PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7268737

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
DOUGLAS A. DUCOTE JR.	03/29/2022
BRENT A. HEYRMAN	03/29/2022
TIMOTHY P. GUSHANAS	03/29/2022
RICHARD HOPEWELL	03/29/2022

RECEIVING PARTY DATA

Name:	CHART ENERGY & CHEMICALS, INC.		
Street Address:	2200 AIRPORT INDUSTRIAL DRIVE		
Internal Address:	SUITE 100		
City:	BALL GROUND		
State/Country:	GEORGIA		
Postal Code:	30107		

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17715711

CORRESPONDENCE DATA

Fax Number: (312)236-8176

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: 3122368500

Email: docket@cookalex.com
Correspondent Name: COOK ALEX LTD

Address Line 1: 200 WEST ADAMS STREET

Address Line 2: SUITE 2004

Address Line 4: CHICAGO, ILLINOIS 60606

ATTORNEY DOCKET NUMBER:	2202-0600.18
NAME OF SUBMITTER:	FRANCISCA HUBBARD
SIGNATURE:	/FRANCISCA HUBBARD/
DATE SIGNED:	04/07/2022

Total Attachments: 5

PATENT REEL: 059536 FRAME: 0134



PATENT REEL: 059536 FRAME: 0135

Serial/Application No.: 17/715,711

Attorney Docket No.: 2202-0600.18

Title: Dehydrogenation Separation Unit with Mixed

Refrigerant Cooling

Filed: April 7, 2022

ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned hereby assign to Chart Energy & Chemicals, Inc., 2200 Airport Industrial Drive, Suite 100, Ball Ground, GA, 30107, (hereinafter "Assignee"), its successors and assigns, the entire right, title and interest in the invention or improvements of the undersigned disclosed in the above-identified application for letters patent of the United States, executed by the undersigned and in said application and any and all other applications, both in the United States and in other countries, which the undersigned may file or be named as an inventor, either solely or jointly with others, on said invention or improvements, and in any and all letters patent of the United States and other countries, which may be obtained on any of said applications, and in any reissue or extension thereof. The undersigned further convey, transfer, and assign to Assignee the undersigned's right(s), privilege(s) and interest(s) to claim priority benefit of any of the applications described above; to apply for and obtain patents in the name of the undersigned or the name of Assignee; and the rights to bring suit, claim, and retain any damages or other remedies for infringement (including past infringement) of any of the applications or patents described above.

The undersigned hereby authorize and request the Commissioner for Patents to issue said letters patent to said Assignee.

The undersigned hereby authorize and request Assignee or its legal representatives to insert in this assignment the date and serial number of said application when officially known.

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Serial/Application No.: 17/715,711

Attorney Docket No.: 2202-0600.18

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Title: Dehydrogenation Separation Unit with Mixed

Refrigerant Cooling

The undersigned warrant themselves to be the owners of the interest herein assigned and to have the right to make this assignment and further warrant that there are no outstanding prior assignments, licenses, or other rights in the interest herein assigned except in favor of Assignee.

The above-identified application was made or authorized to be made by the undersigned, and the undersigned believes himself or herself to be the original inventor or an original joint inventor of the invention claimed in the above identified application.

For said consideration the undersigned hereby agree, upon the request and at the expense of said Assignee, its successors and assigns, to execute any and all applications on said invention or improvements, and any necessary oath or affidavit relating thereto, and any application for the reissue or extension of any letters patent that may be granted upon any and, all of said applications, and any and all applications and other documents for letters patent in other countries on said invention or improvements, that said Assignee, its successors or assigns, may deem necessary or expedient, and for said consideration the undersigned further agree upon the request of said Assignee, its successors or assigns, in the event of any application or letters patent assigned herein becoming involved in Interference or Opposition, to cooperate to the best of the ability of the undersigned with said Assignee, its successors or assigns, in all matters, including but not limited to preparing and executing the preliminary statement and giving and producing evidence in support thereof, the undersigned hereby agreeing to perform, upon request, any and all affirmative acts to obtain said letters patent, both in the United States and in other countries, and vest all rights therein hereby conveyed

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Serial/Application No.: 17/715,711

Attorney Docket No.: 2202-0600.18

Title: Dehydrogenation Separation Unit with Mixed

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in said Assignee, its successors and assigns, whereby said letters patent will be held and enjoyed by said Assignee, its successors and assigns, to the full end of the term for which said letters patent may be granted as fully and entirely as the same would have been held and enjoyed by the undersigned if this assignment and sale had not been made; the undersigned further agree to fully cooperate and assist said Assignee in the enforcement and/or defense of said letters patent both in the United States and in other countries.

DECLARATION

I hereby declare that with reference to the application identified above and assigned hereunder ("the patent application"):

I have reviewed and understand the contents of the patent application, including the claims;

I believe myself to be the original inventor or original joint inventor (if additional inventors are listed below) of a claimed invention in the patent application;

The patent application is and was made or authorized to be made by me; My residence and mailing address are as listed below next to my name; and I am aware of the duty to disclose to the U.S. Patent and Trademark Office all information known to me to be material to patentability as set forth in 37 CFR 1.56.

I acknowledge that any willful false statement made in this declaration or statement is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than 5 years, or both.

Attorney Docket No.: 22 Title: Dehydrogenation Refrigerant Cooling Witness my hand a	Separation Unit with Mixed	Serial/Application No.: Filed:	17/715,711 April 7, 2022	
Traces of traces of	134 00011			
Inventor: <u>Douglas</u>	<u>A. Ducote, Jr.</u>	Signature: 3 29 23	200 000 000 000 000 000 000 000 000 000	
Residence: The Woodlands, TX				
Mailing Address:	2200 Airport Industrial Ball Ground, GA 3010			
Inventor: Brent A.	<u>Heyrman</u>	Signature: 44 (4) Date: 3 29 22		
Residence: The	<u> Woodlands, TX</u>			
Mailing Address:	2200 Airport Industrial Ball Ground, GA 3010			
Inventor: <u>Timothy</u>	P. Gushanas	Signature:		
Residence: Pearland, TX				
Mailing Address:	2200 Airport Industrial I Ball Ground, GA 3010			

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Attorney Docket No.: 2202-0600.18

Title: Dehydrogenation Separation Unit with Mixed

Refrigerant Cooling

Inventor: Richard Hopewell

Serial/Application No.:

Filed:

17/715,711

April 7, 2022

Signature:

Date:

Residence: The Woodlands, TX

Mailing Address: 2200 Airport Industrial Drive, Suite 100

Ball Ground, GA 30107

On behalf of the Assignee, the undersigned (a duly-authorized representative of Assignee) hereby confirms the Assignee's acceptance of all rights, privileges and interests assumed by this Assignment.

interests conveyed by this Assignment.

Date:

Name: Herbert G. Hotchkiss

Title: Vice President, General Counsel

and Secretary

For: Chart Energy & Chemicals, Inc.

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RECORDED: 04/07/2022