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PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JAN SCHOENHABER	07/16/2020
NAINA DEIBEL	07/14/2020
MARTIN ROESCH	07/16/2020
STEPHANIE SPIESS	06/03/2020
MEIKE GOTTHARDT	06/11/2020
NICOLE SCHICHTEL	07/17/2020

RECEIVING PARTY DATA

Name:	UMICORE AG & CO. KG
Street Address:	RODENBACHER CHAUSSEE 4
City:	HANAU-WOLFGANG
State/Country:	GERMANY
Postal Code:	63457

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16954305

CORRESPONDENCE DATA

Fax Number: (202)263-4329

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Address Line 2: SUITE 400

Address Line 4: WASHINGTON, D.C. 20007

ATTORNEY DOCKET NUMBER:	034166.327
NAME OF SUBMITTER:	DENNIS C. RODGERS
SIGNATURE:	/Dennis C. Rodgers/
DATE SIGNED:	12/23/2020

PATENT REEL: 054741 FRAME: 0171 506420408

Total Attachments: 6 source=034166_327_Assignment#page1.tif source=034166_327_Assignment#page2.tif source=034166_327_Assignment#page3.tif source=034166_327_Assignment#page4.tif source=034166_327_Assignment#page5.tif

source=034166_327_Assignment#page6.tif

PATENT REEL: 054741 FRAME: 0172

ASSIGNMENT

This assignment agreement is applicable to an invention entitled:

CATALYTICALLY ACTIVE PARTICULATE FILTER

and v	which is found in (check one)
	A patent application for this invention, executed by the ASSIGNOR(S) concurrently with this assignment (U.S. Application No);
	U.S. Patent Application No, filed _ ;
	A U.S. Patent Application based on PCT International Application No filed on _ (U.S. Application No);
\boxtimes	PCT International Application No. <u>PCT/EP2018/084902</u> filed on <u>December 14, 2018 (U.S. Application No; and/or</u>
	U.S. Patent No, issued _ (date).
The	PATENT PROPERTY assigned under this agreement is (check one):
	U.S. Patent Property only: The entire right, title and interest for the United States and its territorial possessions in and to the invention identified above, any and all improvements thereof, the right to claim priority including the right to claim priority to any earlier patent applications for said invention, and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, continuation-in-part, extension, conversion to 35 U.S.C. 111(a), or substitute thereof, and any reissue, reexamination, or extension of said Letters Patent, and the right to sue and recover for any past infringement, the right to file and/or prosecute any applications for said invention as Applicant, and the right to have said Letters Patent issue with the Assignee as named Applicant, or
	Worldwide Patent Property: The entire right, title and interest for the United States and its territorial possessions and in all foreign countries in and to the invention identified above, any and all improvements thereof, and any legal equivalent thereof in a foreign country, the right to claim priority including the right to claim priority to any earlier patent applications for said invention, and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, continuation-in-part, extension, conversion to 35 U.S.C. 111(a), or substitute thereof, and any reissue, reexamination, or extension of said Letters Patent, and all rights under all International Conventions for the Protection of Industrial Property, and the right to sue and recover for any past infringement, and where applicable, the right to file and/or prosecute any applications for said invention as Applicant and/or the right to have said Letters Patent issue with the Assignee as named Applicant.

The following ASSIGNEE is the recipient of the PATENT PROPERTY:

UMICORE AG & CO. KG Rodenbacher Chaussee 4 Hanau-Wolfgang, GERMANY 63457

This ASSIGNEE is (check one):

An Individual;		
A Partnership;		
A Corporation/Entity of Germany (specify state	or country); or	•
(other)		

In consideration of the premises hereof, and other good and valuable consideration, receipt of which is acknowledged, the ASSIGNOR(S) hereby sell, assign and transfer to the ASSIGNEE, its successors, assigns, and legal representatives, the PATENT PROPERTY.

As to all U.S. Patent Property assigned under this agreement, the ASSIGNOR(S) hereby authorize and request the Director of the U.S. Patent & Trademark Office to issue said Letters Patent and any reissue or extension thereof to the ASSIGNEE.

The ASSIGNOR(S) hereby agree that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

Further, the ASSIGNOR(S) hereby agree to communicate to said ASSIGNEE, its successors, assigns, and legal representatives, any facts known to the ASSIGNOR(S) respecting said invention, promptly provide upon request all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR(s), testify in any interference, derivation, post grant review, inter partes review, litigation, or legal proceeding relating to the PATENT PROPERTY, sign all lawful papers, execute all divisional, continuation, continuation-in-part, substitute, renewal, reexamination and reissue applications, execute all necessary assignment papers to cause any and all Letters Patent to be issued to said ASSIGNEE, make all rightful oaths and generally do everything necessary or desirable to aid said ASSIGNEE, its successors, assigns, and legal representatives, to obtain and enforce proper protection for said invention.

The ASSIGNOR(S) authorize any attorneys and agents of record and/or who have a power of attorney in this application to check any appropriate boxes and to insert the Serial Number and filing date in this document after it has been executed.

IN WITNESS WHEREOF, the below designated ASSIGNOR(S) and ASSIGNEE have executed this ASSIGNMENT:

ASSIGNOR

Signature: Salabets	Date: 16 (7/76)
Name: Jan SCHOENHABER	
Signature:	Date: 14.07.20
Name: Naina DEIBEL	
Signature: Que M	Date: 16-07.7070
Name: Martin ROESCH	
Signature:	Date:
Name: Stephanie SPIESS	
Signature:	Date:
Name: Meike GOTTHARDT Signature:	Date: <u>17-07-2020</u>
Name: Nicole SCHICHTEL	
ASSIGNEE Signature:	Date: 20.07.2020
Name: I.V. Dr. Stefan Retzow acting in UMICO	official capacity on behalf of DRE AG & CO. KG
Signature: 4444	Date: 30.0) 2020
	official capacity on behalf of ORE AG & CO. KG

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ASSIGNMENT

This assignment agreement is applicable to an invention entitled:

CATALYTICALLY ACTIVE PARTICULATE FILTER

and \	which is found in (check one)::
	A patent application for this invention, executed by the ASSIGNOR(S) concurrently with this assignment (U.S. Application No);
	U.S. Patent Application No, filed _;
	A U.S. Patent Application based on PCT International Application No filed on _ (U.S. Application No);
\boxtimes	PCT International Application No. <u>PCT/EP2018/084902</u> filed on <u>December 14, 2018 (U.S. Application No; and/or</u>
	U.S. Patent No, issued _ (date).
The	PATENT PROPERTY assigned under this agreement is (check one):
	U.S. Patent Property only: The entire right, title and interest for the United States and its' territorial possessions in and to the invention identified above, any and all improvements thereof, the right to claim priority including the right to claim priority to any earlier patent applications for said invention, and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, continuation-in-part, extension, conversion to 35 U.S.C. 111(a), or substitute thereof, and any reissue, reexamination, or extension of said Letters Patent, and the right to sue and recover for any past infringement, the right to file and/or prosecute any applications for said invention as Applicant, and the right to have said Letters Patent issue with the Assignee as named Applicant, or
	Worldwide Patent Property: The entire right, title and interest for the United States and its territorial possessions and in all foreign countries in and to the invention identified above, any and all improvements thereof, and any legal equivalent thereof in a foreign country, the right to claim priority including the right to claim priority to any earlier patent applications for said invention, and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, continuation-in-part, extension, conversion to 35 U.S.C. 111(a), or substitute thereof, and any reissue, reexamination, or extension of said Letters Patent, and all rights under all International Conventions for the Protection of Industrial Property, and the right to sue and recover for any past infringement, and where applicable, the right to file and/or prosecute any applications for said invention as Applicant

The following ASSIGNEE is the recipient of the PATENT PROPERTY:

UMICORE AG & CO. KG Rodenbacher Chaussee 4 Hanau-Wolfgang, GERMANY 63457

This ASSIGNEE is (check one):

	An Individual;	
	A Partnership;	
\boxtimes	A Corporation/Entity of <u>Germany</u> (specify state or country); or	
	(other)	

In consideration of the premises hereof, and other good and valuable consideration, receipt of which is acknowledged, the ASSIGNOR(S) hereby sell, assign and transfer to the ASSIGNEE, its successors, assigns, and legal representatives, the PATENT PROPERTY.

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The ASSIGNOR(S) hereby agree that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

Further, the ASSIGNOR(S) hereby agree to communicate to said ASSIGNEE, its successors, assigns, and legal representatives, any facts known to the ASSIGNOR(S) respecting said invention, promptly provide upon request all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR(s), testify in any interference, derivation, post grant review, inter partes review, litigation, or legal proceeding relating to the PATENT PROPERTY, sign all lawful papers, execute all divisional, continuation, continuation-in-part, substitute, renewal, reexamination and reissue applications, execute all necessary assignment papers to cause any and all Letters Patent to be issued to said ASSIGNEE, make all rightful oaths and generally do everything necessary or desirable to aid said ASSIGNEE, its successors, assigns, and legal representatives, to obtain and enforce proper protection for said invention.

The ASSIGNOR(S) authorize any attorneys and agents of record and/or who have a power of attorney in this application to check any appropriate boxes and to insert the Serial Number and filing date in this document after it has been executed.

IN WITNESS WHEREOF, the below designated ASSIGNOR(S) and ASSIGNEE have executed this ASSIGNMENT:

ASSIGNOR

Signature:	Date:
Name: Jan SCHOENHABER	
Signature:	Date:
Name: <u>Naina DEIBEL</u>	
Signature:	Date:
Name: <u>Martin ROESCH</u>	
Signature: The Discourse	Date: 03.06.2020
Name: <u>Stephanie SPIESS</u>	
Signature: Gotta o	Date: <u>/// 06 2020</u>
Name: <u>Meike GOTTHARDT</u>	
Signature:	Date:
Name: <u>Nicole SCHICHTEL</u>	
ASSIGNEE	
A DA	28 80 202
Signature: 1040	Date: 2 P. OP. 7020
Name: i.V. Dr. Stefan Retzow	acting in official capacity on behalf of
Senior IP Manager	UMICORE AG & CO. KG
lh la l	2-02-201-
Signature:	Date: 30 07 2020
Name: i.V. Dr. Kai-Uwe Clauswitz	acting in official capacity on behalf of
Senior IP Manager	UMICORE AG & CO KG

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