April 18, 2007

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Action: Assignment

Title: Two-Dimensional Composite Particle Adapted for Use as a
Catalyst and Method of Making Same

**TO: Commissioner of Patents
and Trademarks
Washington, DC 20231**

WHEREAS, I, KENT E. COULTER, a citizen of the United States, residing at 7419 Secretariat Lane, Fair Oaks Ranch, Bexar County, Texas, together with JAMES H. ARPS, am a joint inventor of new and useful improvements in *TWO-DIMENSIONAL COMPOSITE PARTICLE ADAPTED FOR USE AS A CATALYST AND METHOD OF MAKING SAME* for which we have executed an application for Letters Patent which was filed on April 18, 2007;

WHEREAS, I represent that we are joint owners of said invention and application for Letters Patent; and,

WHEREAS, SOUTHWEST RESEARCH INSTITUTE, hereinafter called "ASSIGNEE," a Texas Corporation having its principal office at 6220 Culebra Road, San Antonio, Bexar County, Texas 78238-5166, is desirous of acquiring my right, title and interest in and to the said application and the invention therein described and claimed and any Letters Patent that may be issued upon said application or for the invention therein contained;

NOW, THEREFORE, for and in consideration of the sum of Sixty-Five Dollars (\$65.00), lawful money of the United States, and other valuable consideration, to me in hand paid, the receipt and sufficiency whereof I hereby acknowledge, I, the said KENT E. COULTER, hereinafter called "ASSIGNOR" have sold, assigned and transferred, and do hereby sell, assign and transfer unto the said ASSIGNEE, its successors and assigns, my entire right, title and interest in and to (a) said invention and worldwide rights therein, including the right to claim the priority date of said application and all other rights arising under the International Convention for the Protection of

Industrial Property; (b) said application, including all divisions, continuations, continuations-in-part and substitutions thereof; and (c) all United States and foreign patents which shall issue on said invention, including all reissues, renewals, divisions and extensions thereof, for the United States, its territories and possessions and all foreign countries, including the right to file applications for Letters Patent on said invention in any and all foreign countries, the same to be held and enjoyed by said ASSIGNEE, its assigns and successors, as fully and entirely as the same would have been held and enjoyed by me, had this Assignment and sale not been made.

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I covenant and agree that I and my executors or administrators will, at any time upon the request and at the expense of said ASSIGNEE, execute and deliver any and all papers and perform all lawful acts that may be necessary or desirable, in the opinion of said ASSIGNEE, to enable and assist said ASSIGNEE to (a) obtain Letters Patent, both domestic and foreign, on said invention; (b) establish, maintain and secure title in said ASSIGNEE, its successors and assigns, to said invention, application and Letters Patent, including making such title of lawful public record; and (c) defend, establish or otherwise preserve the validity of said Letters Patent against any and all infringers, and perform such other acts as are necessary to give full force and effect to this Assignment.

ASSIGNOR further covenants with ASSIGNEE that the rights and property herein conveyed are free and clear of any encumbrances, and that ASSIGNOR has the full right to convey the same as herein expressed.

IN TESTIMONY WHEREOF, I have fully executed this Assignment this 26 day of June, 2007.

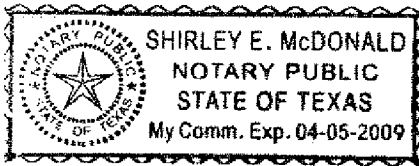


Kent E. Coulter

STATE OF TEXAS §
 §
COUNTY OF BEXAR §

BEFORE ME, the undersigned authority, on this day personally appeared KENT E. COULTER, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed.

GIVEN under my hand and seal of office this 26th day of June, 2007.



Shirley E. McDonald
Notary Public, State of Texas