506629029 04/26/2021

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6675838

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	

CONVEYING PARTY DATA

Name	Execution Date
STANDING WAVE REFORMERS, INC.	02/26/2021

RECEIVING PARTY DATA

Name:	NEW WAVE HYDROGEN, INC.	
Street Address:	1600, 421 - 7TH AVENUE SW	
City:	CALGARY, ALBERTA	
State/Country:	CANADA	
Postal Code:	T2P 4K9	

PROPERTY NUMBERS Total: 4

Property Type	Number
Application Number:	15885453
Application Number:	63020754
Application Number:	63127614
Application Number:	63155007

CORRESPONDENCE DATA

Fax Number:

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: djackson@dbjg.com

DONALD L. JACKSON Correspondent Name:

Address Line 1: 8300 GREENSBORO DR., SUITE 500

Address Line 4: MCLEAN, VIRGINIA 22102

NAME OF SUBMITTER:	DONALD L. JACKSON	
SIGNATURE: /Donald L. Jackson/		
DATE SIGNED:	04/26/2021	

Total Attachments: 4

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> **PATENT** REEL: 056039 FRAME: 0572

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PATENT ASSIGNMENT

THIS PATENT ASSIGNMENT ("<u>Patent Assignment</u>") is made as of February 26, 2021 by Standing Wave Reformers, Inc., 2320 Timberview Drive, Durham, NC 27705, a Delaware corporation ("<u>Assignor</u>"), and New Wave Hydrogen, Inc., 1600, 421 - 7th Avenue SW. Calgary, Alberta, Canada T2P 4K9, a Canadian corporation ("<u>Assignee</u>"). Capitalized terms used herein but not otherwise defined shall have the meanings ascribed to them in the Purchase Agreement (as defined below).

WHEREAS, Assignee desires to acquire the entire right, title and interest in and to the patents, patent applications, and disclosures listed in Exhibit A hereto, and the inventions disclosed therein, Assignor has agreed to convey, assign, transfer and deliver to Assignee all of Assignor's right, title and interest in, to and under the patents, patent applications, and disclosures listed in Exhibit A hereto; and

WHEREAS, Assignor has agreed to execute and deliver this Patent Assignment by which the patents, patent applications, and disclosures set forth in <u>Exhibit A</u> hereto (the "<u>Transferred Patents</u>") are assigned and conveyed by Assignor to Assignee.

NOW, THEREFORE, in consideration of the foregoing premises and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and intending to be legally bound hereby, it is hereby agreed that:

- 1. <u>Patent Conveyance</u>. Assignor does hereby irrevocable and unconditionally:
- sell, transfer, convey, assign and deliver to Assignee all of Assignor's right, title and interest in, to and under, free and clear of all encumbrances and liabilities: (i) the Transferred Patents and the inventions disclosed therein, including any patents issuing on any applications included in the Transferred Patents and all reissues, reexaminations, extensions, continuations, continuations in part, continuing prosecution applications, requests for continuing examinations and divisionals of any of the Transferred Patents and all foreign patents, foreign patent applications, and foreign counterparts relating to any of the foregoing, including, without limitation, certificates of invention, utility models and other governmental grants or issuances and any patents and patent applications that claim priority from any of the foregoing, and all rights of priority resulting from the filing of any of the foregoing; (ii) all causes of action (whether known or unknown or whether currently pending, filed, or otherwise) and other enforcement rights under, or on account of, the Transferred Patents, including, without limitation, all causes of action and other enforcement rights for (A) damages, (B) injunctive relief and (C) any other remedies of any kind for past, current and future infringement; and (iii) all rights to collect royalties or other payments under or on account of the Transferred Patents, the same to be held by Assignee for Assignee's own use and enjoyment, and for the use and enjoyment of Assignee's successors, assigns and other legal representatives, as fully and entirely as the same would have been held and enjoyed by Assignor if this Assignment had not been made, including all rights therein provided by international conventions and treaties. This assignment includes assignment to Assignee of the right to make application in its own behalf for protection of the Transferred Patents and any patents issued on the Transferred Patents, in the United States and countries foreign to the United States, and to claim under the Patent Cooperation Treaty, the International Convention and/or other international arrangement for any such application the date of any earlier application to gain priority with respect to other applications.

- agree, without charge to Assignee, to assist Assignee in perfecting Assignee's right, title and interest throughout the world in all Transferred Patents assigned to Assignee hereunder, include executing applications, assignments, declarations, affidavits, and any other papers in connection therewith reasonably necessary to perfect such right, title and interest in Assignee. In the event Assignee is unable for any reason, after reasonable effort, to secure Assignor's signature on any document needed to perfect the transfer of ownership of the Transferred Patents, Assignor hereby irrevocably designates and appoints Assignee and its duly authorized officers and agents as Assignor's agent and attorney-in-fact, which appointment is coupled with an interest, to act for and on Assignor's behalf to execute and file such documents, with the same legal force and effect as if executed by Assignor. Assignor agrees to provide such assistance and cooperation as Assignee may reasonably request in connection with Assignee's prosecution of any patent applications included in the Transferred Patents (including appeals in connection therewith), including providing documents and materials in the possession or control of Assignor and making the named inventors in any of the patent applications reasonably available to Assignee upon reasonable prior notice if such inventors are employed by Assignor or any of its Affiliates at the time of Assignor's receipt of such written notice from Assignee.
- 2. Representations and Warranties. Assignor hereby covenants and agrees to and with Assignee, its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, to the best knowledge of Assignor without duty of investigation, Assignor is the sole and lawful owner of the entire right, title and interest in and to the Transferred Patents and the inventions disclosed therein, and that the same is unencumbered and that Assignor has good and full right and lawful authority to sell and convey the same in the manner herein set forth. Notwithstanding the forgoing, Assignor makes no representation or warranty whatsoever with respect to the Transferred Patents. By accepting this assignment, Assignee acknowledges that (i) it has not relied on any representation or warranty made by Assignor, or any other person on Assignor's behalf, and (ii) it is receiving the Transferred Patents "as is, where is" and shall assume all risks.
- 3. <u>Governing Law</u>. This Patent Assignment and all disputes or controversies arising out of or relating to this Assignment or the transactions contemplated hereby shall be governed by, and construed in accordance with, the internal laws of the State of Delaware, without regard to the laws of any other jurisdiction that might be applied because of the conflicts of laws principles of the State of Delaware.
- 4. <u>Counterparts; Facsimile or .pdf Signature</u>. This Patent Assignment may be executed in two or more counterparts, all of which shall be considered one and the same instrument and shall become effective when one or more counterparts have been signed by each of the parties and delivered to the other party. This Patent Assignment may be executed by facsimile or .pdf signature and a facsimile or .pdf signature shall constitute an original for all purposes.

Remainder of page left intentionally blank; signature page follows.

IN WITNESS WHEREOF, Assignor has caused this Patent Assignment to be executed as of the date first above written,

ASSIGNOR:

STANDING WAVE REFORMERS, INC.

By: ______Name: Kathleen O'Neil

Title: CEO

Assignee hereby accepts assignment of the Transferred Patents.

ASSIGNEE:

NEW WAVE HYDROGEN, INC.

Name: Kathleen O'Neil

Title: CEO

 $\underline{Exhibit\ A}$ Transferred Patents and Applications

Application Number	Patent or Publication Number	Country	Title
15/885,453	US 2018/0215615	U.S.	Hydrocarbon Wave Reformer and Methods of Use
PCT/US2018/016226	WO 2018/144595A1	PCT	Hydrocarbon Wave Reformer and Methods of Use
EP18747576.9	EP 3577065A4	EPO	Hydrocarbon Wave Reformer and Methods of Use
CA3051697A	CA 3051697A1	Canada	Hydrocarbon Wave Reformer and Methods of Use
AU2018217057	AU 2018217057A1	Australia	Hydrocarbon Wave Reformer and Methods of Use
63/020,754	N/A	U.S.	Systems Using Hydrogen Fuel Production by a Standing Wave Rotor with Gas Turbines in Flexible Designs with Examples Also Integrating Pressure Gain Enhancements
63/127,614	N/A	U.S.	A Zero-Emission Jet Engine by a Dual-Fuel Mix of Ammonia and Hydrogen Using a Wave Rotor Reformer
63/155,007	N/A	U.S.	Methane Conversion to Hydrogen Employing a Novel Type Unsteady Wave Chemical Reactor

RECORDED: 04/26/2021