506058515 05/13/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6105229

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

CONVEYING PARTY DATA

| Name | Execution Date |
|-----------------------|----------------|
| IOWA STATE UNIVERSITY | 05/11/2020 |

RECEIVING PARTY DATA

| Name: | NATIONAL SCIENCE FOUNDATION |
|-------------------|-----------------------------|
| Street Address: | 2415 EISENHOWER AVENUE |
| Internal Address: | ROOM W 18000 |
| City: | ALEXANDRIA |
| State/Country: | VIRGINIA |
| Postal Code: | 22314 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|----------------|----------|
| Patent Number: | 10619153 |

CORRESPONDENCE DATA

Fax Number: (703)292-9041

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.

Email: nsfpatents@nsf.gov

Correspondent Name: NATIONAL SCIENCE FOUNDATION

Address Line 1: 2415 EISENHOWER AVENUE

Address Line 2: ROOM W 18000

Address Line 4: ALEXANDRIA, VIRGINIA 22314

| NAME OF SUBMITTER: | DANA THIBODEAU | |
|--------------------|----------------|--|
| SIGNATURE: | /DMT/ | |
| DATE SIGNED: | 05/13/2020 | |

Total Attachments: 1 source=6353#page1.tif

PATENT 506058515 REEL: 052656 FRAME: 0690

License to the United States Government

RECORDED: 05/13/2020

| Sign and submit the executed document to the appropriate funding agency (e.g. upload in iEdison). |
|---|
| Invention Title: TAL Effector-Mediated DNA Modification |
| Inventor(s): Adam J Bogdanove, Feng Zhang, Daniel F Voytas |
| U.S. Filing/Issue Date: 10/05/2017 / 04/14/2020 |
| Patent or Application Serial No.: 10,619,153 |
| Grant/Contract Number(s): NSF 0504304 |
| Foreign Applications filed/intended in (countries): |
| The invention identified above is a Subject Invention under 35 U.S.C. 200, et seq. , and the Standard Patent Rights clause at 37 CFR 401.14, FAR 52.227-11 or FAR 52.227-12 (if applicable) which are included among the terms of the above identified grant or contract award from the United States Government. This document is confirmatory of: |
| The nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the invention described in any patent application and in any and all divisions, continuations, and continuations in part, and in any and all patents and re-issues granted thereon throughout the world; and All other rights acquired by the Government by reason of the above identified grant/contract award and the laws and regulations that are applicable to the award. |
| The Government is hereby granted an irrevocable power to inspect and make copies of the above-identified patent application. |
| Signed this day of, 20 20 . |
| By Dana Rewoldt Dana Lucket |
| (Institutional Business Official) (Signature) |
| Title President |
| For IOWA STATE UNIVERSITY (Grantee/Contractor Organization) |
| At Iowa State University Research Foundation, Inc. 1805 Collaboration Place, Suite 2100 |
| Ames, IA 50010 (Business Address) |

PATENT REEL: 052656 FRAME: 0691