

## PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT3216992

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
G. PAULL TORRENCE	05/17/2012
RONALD DAVID SHAVER	05/17/2012
YAW-HWA LIU	05/17/2012
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	CELANESE INTERNATIONAL CORPORATION
<b>Street Address:</b>	222 W. LAS COLINAS ROAD
<b>Internal Address:</b>	SUITE 900N
<b>City:</b>	IRVING
<b>State/Country:</b>	TEXAS
<b>Postal Code:</b>	75039
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	14613209
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	
<i>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.</i>	
<b>Phone:</b>	2025805800
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<b>Correspondent Name:</b>	KILPATRICK TOWNSEND & STOCKTON LLP
<b>Address Line 1:</b>	TWO EMBARCADERO CENTER
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<b>Address Line 4:</b>	SAN FRANCISCO, CALIFORNIA 94111-3834
<b>ATTORNEY DOCKET NUMBER:</b>	17851US-IC (934214)
<b>NAME OF SUBMITTER:</b>	KEITH FREDLAKE
<b>SIGNATURE:</b>	/Keith DS Fredlake/
<b>DATE SIGNED:</b>	02/08/2015
<b>Total Attachments: 2</b>	
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source=17851US-IC Assignment#page2.tif	

ASSIGNMENT

WHEREAS, G. PAULL TORRENCE residing at 4206 MASTERS DRIVE, LEAGUE CITY, TX 77573; RONALD DAVID SHAVER residing at 906 BRIDGE HOLLOW COURT, HOUSTON, TX 77062; and YAW-HWA LIU residing at 3610 BELMONT SHORE COURT, MISSOURI CITY, TX 77459 (hereinafter referred to as ASSIGNORS), has been assigned the entire right, title and interest in and to the same in the United States and throughout the world certain new and useful improvements in REMOVAL OF AROMATICS FROM CARBOXYLATION PROCESS (hereinafter referred to as THE INVENTION) for which an application for United States Letters Patent was filed on May 3, 2012, as Serial No. 13/462,979.

WHEREAS, CELANESE INTERNATIONAL CORPORATION, a corporation duly organized under and pursuant to the laws of Delaware and whose post office address is 1601 WEST LBJ FREEWAY, DALLAS TX 75234, (hereinafter referred to as ASSIGNEE), is desirous of acquiring the entire right, title and interest in and to the same in the United States and throughout the world.

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, ASSIGNORS, by these presents does sell, assign and transfer unto said ASSIGNEE, the entire right, title and interest in and to said invention and application throughout the United States of America, including any and all United States Letters Patent granted on any non-provisional, division, continuation, and reissue of said application; and the entire right, title and interest in and to 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 the 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, ASSIGNORS hereby agree 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. ASSIGNORS also agree, without further consideration and at ASSIGNEE'S expense, 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 ASSIGNORS in respect of the prosecution, maintenance and defense of any patent application or patent encompassed within the terms of this instrument.

ASSIGNORS also agree, without further consideration and at ASSIGNEE'S expense, to transfer the right to sue for past infringement to ASSIGNEE and at ASSIGNEE'S request documents and information concerning the enforcement of the right to sue within ASSIGNORS 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 right to sue of any patent encompassed within the terms of this instrument.

ASSIGNORS' obligation under this instrument shall extend to ASSIGNOR'S heirs, executors, administrators and other legal representatives.

ASSIGNORS hereby grant the firm of Roberts Mlotkowski Safran & Cole, P.C of McLean, Virginia, the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

ASSIGNORS hereby authorize and requests the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent referred to above to ASSIGNEE of the entire right, title and interest in and to the same, for ASSIGNEE'S sole use and behalf, and for the use and behalf of ASSIGNEE'S legal representatives and successors, to the full end of the term for which such Letters Patent may be granted, as fully and entirely as the same would have been held by ASSIGNORS had this assignment and sale not been made.

Date 05/17/2012 Signature of Assignor G. PAULL TORRENCE

STATE OF TEXAS )  
 ) SS  
COUNTY OF Harris )

Before me personally appeared the person whose name is subscribed to the foregoing instrument, and executed the foregoing instrument in my presence for the purpose contained therein, by signing his name hereto.

Subscribed and Sworn to before me, in my presence,

This 17th day of May, 2012  
Notary Public Zephia L Riess  
My commission expires November 16, 2015



Date 5/17/12 Signature of Assignor

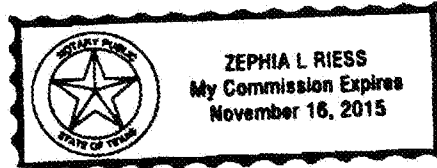
Ronald D. Shaver  
RONALD DAVID SHAVER

STATE OF TEXAS )  
                          ) SS  
COUNTY OF Harris )

Before me personally appeared the person whose name is subscribed to the foregoing instrument, and executed the foregoing instrument in my presence for the purpose contained therein, by signing his name hereto.

Subscribed and Sworn to before me, in my presence,

This 17<sup>th</sup> day of May, 2012  
Notary Public Zephia L. Riess  
My commission expires November 16, 2015



Date 5-17-12 Signature of Assignor

Yaw-Hwa Liu  
YAW-HWA LIU

STATE OF TEXAS )  
                          ) SS  
COUNTY OF Harris )

Before me personally appeared the person whose name is subscribed to the foregoing instrument, and executed the foregoing instrument in my presence for the purpose contained therein, by signing his name hereto.

Subscribed and Sworn to before me, in my presence,

This 17<sup>th</sup> day of May, 2012  
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