PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5518042

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ROBERT E. TSAI	05/10/2019
JOSEPH MONTALBANO	05/10/2019
ELLEN ARNOLD	05/10/2019

RECEIVING PARTY DATA

Name:	UOP LLC
Street Address:	25 EAST ALGONQUIN ROAD
Internal Address:	PATENT DEPARTMENT
City:	DES PLAINES
State/Country:	ILLINOIS
Postal Code:	60017

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16408806

CORRESPONDENCE DATA

Fax Number: (602)293-2822

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: (602)293-1254 Email: rlyons@gbc.law

HONEYWELL INTERNATIONAL INC **Correspondent Name:** Address Line 1: 101 COLUMBIA ROAD P. O. BOX 2245 Address Line 2: MAIL STOP AB/2B PATENT SERVICES Address Line 4: MORRISTOWN, NEW JERSEY 07962

ATTORNEY DOCKET NUMBER: H213326-US (134846) NAME OF SUBMITTER: PATRICK J. SMITH SIGNATURE: /Patrick J. Smith/ **DATE SIGNED:** 05/10/2019

Total Attachments: 6 source=1472557#page1.tif source=1472557#page2.tif

505471239

PATENT REEL: 049144 FRAME: 0679



PATENT REEL: 049144 FRAME: 0680 therein:

for which application for patent in the United States:
has been executed on even date herewith:

WHEREAS, the undersigned inventor(s) (hereinafter individually and collectively referred to as "ASSIGNOR") has invented new and useful improvements in:

PROCESSES FOR SEPARATING PARA-XYLENE FROM TOLUENE

	The both of the bo
	was executed on;
<u>_X</u> _	was filed on May 10, 2019 and assigned U.S. Application No. 16/408,806;
	AND WHEREAS, the "Assigned Property" shall mean (i) the above-identified United States application
for p	atent (the "Application"), (ii) all inventions disclosed in the Application, (iii) any and all applications for
pate	nt throughout the world directed to the subject matter of the Application, (iv) the right of priority arising
from	the Application or from such other applications, under the Paris Convention for the Protection of
	strial Property or under relevant laws, treaties, conventions or bilateral and multilateral agreements, in

assigned by this Agreement;

AND WHEREAS, UOP LLC, a Delaware Limited Liability Company having a place of business at 25 East Algonquin Road, Des Plaines, IL 60017-5017, its successors and assigns (hereinafter individually and collectively referred to as "ASSIGNEE"), is desirous of acquiring ASSIGNOR's entire right, title, and interest in and to and resulting from said Assigned Property and in general all property rights included

any jurisdiction, (v) any and all patents throughout the world resulting from the Application or such other application(s) for patents, and (vi) any and all claims against third parties in connection with any of the rights

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, ASSIGNOR does hereby irrevocably and unconditionally assign and transfer unto ASSIGNEE ASSIGNOR's entire right, title and interest in and to and resulting from the Assigned Property, and hereby authorizes and requests the Commissioner of Patents to issue said patent to ASSIGNEE for the sole use and benefit of ASSIGNEE; ASSIGNEE hereby accepts such transfer and assignment;

AND ASSIGNOR FURTHERMORE authorizes ASSIGNEE, or anyone it may properly designate, to insert on each page of this instrument (where indicated) the filing date and application number of said Application when known:

AND ASSIGNOR AGREES, FURTHERMORE, upon request of ASSIGNEE, and without further remuneration, but at no expense to ASSIGNOR, that ASSIGNOR or ASSIGNOR'S heirs, executors, or administrators will provide all reasonable assistance to obtain, maintain, and assert the fullest measure of legal protection that ASSIGNEE desires to obtain or assert for the Assigned Property, including executing any and all papers desired by ASSIGNEE for the filing and granting of patent rights in the Assigned Property, the perfecting of title in ASSIGNEE, and in enforcing any rights in the Assigned Property.

This instrument is executed by, and shall be binding upon ASSIGNOR, and ASSIGNOR's heirs, executors and administrators, for the uses and purposes above set forth and referred to and shall inure to the benefit of ASSIGNEE or anyone it may properly designate.

If any provision of this assignment is held by any court to be unenforceable, such provision shall be interpreted to accomplish the objectives of the original provision to the fullest extent allowed by law and the remainder of this assignment shall remain in full force and effect.

This assignment shall be construed, governed, interpreted and applied in accordance with the laws of the State of Delaware, United States of America.

U.S Application No. 16/408,806 filed May 10, 2019

EXECUTED on behalf of ASSIGNEE and effective as of the latest date of the ASSIGNOR signature(s) below:

Ashley E. Romano Deputy Chief IP Counsel UOP LLC

EXECUTED as of the date(s) set forth below on behalf of the ASSIGNOR:

ROBERT E. TSAI	Date: <u>1144 10, 2019</u>
JOSEPH MONTALBANO	Date:
ELLEN ARNOLD	Date:

assigned by this Agreement;

for which application for patent in the United States:
has been executed on even date herewith:

WHEREAS, the undersigned inventor(s) (hereinafter individually and collectively referred to as "ASSIGNOR") has invented new and useful improvements in:

PROCESSES FOR SEPARATING PARA-XYLENE FROM TOLUENE

	executed on;
	filed on May 10, 2019 and assigned U.S. Application No. 16/408,806;
ANE	WHEREAS, the "Assigned Property" shall mean (i) the above-identified United States application
	it (the "Application"), (ii) all inventions disclosed in the Application, (iii) any and all applications fo
patent ti	roughout the world directed to the subject matter of the Application, (iv) the right of priority arising
from the	Application or from such other applications, under the Paris Convention for the Protection of
Industria	l Property or under relevant laws, treaties, conventions or bilateral and multilateral agreements, in

AND WHEREAS, UOP LLC, a Delaware Limited Liability Company having a place of business at 25 East Algonquin Road, Des Plaines, IL 60017-5017, its successors and assigns (hereinafter individually and collectively referred to as "ASSIGNEE"), is desirous of acquiring ASSIGNOR's entire right, title, and interest in and to and resulting from said Assigned Property and in general all property rights included therein:

any jurisdiction, (v) any and all patents throughout the world resulting from the Application or such other application(s) for patents, and (vi) any and all claims against third parties in connection with any of the rights

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, ASSIGNOR does hereby irrevocably and unconditionally assign and transfer unto ASSIGNEE ASSIGNOR's entire right, title and interest in and to and resulting from the Assigned Property, and hereby authorizes and requests the Commissioner of Patents to issue said patent to ASSIGNEE for the sole use and benefit of ASSIGNEE; ASSIGNEE hereby accepts such transfer and assignment;

AND ASSIGNOR FURTHERMORE authorizes ASSIGNEE, or anyone it may properly designate, to insert on each page of this instrument (where indicated) the filing date and application number of said Application when known;

AND ASSIGNOR AGREES, FURTHERMORE, upon request of ASSIGNEE, and without further remuneration, but at no expense to ASSIGNOR, that ASSIGNOR or ASSIGNOR'S heirs, executors, or administrators will provide all reasonable assistance to obtain, maintain, and assert the fullest measure of legal protection that ASSIGNEE desires to obtain or assert for the Assigned Property, including executing any and all papers desired by ASSIGNEE for the filing and granting of patent rights in the Assigned Property, the perfecting of title in ASSIGNEE, and in enforcing any rights in the Assigned Property.

This instrument is executed by, and shall be binding upon ASSIGNOR, and ASSIGNOR's heirs, executors and administrators, for the uses and purposes above set forth and referred to and shall inure to the benefit of ASSIGNEE or anyone it may properly designate.

If any provision of this assignment is held by any court to be unenforceable, such provision shall be interpreted to accomplish the objectives of the original provision to the fullest extent allowed by law and the remainder of this assignment shall remain in full force and effect.

This assignment shall be construed, governed, interpreted and applied in accordance with the laws of the State of Delaware, United States of America.

U.S Application No. 16/408,806 filed May 10, 2019

EXECUTED on behalf of ASSIGNEE and effective as of the latest date of the ASSIGNOR signature(s) below:

Ashley E. Romano Deputy Chief IP Counsel UOP LLC

EXECUTED as of the date(s) set forth below on behalf of the ASSIGNOR:

ROBERT E. TSAI	Date:	0000000000000000000000000000000000000
JOSEPH MONTALBANO	Date:	10 May 2019
ELLEN ARNOLD	Date:	

U₂S Application No. 16/408,806 filed May 10, 2019

for which application for patent in the United States:

WHEREAS, the undersigned inventor(s) (hereinafter individually and collectively referred to as "ASSIGNOR") has invented new and useful improvements in:

PROCESSES FOR SEPARATING PARA-XYLENE FROM TOLUENE

has been executed on even date herewith;	
was executed on	
X was filed on May 10, 2019 and assigned U.S	
AND WHEREAS, the "Assigned Property" sh	iall mean (i) the above-identified United States applical
for patent (the "Application"), (ii) all inventions dis	sclosed in the Application, (iii) any and all applications
patent throughout the world directed to the subje	ct matter of the Application, (iv) the right of priority aris

AND WHEREAS, the "Assigned Property" shall mean (i) the above-identified United States application for patent (the "Application"), (ii) all inventions disclosed in the Application, (iii) any and all applications for patent throughout the world directed to the subject matter of the Application, (iv) the right of priority arising from the Application or from such other applications, under the Paris Convention for the Protection of Industrial Property or under relevant laws, treaties, conventions or bilateral and multilateral agreements, in any jurisdiction, (v) any and all patents throughout the world resulting from the Application or such other application(s) for patents, and (vi) any and all claims against third parties in connection with any of the rights assigned by this Agreement;

AND WHEREAS, UOP LLC, a Delaware Limited Liability Company having a place of business at 25 East Algoriquin Road, Des Plaines, IL 60017-5017, its successors and assigns (hereinafter individually and collectively referred to as "ASSIGNEE"), is desirous of acquiring ASSIGNOR's entire right, title, and interest in and to and resulting from said Assigned Property and in general all property rights included therein;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, ASSIGNOR does hereby irrevocably and unconditionally assign and transfer unto ASSIGNEE ASSIGNOR's entire right, title and interest in and to and resulting from the Assigned Property, and hereby authorizes and requests the Commissioner of Patents to issue said patent to ASSIGNEE for the sole use and benefit of ASSIGNEE; ASSIGNEE hereby accepts such transfer and assignment;

AND ASSIGNOR FURTHERMORE authorizes ASSIGNEE, or anyone it may properly designate, to insert on each page of this instrument (where indicated) the filing date and application number of said Application when known;

AND ASSIGNOR AGREES, FURTHERMORE, upon request of ASSIGNEE, and without further remuneration, but at no expense to ASSIGNOR, that ASSIGNOR or ASSIGNOR'S heirs, executors, or administrators will provide all reasonable assistance to obtain, maintain, and assert the fullest measure of legal protection that ASSIGNEE desires to obtain or assert for the Assigned Property, including executing any and all papers desired by ASSIGNEE for the filing and granting of patent rights in the Assigned Property, the perfecting of title in ASSIGNEE, and in enforcing any rights in the Assigned Property.

This instrument is executed by, and shall be binding upon ASSIGNOR, and ASSIGNOR's heirs, executors and administrators, for the uses and purposes above set forth and referred to and shall inure to the benefit of ASSIGNEE or anyone it may properly designate.

If any provision of this assignment is held by any court to be unenforceable, such provision shall be interpreted to accomplish the objectives of the original provision to the fullest extent allowed by law and the remainder of this assignment shall remain in full force and effect.

This assignment shall be construed, governed, interpreted and applied in accordance with the laws of the State of Delaware. United States of America.

U.S. Application No. 16/408,806 filed May 10, 2019

EXECUTED on behalf of ASSIGNEE and effective as of the latest date of the ASSIGNOR signature(s) below:

Ashley E. Romano Deputy Chief IP Counsel UOP LLC

EXECUTED as of the date(s) set forth below on behalf of the ASSIGNOR:

ROBERT E. TSAI	Date:
JOSEPH MONTALBANO	Date:
ELLEN ARNOLD	Date: <u>5/10/19</u>

U.S Application No. 16/408,806 filed May 10, 2019

RECORDED: 05/10/2019

(Rev.03/20/2012)

PATENT REEL: 049144 FRAME: 0686