

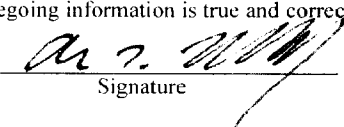


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WBAM Ref. No.:KG37904-0025

FORM PTO-1595 <span style="float: right;">RI</span> (Rev. 6-93) <b>PATENTS ONLY</b> <span style="float: right;">1</span>		 <b>101441154</b>		ET U.S. DEPARTMENT OF COMMERCE	
To the Honorable Commissioner c		d original documents or copy thereof.			
1. Name of conveying party(ies) <span style="float: right; font-size: 1.2em;">8-10-00</span>  Rolf Gerhardt Rainer Köppler Werner Ponto Waltraud Werdecker  Additional name(s) of conveying party(ies) attached? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		2. Name and address of receiving party(ies)  1) Heraeus Quarzglas GmbH & Co. KG Quarzstrasse 63450 Hanau Germany  Additional name(s) & address(es) attached? _ Yes <input checked="" type="checkbox"/> No			
3. Nature of conveyance:  <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Security Agreement <input type="checkbox"/> Merger <input type="checkbox"/> Change of Name <input type="checkbox"/> Other  Execution Dates: 8/7/00; 8/1/00;		JC675 U.S. PTO <b>09/636148</b> 			
4. Application number(s) or patent number(s): <span style="float: right; font-size: 1.2em;">09/636148</span>  If this document is being filed together with a new application, the execution date of the application is: 8/7/00  A. Patent Application No.(s) <span style="margin-left: 200px;">B. Patent No.(s)</span>  Additional numbers attached? _ Yes <input checked="" type="checkbox"/> No					
5. Name and address of party to whom correspondence concerning document should be mailed:  Name: <u>Andrew L. Tiajolloff, Esq.</u> Internal Address: <u>Whitman Breed Abbott &amp; Morgan LLP</u>  Street Address: <u>200 Park Avenue</u>  City: <u>New York</u> State: <u>NY</u> Zip: <u>10166</u>		6. Total number of applications and patents involved ..... <u>1</u>  7. Total fee (37 CFR 3.41) ..... \$ <u>40.00</u> X is Enclosed Authorized to be charged to deposit account #50-0297  8. Deposit account number: 50-0297 (Attach duplicate copy of this page if paying by deposit account)			
9. Statement and signature.  To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.  <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <u>Andrew L. Tiajolloff</u>            Name of Person Signing         </div> <div style="width: 30%; text-align: center;">             Signature         </div> <div style="width: 30%; text-align: right;"> <u>August 10, 2000</u>            Date            Total number of pages including cover sheet, attachments, and document): 3         </div> </div>		Do not use this space			
Do not detach this portion Mail documents to be recorded with required cover sheet information to: <b>Commissioner of Patents and Trademarks</b> <b>Box Assignments</b> <b>Washington, D.C. 20231</b> Public burden reporting for this sample cover sheet is estimated to average about 30 minutes per document to be recorded, including time for reviewing the document and gathering the data needed, and completing and reviewing the sample cover sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Office of Information Systems, PK2-1000C, Washington, D.C. 20231, and to the Office of Management and Budget, Paperwork Reduction Project (0651-0011), Washington, D.C. 20503.					

**ASSIGNMENT**

**WHEREAS**, I, as a below named inventor, am a sole inventor (if only one name is listed below) or a joint inventor (if plural names are listed below) of certain new and useful improvements in

**PROCESS FOR THE MANUFACTURE OF DENSE QUARTZ GLASS GRANULATE**

for which I have contemporaneously executed a U.S. patent application;

**AND WHEREAS**, Heraeus Quarzglas GmbH & Co. KG, a German corporation with offices at Quarzstrasse, 63450 Hanau, Germany ("ASSIGNEE") is desirous of acquiring all interest in, to and under said invention, said application disclosing the invention and in, to and under any Letters Patent or similar legal protection which may be granted therefor in the United States and in any and all foreign countries;

**NOW THEREFORE**, in consideration of the sum of One Dollar (\$1.00), and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I, as a sole or joint inventor as indicated below, by these presents do hereby assign, sell and transfer unto the said ASSIGNEE, its successors, assigns, and legal representatives, the entire right, title and interest in the said invention, said application, including any divisions and continuations thereof, and in and to any and all Letters Patent of the United States, and countries foreign thereto, which may be granted for said invention, and in and to any and all priority rights and/or convention rights under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and to any other benefits accruing or to accrue to me with respect to the filing of applications for patents or securing of patents in the United States and countries foreign thereto, and I hereby authorize and request the Commissioner of Patents to issue the said United States Letters Patent to said ASSIGNEE, as the assignee of the whole right, title and interest thereto;


And I further agree to execute all necessary or desirable and lawful future documents, including assignments in favor of ASSIGNEE or its designee, as ASSIGNEE or its successors, assigns and legal representatives may from time-to-time present to me and without further remuneration, in order to perfect title in said invention, modifications, and improvements in said invention, applications and Letters Patent of the United States and countries foreign thereto;

And I further agree to properly execute and deliver and without further remuneration, such necessary or desirable and lawful papers for application for foreign patents, for filing subdivisions of said application for patent, and/or for obtaining any reissue or reissues of any Letters Patent which may be granted for my aforesaid invention, as the ASSIGNEE thereof shall hereafter require and prepare at its own expense;

And I further agree that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent and legal equivalents in foreign countries as may be known and accessible to me and will testify as to the same in any interference or litigation related thereto;

And I hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment and sale.

This assignment executed on the date indicated below.

07.08.00   
Date Rolf Gerhard

August 1, 2000   
Date Rainer Köppler

August 1, 2000   
Date Werner Ponto

August 1, 2000   
Date Waltraud Werdecker