

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>Mr. Robert A. Pattillo</td> <td>02/04/2012</td> </tr> <tr> <td>Mr. Samuel Bonsall</td> <td>02/01/2012</td> </tr> </tbody> </table>		Name	Execution Date	Mr. Robert A. Pattillo	02/04/2012	Mr. Samuel Bonsall	02/01/2012
Name	Execution Date						
Mr. Robert A. Pattillo	02/04/2012						
Mr. Samuel Bonsall	02/01/2012						
RECEIVING PARTY DATA							
Name:	Vesuvius Crucible Company						
Street Address:	103 Foulk Road						
Internal Address:	Suite 202						
City:	Wilmington						
State/Country:	DELAWARE						
Postal Code:	19803						
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>13362665</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13362665		
Property Type	Number						
Application Number:	13362665						
CORRESPONDENCE DATA							
Fax Number:	(412)429-3448						
Phone:	412-429-1800 x6921						
Email:	thomas.clinton@us.vesuvius.com						
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>							
Correspondent Name:	Thomas Clinton						
Address Line 1:	250 Park West Drive						
Address Line 4:	Pittsburgh, PENNSYLVANIA 15275						
ATTORNEY DOCKET NUMBER:	1523-1 CIP US						
NAME OF SUBMITTER:	Thomas Clinton						
<p>Total Attachments: 4 source=1523-1 CIP Inventors Assignment#page1.tif source=1523-1 CIP Inventors Assignment#page2.tif source=1523-1 CIP Inventors Assignment#page3.tif source=1523-1 CIP Inventors Assignment#page4.tif</p>							

CH \$40.00 13362665

ASSIGNMENT OF INVENTION

WHEREAS WE,

Robert A. Pattillo of Birmingham, Alabama, United States, a U.S. citizen residing at 3344 Afton Lane, Birmingham, Alabama, 35242 USA ;

Samuel B. Bonsall of Bowling Green, Ohio, United States, a U.S. citizen residing at 1006 Lafayette Blvd., Bowling Green, Ohio, 43402 USA; have made a certain new and useful invention as set forth in an application for United States Letters Patent, entitled:

CEMENT-FREE REFRACTORY

and was filed on January 31, 2012 as US Application No. 13/362,665.

AND WHEREAS, Vesuvius Crucible Company, a corporation of the State of Delaware and having an address of 103 Foulk Road, Suite 202, Wilmington, DE 19803, hereinafter referred to as assignee, is desirous of acquiring the entire right, title and interest in and to said invention and in and to any and all Letters Patent of the United States and foreign countries that may be obtained therefor;

NOW, THEREFORE, for good and valuable consideration, the receipt for and sufficiency of which is hereby acknowledged, We do hereby sell, assign, transfer and set over unto said assignee, its legal representatives, successors, and assigns, the entire right, title and interest in and to said invention as set forth in the above-mentioned application, including any continuations, continuations-in-part, divisions, reissues, re-examinations or extensions thereof, and in and to any and all patents of the United States and foreign countries that may be issued for said invention;

UPON SAID CONSIDERATIONS, We hereby agree with the said assignee that We will not execute any writing or do any act whatsoever conflicting with these presents, and that We will, at any time upon request, without further or additional consideration but at the expense of said assignee, execute such additional assignments and other writings and do such additional acts as said assignee may deem necessary or desirable to perfect the assignee's enjoyment of this grant, and render all necessary assistance in making application for and obtaining original, divisional, continuations, continuations-in-part, reexamined, reissued, or extended Letters Patent of the United States or of any and all foreign countries on said invention, and in enforcing any rights or choses in action accruing as a result of such applications or patents, by giving testimony in any proceedings or transactions

Attorney Docket No. 1523-1 CIP
involving such applications or patents, and by executing

preliminary statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind, and inure to the benefit of the assigns and legal representatives of assignor and assignee;

AND We request the Commissioner of Patents and Trademarks to issue any Letters Patent of the United States that may be issued for said invention to said assignee, its legal representatives, successors or assigns, as the sole owner of the entire right, title and interest in and to said patent and the invention covered thereby.

Date
February 1, 2012

Date

Signature - Robert A. Pattillo
Samuel B. Bonsall

Signature - Samuel B. Bonsall

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Robert A. Pattillo of Birmingham, Alabama, United States, a U.S. citizen residing at 3344 Afton Lane, Birmingham, Alabama, 35242 USA ;

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