

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT2877139

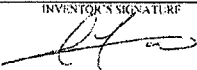
SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
FLORENT GUILLOU	03/31/2014
THIERRY GAUTHIER	03/31/2014
ALI HOTEIT	04/01/2014
SEBASTIEN RIFFLART	04/07/2014
RECEIVING PARTY DATA	
Name:	TOTAL SA
Street Address:	TOUR COUPOLE, 2, PLACE JEAN MILLIER,
Internal Address:	LA DEFENSE 6
City:	COURBEVOIE
State/Country:	FRANCE
Postal Code:	92400
Name:	IFP ENERGIES NOUVELLES
Street Address:	1 ET 4 AVENUE DE BOIS PREAU
City:	RUEIL-MALMAISON CEDEX
State/Country:	FRANCE
Postal Code:	92852
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	14361755
CORRESPONDENCE DATA	
Fax Number:	(703)312-6666
<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>	
Phone:	703-312-6600
Email:	svannarath@antonelli.com
Correspondent Name:	ANTONELLI, TERRY, STOUT & KRAUS, LLP
Address Line 1:	1300 NORTH SEVENTEENTH STREET
Address Line 2:	SUITE 1800
Address Line 4:	ARLINGTON, VIRGINIA 22209-3873
ATTORNEY DOCKET NUMBER:	612.53533X00

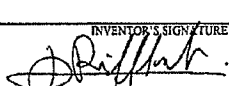
PATENT

NAME OF SUBMITTER:	ALAN E. SCHIAVELLI
SIGNATURE:	/Alan E. Schiavelli/
DATE SIGNED:	05/30/2014
Total Attachments: 3 source=53533X00ASN#page1.tif source=53533X00ASN#page2.tif source=53533X00ASN#page3.tif	

6399/00

ASSIGNMENT				ATTY. DOCKET NO.:	
				612.53533X00	
WHEREAS the below named inventor (if only one inventor is named below) or inventors (if plural inventors are named below) hereinafter referred to as the ASSIGNOR invented a certain improvement relating to					
CHEMICAL-LOOPING COMBUSTION METHOD WITH DILUTE PHASE REMOVAL OF ASHES AND FINES IN THE OXIDATIONZONE AND PLANT USING SAME					
X	for which an application for Letters Patent to be filed in the United States Patent and Trademark Office was executed on even date.				
	for which U.S. Application No.		for Letters Patent was filed in the U.S. Patent and Trademark Office on		
	for which an International Application was filed on	October 25, 2012	as	PCT/FR2012/000432	, designating the United States.
AND WHEREAS	<p>TOTAL SA Tour Coupole, 2, Place Jean millier, La Défense 6 92400 Courbevoie France</p> <p>IFP Energies nouvelles 1 et 4 avenue de Bois Préau 92852 Rueil-Malmaison Cedex France</p>				
hereinafter referred to as the ASSIGNEE, is desirous of acquiring the entire right, title, and interest in and to said invention and application, including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted thereon, including any and all renewals, reissues, reexaminations and extensions thereof.					
NOW, WITNESSETH that for good and valuable consideration, the receipt whereof is hereby acknowledged, ASSIGNOR hereby assigns, sells, and transfers to ASSIGNEE, its assigns and legal representatives, the entire and exclusive right, title and interest in and to said invention and application, including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted therefor, including any and all renewals, reissues, reexaminations and extensions thereof, and in and to any and all priority and/or convention rights or benefits accruing or to accrue with respect to the filing or securing of patents in the United States and/or any countries foreign thereto, SAID ASSIGNEE, its assigns and legal representatives to have, hold, exercise, and enjoy said invention and application, including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted therefor, including any and all renewals, reissues, reexaminations and extensions thereof, with all the rights, powers, privileges and advantages in anywise arising from or appertaining thereto, for and during the term or terms of any and all such Letters Patent when granted, including any and all renewals, reissues, reexaminations and extensions thereof, for the use and benefit of ASSIGNEE and its assigns and legal representatives, in as ample and beneficial a manner to all intents and purposes as the ASSIGNOR might or could have held and enjoyed the same, if the assignment had not been made.					
AND ASSIGNOR hereby agrees to execute all papers that may be necessary to file applications in the United States and foreign countries for said invention and to assign the same to said ASSIGNEE, its assigns and legal representatives and to execute any other papers that may be needed in connection with filing said applications and securing Letters Patents thereon.					
AND ASSIGNOR authorizes and requests the Commissioner of Patents and Trademarks to issue a Letters Patent on said application, and on any and all divisions and continuations thereof, to ASSIGNEE, its assigns and legal representatives, in accordance herewith.					
The undersigned hereby grant(s) the law firm of Antonelli, Terry, Stout, Kraus, LLP 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.					
IN TESTIMONY WHEREOF this assignment is executed by ASSIGNOR.					
201	FULL NAME OF SOLE OR FIRST NAMED INVENTOR	INVENTOR'S SIGNATURE		DATE	
	Florent GUILLOU	Fr. Guillou		March 31 st , 2014	
202	FULL NAME OF SECOND JOINT INVENTOR	INVENTOR'S SIGNATURE		DATE	
	Thierry GAUTHIER	T.A. Gauthier		31 march 2014	
203	FULL NAME OF THIRD JOINT INVENTOR	INVENTOR'S SIGNATURE		DATE	
	Ali HOTEIT				
204	FULL NAME OF FOURTH JOINT INVENTOR	INVENTOR'S SIGNATURE		DATE	
	Sébastien RIFFLART				
205	FULL NAME OF FIFTH JOINT INVENTOR	INVENTOR'S SIGNATURE		DATE	

ASSIGNMENT				ATTY. DOCKET NO.:	
				612.53533X00	
WHEREAS the below named inventor (if only one inventor is named below) or inventors (if plural inventors are named below) hereinafter referred to as the ASSIGNOR invented a certain improvement relating to					
CHEMICAL-LOOPING COMBUSTION METHOD WITH DILUTE PHASE REMOVAL OF ASHES AND FINES IN THE OXIDATIONZONE AND PLANT USING SAME					
X	for which an application for Letters Patent to be filed in the United States Patent and Trademark Office was executed on even date.				
	for which U.S. Application No.		for Letters Patent was filed in the U.S. Patent and Trademark Office on		
	for which an International Application was filed on	October 25, 2012	as	PCT/FR2012/000432	designating the United States
	<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> AND WHEREAS </div> <div style="width: 65%;"> TOTAL SA Tour Coupole, 2, Place Jean millier, La Défense 6 92400 Courbevoie France IFP Energies nouvelles 1 et 4 avenue de Bois Préau 92852 Rueil-Malmaison Cedex France </div> </div>				
hereinafter referred to as the ASSIGNEE, is desirous of acquiring the entire right, title, and interest in and to said invention and application, including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted thereon, including any and all renewals, reissues, reexaminations and extensions thereof.					
NOW, WITNESSETH that for good and valuable consideration, the receipt whereof is hereby acknowledged, ASSIGNOR hereby assigns, sells, and transfers to ASSIGNEE, its assigns and legal representatives, the entire and exclusive right, title and interest in and to said invention and application, including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted therefor, including any and all renewals, reissues, reexaminations and extensions thereof, and in and to any and all priority and/or convention rights or benefits accruing or to accrue with respect to the filing or securing of patents in the United States and/or any countries foreign thereto, SAID ASSIGNEE, its assigns and legal representatives to have, hold, exercise, and enjoy said invention and application, including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted therefor, including any and all renewals, reissues, reexaminations and extensions thereof, with all the rights, powers, privileges and advantages in anywise arising from or appertaining thereto, for and during the term or terms of any and all such Letters Patent when granted, including any and all renewals, reissues, reexaminations and extensions thereof, for the use and benefit of ASSIGNEE and its assigns and legal representatives, in as ample and beneficial a manner to all intents and purposes as the ASSIGNOR might or could have held and enjoyed the same, if the assignment had not been made.					
AND ASSIGNOR hereby agrees to execute all papers that may be necessary to file applications in the United States and foreign countries for said invention and to assign the same to said ASSIGNEE, its assigns and legal representatives and to execute any other papers that may be needed in connection with filing said applications and securing Letters Patents thereon.					
AND ASSIGNOR authorizes and requests the Commissioner of Patents and Trademarks to issue a Letters Patent on said application, and on any and all divisions and continuations thereof, to ASSIGNEE, its assigns and legal representatives, in accordance herewith.					
The undersigned hereby grant(s) the law firm of Antonelli, Terry, Stout, Kraus, LLP 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.					
IN TESTIMONY WHEREOF this assignment is executed by ASSIGNOR.					
201	FULL NAME OF SOLE OR FIRST NAMED INVENTOR	INVENTOR'S SIGNATURE		DATE	
	Florent GUILLOU				
202	FULL NAME OF SECOND JOINT INVENTOR	INVENTOR'S SIGNATURE		DATE	
	Thierry GAUTHIER				
203	FULL NAME OF THIRD JOINT INVENTOR	INVENTOR'S SIGNATURE		DATE	
	Ali HOTEIT			21/04/2014	
204	FULL NAME OF FOURTH JOINT INVENTOR	INVENTOR'S SIGNATURE		DATE	
	Sébastien RIFFLART				
205	FULL NAME OF FIFTH JOINT INVENTOR	INVENTOR'S SIGNATURE		DATE	

ASSIGNMENT		ATTY. DOCKET NO.:	
		612.53533X00	
WHEREAS the below named inventor (if only one inventor is named below) or inventors (if plural inventors are named below) hereinafter referred to as the ASSIGNOR invented a certain improvement relating to			
CHEMICAL-LOOPING COMBUSTION METHOD WITH DILUTE PHASE REMOVAL OF ASHES AND FINES IN THE OXIDATIONZONE AND PLANT USING SAME			
<input checked="" type="checkbox"/>	for which an application for Letters Patent to be filed in the United States Patent and Trademark Office was executed on even date.		
	for which U.S. Application No.		for Letters Patent was filed in the U.S. Patent and Trademark Office on
	for which an International Application was filed on	October 25, 2012	as PCT/FR2012/000432, designating the United States.
AND WHEREAS	TOTAL SA Tour Coupole, 2, Place Jean millier, La Défense 6 92400 Courbevoie France IFP Energies nouvelles 1 et 4 avenue de Bois Préau 92852 Rueil-Malmaison Cedex France		
hereinafter referred to as the ASSIGNEE, is desirous of acquiring the entire right, title, and interest in and to said invention and application, including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted thereon, including any and all renewals, reissues, reexaminations and extensions thereof. NOW, WITNESSETH that for good and valuable consideration, the receipt whereof is hereby acknowledged, ASSIGNOR hereby assigns, sells, and transfers to ASSIGNEE, its assigns and legal representatives, the entire and exclusive right, title and interest in and to said invention and application, including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted therefor, including any and all renewals, reissues, reexaminations and extensions thereof, and in and to any and all priority and/or convention rights or benefits accruing or to accrue with respect to the filing or securing of patents in the United States and/or any countries foreign thereto, SAID ASSIGNEE, its assigns and legal representatives to have, hold, exercise, and enjoy said invention and application, including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted therefor, including any and all renewals, reissues, reexaminations and extensions thereof, with all the rights, powers, privileges and advantages in anywise arising from or appertaining thereto, for and during the term or terms of any and all such Letters Patent when granted, including any and all renewals, reissues, reexaminations and extensions thereof, for the use and benefit of ASSIGNEE and its assigns and legal representatives, in as ample and beneficial a manner to all intents and purposes as the ASSIGNOR might or could have held and enjoyed the same, if the assignment had not been made. AND ASSIGNOR hereby agrees to execute all papers that may be necessary to file applications in the United States and foreign countries for said invention and to assign the same to said ASSIGNEE, its assigns and legal representatives and to execute any other papers that may be needed in connection with filing said applications and securing Letters Patents thereon. AND ASSIGNOR authorizes and requests the Commissioner of Patents and Trademarks to issue a Letters Patent on said application, and on any and all divisions and continuations thereof, to ASSIGNEE, its assigns and legal representatives, in accordance herewith. The undersigned hereby grant(s) the law firm of Antonelli, Terry, Stout, Kraus, LLP 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.			
IN TESTIMONY WHEREOF this assignment is executed by ASSIGNOR.			
201	FULL NAME OF SOLE OR FIRST NAMED INVENTOR	INVENTOR'S SIGNATURE	DATE
	Florent GUILLOU		
202	FULL NAME OF SECOND JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
	Thierry GAUTHIER		
203	FULL NAME OF THIRD JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
	Ali HOTEIT		
204	FULL NAME OF FOURTH JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
	Sébastien RIFFLART		4/7/14
205	FULL NAME OF FIFTH JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE