505250717 12/21/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT5297498

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
NIGEL ROBERT WHIPPEY	07/28/2018
MARCUS CONSTANTIN GÖBEL	08/13/2018
BORIS GROMANN	08/03/2018
GERRIT SCHEICH	08/13/2018

RECEIVING PARTY DATA

Name:	HERAEUS QUARZGLAS GMBH & CO. KG	
Street Address:	QUARZSTRASSE 8	
City:	HANAU	
State/Country:	GERMANY	
Postal Code:	63450	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16062387

CORRESPONDENCE DATA

Fax Number: (612)573-2005

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 612-573-2000

Email: USPTO.PATENTS@dbclaw.com

Correspondent Name: DICKE, BILLIG & CZAJA Address Line 1: FIFTH STREET TOWERS

Address Line 2: 100 SOUTH FIFTH STREET, SUITE 2250

Address Line 4: MINNEAPOLIS, MINNESOTA 55402

ATTORNEY DOCKET NUMBER: H685.133.101/HU13585PCUS		
NAME OF SUBMITTER:	PAUL P. KEMPF	
SIGNATURE:	/paulpkempf/	
DATE SIGNED:	12/21/2018	

Total Attachments: 3

source=2018-12-21-DeclarationandAssignment_signed_133_#page1.tif source=2018-12-21-DeclarationandAssignment signed 133 #page2.tif

PATENT REEL: 047978 FRAME: 0389 505250717

 $source = 2018\text{-}12\text{-}21\text{-}Declaration and Assignment_signed_133_\#page3.tif$

PATENT REEL: 047978 FRAME: 0390

Docket No. H685.133.101/HU13585PCUS

ASSIGNMENT AND DECLARATION

WHEREAS, we:

bearing Serial No. <u>16/062,387</u>.

	<u>Inventor</u>	Citizenship	<u>Address</u>
	Nigel Robert Whippey	GB	Trieler Ring 66
			63500 Seligenstadt, Germany
	Marcus Constantin Göbel	DE	Frankfurter Str. 41
		35392 Giessen, Germany	
	Boris Gromann	DE	Spessartstrasse 22
		63743 Aschaffenburg, Germany	
	Gernit Scheich	DE	Schäferstrasse 10
			63500 Seligenstadt, Germany
entitl		SSIGNORS"), have made a	discovery or invention ("INVENTION")
	INCREASE IN SILICON	CONTENT IN THE PREPAR	RATION OF QUARTZ GLASS
	for which an application for Letters Patent of the United States has been executed on even date herewith.		
\boxtimes	for which an application for Letters Patent of the United States has been filed on June 14, 2018.		

ASSIGNMENT

WHEREAS, at the time the INVENTION was made, ASSIGNORS were under an obligation to assign all rights, title, and interest in ASSIGNORS' INVENTION to:

Heraeus Quarzglas GmbH & Co. KG
(a German Corporation)
Quarzstrasse 8
63450 Hanau
Germany

and its legal representatives, successors, and assigns (hereinafter referred to as "ASSIGNEE"), which

PATENT REEL: 047978 FRAME: 0391 desires to formalize the assignment and its ownership of the entire interest in, to and under said INVENTION and in, to and under any and all applications for patent thereon and all Letters Patent which may be granted thereon.

NOW, THEREFORE, for valuable consideration received by ASSIGNORS, receipt and sufficiency of which is hereby acknowledged and agreed, and intending to be legally bound hereby, ASSIGNORS have assigned and hereby assign to ASSIGNEE, the entire right, title and interest to said INVENTION in the United States and its territorial possessions and in all foreign countries and to all Letters Patent or similar legal protection in the United States and its territorial possessions and in any and all foreign countries to be obtained for said INVENTION by said applications or any patent applications related thereto, including, but not limited to, continuations, divisionals, reexaminations or reissues thereof or any legal equivalent thereof in the United States and all foreign countries for the full term or terms for which the same may be granted.

WE, SAID ASSIGNORS, hereby covenant that we have full right to convey the entire right, title and interest herein to ASSIGNEE;

WE, SAID ASSIGNORS, hereby authorize ASSIGNEE, or its representatives, to insert the filing date and serial number of the application when these are known;

AND WE, SAID ASSIGNORS, hereby further covenant and agree that the ASSIGNEE may apply for foreign Letters Patent on said INVENTION, and that we will, at any time, when called upon to do so by the ASSIGNEE communicate to the ASSIGNEE as the case may be, any facts known to us respecting said INVENTION, and execute and deliver any and all lawful papers that may be necessary or desirable to perfect the title to the said INVENTION, the said applications and the said Letters Patent in the ASSIGNEE and that if reissues of the said Letters Patent or disclaimers relating thereto, or continuations, divisionals, reexaminations, or reissues of the said applications, or any thereof, shall hereafter be desired by the ASSIGNEE, we will, at any time, when requested by ASSIGNEE, sign all lawful papers, make all rightful oaths, execute and deliver all such disclaimers and all continuations, divisionals, reexaminations, or reissues of said applications so desired, and generally do everything possible to aid ASSIGNEE to obtain and enforce proper patent protection for said INVENTION, and without further compensation, but at the expense of the ASSIGNEE.

DECLARATION

As an above-named inventor, I hereby declare that:

This declaration is directed to the United States application referenced above.

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention (or claimed design) in the above-identified application for which this declaration is being submitted.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

Signature: Nigel Whippes	Date: July 28, 2018
Legal Name of Inventor: Nigel Robert Whippey	Citizenship: <u>GB</u>
Signature: //www	Date: Alyns + 13, 2018
Legal Name of Inventor: Marcus Constantin Göbel	Citizenship: DE
Signature: D Love	Date: 400 7 / 03 / 2017
Legal Name of Inventor: Boris Gromann	Citizenship: <u>DE</u>
Signature: Alas	Date: August 13, 2018
Legal Name of Inventor: Gerrit Scheich	Citizenship: <u>DE</u>