

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT5715108

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
EGBERT STIEDL	07/14/2019
BERND SPANIOL	07/08/2019
NORBERT TRAEGER	07/23/2019
WERNER FEURING	07/23/2019
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	HERAEUS DEUTSCHLAND GMBH & CO. KG
<b>Street Address:</b>	HERAEUSSTRASSE 12-14
<b>City:</b>	HANAU
<b>State/Country:</b>	GERMANY
<b>Postal Code:</b>	63450
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	16476497
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(917)332-3773
<i>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.</i>	
<b>Phone:</b>	202-420-2200
<b>Email:</b>	jyeddo@blankrome.com
<b>Correspondent Name:</b>	BLANK ROME LLP
<b>Address Line 1:</b>	1825 EYE STREET NW
<b>Address Line 4:</b>	WASHINGTON, D.C. 20006-5403
<b>ATTORNEY DOCKET NUMBER:</b>	140891.34200
<b>NAME OF SUBMITTER:</b>	JUDY YEDDO
<b>SIGNATURE:</b>	/Judy Yeddo/
<b>DATE SIGNED:</b>	09/12/2019
<b>Total Attachments: 17</b>	
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**RECORDATION FORM COVER SHEET (PTO-1595)  
(Supplemental Sheet)**

**Additional conveying party(ies) and/or Execution Date(s) (1. and/or 3. continued):**

Werner Feuring (07/23/2019)

**Additional receiving party(ies) (2. continued):**

Name: \_\_\_\_\_

Internal Address:

Street Address:

City: \_\_\_\_\_ State: \_\_\_\_\_ Country: \_\_\_\_\_ Zip: \_\_\_\_\_

Name: \_\_\_\_\_

Internal Address:

Street Address:

City: \_\_\_\_\_ State: \_\_\_\_\_ Country: \_\_\_\_\_ Zip: \_\_\_\_\_

Name: \_\_\_\_\_

Internal Address:

Street Address:

City: \_\_\_\_\_ State: \_\_\_\_\_ Country: \_\_\_\_\_ Zip: \_\_\_\_\_

**Additional application and/or patent number(s) (4. continued):**

Additional Patent Application No.(s)  
(4A. continued):

Additional Patent No.(s)  
(4B. continued):

Additional numbers attached?

Yes

No

**COMBINED ASSIGNMENT & DECLARATION  
FOR UTILITY OR DESIGN PATENT APPLICATIONS**

**ASSIGNMENT**

**THIS ASSIGNMENT**, made by

Bernd Spaniol, a resident of Hammersbach, GERMANY;

Norbert Traeger, a resident of Maintal, GERMANY; and

Werner Feuring, a resident of Gelnhausen, GERMANY;

(hereinafter referred to as Assignors), respectively;

**WHEREAS**, Assignors have invented certain new and useful improvements in METHOD FOR CUTTING REFRACTORY METALS, set forth in a Patent application for which an International Application was filed on November 20, 2017, PCT/EP2017/079770, designating the United States; and

**WHEREAS**, Heraeus Deutschland GmbH & Co. KG, a Company organized under and pursuant to the laws of Germany having its principal place of business at Heraeusstrasse 12-14, 63450 Hanau, GERMANY (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to said inventions and said Application for Letters Patent of the United States, and in and to any Letters Patent of the United States to be obtained therefore and thereon.

**NOW, THEREFORE**, for good and valuable consideration, the receipt of which is hereby acknowledged, Assignors have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto Assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions and application for Letters Patent, and in and to any and all direct and indirect divisions, continuations and continuations-in-part of said application, and any and all Letters Patent in the United States and all foreign countries which may be granted therefore and thereon, and reissues, reexaminations and extensions of said Letters Patent, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and

enjoyed by Assignee, for its own use and benefit and the use and benefit of its successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent may be granted and/or extended, as fully and entirely as the same would have been held and enjoyed by Assignors, had this sale and assignment not been made.

**AND** for the same consideration, Assignors hereby represent and warrant to Assignee, its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, except for any rights, titles and/or interests that have arisen to Assignee under law or that have already been transferred to Assignee, Assignors are the sole and lawful owners of the entire right, title and interest in and to the said inventions and application for Letters Patent above-mentioned, and that the same are unencumbered and that 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, Assignors hereby covenant and agree to and with Assignee, its successors, legal representatives and assigns, that Assignors will 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 any Letters Patent and applications for Letters Patent for said inventions, without charge to Assignee, its successors, legal representatives and assigns, whenever counsel of Assignee, or counsel of its successors, legal representatives and assigns, shall advise: that any proceeding in connection with said inventions, or said Patent application for Letters Patent, or any proceeding in connection with any Letters Patent or applications for Letters Patent for said inventions in any country, including but not limited to interference proceedings, is lawful and desirable; or, that any division, continuation or continuation-in-part of any application for Letters Patent, or any reissue, reexamination or extension of any Letters Patent, to be obtained thereon, is lawful and desirable.

**AND** Assignors hereby request the Commissioner for Patents and Trademarks to issue said Letters Patent of the United States to Assignee, as Assignee of said inventions and the Letters Patent to be issued thereon, for the sole use and benefit of Assignee, its successors, legal representatives and assigns.

AND Assignors acknowledge an obligation of assignment of this invention to Assignee at the time the invention was made.

**DECLARATION**

As a below named inventor, I hereby declare that:

This declaration is directed to the patent application entitled:

METHOD FOR CUTTING REFRACTORY METALS

the specification of which is attached hereto.

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 in the application.

I have reviewed and understand the contents of the above-identified application.

I am aware of the duty to disclose to the Office all information known to me to be material to patentability as defined in 37 C.F.R. 1.56.

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 the event that the filing date and/or Application No. are not entered above at the time I execute this document, and if such information is deemed necessary, I hereby authorize and request the attorneys/agent(s) at Blank Rome LLP, 717 Texas Avenue, Suite 1400, Houston, Texas 77002, to insert the filing date and/ or Application No. of said application into this document.

Date: July 8, 2019

Signature:   
Bernd Spaniol

Date: \_\_\_\_\_

Signature: \_\_\_\_\_  
Norbert Traeger

Date: \_\_\_\_\_

Signature: \_\_\_\_\_  
Werner Feuring



**COMBINED ASSIGNMENT & DECLARATION  
FOR UTILITY OR DESIGN PATENT APPLICATIONS**

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Bernd Spaniol, a resident of Hammersbach, GERMANY;

Norbert Traeger, a resident of Maintal, GERMANY; and

Werner Feuring, a resident of Gelnhausen, GERMANY;

(hereinafter referred to as Assignors), respectively;

WHEREAS, Assignors have invented certain new and useful improvements in METHOD FOR CUTTING REFRACTORY METALS, set forth in a Patent application for which an International Application was filed on November 20, 2017, PCT/EP2017/079770, designating the United States; and

WHEREAS, Heraeus Deutschland GmbH & Co. KG, a Company organized under and pursuant to the laws of Germany having its principal place of business at Heraeusstrasse 12-14, 63450 Hanau, GERMANY (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to said inventions and said Application for Letters Patent of the United States, and in and to any Letters Patent of the United States to be obtained therefore and thereon.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, Assignors have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto Assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions and application for Letters Patent, and in and to any and all direct and indirect divisions, continuations and continuations-in-part of said application, and any and all Letters Patent in the United States and all foreign countries which may be granted therefore and thereon, and reissues, reexaminations and extensions of said Letters Patent, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and

enjoyed by Assignee, for its own use and benefit and the use and benefit of its successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent may be granted and/or extended, as fully and entirely as the same would have been held and enjoyed by Assignors, had this sale and assignment not been made.

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Date: \_\_\_\_\_

Signature: \_\_\_\_\_  
Bernd Spaniol

Date: 23.07.2019

Signature: Norbert Traeger  
Norbert Traeger

Date: \_\_\_\_\_

Signature: \_\_\_\_\_  
Werner Feuring

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FOR UTILITY OR DESIGN PATENT APPLICATIONS**

**ASSIGNMENT**

**THIS ASSIGNMENT**, made by

Bernd Spaniol, a resident of Hammersbach, GERMANY;

Norbert Traeger, a resident of Maintal, GERMANY; and

Werner Feuring, a resident of Geinhausen, GERMANY;

(hereinafter referred to as Assignors), respectively;

**WHEREAS**, Assignors have invented certain new and useful improvements in **METHOD FOR CUTTING REFRACTORY METALS**, set forth in a Patent application for which an International Application was filed on November 20, 2017, PCT/EP2017/079770, designating the United States; and

**WHEREAS**, Heraeus Deutschland GmbH & Co. KG, a Company organized under and pursuant to the laws of Germany having its principal place of business at Heraeusstrasse 12-14, 63450 Hanau, GERMANY (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to said inventions and said Application for Letters Patent of the United States, and in and to any Letters Patent of the United States to be obtained therefore and thereon.

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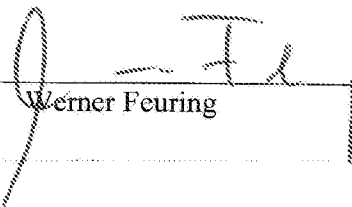
Date: \_\_\_\_\_

Signature: \_\_\_\_\_  
Bernd Spaniol

Date: \_\_\_\_\_

Signature: \_\_\_\_\_  
Norbert Traeger

Date: July 23, 2019

Signature:  \_\_\_\_\_  
Werner Feuring



**COMBINED ASSIGNMENT & DECLARATION  
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**ASSIGNMENT**

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**PATENT  
REEL: 050354 FRAME: 0698**

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Date: X July 19, 2019

Signature: X Egbert Stiedl  
Egbert Stiedl