PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4785293

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST

CONVEYING PARTY DATA

Name	Execution Date
CHART INC.	01/18/2018

RECEIVING PARTY DATA

Name:	JPMORGAN CHASE BANK, N.A., AS ADMINISTRATIVE AGENT
Street Address:	IL1-1145/54/63, P.O. BOX 6026
City:	CHICAGO
State/Country:	ILLINOIS
Postal Code:	60680-6026

PROPERTY NUMBERS Total: 27

Property Type	Number
Patent Number:	9771931
Patent Number:	9746132
Patent Number:	9551330
Patent Number:	9388943
Application Number:	15314875
Application Number:	15085630
Application Number:	14553888
Application Number:	14553967
Application Number:	14548746
Application Number:	14450142
Application Number:	14177781
Application Number:	13693005
Application Number:	14258873
Application Number:	15227235
Application Number:	15345957
Application Number:	62406171
Application Number:	62409980
Application Number:	62412999
Application Number:	62447185
Application Number:	62558706

PATENT REEL: 044682 FRAME: 0621

504738565

Property Type	Number
Application Number:	62439377
Application Number:	62472706
Application Number:	62489575
Application Number:	13216666
Application Number:	14044622
Application Number:	14089096
Application Number:	14092329

CORRESPONDENCE DATA

Fax Number: (312)993-9767

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.

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Email: zeynep.gieseke@lw.com
Correspondent Name: ZEYNEP GIESEKE

Address Line 1: 330 NORTH WABASH AVENUE, SUITE 2800

Address Line 2: LATHAM & WATKINS LLP
Address Line 4: CHICAGO, ILLINOIS 60611

ATTORNEY DOCKET NUMBER:	049067-0118
NAME OF SUBMITTER:	ZEYNEP GIESEKE
SIGNATURE:	/ZG/
DATE SIGNED:	01/20/2018

Total Attachments: 5

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CONFIRMATORY GRANT OF SECURITY INTEREST IN UNITED STATES PATENTS

THIS CONFIRMATORY GRANT OF SECURITY INTEREST IN UNITED STATES PATENTS (the "<u>Confirmatory Grant</u>") is made effective as of January 18, 2018 by and from Chart Inc., a Delaware corporation (the "<u>Grantor</u>"), to and in favor of JPMORGAN CHASE BANK, N.A., (the "<u>Grantee</u>") 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 <u>Exhibit A</u> attached hereto (the "<u>Patents</u>"), 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) <u>Definitions</u>. 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) <u>Counterparts</u>. 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) <u>Governing Law</u>. 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.

CHART INC.

Name/Jillian C. Evanko

Title: Wice President, Chief Financial Officer and

Treasurer

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

CONFIRMATORY GRANT OF SECURITY INTEREST IN UNITED STATES PATENTS

Exhibit A - SCHEDULE OF PATENTS

Title	Patent No./Application No.	Status	Owner
Spin pump with spun-epicyclic geometry	9,771,931	Granted	Chart Inc.
Self-saturating liquefied natural gas delivery system utilizing hydraulic pressure	9,746,132	Granted	Chart Inc.
Frangible closure coupling for liquid natural gas tank	9,551,330	Granted	Chart Inc.
Ullage tank for vertical storage tank	9,388,943	Granted	Chart Inc.
LNG Delivery System With Saturated Fuel Reserve	15/314,875	Published - pending	Chart Inc.
CRYOGENIC FREEZER	15/085,630	Published - pending	Chart Inc.
Pump Column Baffle for LNG Pump	14/553,888	Published - pending	Chart Inc.
Multimode Gas Delivery for Rail Tender	14/553,967	Published - pending	Chart Inc.
Dual Expansion Chamber With Internal Connecting Tube For Use With An Oxygen Concentrator	14/548,746	Published -pending	Chart Inc.
Cryocooler with Magnetic Reciprocating Piston	14/450,142	Published - pending	Chart Inc.
Integrated Cryogenic Fluid Delivery System	14/177,781	Allowed – Issue fee paid	Chart Inc.
Ullage Tank For Vertical Storage Tank	13/693005	Granted – 9,388,943	Chart Inc.
Liquid Natural Gas Cooling On The Fly	14/258873	Not published	Chart Inc.
INTEGRATED PRE-COOLED MIXED REFRIGERANT SYSTEM AND	15/227,235	Published - pending	Chart Inc.
INTEGRATED PRE-COOLED MIXED REFRIGERANT SYSTEM AND	15/345,957	Published - pending	Chart Inc.
VORTEX VENT DISCHARGE DEVICE AND METHOD	62/406,171	Not published	Chart Inc.
INTERCHANGEABLE DOSING ARM DEVICE, SYSTEM AND METHOD	62/409,980	Not published	Chart Inc.
DIFFERENTIAL PRESSURE FILLING SYSTEM AND METHOD FOR A	62/412,999	Not published	Chart Inc.
CRYOGENIC CONTAINER WITH RESERVE PRESSURE BUILDING	62/447,185	Not published	Chart Inc.
MIXED REFRIGERANT CONDENSER OUTLET MANIFOLD SEPARATOR	62/558,706	Not published	Chart Inc.
SHOCK-SURVIVABLE DEWAR	62/439,377	Not published	Chart Inc.
SPACE CONSERVING INTEGRATED CRYOGENIC FLUID DELIVERY	62/472,706	Not published	Chart Inc.

Title	Patent No./Application No.	Status	Owner
PRESSURE BUILDING CRYOGENIC FLUID DELIVERY SYSTEM	62/489,575	Not published	Chart Inc.
BULK LIQUID COOLING AND PRESSURIZED DISPENSING SYSTEM	13/216,666	Published - pending	Chart Inc.
CRYOGENIC LIQUID DELIVERY SYSTEM AND METHOD WITH ACTIVE	14/044,622	Allowed – awaiting payment of Issue Fee	Chart Inc.
METERING SYSTEM AND METHOD FOR CRYOGENIC LIQUID	H/I/HXU HUK	Allowed – awaiting payment of Issue Fee	Chart Inc.
HEAT MANAGEMENT SYSTEM AND METHOD FOR CRYOGENIC LIQUID DISPENSING SYSTEMS	14/092,329	Granted - 9,752,727	Chart Inc.