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PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JOHN BARCLAY	03/27/2021

RECEIVING PARTY DATA

Name:	EMERALD ENERGY NW, LLC
Street Address:	17505 7TH AVE. W.
City:	BOTHELL
State/Country:	WASHINGTON
Postal Code:	98012-9110

PROPERTY NUMBERS Total: 11

Property Type	Number
Application Number:	62298346
Patent Number:	10443928
Application Number:	16563692
Application Number:	62298356
Application Number:	15438536
Application Number:	62477928
PCT Number:	US1824668
Application Number:	15937773
Application Number:	62477924
PCT Number:	US1824670
Application Number:	15937776

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ATTORNEY DOCKET NUMBER:	23-98671-03
NAME OF SUBMITTER:	WAYNE RUPERT
SIGNATURE:	/Wayne Rupert/
DATE SIGNED:	03/29/2021
Total Attachments: 3 source=Emerald Energy NW_Assignment#page1.tif source=Emerald Energy NW_Assignment#page2.tif	

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ASSIGNMENT

WHEREAS, I, John Barclay, of Richland, WA, have invented certain inventions, with others, as described in the following patent and patent applications:

- U.S. Provisional Patent Application No. 62/298,346, filed on February 22, 2016, entitled,
- "ACTIVE MAGNETIC REGENERATIVE LIQUEFIER USING PROCESS GAS PRE-COOLING FROM BYPASS FLOW OF HEAT TRANSFER FLUID,"
- U.S. Patent No. 10,443,928, issued on October 15, 2019, entitled,
- "ACTIVE MAGNETIC REGENERATIVE LIQUEFIER USING PROCESS GAS PRE-COOLING FROM BYPASS FLOW OF HEAT TRANSFER FLUID,"
- U.S. Patent Application No. 16/563,692, filed on September 6, 2019, entitled,
- "ACTIVE MAGNETIC REGENERATIVE LIQUEFIER USING PROCESS GAS PRE-COOLING FROM BYPASS FLOW OF HEAT TRANSFER FLUID,"
- **U.S. Provisional Patent Application No. 62/298,356**, filed on February 22, 2016, entitled, "INTEGRATED REFUELING STATION,"
- U.S. Patent Application No. 15/438,536, filed on February 21, 2017, entitled,
- "INTEGRATED REFUELING STATION."
- U.S. Provisional Patent Application No. 62/477,928, filed on March 28, 2017, entitled,
- "ACTIVE MAGNETIC REGENERATIVE PROCESSES AND SYSTEMS EMPLOYING HYDROGEN HEAT TRANSFER FLUID,"

International PCT Application No. PCT/US2018/024668, filed on March 27, 2018, entitled,

- "ACTIVE MAGNETIC REGENERATIVE PROCESSES AND SYSTEMS EMPLOYING HYDROGEN AS HEAT TRANSFER FLUID AND PROCESS GAS,"
- U.S. Patent Application No. 15/937,773, filed on March 27, 2018, entitled,
- "ACTIVE MAGNETIC REGENERATIVE PROCESSES AND SYSTEMS EMPLOYING HYDROGEN AS HEAT TRANSFER FLUID AND PROCESS GAS,"
- U.S. Provisional Patent Application No. 62/477,924, filed on March 28, 2017, entitled, "ADVANCED MULTI-LAYER ACTIVE MAGNETIC REGENERATOR SYSTEMS AND PROCESSES FOR MAGNETOCALORIC LIQUEFACTION,"

International PCT Application No. PCT/US2018/024670, filed on March 27, 2018, entitled, "ADVANCED MULTI-LAYER ACTIVE MAGNETIC REGENERATOR SYSTEMS AND

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PROCESSES FOR MAGNETOCALORIC LIQUEFACTION," and

U.S. Patent Application No. 15/937,776, filed on March 27, 2018, entitled,

"ADVANCED MULTI-LAYER ACTIVE MAGNETIC REGENERATOR SYSTEMS AND

PROCESSES FOR MAGNETOCALORIC LIQUEFACTION,"

which patent and patent applications are collectively referred to as "the patent and patent applications."

WHEREAS, Emerald Energy NW, LLC, having a place of business at 17505 7th Ave. W., Bothell, WA, 98012-9110, desires to acquire an interest therein:

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I, John Barclay hereby sell, assign and transfer to Emerald Energy NW, LLC, the full and exclusive right, title and interest in and to the inventions, patent and patent applications and patent rights throughout the world, including foreign patent priority rights, the right to file and prosecute International Applications under the Patent Cooperation Treaty, and the right to file and prosecute applications under the European Patent Convention; the inventions, patent and patent applications and letters patent in this or any foreign country, and all corresponding non-provisional applications, divisions, continuations, continuations-inpart, reissues and extensions thereof, to be held and enjoyed by Emerald Energy NW, LLC, for its own use and benefit, and for its successors and assigns to the full end of the term for which letters patent may be granted by the United States or any foreign country, as fully and entirely as the same would have been held by me had this assignment and sale not been made, and covenant that I have full right so to do, and agree that I will communicate to Emerald Energy NW, LLC, or its successors and assigns, any facts known to me respecting the inventions, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths, and do everything possible to aid Emerald Energy NW, LLC, its successors and assigns to obtain and enforce proper patent protection for the inventions in the United States or any foreign country.

I confirm that at the time the inventions were made, I was under an obligation to assign the inventions to Emerald Energy NW, LLC.

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RECORDED: 03/29/2021

23-96359; 23-96360; 23-97015; 23-98671 30865-E; 30877-E; 30950-E; 30965-E

Executed at the place and date opposite my signature below.

I hereby grant the law firm of Klarquist Sparkman, LLP, the power to insert on this Assignment any further information which may be necessary or desirable in order to comply with all applicable legal requirements, including the rules of the United States Patent and Trademark Office, for submitting and recording this document.

John Arthur Barclay 3/27/2021 Bothell, WA

John Barclay Date Location (city, state)

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