505215588 12/03/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5262356

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|--------------------------------------|----------------|
| DOW STADE PRODUKTIONS GMBH & CO. OHG | 04/27/2015 |

RECEIVING PARTY DATA

| Name: | THE DOW CHEMICAL COMPANY |
|-----------------|--------------------------|
| Street Address: | 2030 DOW CENTER |
| City: | MIDLAND |
| State/Country: | MICHIGAN |
| Postal Code: | 48674 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 15550581 |

CORRESPONDENCE DATA

Fax Number: (703)413-2220

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: (703) 413-3000

Email: corpassignments@oblon.com

Correspondent Name: OBLON, ET AL.

Address Line 1: 1940 DUKE STREET

Address Line 4: ALEXANDRIA, VIRGINIA 22314

| ATTORNEY DOCKET NUMBER: | 506111US |
|-------------------------|---------------|
| NAME OF SUBMITTER: | CARLA ASKEY |
| SIGNATURE: | /Carla Askey/ |
| DATE SIGNED: | 12/03/2018 |

Total Attachments: 4

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PATENT 505215588 REEL: 047652 FRAME: 0601

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: Dominic RIEDEL et al.

SERIAL NUMBER: 15/550,581 ATTN: ASSIGNMENT BRANCH

FILING DATE: August 11, 2017

FOR: PROCESS FOR THE REGENERATION OF A TITANIUM ZEOLITE

CATALYST FOR PROPYLENE EPOXIDATION

IDENTIFICATION OF PATENTS AND PATENT APPLICATIONS UNDER 37 CFR 3.21

COMMISSIONER FOR PATENTS ALEXANDRIA, VIRGINIA 22313

Commissioner:

The Assignment enclosed herewith contains the foreign priority number and inventors names and is believed, in combination with the application serial number and filing date contained in this cover letter, to adequately identify the above-identified application in accordance with 37 CFR 3.21, as set forth in MPEP Section 302.03.

In light of the foregoing, this Assignment is deemed to be in proper condition for examination and such favorable action is earnestly solicited.

Respectfully Submitted,

OBLON, McCLELLAND, MAIER & NEUSTADT, L.L.P.

Richard L. Treanor Registration No. 36,379

Customer Number

22850

Tel. (703) 413-3000 Fax. (703) 413-2220 (OMMN 07/09)

Beau Burton

Registration No. 65,353

0,11 0,110 0

This Assignment 440 is in the ENGLISH language and has the same meaning in other languages with the same 440 number. FORM 440

ASSIGNMENT

(with Priority Rights) and

INVENTORSHIP DECLARATION

We, ASSIGNOR, of:

DOW STADE PRODUKTIONS GMBH & CO. OHG

Buetzflether Sand D-21683 Stade Germany

an entity organized and existing under the laws of GERMANY do hereby claim and declare that we hold the invention and all patent and other rights and powers obtainable or exercisable in respect thereof from the sole, true and first inventor(s):

Werner J. Witzl, Dow Deutschland, P.O. Box 1120, 21677 Stade, Germany, Citizen of Germany and Meinolf Weidenbach, Kehdinger Torswall 3, 21682 Stade, Germany, Citizen of Germany

by an Assignment dated: April 27, 2015 of an invention relating to and entitled:

PROCESS FOR THE REGENERATION OF A CATALYST

We do hereby declare, for good and valuable consideration, received, sell, assign, and transfer unto:

WE, the ASSIGNEE: T

THE DOW CHEMICAL COMPANY

2030 Dow Center

Midland, Michigan 48674 United States of America

an entity organized and existing under the laws of the State of Delaware, United States of America our entire right, title and interest throughout the world, in and to the invention and all rights and powers to make application for Letters Patent in its own name, or in the name of its nominee; and all rights and powers to file any reissue, divisional, continuing or substitute application and any corresponding applications in any and all countries, including all rights to claim priority under all International Conventions and Treaties in the name of said Assignee, and do hereby authorize said Assignee to insert here the Priority Number, Filing Date, and Filing Country

| Priority Number | Filing Date | Filing Country |
|-----------------|-------------------|--------------------------|
| 62/115,658 | February 13, 2015 | United States of America |

of the application on which the priority will be based; and in and to any Letters Patent that may be issued for said invention in any and all countries; and we do hereby agree to assist said Assignee in the prosecution of the said applications and in any interference, conflict, opposition or litigation which may arise involving said invention or the patent or patents thereon, and to execute any reissue, divisional, continuing or substitute application and assent to their making any applications in other countries corresponding to the above and below specifically identified application, as may be requested by said Assignee; and we do hereby authorize said Assignee to insert here the corresponding Application Number, Filing Date, and Filing Country

| Application Number | Filing Date | Filing Country |
|--------------------|-------------|----------------|
| | | |

of the corresponding application in any country where that patent property must be entered for recordal of this Assignment; and we do hereby authorize and request that any such Letters Patent be issued to said Assignee in accordance herewith, and consent to the recordal of this Assignment being under covenant, not only that we have full power to make the same, but also that such assigned rights are not encumbered by any grant, license, or other right heretofore given.

| Subscribed and Sworn by us at | Midland, Michigan 48674, USA | |
|-------------------------------|------------------------------|--|
| this 29 day of Apr | , 20 /5 | |

CORP.

DOW STADE PRODUKTIONS GMBH & CO. OHG

DARRYL P. FRICKEY

Authorized Representative

Attach Notarial Certificate

PATENT REEL: 047652 FRAME: 0603 This Notarial Certificate 550 is in the ENGLISH language and has the same meaning in other languages with the same 550 number, FORM 550

NOTARIAL CERTIFICATE

| UNITED STATES OF AMERICA |) |
|--|-----------------------------|
| STATE OF MICHIGAN |) SS |
| County/Parish of Midland |) |
| On this 29 day of April before me, DARRYL P. FRICKEY, Au | , 20_5, personally appeared |

known or identified to me to be the individual described in and who executed the foregoing document and acknowledged the same as a free act and deed for uses and purposes therein expressed by authority of the said entity organized and existing under the laws of **GERMANY**.

I further certify that said authority, dated March 25, 2011, is based on

by authority of a Power of Attorney

which I have seen, appointing the said individual Authorized Representative with full power to sign the foregoing document on behalf of the said entity and that the purposes for which said document is granted are within the scope of the objects or activities of said entity.

SEAL

Kathy Sue Wertz

NOTAFF PUBLIC, MIDLAND COUNTY, MICHIGAN
MY COMMISSION EXPIRES APRIL 07, 2018

PATENT REEL: 047652 FRAME: 0604 ●660 ● 660

This Assignce Acceptance 660 is in the ENGLISH language and has the same meaning in other languages with the same 660 number. FORM 660

ASSIGNEE ACCEPTANCE

WE, the ASSIGNEE:

THE DOW CHEMICAL COMPANY

2030 Dow Center

Midland, Michigan 48674 United States of America

hereby accept the ASSIGNMENT which is dated: April 29, 2015

From, the ASSIGNOR:

DOW STADE PRODUKTIONS GMBH & CO. OHG

Buetzflether Sand D-21683 Stade Germany

of the invention entitled:

PROCESS FOR THE REGENERATION OF A CATALYST

without any restrictions and with all rights and obligations deriving therefrom and declare that this confirmation of acceptance shall be deemed a part of the said ASSIGNMENT.

| Signed at, Midland | , Michigan 48674, USA | |
|--------------------|---|--|
| this 49 day of | April , 20 15 | |
| CORP. | By: DARRYL P. FRICKEY Authorized Representative | |

NOTARIAL CERTIFICATE

| UNITED STATES OF AMERICA |) |
|--------------------------|------|
| STATE OF MICHIGAN |) SS |
| County/Parish of Midland |) |

29 day of April ______, 20<u>/5</u>____, personally appeared

before me, DARRYL P. FRICKEY, Authorized Representative,

known or identified to me to be the individual described in and who executed the foregoing document and acknowledged the same as a free act and deed for uses and purposes therein expressed by authority of the said entity organized and existing under the laws of the State of Delaware, United States of America.

I further certify that said authority, dated July 12, 2013, is based on

a Certified Resolution

which I have seen, appointing the said individual Authorized Representative with full power to sign the foregoing document on behalf of the said entity and that the purposes for which said document is granted are within the scope of the objects or activities of said entity.

Kathy Sue Weytz NOTÁÁY PUBLIC, MIĎLAND COUNTY, MICHIGAN

MY COMMISSION EXPIRES APRIL 07, 2018

PATENT REEL: 047652 FRAME: 0605 **RECORDED: 12/03/2018**