505770904 11/13/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5817720

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
GUANGYU SHEN	05/18/2017
JINGKAI WENG	05/18/2017

RECEIVING PARTY DATA

Name:	CARRIER AIR CONDITIONING AND REFRIGERATION R&D MANAGEMENT (SHANGHAI) CO., LTD.
Street Address:	NO. 3239 SHENJIANG ROAD, PUDONG DISTRICT
City:	SHANGHAI
State/Country:	CHINA
Postal Code:	201206

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16612893

CORRESPONDENCE DATA

Fax Number: (860)286-0115

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: 860-286-2929

Email: usptopatentmail@cantorcolburn.com

Correspondent Name: CANTOR COLBURN LLP

Address Line 1: 20 CHURCH STREET 22ND FLOOR Address Line 4: HARTFORD, CONNECTICUT 06103

ATTORNEY DOCKET NUMBER:	RNEY DOCKET NUMBER: 97148US01 (U301222US)	
NAME OF SUBMITTER:	DAVID A. FOX	
SIGNATURE:	/David A. Fox/	
DATE SIGNED:	11/13/2019	

Total Attachments: 2 source=8F96656#page1.tif source=8F96656#page2.tif

PATENT 505770904 REEL: 050994 FRAME: 0355

ASSIGNMENT

WHEREAS, I, Guangyu Shen and Jingkai Weng of No. 3239 Shenjiang Road, Pudong District, Shanghai 201206 CN have invented certain improvements in

HEAT PUMP AND CONTROL METHOD THEREOF

identified as Attorney Docket No. 97148 and described in a patent application as further identified hereinbelow, and

WHEREAS, Carrier Air Conditioning and Refrigeration R&D Management (Shanghai) Co., Ltd., a limited liability company organized and established under the laws of PRC, with a registered office at No. 3239 Shenjiang Road, Pudong District, Shanghai 201206 China, is desirous of acquiring the entire worldwide right, title and interest in and to said invention or inventions and any and all patents, utility models, design patents or other industrial property rights to be obtained therefore;

NOW, THEREFORE, in consideration of inventor compensation determined and paid in accordance with the UTC Climate Controls & Security Employee Inventor Compensation Award Policy, the undersigned does hereby sell, assign, transfer and set over unto Assignee, its successors and assigns, to the extent owned or assignable by the undersigned, all right, title and interest in and to:

- said invention or inventions, as described in the aforesaid patent application, in any form or embodiment thereof, and in and to the aforesaid application;
- any application filed in any country, jurisdiction or other authority based thereon, including direct or indirect nonprovisional, divisional, continuation-in-part or substitute applications, and including the right to file said applications under the provisions of the Paris Convention for the Protection of Industrial Property, the Patent Corporation Treaty or other international convention or agreement;
- any and all patents or reissues or extensions thereof to be obtained in any country, jurisdiction or other authority which may be filed upon said invention or inventions in any country or other authority;
- all such rights relating to prior infringements, retroactive or past royalties, provisional rights, and other retroactive or past relief or compensation.

The undersigned hereby authorizes and requests the issuing authority to issue any and all patents on said application or applications to Assignee or its successors and assigns.

The undersigned further agrees, to communicate to Assignee, its representatives or agents or its successors and assigns, any facts relating to said invention or inventions including evidence for interference purposes or for other legal proceedings whenever requested; testify in any interference or other legal proceedings, whenever requested; execute and deliver, on request, all lawful papers required to make any of the foregoing provisions effective; and generally do everything possible to aid Assignee, its successors or assigns and nominees to obtain and enforce proper patent protection for said invention or inventions in any country.

97148CN01 (U301222CN)

The undersigned hereby authorizes the Assignee to insert the application number and filing date of the abovenoted international patent application into the following spaces, when known:

Application No.

201710332939.1

Country or Receiving Office:

CN

Filing Date:

May 12, 2017

Inventors:

GUANGYU SHEN; JINGKAI WENG

IN TESTIMONY WHEREOF, the undersigned has hereunto set her/his hand and seal on the date after her/his signature.

Jing Icai. Weng JINGKAT WENG

Date: May 18, 20/7

Date: May 18.201)

97148CN01 (U301222CN)

PATENT REEL: 050994 FRAME: 0357

RECORDED: 11/13/2019