504122588 12/05/2016

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

tylesheet Version v1.2

EPAS ID: PAT4169258

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
GARY M WALKER	08/12/2014
EWAN E. DELBRIDGE	02/03/2016
YANSHI ZHANG	08/25/2014
EDWARD P. SAMPLER	08/12/2014
STEPHEN P. COOK	08/12/2014
CHRISTOPHER L. FRIEND	08/12/2014
MOHAMED G. FAHMY	08/11/2014

RECEIVING PARTY DATA

Name:	THE LUBRIZOL CORPORATION
Street Address:	29400 LAKELAND BLVD.
City:	WICKLIFFE
State/Country:	ОНЮ
Postal Code:	44092-2298

PROPERTY NUMBERS Total: 1

Property Type	Number
PCT Number:	US2014050505

CORRESPONDENCE DATA

Fax Number: (440)347-5219

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: 440-347-7201

Email: sarah.degennaro@lubrizol.com,patents@lubrizol.com

Correspondent Name: THE LUBRIZOL CORPORATION

Address Line 1: 29400 LAKELAND BLVD.

Address Line 4: WICKLIFFE, OHIO 44092-2298

ATTORNEY DOCKET NUMBER:	4106-01
NAME OF SUBMITTER:	SARAH DEGENNARO
SIGNATURE:	/Sarah DeGennaro/
DATE SIGNED:	12/05/2016

PATENT 504122588 REEL: 040814 FRAME: 0802

Total Attachments: 9 source=4106-01-US_Assignment 2016.12.05#page1.tif source=4106-01-US_Assignment 2016.12.05#page2.tif source=4106-01-US_Assignment 2016.12.05#page3.tif source=4106-01-US_Assignment 2016.12.05#page4.tif source=4106-01-US_Assignment 2016.12.05#page5.tif source=4106-01-US_Assignment 2016.12.05#page6.tif source=4106-01-US_Assignment 2016.12.05#page7.tif source=4106-01-US_Assignment 2016.12.05#page8.tif source=4106-01-US_Assignment 2016.12.05#page9.tif

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged to full satisfaction, I hereby sell and assign to:

□ THE LUBRIZOL CORPORATION, an Ohio corporation having its principal place of business at 29400 Lakeland Blvd., Wickliffe, Ohio 44092-2298,

(the Assignee) its successors, legal representatives, and assigns, the entire right, title and interest in, to and under the above-identified Application and any inventions disclosed therein, and any letters patent of The United States which may be issued thereon, together with all reissues or reexaminations of said letters patent, all divisions and continuations of said application and all applications and patent rights for the inventions disclosed therein in countries foreign to the United States; and I agree to execute all further papers and do all further acts appropriate to fully vest in said Assignee the rights herein conveyed. I further agree that if the Assignee desires to file a disclaimer relating to any invention contained therein in any country, I will, upon its request, sign and deliver all papers requisite for the filing of such disclaimer. I further authorize and request the Commissioner for Patents and Trademarks of the United States to issue said letters patent to the Assignee.

I authorize the Assignee to insert into this Assignment the filing date and Serial Number of the corresponding U.S. Provisional, PCT, and/or U.S. Utility Applications when known.

U.S. Provisional No.: PCT Appln. No. U.S. Serial No.:	61/866,055 PCT/US2014/50505		August 15, 2013 August 11, 2014
	SIGNATURE	e e e e e e e e e e e e e e e e e e e	
Inventor's signature	Gary M. Walker	*************	Date: 12th August2014
Residence Allestree, UK	GB		
Post Office Address	P.O. Box 88 Belper, DE56 1QN GB		
Inventor's signature	Ewan E. Delbriege		Date: Feb, 3, 206
Residence Concord US	Twp., OH		
Post Office Address	29400 Lakeland Blvd. Wickliffe, Ohio 44092-2298 U.S.A.		

[SIGNATURES TO FOLLOW ON NEXT PAGE]

Inventor's signature	Yanshi Zhang		Date:
Residence Solon, C US	H		
Post Office Address	29400 Lakeland Bl Wickliffe, Ohio 440 U.S.A.		

Inventor's signature	Edward P. Sampler		Date: 1214 August 2014
Residence Leicestei UK	rshire, GB		
Post Office Address	P.O. Box 88 Belper, DE56 1QN GB		
Inventor's signature	Stephen J. Cook	160k	Date: 12 Aug 2014
Residence Belper, C UK	68		
Post Office Address	P.O. Box 88 Belper, DE56 1QN GB		
Inventor's signature	juming f	***** 5 ~\	Date: Q ^{im} Av _{ens} + 2014
Residence Nottingha	am, GB		
Post Office Address	P.O. Box 88 Belper, DE56 1QN GB		
		000 000 000 000 000	

[SIGNATURES TO FOLLOW ON NEXT PAGE]

Inventor's	1000	Mohamed G. Fahmy	Date:
Residence	Eastlake, US	ОН	
Post Office		29400 Lakeland Blvd. Wickliffe, Ohio 44092-2298 U.S.A.	

THIS DECLARATION ENDS ON THIS PAGE

REEL: 040814 FRAME: 0806

PATENT

PATENT

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged to full satisfaction, I hereby sell and assign to:

☑ THE LUBRIZOL CORPORATION, an Ohio corporation having its principal place of business at 29400 Lakeland Blvd., Wickliffe, Ohio 44092-2298,

(the Assignee) its successors, legal representatives, and assigns, the entire right, title and interest in, to and under the above-identified Application and any inventions disclosed therein, and any letters patent of The United States which may be issued thereon, together with all reissues or reexaminations of said letters patent, all divisions and continuations of said application and all applications and patent rights for the inventions disclosed therein in countries foreign to the United States; and I agree to execute all further papers and do all further acts appropriate to fully vest in said Assignee the rights herein conveyed. I further agree that if the Assignee desires to file a disclaimer relating to any invention contained therein in any country, I will, upon its request, sign and deliver all papers requisite for the filing of such disclaimer. I further authorize and request the Commissioner for Patents and Trademarks of the United States to issue said letters patent to the Assignee.

I authorize the Assignee to insert into this Assignment the filing date and Serial Number of the corresponding U.S. Provisional, PCT, and/or U.S. Utility Applications when known.

U.S. Provisional No.: PCT Appln. No. U.S. Serial No.:	61/856,055 PCT/US2014/50505	Filed:	August 15, 2013 August 11, 2014
	SIGNATURE		
Inventor's signature	Gary M. Walker		Date:
Residence Allestree, UK	GB .		
Post Office Address	P.O. Box 88 Belper, DE56 1QN GB		
	38 88 88 88 88		
Inventor's signature	Ewan E. Delbridge	·····	Date:
Residence Concord US	Twp., OH		
	29400 Lakeland Blvd. Wickliffe, Ohio 44092-2298 U.S.A.		

[SIGNATURES TO FOLLOW ON NEXT PAGE]

(Declaration and Assignment—page 3 of 5)

PATENT

Inventor's signature	>			Date:		
	Yanshi Zhang					***************************************
Residence Solon, (US)H					
Post Office Address	3 29400 Lakeland B Wickliffe, Ohio 440 U.S.A.					

inventor's signature	Edward P. Sample			Date:		***************************************
Residence Licesters UK						
Post Office Address	P.O. Box 88 Belper, DE56 1QN GB					

Inventor's signature	Stephen J. Cook	•••••	***************************************	Date:	***************************************	
	Stephen J. Cook					
Residence Belper, C UK	38					
Post Office Address	P.O. Box 88 Belper, DE56 1QN					
	GB					

Inventor's signature	Charles Time			Date:		
Residence Nottingha UK	Christopher L. Friei im, GB	3 0				
Post Office Address	P.O. Box 88 Belper, DE56 1QN GB					

[SIGNATURES TO FOLLOW ON NEXT PAGE]

(Declaration and Assignment—page 4 of 5)

PATENT

Inventor's signature

Mohamed G. Fahmy

Date: <u>8////20/4</u>

Residence Eastlake, OH

US

Post Office Address 29400 Lakeland Blvd.

Wickliffe, Ohio 44092-2298

U.S.A.

₩₩₩₩₩₩

THIS DECLARATION ENDS ON THIS PAGE

(Declaration and Assignment—page 5 of 5)

PATENT

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged to full satisfaction, I hereby sell and assign to:

THE LUBRIZOL CORPORATION, an Ohio corporation having its principal place of business at 29400 Lakeland Blvd., Wickliffe, Ohio 44092-2298,

(the Assignee) its successors, legal representatives, and assigns, the entire right, title and interest in, to and under the above-identified Application and any inventions disclosed therein, and any letters patent of The United States which may be issued thereon, together with all reissues or reexaminations of said letters patent, all divisions and continuations of said application and all applications and patent rights for the inventions disclosed therein in countries foreign to the United States; and I agree to execute all further papers and do all further acts appropriate to fully vest in said Assignee the rights herein conveyed. I further agree that if the Assignee desires to file a disclaimer relating to any invention contained therein in any country, I will, upon its request, sign and deliver all papers requisite for the filing of such disclaimer. I further authorize and request the Commissioner for Patents and Trademarks of the United States to issue said letters patent to the Assignee.

I authorize the Assignee to insert into this Assignment the filing date and Serial Number of the corresponding U.S. Provisional, PCT, and/or U.S. Utility Applications when known.

U.S. Provisiona PCT Appln. No U.S. Serial No.	el No.: <u>61/866,055</u> - <u>PCT/US20</u>		Filed: Filed: Filed:	August August	15, 2013 11, 2014	aio rico
		SIGNATURE				T.
inventor's sign			8 ×	Date:		
	Gary M. Wa	alker				
Residence Alle UK						
Post Office Ad	dress P.O. Box 88 Belper, DE5 GB					
		20 20 20 20 20 20 20 20 20 20 20 20 20 2				
Inventor's sign			***************************************	Date:		
	Ewan E. Del	bridge				
Residence Cor US	rcord Twp., OH					
Post Office Add	fress 29400 Lakel Wickliffe, Oh U.S.A.	and Blvd. io 44092-2298				

[SIGNATURES TO FOLLOW ON NEXT PAGE]

(Declaration and Assignment-page 3 of 5)

Attorney Docket No.:	4106-01			į	PATENT
Inventor's signatur	Yartishi Zhiyog	lu	Date:	0.8/20,	7201
Residence Solon, (US	HC Section HC				
Post Office Address	29400 Lakeland Blvd. Wickliffe, Ohio 44092- U.S.A.				
	8888	X 88 88 88			
Inventor's signature	Edward P. Sampler		Date: _	·	
Residence Licesters UK	shire, GB				
Post Office Address	Belper, DE56 1QN GB	5 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8			
Inventor's signature	Stephen J. Cook		Date: _		
Residence Belper, C UK	**************************************				
Post Office Address	P.O. Box 88 Belper, DE56 1QN GB				

Inventor's signature _____ Date: ____

Christopher L. Friend

Residence Nottingham, GB UK

Post Office Address P.O. Box 88 Belper, DE56 1QN GB

[SIGNATURES TO FOLLOW ON NEXT PAGE]

(Declaration and Assignment—page 4 of 5)

Attorney I	Docket	No.:	4106-01
------------	--------	------	---------

PATENT

Inventor's signature	Mohamed G. Fahmv	Date:
	Mohamed G. Fahmv	

Residence Eastlake, OH US

Post Office Address 29400 Lakeland Blvd. Wickliffe, Ohio 44092-2298 U.S.A.

THIS DECLARATION ENDS ON THIS PAGE

(Declaration and Assignment-page 5 of 5)

PATENT REEL: 040814 FRAME: 0812

RECORDED: 12/05/2016