

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT4785297

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	SECURITY INTEREST
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
CAIRE INC.	01/18/2018
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	JPMORGAN CHASE BANK, N.A., AS ADMINISTRATIVE AGENT
<b>Street Address:</b>	IL1-1145/54/63, P.O. BOX 6026
<b>City:</b>	CHICAGO
<b>State/Country:</b>	ILLINOIS
<b>Postal Code:</b>	60680-6026
<b>PROPERTY NUMBERS Total: 8</b>	
<b>Property Type</b>	<b>Number</b>
Patent Number:	6691702
Patent Number:	6712087
Patent Number:	6651658
Patent Number:	6629525
Patent Number:	6471744
Patent Number:	6457485
Patent Number:	6311719
Application Number:	14670979
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(312)993-9767
<i>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.</i>	
<b>Phone:</b>	3129932647
<b>Email:</b>	zeynep.gieseke@lw.com
<b>Correspondent Name:</b>	ZEYNEP GIESEKE
<b>Address Line 1:</b>	330 NORTH WABASH AVENUE, SUITE 2800
<b>Address Line 2:</b>	LATHAM & WATKINS LLP
<b>Address Line 4:</b>	CHICAGO, ILLINOIS 60611
<b>ATTORNEY DOCKET NUMBER:</b>	049067-0118
<b>NAME OF SUBMITTER:</b>	ZEYNEP GIESEKE
<b>SIGNATURE:</b>	/zg/

PATENT

<b>DATE SIGNED:</b>	01/20/2018
---------------------	------------

**Total Attachments: 4**

source=Patent Grant (Caire Inc.)#page1.tif

source=Patent Grant (Caire Inc.)#page2.tif

source=Patent Grant (Caire Inc.)#page3.tif

source=Patent Grant (Caire Inc.)#page4.tif

**CONFIRMATORY GRANT OF SECURITY INTEREST  
IN UNITED STATES PATENTS**

THIS CONFIRMATORY GRANT OF SECURITY INTEREST IN UNITED STATES PATENTS (the "Confirmatory Grant") is made effective as of January 18, 2018 by and from Caire Inc., a Delaware corporation (the "Grantor"), to and in favor of JPMORGAN CHASE BANK, N.A., (the "Grantee") for itself and as Administrative Agent for the Secured Parties (as defined in the Credit Agreement referenced below).

WHEREAS, Chart Industries, Inc. (the "Borrower"), certain other persons party thereto, the Lenders and the Grantee have entered into that certain Third Amended and Restated Credit Agreement dated November 3, 2017 (as may be amended, restated, supplemented or otherwise modified from time to time, the "Credit Agreement").

WHEREAS, the Grantor and certain other Subsidiaries of the Borrower have guaranteed the repayment of the Secured Obligations pursuant to that certain Third Amended and Restated Guarantee and Collateral Agreement dated November 3, 2017 (as may be amended, restated, supplemented or otherwise modified from time to time, the "Collateral Agreement").

WHEREAS, the Grantor owns the patents listed on Exhibit A attached hereto (the "Patents"), which Patents are issued or pending with the United States Patent and Trademark Office.

WHEREAS, this Confirmatory Grant has been granted in conjunction with the security interest granted under the Collateral Agreement to the Grantee for the benefit of the Secured Parties. The rights and remedies of the Grantee with respect to the security interest granted herein are without prejudice to and are in addition to those set forth in the Collateral Agreement and the other Loan Documents, all terms and provisions of which are incorporated herein by reference. In the event that any provisions of this Confirmatory Grant are deemed to conflict with the Collateral Agreement, the provisions of the Collateral Agreement shall govern.

NOW, THEREFORE, in consideration of the mutual covenants and agreements set forth herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, it is hereby agreed that:

1) Definitions. All capitalized terms not defined herein shall have the respective meaning given to them in the Credit Agreement.

2) The Security Interest.

(a) This Confirmatory Grant is made to secure the satisfactory performance and payment of all the Secured Obligations. Upon the payment in full of all Secured Obligations (other than contingent indemnification obligations), the Grantee shall promptly, upon such satisfaction, execute, acknowledge, and deliver to the Grantor all reasonably requested instruments in writing releasing the security interest in the Patents acquired under this Confirmatory Grant.

(b) The Grantor hereby grants to the Grantee a security interest in (1) all of the Grantor's right, title and interest in and to the Patents now owned or from time to time after the date hereof owned or acquired by the Grantor, together with (2) all proceeds and products of the Patents, and (3) all causes of action arising prior to or after the date hereof for infringement of the Patents or unfair competition regarding the same.

3) Counterparts. This Confirmatory Grant may be executed in any number of counterparts and by different parties in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement. Signature pages may be detached from multiple separate counterparts and attached to a single counterpart.

4) Governing Law. This Confirmatory Grant and the rights and obligations of the parties hereto shall be governed by, and construed and interpreted in accordance with, the law of the State of New York.

[Signature Page Follows]

IN WITNESS WHEREOF, the Grantor has executed this Confirmatory Grant effective as of the date first written above.

CAIRE INC.

By: 

Name: Jillian C. Evanko

Title: Vice President, Chief Financial Officer and  
Treasurer

Signature Page to  
Confirmatory Grant of Security Interest in United States Patents

**PATENT**  
**REEL: 044682 FRAME: 0638**

CONFIRMATORY GRANT OF SECURITY INTEREST  
IN UNITED STATES PATENTS

Exhibit A - SCHEDULE OF PATENTS

Title	Patent No./Application No.	Status	Owner
Portable oxygen concentration system and method of using the same	6,691,702	Granted	Caire Inc.
Rotary valve assembly for pressure swing adsorption system	6,712,087	Granted	Caire Inc.
Portable oxygen concentration system and method of using the same	6,651,658	Granted	Caire Inc.
Portable oxygen concentration system and method of using the same	6,629,525	Granted	Caire Inc.
Vacuum-pressure swing absorption fractionator and method of using the same	6,471,744	Granted	Caire Inc.
Rotary valve assembly for pressure swing absorption system	6,457,485	Granted	Caire Inc.
Rotary valve assembly for pressure swing adsorption system	6,311,719	Granted	Caire Inc.
Controlling Oxygen Concentrator Timing Cycle Based on Flow Rate of Oxygen Output	14/670,979	Published - pending	Caire Inc.