505775017 11/15/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1

EPAS ID: PAT5821835 Stylesheet Version v1.2

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

CONVEYING PARTY DATA

| Name | Execution Date |
|----------------|----------------|
| MAIKE KORTMANN | 10/14/2019 |
| MEIKE BAUMGART | 10/09/2019 |
| MICHAEL BOTT | 10/08/2019 |

RECEIVING PARTY DATA

| Name: | FORSCHUNGSZENTRUM JUELICH GMBH | |
|-----------------|--------------------------------|--|
| Street Address: | WILHELM-JOHNEN-STRASSE | |
| City: | JUELICH | |
| State/Country: | GERMANY | |
| Postal Code: | 52425 | |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 16606230 |

CORRESPONDENCE DATA

Fax Number: (312)616-5700

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: 3126165600

Email: assignments@leydig.com LEYDIG, VOIT & MAYER, LTD. **Correspondent Name:**

Address Line 1: TWO PRUDENTIAL PLAZA, SUITE 4900

Address Line 2: 180 NORTH STETSON AVENUE CHICAGO, ILLINOIS 606016731 Address Line 4:

| ATTORNEY DOCKET NUMBER: | 817249 | |
|-------------------------|--------------------|--|
| NAME OF SUBMITTER: | BRENT A. CHATHAM | |
| SIGNATURE: | /Brent A. Chatham/ | |
| DATE SIGNED: | 11/15/2019 | |

Total Attachments: 3

source=817249_executed_Assignment#page1.tif source=817249 executed Assignment#page2.tif source=817249 executed Assignment#page3.tif

> **PATENT REEL: 051015 FRAME: 0303** 505775017

Rowald

ASSIGNMENT

I, Maike Kortmann, residing at Victoriastrasse 45; 52066 Aachen; GERMANY; and

Am Bardiscker 6 5025 Pulheim 22.0.43
I, Meike Baumgart, residing at Zur Glosemer Hoche 38; 50129 Bergheim;
GERMANY; and

I, Michael Bott, residing at Hermann-Barnikol-Strasse 14; 52428 Juelich; GERMANY;

and each of us, if more than one person is identified above, have invented and have owned or do own a whole or partial right, title and interest in a certain invention entitled:

PYRUVATE CARBOXYLASE AND PYRUVATE CARBOXYLASE-ENCODING DNA, PLASMID CONTAINING SAID DNA AND MICROORGANISM FOR THE PRODUCTION THEREOF, AND METHODS FOR THE PRODUCTION OF PRODUCTS THE BIOSYNTHESIS OF WHICH INCLUDES OXALOACETATE AS PRECURSOR, AND CHROMOSOME

for which invention International Application No. PCT/DE2018/000104 was filed on April 13, 2018, designating the U.S. and

WHEREAS,

Forschungszentrum Juelich GmbH

having an address at \$2425 Juelich; GERMANY,

hereinafter referred to as Assignee, was and/or is desirous of acquiring the entire domestic and foreign right, title, and interest in and under the invention described in the above patent application.

Now, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I/we have or hereby do assign and transfer to the Assignee and the Assignee's legal representatives, successors and assigns my/our full and exclusive rights in and to the invention in the U.S. and every foreign country and my/our entire right, title, and interest in and to the patent application and other such applications (e.g., provisional applications, non-provisional applications, continuations, continuations-in-part, divisionals,

Page 1 of 3

Attorney Docket No. 817249 (Client Ref. PT 1.2785 PCT/US)

reissues, reexaminations, National phase applications, including petty patent applications, and utility model applications) that may be filed in the United States and every foreign country on the invention, and the patents, extensions, or derivations thereof, both foreign and domestic, that may issue thereon, and I/we do hereby authorize and request the Commissioner of Patents to issue U.S. patents to the above-mentioned Assignee agreeably with the terms of this assignment document.

UPON SAID CONSIDERATION, I/we have conveyed or hereby do convey to the Assignee the right to make application in its own behalf for protection of the invention in the U.S. and countries foreign to the U.S. and to claim under the Patent Cooperation Treaty, the International Convention and/or other international arrangement for any such application the date of the U.S. application (or any other application on the invention) to gain priority with respect to other applications.

I/WE DO HEREBY COVENANT and agree with the Assignee that I/we will not execute any writing or do any act whatsoever conflicting with the terms of this assignment document set forth herein, and that I/we will at any time upon request, without further or additional consideration, but at the expense of the Assignee, execute such additional assignments and other writings and do such additional acts as the Assignee may deem necessary or desirable to perfect the Assignee's enjoyment of this assignment, and render all necessary assistance in making application for and obtaining original, continuation, continuation-in-part, divisional, reissued, reexamined, and National phase patents of the U.S. or of any and all foreign countries on the invention, and in enforcing any rights or choses in action accruing as a result of such applications or patents, and by executing statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind, and inure to the benefit of, the assigns and legal representatives of all parties hereto.

Date 14.10.2019 926

Maike Kortmann, Inventor

Attorney Docket No. 817249 (Client Ref. PT 1.2785 PCT/US)

Date <u>2015-10-08</u>

Meike Baumgart, Inventor

Michael Bott, Inventor