PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3672952

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
HUA LIU	12/23/2015
LAKSHA J. DEKA	12/21/2015
MOHAMED ALSHOURBAGY	12/27/2015
DIPTESH MUKHERJEE	12/23/2015

RECEIVING PARTY DATA

Name:	WHIRLPOOL CORPORATION
Street Address:	2000 NORTH M-63
City:	BENTON HARBOR
State/Country:	MICHIGAN
Postal Code:	49022

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14980778

CORRESPONDENCE DATA

Fax Number: (616)957-8196

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: 269-923-5470

Email: mike_lafrenz@whirlpool.com, ptomail@priceheneveld.com

Correspondent Name: WHIRLPOOL CORPORATION - MD 3601 / PRICE

Address Line 1: 2000 NORTH M63

Address Line 4: BENTON HARBOR, MICHIGAN 49022

ATTORNEY DOCKET NUMBER:	SUB-06705-US-NP
NAME OF SUBMITTER:	JEFFREY S. KAPTEYN
SIGNATURE:	/Jeffrey S. Kapteyn/
DATE SIGNED:	12/28/2015
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 4

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PATENT REEL: 037367 FRAME: 0464

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Atty. Docket: SUB-06705-US-NP

COMBINED ASSIGNMENT AND DECLARATION FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET

	THIS DOCUMENT IS BEING SUBMITTED FOR DUAL PURPOSES
Title of	MULTI-LAYER GAS BARRIER MATERIALS FOR VACUUM INSULATED
Invention	STRUCTURE
	ed inventor, I hereby declare that: The attached application, or United States application or PCT international application number filed on
The above-identifi	ed application was made or authorized to be made by me.
I believe that I am	the original inventor or an original joint inventor of a claimed invention in the application.
	I reviewed and understand the contents of the above-identified specification, including the claims. I luty to disclose information material to patentability of this application in accordance with 37 C.F.R §1.56.
	edge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or not more than five (5) years, or both.
M-63, Benton Har	RLPOOL CORPORATION (hereinafter referred to as "ASSIGNEE") having places of business at 2000 North bor, Michigan 49022, U.S.A. is desirous of acquiring the entire right, title and interest in and to said invention is and throughout the world;
receipt and sufficie unto said ASSIGN including any and and reissue of said including the right accorded ASSIGNo treaties; and the er	RE, in accord with my obligations by law and/or agreement, and/or for good and valuable consideration, the ency of are hereby acknowledged, I (hereinafter referred to as "ASSIGNOR") hereby sell, assign and transfer EE, the entire right, title and interest in and to said invention and application throughout the United States, all United States Letters Patent granted on any division, continuation, continuation-in-part, reexamination application; and the entire right, title and interest in and to the said invention throughout the world, to apply for patents and inventor certificates in respect thereof and to claim priority pursuant to rights OR under terms of the Paris International Convention and all other available international conventions and after right, title and interest in and to any and all patents, patents of addition, utility models, patents of idation patents and inventor certificates which may be granted throughout the world in respect of said
prosecution and m and in foreign cour ASSIGNEE in and but at no expense t information concer testimony on beha defense of any pate	R hereby agrees to execute any documents that legally may be required in connection with the filing, taintenance of said application or any other patent application(s) or inventor certificate(s) in the United States entries for said invention, including additional documents that may be required to affirm the rights of to said invention, all without further consideration. ASSIGNOR also agrees, without further consideration to ASSIGNOR, to identify and communicate to ASSIGNEE at ASSIGNEE'S request documents and enting the invention that are within ASSIGNOR'S possession or control and to provide further assurances and left of ASSIGNEE that lawfully may be required of ASSIGNOR in respect of the prosecution, maintenance and ent application or patent encompassed within the terms of this instrument. ASSIGNOR'S obligations under all extend to ASSIGNOR'S heirs, executors, administrators and other legal representatives.
Letters Patent refer ASSIGNEE'S sole tend of the term for	by authorizes and requests the Commissioner of Patents and Trademarks to issue any and all United States ared to above to ASSIGNEE, as the ASSIGNEE of the entire right, title and interest in and to the same, for use and behoof; and for the use and behoof of ASSIGNEE'S legal representatives and successors, to the full which such Letters Patent may be granted, as fully and entirely as the same would have been held by us agreement and sale not been made.
	orizes any member or representative of WHIRLPOOL CORPORATION to insert or complete any information needed to effect its recordal in the U.S. Patent and Trademark Office.
LEGAL NAME OF Inventor: Hua Liu Date: 12/23	Signature: Herly

Atty. Docket: SUB-06705-US-NP

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Invention	STRUCTURE
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The above-identifi	ed application was made or authorized to be made by me.
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receipt and sufficie unto said ASSIGN including any and and reissue of said including the right accorded ASSIGN treaties; and the er	RE, in accord with my obligations by law and/or agreement, and/or for good and valuable consideration, the ency of are hereby acknowledged, I (hereinafter referred to as "ASSIGNOR") hereby sell, assign and transfer EE, the entire right, title and interest in and to said invention and application throughout the United States, all United States Letters Patent granted on any division, continuation, continuation-in-part, reexamination application; and the entire right, title and interest in and to the said invention throughout the world, to apply for patents and inventor certificates in respect thereof and to claim priority pursuant to rights OR under terms of the Paris International Convention and all other available international conventions and attire right, title and interest in and to any and all patents, patents of addition, utility models, patents of idation patents and inventor certificates which may be granted throughout the world in respect of said
prosecution and mand in foreign courant in foreign courant at no expense tinformation concertestimony on behadefense of any patents.	R hereby agrees to execute any documents that legally may be required in connection with the filing, aintenance of said application or any other patent application(s) or inventor certificate(s) in the United States ntries for said invention, including additional documents that may be required to affirm the rights of to said invention, all without further consideration. ASSIGNOR also agrees, without further consideration to ASSIGNOR, to identify and communicate to ASSIGNEE at ASSIGNEE'S request documents and mining the invention that are within ASSIGNOR'S possession or control and to provide further assurances and left of ASSIGNEE that lawfully may be required of ASSIGNOR in respect of the prosecution, maintenance and ent application or patent encompassed within the terms of this instrument. ASSIGNOR'S obligations under all extend to ASSIGNOR'S heirs, executors, administrators and other legal representatives.
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LEGAL NAME OF	
Inventor: <u>Laksha J.</u>	Deka Signature:
Date: Du 2	<u>1, 30 1</u>

Atty. Docket: SUB-06705-US-NP

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	orizes any member or representative of WHIRLPOOL CORPORATION to insert or complete any information needed to effect its recordal in the U.S. Patent and Trademark Office.
LEGAL NAME OF	d Alshourbagy Signature:
Date: <u>12/27/20</u>	

REEL: 037367 FRAME: 0468

Atty. Docket: 5UB-06705-US-NP

COMBINED ASSIGNMENT AND DECLARATION FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET

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Invention	STRUCTURE
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ASSIGNOR auth in this document i	orizes any member or representative of WHIRLPOOL CORPORATION to insert or complete any information needed to effect its recordal in the U.S. Patent and Trademark Office.
LEGAL NAME O	Mukherjee Signature: Aglich Malkeryee

RECORDED: 12/28/2015