502442211 08/01/2013

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT	
NATURE OF CONVEYANCE:	Corrective Assignment to correct the Address of the Assignee previously recorded on Reel 029970 Frame 0295. Assignor(s) hereby confirms the Corrective Assignment: address previously recorded on Reel 029970, Frame 0595 should read: Gruener Weg 37, Hanau 63450, Germany.	

CONVEYING PARTY DATA

Name	Execution Date
Matthias KATTER	02/12/2013
Alexander BARCZA	02/12/2013
Volker ZELLMANN	02/12/2013

RECEIVING PARTY DATA

Name:	VACUUMSCHMELZE GMBH & CO. KG		
Street Address:	Gruener Weg 37		
City:	Hanau		
State/Country:	GERMANY		
Postal Code:	63450		

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13817304

CORRESPONDENCE DATA

Fax Number:

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 7038366620

Email: albina.torres-price@bipc.com

Correspondent Name: Buchanan Ingersoll & Rooney

Address Line 1: P.O. Box 1404

Address Line 4: Alexandria, VIRGINIA 22314-1404

ATTORNEY DOCKET NUMBER:	0070747-000072
NAME OF SUBMITTER:	Bruce D. Gray

PATENT REEL: 030937 FRAME: 0001 D \$40.00 13817304

502442211

Signature:	/BDGray/
Date:	08/01/2013
Total Attachments: 7 source=Assignment#page1.tif source=Assignment#page2.tif source=Assignment#page3.tif source=Assignment#page4.tif source=Assignment#page5.tif source=Assignment#page6.tif source=Assignment#page7.tif	

502262797 03/12/2013

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:			NEW ASSIGNMENT		
NATURE OF CONVEYANCE:			ASSIGNMENT		
CONVEYING PARTY	/ DATA				
		N	lame	Execution Date	
Matthias KATTER				02/12/2013	
Alexander BARCZA				02/12/2013	
Volker ZELLMANN				02/12/2013	
RECEIVING PARTY	DATA	***************************************			
Name:	VACUUMSCI	HMEL	ZE GMBH & CO, KG		
Street Address:	Gruner Weg	37			
City:	Hanau				
State/Country:	GERMANY				
Postal Code:	63450				
PROPERTY NUMBERS Total: 1 Property Type Number					
Application Number: 13817		304			
CORRESPONDENC	E DATA				
Correspondence will	be sent via US	<i>Mail</i> w	then the fax attempt is unsuccessful.		
Phone:	7038366				
Email: albina.torres-price@bipc.com					
Correspondent Name: Buchanan Ingersoll & Rooney Address Line 1: P.O. Box 1404					
Address Line 4:			RGINIA 22314-1404		
ATTORNEY DOCKET NUMBER:		0070747-000072			
NAME OF SUBMITTER:		Bruce D. Gray			
Total Attachments: 2 source=Assignment# source=Assignment#	page1.tif			-	

ASSIGNMENT

(JOINT)

THIS ASSIGNMENT, by (1) Matthias KATTER, (2) Alexander BARCZA and (3) Volker ZELLMANN, residing at (1) Alzenau, Germany; (2) Hanau, Germany and (3) Linsengericht, Germany, (hereinafter referred to as "the Assignors"), respectively, witnesseth:

WHEREAS, the Assignors have invented certain new and useful improvements in A METHOD FOR FABRICATING A FUNCTIONALLY-GRADED MONOLITHIC SINTERED WORKING COMPONENT FOR MAGNETIC HEAT EXCHANGE AND AN ARTICLE FOR MAGNETIC HEAT EXCHANGE set forth in an application for Letters Patent of the United States, which is a

1)	(a) (b)	provisional application bearing Application No, and filed on; to be filed herewith; or
2)	\boxtimes	non-provisional application
	(a)	bearing Application No, and filed on;
	(b)	having an oath or declaration executed on even date herewith prior to filing of application;
	(c)	having an oath or declaration executed on a different date than this Assignment; and

WHEREAS, <u>VACUUMSCHMELZE GMBH & CO. KG</u>, a corporation duly organized under and pursuant to the laws of <u>Germany</u> and having a principal place of business at <u>Grüner Weg 37</u>, <u>63450 Hanau</u>, <u>Germany</u> (hereinafter referred to as "the Assignee"), is desirous of acquiring the entire right, title, and interest in and to said inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications, including provisional applications for Letters Patent of the United States or other countries claiming priority to said application, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefor and thereon.

NOW, THEREFORE, for good and sufficient consideration, the receipt of which is hereby acknowledged, the Assignors have sold, assigned, transferred, and set over, and by these presents do sell, assign, transfer, and set over, unto the Assignee, its successors, legal representatives, and assigns the entire right, title, and interest in and to the above-mentioned inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications for Letters Patent of the United States or other countries claiming priority to said applications, and any and all Letters Patent or Patents of the United States of America and all foreign countries that may be granted therefor and thereon, and in and to any and all applications claiming priority to said applications, divisions, continuations, and continuations-in-part of said applications, and reissues and extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by the Assignee, for its own use and behoof and the use and behoof of its successors, legal representatives, and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted as fully and entirely as the same would have been held and enjoyed by the Assignors had this sale and assignment not been made;

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns, that, at the time of execution and delivery of these presents, the Assignors are the sole and lawful owners of the entire right, title, and interest in and to the inventions set forth in said applications and said applications, including provisional applications,

Buchanan Ingersoll & Rooney PC
Attorneys & Government Relations Professionals

Application No	
Attorney Docket No.	0070747-000072
•	Page 2 of 2

above-mentioned, and that the same are unencumbered, and that the 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, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns that the Assignors will, whenever counsel of the Assignee, or the counsel of its successors, legal representatives, and assigns, shall advise that any proceeding in connection with said inventions or said applications for Letters Patent or Patents, or any proceeding in connection with Letters Patent or Patents for said inventions in any country, including interference proceedings, is lawful and desirable, or that any application claiming priority to said application, division, continuation, or continuation-in-part of any applications for Letters Patent or Patents, or any reissue or extension of any Letters Patent or Patents to be obtained thereon, is lawful and desirable, 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 Letters Patent or Patents for said inventions, without charge to the Assignee, its successors, legal representatives, and assigns, but at the cost and expense of the Assignee, its successors, legal representatives, and assigns;

AND the Assignors hereby authorize and request the attorneys of Buchanan Ingersoll & Rooney PC to insert in the spaces provided above the title of the invention, filing date, application number, and attorney's docket number of said application when known.

AND the Assignors hereby request the Commissioner of Patents to issue any and all said Letters Patent of the United States to the Assignee as the Assignee of said invention, the Letters Patent to be issued for the sole use and behoof of the Assignee, its successors, legal representatives, and assigns.

DATE 12.2.2013	1. Nhe
	Matthias KATTER
DATE 12.2.2013	Barasa_
	Alexander BARCZA
DATE 12.02.13	V. W.
	Volker ZELLMANN

ASSIGNMENT

(JOINT)

THIS ASSIGNMENT, by (1) Matthias KATTER. (2) Alexander BARCZA and (3) Volker ZELLMANN, residing at (1) Alzenau, Germany; (2) Hanau, Germany and (3) Linsengericht, Germany, (hereinafter referred to as "the Assignors"), respectively, witnesseth:

WHEREAS, the Assignors have invented certain new and useful improvements in A METHOD FOR FABRICATING A FUNCTIONALLY-GRADED MONOLITHIC SINTERED WORKING COMPONENT FOR MAGNETIC HEAT EXCHANGE AND AN ARTICLE FOR MAGNETIC HEAT EXCHANGE set forth in an application for Letters Patent of the United States, which is a

1) provisional application		provisional application
	(a)	bearing Application No, and filed on;
	(b)	to be filed herewith; or
2)	\boxtimes	non-provisional application
	(a)	bearing Application No, and filed on;
	(b)	having an oath or declaration executed on even date herewith prior to filing of application;
	(c)	having an oath or declaration executed on a different date than this Assignment; and

WHEREAS, <u>VACUUMSCHMELZE GMBH & CO. KG</u>, a corporation duly organized under and pursuant to the laws of <u>Germany</u> and having a principal place of business at <u>Grüner Weg 37</u>, <u>63450 Hanau</u>, <u>Germany</u> (hereinafter referred to as "the Assignee"), is desirous of acquiring the entire right, title, and interest in and to said inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications, including provisional applications for Letters Patent of the United States or other countries claiming priority to said application, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefor and thereon.

NOW, THEREFORE, for good and sufficient consideration, the receipt of which is hereby acknowledged, the Assignors have sold, assigned, transferred, and set over, and by these presents do sell, assign, transfer, and set over, unto the Assignee, its successors, legal representatives, and assigns the entire right, title, and interest in and to the above-mentioned inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications for Letters Patent of the United States or other countries claiming priority to said applications, and any and all Letters Patent or Patents of the United States of America and all foreign countries that may be granted therefor and thereon, and in and to any and all applications claiming priority to said applications, divisions, continuations, and continuations-in-part of said applications, and reissues and extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by the Assignee, for its own use and behoof and the use and behoof of its successors, legal representatives, and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted as fully and entirely as the same would have been held and enjoyed by the Assignors had this sale and assignment not been made;

AND for the same consideration, the Assignors hereby coverant and agree to and with the Assignee, its successors, legal representatives, and assigns, that, at the time of execution and delivery of these presents, the Assignors are the sole and lawful owners of the entire right, title, and interest in and to the inventions set forth in said applications and said applications, including provisional applications,

Buchanan Ingersoll & Rooney PC

Application No	
Attorney Docket No.	0070747-000072
	Page 2 of 2

above-mentioned, and that the same are unencumbered, and that the 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, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns that the Assignors will, whenever counsel of the Assignee, or the counsel of its successors, legal representatives, and assigns, shall advise that any proceeding in connection with said inventions or said applications for Letters Patent or Patents, or any proceeding in connection with Letters Patent or Patents for said inventions in any country, including interference proceedings, is lawful and desirable, or that any application claiming priority to said application, division, continuation, or continuation-in-part of any applications for Letters Patent or Patents, or any reissue or extension of any Letters Patent or Patents to be obtained thereon, is lawful and desirable, 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 Letters Patent or Patents for said inventions, without charge to the Assignee, its successors, legal representatives, and assigns; but at the cost and expense of the Assignee, its successors, legal representatives, and assigns;

AND the Assignors hereby authorize and request the attorneys of Buchanan Ingersoll & Rooney PC to insert in the spaces provided above the title of the invention, filing date, application number, and attorney's docket number of said application when known.

AND the Assignors hereby request the Commissioner of Patents to issue any and all said Letters Patent of the United States to the Assignee as the Assignee of said invention, the Letters Patent to be issued for the sole use and behoof of the Assignee, its successors, legal representatives, and assigns.

DATE 12.2.2013	1. Nhe	
	Matthias KATTER	
DATE 12.2.2013	Ba90650	
	Alexander BARCZA	
DATE 12.02.13	V. W.	
	Volker ZELLMANN	

Buchanan Ingersoll & Rooney Po