PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6710358

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|--|
| NATURE OF CONVEYANCE: | EXECUTIVE ORDER 9424, CONFIRMATORY LICENSE |

CONVEYING PARTY DATA

| Name | Execution Date |
|--------------------------------------|----------------|
| NATIONAL RENEWABLE ENERGY LABORATORY | 08/06/2019 |

RECEIVING PARTY DATA

| Name: | UNITED STATES DEPARTMENT OF ENERGY | |
|-----------------|------------------------------------|--|
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| City: | WASHINGTON | |
| State/Country: | D.C. | |
| Postal Code: | 20585 | |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 16530539 |

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| ATTORNEY DOCKET NUMBER: | 16-530539 CAR |
|-------------------------|------------------|
| NAME OF SUBMITTER: | CYNTHIA RIDGE |
| SIGNATURE: | /S/CYNTHIA RIDGE |
| DATE SIGNED: | 05/14/2021 |

Total Attachments: 1

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PATENT 506663544 REEL: 056244 FRAME: 0082



DOE Docket No.: S-149,543 iEdison No.: 10011192-18-0061

NREL 18-80

CONFIRMATORY LICENSE

Application for:

CONVERSION OF S-LIGNIN COMPOUNDS TO USEFUL INTERMEDIATES

Inventor(s):

Gregg Tyler BECKHAM, Christopher W. JOHNSON, Sandra Fabienne

NOTONIER

Serial No.:

16/530,539

Filing Date:

August 2, 2019

Contract No.:

DE-AC36-08GO28308

Contractor:

Alliance for Sustainable Energy, LLC

The invention identified above is a "Subject Invention" under the above-numbered contract. A copy of the Subject Invention has been submitted to the U.S. Department of Energy.

The Contractor hereby confirms that under the provisions of the above-numbered contract governing patent rights, it has granted to the Government a nonexclusive, nontransferable, irrevocable, paid-up license to practice or to have practiced for or on behalf of the United States the Subject Invention throughout the world. This license applies to the invention in the above-identified patent application and any and all divisions or continuations thereof and any resulting patent or reissue patent which may be granted thereon.

It is understood and agreed that this document does not preclude the Government from asserting rights under the provisions of said contract or any other agreement between the Government and the Contractor, or any other rights of the Government with respect to the above-identified invention.

The Contractor hereby grants the Government an irrevocable power to inspect and make copies of the above-identified application.

Signed this day of August 2019

Sam J. Barkley

Patent Counsel

15013 Denver West Parkway Golden, CO 80401 Phone 303-275-3000 NREL is a national laboratory of the U.S. Department of Energy
Office of Energy Efficiency & Renewable Energy
Operated by the Alliance for Sustainable Energy, LLC
PATENT

RECORDED: 05/14/2021 REEL: 056244 FRAME: 0083