PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT2588760

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JAEHYEOK CHOI	08/26/2013
GUKHYUN KIM	08/26/2013
DEOKHYUN LIM	08/26/2013
YOUNGJUN KIM	08/26/2013

RECEIVING PARTY DATA

Name:	HS R & A CO., LTD.
Street Address:	147-1, GYO-DONG, YANGSAN-SI
City:	GYEONGSANGNAM-DO
State/Country:	KOREA, REPUBLIC OF

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14019138

CORRESPONDENCE DATA

Fax Number: (503)595-5301 503-595-5300 Phone:

Email: erin.vaughn@klarquist.com

Correspondence will be sent via US Mail when the email attempt is unsuccessful. Correspondent Name: MICHAEL GIRARD, KLARQUIST SPARKMAN LLP

Address Line 1: 121 SW SALMON ST., STE. 1600 Address Line 2: ONE WORLD TRADE CENTER Address Line 4: PORTLAND, OREGON 97204-2927

	PATENT
Signature:	/Michael P. Girard/
NAME OF SUBMITTER:	MICHAEL P. GIRARD
ATTORNEY DOCKET NUMBER:	8640-91697-01

REEL: 031463 FRAME: 0483 502543293

Date:	10/23/2013
Total Attachments: 5 source=8640-91697-01_Assignment#page1 source=8640-91697-01_Assignment#page2 source=8640-91697-01_Assignment#page3 source=8640-91697-01_Assignment#page4 source=8640-91697-01_Assignment#page5	tif .tif .tif

PATENT REEL: 031463 FRAME: 0484

ASSIGNMENT

WHEREAS, we, Jaehyeok Choi, of Yangsan-si, Republic of Korea, Gukhyun Kim, of
Yangsan-si, Republic of Korea, Deokhyun Lim, of Yangsan-si, Republic of Korea, and Youngjun
Kim, of Yangsan-si, Republic of Korea, have invented a certain invention, entitled DUAL PIPE
FOR HEAT EXCHANGE, for which we are making application for Letters Patent of the United
States, said application having been filed on September 5, 2013, and assigned U.S.
Patent Application No. 14/019,138; and

WHEREAS, HS R & A Co., Ltd., a corporation organized under the laws of the State of Republic of Korea, having a place of business at 147-1, Gyo-dong, Yangsan-si, Gyeongsangnam-do, Republic of Korea, desires to acquire an interest therein:

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, we, Jaehyeok Choi, Gukhyun Kim, Deokhyun Lim, Youngjun Kim hereby sell, assign, and transfer to HS R & A Co., Ltd., the full and exclusive right, title, and interest in and to said invention, patent application, 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; said invention, patent application, 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 HS R & A Co., Ltd., 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 us had this assignment and sale not been made, and covenant that we have full right so to do, and agree that we will communicate to HS R & A Co., Ltd., or its successors and assigns, any facts known to us respecting said invention, 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 HS R & A Co., Ltd., its successors, and assigns to obtain and enforce proper patent protection for said invention in the United States or any foreign country.

We confirm that, at the time the invention was made, we were under an obligation to assign the invention to HS R & A Co., Ltd.

Assignment - Page 1 of 5

PATENT REEL: 031463 FRAME: 0485 MPG:mjc 8640-91697-01 YPF201306-0030-US

We hereby grant the law firm of Klarquist Sparkman, LLP, the power to insert on this Assignment any further information that 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.

Executed on the date opposite our respective signatures below.

Date:	2013 =08.26.	Khol
		Jachycok Choi
Witnessed: Signature: Name:	Jīyun. IGM	
Witnessed: Signature; Name;	Phunjung LEE	

Date: Hug 26th, 2013

Witnessed: Signature: Mame: Fiyun, KIM

Witnessed: Signature: Manage Ma

MPG:mjc 8640-91697-01 YPF201306-0030-US

Name:

Assignment - Page 3 of 5

Date: 90 | 3 | 5 | 10 |

Witnessed: Signature: Name: JTyun KIM

Witnessed: Signature: Gan

MPG:mjc 8640-91697-01 YPF201306-0030-US

Name:

Hyunjung

MPGmje 86	40-91697-01 YPF201306-0030-US	
Date:	2013.08.26	Youngjun Kim
Witnessed Signature; Name;		
Witnessed Signature: Name:	Hyunjang LEE	

Assignment - Page 5 of 5

PATENT REEL: 031463 FRAME: 0489

RECORDED: 10/23/2013