503641057 01/08/2016

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3687690

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
NATHAN BILANCIO	12/10/2015
ALEXANDER CLAYTON	12/10/2015
BRANDON L. SATANEK	12/10/2015
WEN SHI	12/10/2015
JAMES O. THOMPSON	12/10/2015

RECEIVING PARTY DATA

Name:	WHIRLPOOL CORPORATION
Street Address:	2000 NORTH M-63
Internal Address:	MD 3601
City:	BENTON HARBOR
State/Country:	MICHIGAN
Postal Code:	49022

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14990906

CORRESPONDENCE DATA

Fax Number: (616)742-1010

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: 616-742-3500

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MCGARRY BAIR PC **Correspondent Name:**

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Address Line 2: SUITE 500

Address Line 4: GRAND RAPIDS, MICHIGAN 49503

ATTORNEY DOCKET NUMBER:	SUB-07729-US-NP
NAME OF SUBMITTER:	JOEL E. BAIR
SIGNATURE:	/Joel E. Bair/
DATE SIGNED:	01/08/2016

Total Attachments: 5 source=G0995013#page1.tif source=G0995013#page2.tif source=G0995013#page3.tif source=G0995013#page4.tif source=G0995013#page5.tif

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

	☐ THIS DOCUMENT IS BEING SUBMITTED FOR DUAL PURPOSE
Title of Invention	NETWORK AND METHOD FOR CASTING A USER INTERFACE
	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.
	dge 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 sufficient 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 other 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 cou ASSIGNEE in and but at no expense information conce testimony on behadefense of any pat	R hereby agrees to execute any documents that legally may be required in connection with the filing, naintenance 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 rning the invention that are within ASSIGNOR'S possession or control and to provide further assurances and if 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 refe ASSIGNEE'S sole end of the term for	by authorizes and requests the Commissioner of Patents and Trademarks to issue any and all United States are 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 1/1 0/
Inventor: Nathan Bi	
Date: 12/10/1	

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~~~	THIS DOCUMENT IS BEING SUBMITTED FOR DUAL PURPOSE
Title of	NETWORK AND METHOD FOR CASTING A USER INTERFACE
Invention	
	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.
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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 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 tire 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 cou ASSIGNEE in and but at no expense information concer testimony on beha defense of any pat	R hereby agrees to execute any documents that legally may be required in connection with the filing, saintenance of said application or any other patent application(s) or inventor certificate(s) in the United States intries 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 ming the invention that are within ASSIGNOR'S possession or control and to provide further assurances and If 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 refe ASSIGNEE'S sole i end of the term for	by authorizes and requests the Commissioner of Patents and Trademarks to issue any and all United States rred 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 his 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 ///p///
Inventor: Alexander	Clayton Signature:
Date: 12/10/15	

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

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Title of	NETWORK AND METHOD FOR CASTING A USER INTERFACE
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receipt and sufficie unto said ASSIGNF including any and a and reissue of said including the right accorded ASSIGNC treaties; and the en	E, in accord with my obligations by law and/or agreement, and/or for good and valuable consideration, the new of are hereby acknowledged, I (hereinafter referred to as "ASSIGNOR") hereby sell, assign and transfer E, 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 DR under terms of the Paris International Convention and all other available international conventions and tire right, title and interest in and to any and all patents, patents of addition, utility models, patents of dation patents and inventor certificates which may be granted throughout the world in respect of said
prosecution and mand in foreign cour ASSIGNEE in and to but at no expense beinformation concertestimony on behald defense of any pate	A hereby agrees to execute any documents that legally may be required in connection with the filing, nintenance of said application or any other patent application(s) or inventor certificate(s) in the United States stries 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 of ASSIGNOR, to identify and communicate to ASSIGNEE at ASSIGNEE'S request documents and ning the invention that are within ASSIGNOR'S possession or control and to provide further assurances and for ASSIGNEE that lawfully may be required of ASSIGNOR in respect of the prosecution, maintenance and application or patent encompassed within the terms of this instrument. ASSIGNOR'S obligations under application or patent encompassed within the terms of this instrument.
Letters Patent refer ASSIGNEE'S sole u end of the term for	y authorizes and requests the Commissioner of Patents and Trademarks to issue any and all United States red to above to ASSIGNEE, as the ASSIGNEE of the entire right, title and interest in and to the same, for se 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 is agreement and sale not been made.
	rizes any member or representative of WHIRLPOOL CORPORATION to insert or complete any information seeded to effect its recordal in the U.S. Patent and Trademark Office.
LEGAL NAME OF	INVENTOR 7 / A
inventor: Brandon L.	Satariek Signature:
Date: 12 - (0	7.15

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THIS	DOCUMENT IS BEING SUBMITTED FOR DUAL PURPOSES
Title of NETWORK AND METHOD FO	R CASTING A USER INTERFACE
Invention	
As the below named inventor, I hereby declare that:  This declaration	olication number
The above-identified 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 hereby state that I reviewed and understand the contents of the above-acknowledge the duty to disclose information material to patentability of	**
I hereby acknowledge that any willful false statement made in this declar imprisonment of not more than five (5) years, or both.	ration is punishable under 18 U.S.C. 1001 by fine or
WHEREAS, WHIRLPOOL CORPORATION (hereinafter referred to as M-63, Benton Harbor, Michigan 49022, U.S.A. is desirous of acquiring to in the United States and throughout the world;	
NOW, THEREFORE, in accord with my obligations by law and/or agree receipt and sufficiency of are hereby acknowledged, I (hereinafter referr unto said ASSIGNEE, the entire right, title and interest in and to said interced in any and all United States Letters Patent granted on any division and reissue of said application; and the entire right, title and interest in a including the right to apply for patents and inventor certificates in respect accorded ASSIGNOR under terms of the Paris International Convention treaties; and the entire right, title and interest in and to any and all pater importation, revalidation patents and inventor certificates which may be invention.	ed to as "ASSIGNOR") hereby sell, assign and transfer vention and application throughout the United States, on, continuation, continuation-in-part, reexamination and to the said invention throughout the world, of thereof and to claim priority pursuant to rights and all other available international conventions and its, patents of
ALSO, ASSIGNOR hereby agrees to execute any documents that legall prosecution and maintenance of said application or any other patent applicant and in foreign countries for said invention, including additional document ASSIGNEE in and to said invention, all without further consideration. Abut at no expense to ASSIGNOR, to identify and communicate to ASSIG information concerning the invention that are within ASSIGNOR'S poss testimony on behalf of ASSIGNEE that lawfully may be required of ASSIGNEE of any patent application or patent encompassed within the territhis instrument shall extend to ASSIGNOR'S heirs, executors, administrations.	Discation(s) or inventor certificate(s) in the United States ents that may be required to affirm the rights of ASSIGNOR also agrees, without further consideration ENEE at ASSIGNEE'S request documents and ession or control and to provide further assurances and IGNOR in respect of the prosecution, maintenance and as of this instrument. ASSIGNOR'S obligations under
ASSIGNOR hereby authorizes and requests the Commissioner of Pater Letters Patent referred to above to ASSIGNEE, as the ASSIGNEE of the ASSIGNEE'S sole use and behoof; and for the use and behoof of ASSIGNENT end of the term for which such Letters Patent may be granted, as fully at ASSIGNOR had this agreement and sale not been made.	entire right, title and interest in and to the same, for NEE'S legal representatives and successors, to the full
<b>ASSIGNOR</b> authorizes any member or representative of <b>WHIRLPOOL</b> in this document needed to effect its recordal in the U.S. Patent and Trace	
7	
LEGAL NAME OF INVENTOR	
Inventor: Wen Shi Signature:	
Date: 12-10-15	

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THIS DOCUMENT IS BEING SUBMITTED FOR DUAL PURPOSES
Title of NETWORK AND METHOD FOR CASTING A USER INTERFACE
Invention
As the below named inventor, I hereby declare that:  This declaration The attached application, or is directed to: United States application or PCT international application number
The above-identified 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 hereby state that I reviewed and understand the contents of the above-identified specification, including the claims. I acknowledge the duty to disclose information material to patentability of this application in accordance with 37 C.F.R §1.56.
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.
WHEREAS, WHIRLPOOL CORPORATION (hereinafter referred to as "ASSIGNEE") having places of business at 2000 North M-63, Benton Harbor, Michigan 49022, U.S.A. is desirous of acquiring the entire right, title and interest in and to said invention in the United States and throughout the world;
NOW, THEREFORE, in accord with my obligations by law and/or agreement, and/or for good and valuable consideration, the receipt and sufficiency of are hereby acknowledged, I (hereinafter referred to as "ASSIGNOR") hereby sell, assign and transfer unto said ASSIGNEE, the entire right, title and interest in and to said invention and application throughout the United States, including any and all United States Letters Patent granted on any division, continuation, continuation-in-part, reexamination and reissue of said application; and the entire right, title and interest in and to the said invention throughout the world, including the right to apply for patents and inventor certificates in respect thereof and to claim priority pursuant to rights accorded ASSIGNOR under terms of the Paris International Convention and all other available international conventions and treaties; and the entire right, title and interest in and to any and all patents, patents of addition, utility models, patents of importation, revalidation patents and inventor certificates which may be granted throughout the world in respect of said invention.
ALSO, ASSIGNOR hereby agrees to execute any documents that legally may be required in connection with the filing, prosecution and maintenance of said application or any other patent application(s) or inventor certificate(s) in the United States and in foreign countries for said invention, including additional documents that may be required to affirm the rights of ASSIGNEE in and to said invention, all without further consideration. ASSIGNOR also agrees, without further consideration but at no expense to ASSIGNOR, to identify and communicate to ASSIGNEE at ASSIGNEE's request documents and information concerning the invention that are within ASSIGNOR'S possession or control and to provide further assurances and testimony on behalf of ASSIGNEE that lawfully may be required of ASSIGNOR in respect of the prosecution, maintenance and defense of any patent application or patent encompassed within the terms of this instrument. ASSIGNOR'S obligations under this instrument shall extend to ASSIGNOR'S heirs, executors, administrators and other legal representatives.
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ASSIGNOR authorizes any member or representative of WHIRLPOOL CORPORATION to insert or complete any information in this document needed to effect its recordal in the U.S. Patent and Trademark Office.
LEGAL NAME OF INVENTOR Inventor: James O. Thompson Signature:
Date:

PATENT REEL: 037440 FRAME: 0542

RECORDED: 01/08/2016