

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT6519940

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT	
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT	
<b>CONVEYING PARTY DATA</b>		
	<b>Name</b>	<b>Execution Date</b>
	ECOLAB USA INC.	08/25/2020
<b>RECEIVING PARTY DATA</b>		
<b>Name:</b>	CHAMPIONX USA INC.	
<b>Street Address:</b>	11177 SOUTH STADIUM DRIVE	
<b>City:</b>	SUGAR LAND	
<b>State/Country:</b>	TEXAS	
<b>Postal Code:</b>	77478	
<b>PROPERTY NUMBERS Total: 1</b>		
	<b>Property Type</b>	<b>Number</b>
	Patent Number:	9702234
<b>CORRESPONDENCE DATA</b>		
<b>Fax Number:</b>	(801)817-9811	
<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>	801-817-9810	
<b>Email:</b>	mary.miller@btlaw.com	
<b>Correspondent Name:</b>	BARNES & THORNBURG, LLP	
<b>Address Line 1:</b>	299 SOUTH MAIN STREET, SUITE 1825	
<b>Address Line 4:</b>	SALT LAKE CITY, UTAH 84111-2571	
<b>ATTORNEY DOCKET NUMBER:</b>	84071-307525 (8536USU1)	
<b>NAME OF SUBMITTER:</b>	ERIC D BABYCH	
<b>SIGNATURE:</b>	/Eric D. Babych/	
<b>DATE SIGNED:</b>	01/27/2021	
<b>Total Attachments: 128</b>		
source=2020-08-25_Patent_Assignment_from_Ecolab_to_ChampionX#page1.tif		
source=2020-08-25_Patent_Assignment_from_Ecolab_to_ChampionX#page2.tif		
source=2020-08-25_Patent_Assignment_from_Ecolab_to_ChampionX#page3.tif		
source=2020-08-25_Patent_Assignment_from_Ecolab_to_ChampionX#page4.tif		
source=2020-08-25_Patent_Assignment_from_Ecolab_to_ChampionX#page5.tif		
source=2020-08-25_Patent_Assignment_from_Ecolab_to_ChampionX#page6.tif		

[illegible]

[illegible]

source=2020-08-25\_Patent\_Assignment\_from\_Ecolab\_to\_ChampionX#page103.tif  
source=2020-08-25\_Patent\_Assignment\_from\_Ecolab\_to\_ChampionX#page104.tif  
source=2020-08-25\_Patent\_Assignment\_from\_Ecolab\_to\_ChampionX#page105.tif  
source=2020-08-25\_Patent\_Assignment\_from\_Ecolab\_to\_ChampionX#page106.tif  
source=2020-08-25\_Patent\_Assignment\_from\_Ecolab\_to\_ChampionX#page107.tif  
source=2020-08-25\_Patent\_Assignment\_from\_Ecolab\_to\_ChampionX#page108.tif  
source=2020-08-25\_Patent\_Assignment\_from\_Ecolab\_to\_ChampionX#page109.tif  
source=2020-08-25\_Patent\_Assignment\_from\_Ecolab\_to\_ChampionX#page110.tif  
source=2020-08-25\_Patent\_Assignment\_from\_Ecolab\_to\_ChampionX#page111.tif  
source=2020-08-25\_Patent\_Assignment\_from\_Ecolab\_to\_ChampionX#page112.tif  
source=2020-08-25\_Patent\_Assignment\_from\_Ecolab\_to\_ChampionX#page113.tif  
source=2020-08-25\_Patent\_Assignment\_from\_Ecolab\_to\_ChampionX#page114.tif  
source=2020-08-25\_Patent\_Assignment\_from\_Ecolab\_to\_ChampionX#page115.tif  
source=2020-08-25\_Patent\_Assignment\_from\_Ecolab\_to\_ChampionX#page116.tif  
source=2020-08-25\_Patent\_Assignment\_from\_Ecolab\_to\_ChampionX#page117.tif  
source=2020-08-25\_Patent\_Assignment\_from\_Ecolab\_to\_ChampionX#page118.tif  
source=2020-08-25\_Patent\_Assignment\_from\_Ecolab\_to\_ChampionX#page119.tif  
source=2020-08-25\_Patent\_Assignment\_from\_Ecolab\_to\_ChampionX#page120.tif  
source=2020-08-25\_Patent\_Assignment\_from\_Ecolab\_to\_ChampionX#page121.tif  
source=2020-08-25\_Patent\_Assignment\_from\_Ecolab\_to\_ChampionX#page122.tif  
source=2020-08-25\_Patent\_Assignment\_from\_Ecolab\_to\_ChampionX#page123.tif  
source=2020-08-25\_Patent\_Assignment\_from\_Ecolab\_to\_ChampionX#page124.tif  
source=2020-08-25\_Patent\_Assignment\_from\_Ecolab\_to\_ChampionX#page125.tif  
source=2020-08-25\_Patent\_Assignment\_from\_Ecolab\_to\_ChampionX#page126.tif  
source=2020-08-25\_Patent\_Assignment\_from\_Ecolab\_to\_ChampionX#page127.tif  
source=2020-08-25\_Patent\_Assignment\_from\_Ecolab\_to\_ChampionX#page128.tif



**PATENT ASSIGNMENT**

This PATENT ASSIGNMENT (this "Assignment"), dated as of June 3, 2020 (the "Effective Date"), is by and between Ecolab USA Inc., a Delaware corporation ("Assignor") and ChampionX USA Inc., a Delaware corporation ("Assignee"), (each a "Party" and collectively, the "Parties"). Capitalized terms not otherwise defined in this Assignment will have the meanings ascribed to such terms in the Separation Agreement (as defined below).

**WHEREAS**, certain Affiliates of Assignor and certain Affiliates of Assignee have entered into that certain Separation and Distribution Agreement, dated as of December 18, 2019 (the "Separation Agreement"), which contemplates the assignment of the assets described herein; and

**WHEREAS**, pursuant to the Separation Agreement, Assignor has agreed to assign, transfer and convey to Assignee all of Assignor's right, title, and interest in and to the Newco Assets, including the Patents set forth on Schedule A hereto (the "Assigned Patents").

**NOW, THEREFORE**, in consideration of the foregoing and the covenants and agreements contained in this Assignment, the receipt and sufficiency of which are hereby acknowledged, the Parties hereby agree as follows:

1. Conveyance. Assignor hereby assigns, transfers and conveys to Assignee all of Assignor's right, title and interest in and to the Assigned Patents, together with any and all (a) related continuations, continuations-in-part, divisionals, reissues, reexaminations, substitutions, extensions, and foreign equivalents thereof and (b) priority rights derived from any the Assigned Patents, or the items described in the foregoing subsection (a), by virtue of the International Convention for the Protection of Industrial Property and any other rights provided under applicable treaties or conventions, including rights in any and all provisional applications, together with all rights and remedies against past, present, and future infringement, misappropriation, or other violation thereof, including the right to enforce the foregoing and to sue for and recover profits and damages for any and all infringements, misappropriations, or other violations thereof, whether past, present or future, to the full end of the term or terms for which said patents may be granted, as fully and entirely as the same would have been held and enjoyed by Assignor without this assignment.

2. Recordation; Further Assurances. Assignor and Assignee shall each take any and all additional actions as may be reasonably necessary to effect the transactions contemplated hereby, including Assignor's execution of individual assignment documentation prepared by Assignee at Assignee's expense for filing with the authorities of each individual jurisdiction. Assignor and Assignee authorize and request that the United States Patent and Trademark Office and the corresponding entities or agencies in any applicable foreign jurisdictions, record Assignee as the assignee and owner of the Assigned Patents (including the Patents set forth on Schedule A) and issue the Patents from any pending applications included in the Assigned Patents to Assignee upon issuance or registration.

3. Successors and Assigns. The provisions of this Assignment and the obligations and rights hereunder shall be binding upon, inure to the benefit of and be enforceable by (and against) the Parties and their respective successors and permitted transferees and assigns.

4. Counterparts. This Assignment may be executed in more than one counterpart, all of which shall be considered one and the same agreement, and shall become effective when one or more such counterparts have been signed by each of the Parties and delivered to each of the Parties.

5. Title and Headings. Titles and headings to sections herein are inserted for the convenience of reference only and are not intended to be a part of or to affect the meaning or interpretation of this Assignment.

6. Conflict. Nothing contained in this Assignment is intended to or shall be deemed to modify, alter, amend or otherwise change any of the rights or obligations of Assignee or Assignor under the Separation Agreement.

7. Governing Law. This Assignment and any dispute arising out of, in connection with or relating to this Assignment shall be governed by and construed in accordance with the Laws of the State of Delaware, without giving effect to the conflicts of laws principles thereof.

[Signature Page Follows]

IN WITNESS WHEREOF, Assignor and Assignee have duly executed this Assignment as of the date first written above.

ASSIGNOR:

Ecolab USA Inc.

By: 

Name: Michael C. McCormick

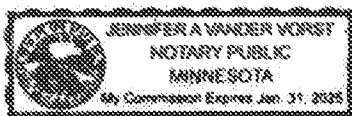
Title: Executive Vice President, General Counsel and Secretary

STATE OF Minnesota     )  
COUNTY OF Ramsey     ) ss.

On this 25 day of August, 2020 before me Jennifer Vander Vorst

Personally appeared Michael C. McCormick, proved to me on the basis of satisfactory evidence to the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of Minnesota that the foregoing paragraph is true and correct.



WITNESS my hand and official seal.

  
Signature of Notary Public

*Signature Page to Patent Assignment*

Acknowledged and Accepted:

ASSIGNEE:

ChampionX USA Inc.

By: [Signature]  
Name: Deric Bryant  
Title: President

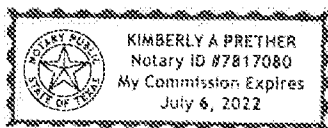
STATE OF Texas  
COUNTY OF Montgomery ss.

On this 13th day of August, 2020 before me Kim Prother

Personally appeared Deric Bryant, proved to me on the basis of satisfactory evidence to the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of Texas that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.



[Signature]  
Signature of Notary Public

*Signature Page to Patent Assignment*

**PATENT**  
**REEL: 055142 FRAME: 0677**

SCHEDULE A TO PATENT ASSIGNMENT

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Great Britain	Zwitterionic water-soluble substituted imine corrosion inhibitor	20030024149	10/27/1999	2394224	6/2/2004
Canada	ZWITTERIONIC WATER-SOLUBLE SUBSTITUTED IMINE CORROSION INHIBITORS	2289163	11/8/1999	2289163	1/4/2011
Great Britain	ZWITTERIONIC WATER-SOLUBLE SUBSTITUTED IMINE CORROSION INHIBITORS	3241494	10/27/1999	2394224	6/2/2004
Norway	Zwitterionske vannloselige imin-korrosjonsinhibitorer, sammensetninger omfattende korrosjonsinhibitorer, og en fremgangsmate for a inhibere korrosjoner pa jernholdige metalloverflater som er i kontakt med korrosive fluider	19995234	10/26/1999	326021	9/1/2008
Canada	METHOD FOR MONITORING FOAM AND GAS CARRY UNDER AND FOR CONTROLLING THE ADDITION OF FOAM INHIBITING CHEMICALS.	2275678	6/16/1999	2275678	9/9/2008
Great Britain	METHOD FOR MONITORING FOAM AND GAS CARRY UNDER AND FOR CONTROLLING THE ADDITION OF FOAM INHIBITING CHEMICALS.	19990012715	6/1/1999	2338789	5/28/2003
Norway	Fremgangsmate for a overvake skumproblemer, samt for a kontrollere tilsetning av skumdempere	19992965	6/17/1999	331631	2/13/2012
United States	DEMULSIFICATION OF WATER-IN-OIL EMULSIONS.	9243972	2/4/1999	6638983	10/28/2003
Canada	DEMULSIFICATION OF WATER-IN-OIL EMULSIONS.	2293196	12/24/1999	2293196	8/26/2008
Great Britain	Demulsification of water-in-oil emulsions	20000001329	1/20/2000	2346378	2/12/2003

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Norway	Demulgering av vann-i-olje emulsjoner	20000234	1/17/2000	317645	11/29/2004
Canada	IMPROVED ACID CONTROL INHIBITOR	2309414	5/24/2000	2309414	12/9/2008
Netherlands	IMPROVED ACID CONTROL INHIBITOR	1015012	4/25/2000	1015012	11/30/2000
United States	IMPROVED ACID CONTROL INHIBITOR	9321240	5/27/1999	6117364	9/12/2000
Canada	CORROSION INHIBITOR COMPOSITIONS	2291417	11/25/1999	2291417	1/20/2009
United States	CORROSION INHIBITOR COMPOSITIONS	9268381	3/15/1999	6303079	10/16/2001
Great Britain	Corrosion inhibiting compositions and methods	20030011582	12/14/1999	2385324	10/15/2003
Great Britain	Corrosion inhibiting compositions and methods	19990029566	12/14/1999	2351285	8/27/2003
Norway	Anvendelse samt fremgangsmate for fremstilling av korrosjonsinhibitorsammensetninger	19996320	12/20/1999	321420	5/8/2006
United States	CORROSION INHIBITOR COMPOSITIONS	9268604	3/15/1999	6488868	12/3/2002
United States	CORROSION INHIBITOR COMPOSITIONS INCLUDING QUATERNIZED COMPOUNDS	10167628	6/12/2002	6696572	2/24/2004
Canada	CORROSION INHIBITOR COMPOSITIONS	2289408	11/15/1999	2289408	10/26/2010
Great Britain	Corrosion inhibitor compositions and methods of making them	19990026862	11/12/1999	2348199	3/3/2004
Norway	Korrosjonsinhibitor sammenstillinger samt metode for a fremstille disse	19995578	11/12/1999	323111	1/2/2007
United States	CORROSION INHIBITOR COMPOSITIONS	9268377	3/15/1999	6448411	9/10/2002
United States	METHOD OF REDUCING THE CONCENTRATION OF METAL SOAPS OF PARTIALLY ESTERIFIED PHOSPHATES FROM HYDROCARBON FLOWBACK FLUIDS.	9392171	9/8/1999	6133205	10/17/2000
United States	COMPOSITIONS AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	10233950	9/3/2002	6984705	1/10/2006

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
United Arab Emirates	COMPOSITIONS AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	3852002	5/23/2001	559	9/27/2015
Australia	COMPOSITIONS AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	2001266600	5/23/2001	2001266600	1/18/2007
Bahrain	COMPOSITIONS AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	23832002	12/23/2002	BP 1470	10/7/2004
Brazil	COMPOSITIONS AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	PI01116134	5/23/2001	PI0111613-4	11/3/2012
Canada	COMPOSITIONS AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	2408312	5/23/2001	2408312	8/18/2009
Denmark	A method of recovering hydrocarbon fluids from a subterranean reservoir	20010944162T	5/23/2001	1290310	7/2/2007
European Patent Office	COMPOSITIONS AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	19441625	5/23/2001	1290310	3/21/2007
Great Britain	COMPOSITIONS AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	19441625	5/23/2001	1290310	3/21/2007

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Indonesia	COMPOSITIONS AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	WOO020020280 8	5/23/2001	ID0019951	10/24/2007
Kuwait	COMPOSITIONS AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	PA1352002	5/23/2001		
Mexico	COMPOSITIONS AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	PAA02011661	5/23/2001	262622	11/13/2008
Netherlands	COMPOSITIONS AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	19441625	5/23/2001	1290310	3/21/2007
Norway	Frengangsmate for a modifisere permeabiliteten for vann til en underjordisk formasjon.	20025581	11/21/2002	330481	4/26/2011
New Zealand	Expandable cross-linked polymeric microparticle compositions and method for recovering hydrocarbon fluids from a subterranean reservoir	522534	5/23/2001	522534	10/6/2005
Russia	COMPOSITION AND METHOD FOR WITHDRAWAL OF HYDROCARBON FLUIDS FROM UNDERGROUND LAYER	20020133464	5/23/2001	2256071	7/10/2005
United States	COMPOSITIONS AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	9593197	6/14/2000	6454003	9/24/2002
Viet Nam	COMPOSITIONS AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	1200201111	5/23/2001	10103	3/6/2012



Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
United States	METHOD OF RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	10251742	9/20/2002	6729402	5/4/2004
United States	COMPOSITION FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	10251006	9/20/2002	7300973	11/27/2007
United States	DEMULSIFIERS, THEIR PREPARATION AND USE IN OIL BEARING FORMATIONS	10034661	12/20/2001	7504438	3/17/2009
United States	DELAYED RELEASE BREAKERS IN GELLED HYDROCARBONS	9430935	11/1/1999	6187720	2/13/2001
United States	METHOD AND COMPOSITION FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	10034276	12/20/2001	6569983	5/27/2003
United Arab Emirates	USE OF DISPERSION POLYMERS AS FRICTION REDUCERS IN AQUEOUS FRACTURING FLUIDS	P11205	4/3/2003		
Argentina	USE OF DISPERSION POLYMERS AS FRICTION REDUCERS IN AQUEOUS FRACTURING FLUIDS	P030101172	4/4/2003	AR 039247	5/28/2010
Australia	USE OF DISPERSION POLYMERS AS FRICTION REDUCERS IN AQUEOUS FRACTURING FLUIDS	2003226237	4/3/2003	2003226237	1/10/2008
Brazil	method of reducing friction resulting from turbulent flow in an aqueous fracturing fluid into a fracturing process in the oil field	20030308889	4/3/2003	P10308889-8	5/31/2016
Canada	USE OF DISPERSION POLYMERS AS FRICTION REDUCERS IN AQUEOUS FRACTURING FLUIDS	2479210	4/3/2003	2479210	1/4/2011
Colombia	USE OF DISPERSION POLYMERS AS FRICTION REDUCERS IN AQUEOUS FRACTURING FLUIDS	4097180	4/3/2003	340	11/30/2009
Mexico	USE OF DISPERSION POLYMERS AS FRICTION REDUCERS IN AQUEOUS FRACTURING FLUIDS	PAA04009500	4/3/2003	243829	2/19/2007

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Norway	USE OF DISPERSION POLYMERS AS FRICTION REDUCERS IN AQUEOUS FRACTURING FLUIDS	20044777	4/3/2003		
Russia	USE OF POLYMER IN FORM OF DISPERSION AS FRICTION REDUCING AGENT IN AQUEOUS FRACTURING FLUIDS	2004132196	4/3/2003	2363719	8/10/2009
United States	USE OF DISPERSION POLYMERS AS FRICTION REDUCERS IN AQUEOUS FRACTURING FLUIDS	10115852	4/3/2002	6787506	9/7/2004
Australia	USE OF ANIONIC DISPERSION POLYMERS AS VISCOSITY MODIFIERS IN AQUEOUS DRILLING FLUIDS.	2003247539	6/16/2003	2003247539	4/23/2009
Brazil	USE OF ANIONIC DISPERSION POLYMERS AS VISCOSITY MODIFIERS IN AQUEOUS DRILLING FLUIDS.	PI03114872	6/16/2003	PI0311487-2	12/16/2014
Canada	USE OF ANIONIC DISPERSION POLYMERS AS VISCOSITY MODIFIERS IN AQUEOUS DRILLING FLUIDS.	2486407	6/16/2003	2486407	8/17/2010
Denmark	Use of the anionic dispersion polymers as viscosity modifiers in aqueous drilling fluids	20030760425T	6/16/2003	1551935	2/27/2012
European Patent Office	USE OF ANIONIC DISPERSION POLYMERS AS VISCOSITY MODIFIERS IN AQUEOUS DRILLING FLUIDS.	37604253	6/16/2003	1551935	1/25/2012
Great Britain	USE OF ANIONIC DISPERSION POLYMERS AS VISCOSITY MODIFIERS IN AQUEOUS DRILLING FLUIDS.	37604253	6/16/2003	1551935	1/25/2012
Italy	USE OF ANIONIC DISPERSION POLYMERS AS VISCOSITY MODIFIERS IN AQUEOUS DRILLING FLUIDS.	37604253	6/16/2003	1551935	1/25/2012
Mexico	USE OF ANIONIC DISPERSION POLYMERS AS VISCOSITY MODIFIERS IN AQUEOUS DRILLING FLUIDS.	PAA04012427	6/16/2003	286978	5/27/2011
Netherlands	USE OF ANIONIC DISPERSION POLYMERS AS VISCOSITY MODIFIERS IN AQUEOUS DRILLING FLUIDS.	37604253	6/16/2003	1551935	1/25/2012

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Norway	Anvendelse av anioniske dispergeringspolymerer som viskositetsmodifiseringsmidler i vandige borevæsker	20050112	1/10/2005	338071	7/25/2016
Russia	UTILIZATION OF ANIONIC DISPERSED POLYMERS AS VISCOSITY MODIFIERS FOR WATER-BASED DRILLING FLUIDS	2005100845	6/16/2003	2301244	6/20/2007
United States	USE OF ANIONIC DISPERSION POLYMERS AS VISCOSITY MODIFIERS IN AQUEOUS DRILLING FLUIDS.	10173253	6/17/2002	6831042	12/14/2004
Angola	PHOSPHATE ESTERS DEMULSIFIER COMPOSITION	8708	3/12/2004	621A	2/2/2009
Azerbaijan	PHOSPHATE ESTERS DEMULSIFIER COMPOSITION	A20050233	3/10/2004	I20080152	9/9/2008
Canada	PHOSPHATE ESTERS DEMULSIFIER COMPOSITION	2519172	3/10/2004	2519172	11/22/2011
Great Britain	Phosphoric ester demulsifier composition	20050018795	3/10/2004	2414482	11/28/2007
Norway	Fosforester demulgatorer, demulgator sammensetning omfattende nevnte fosforester demulgatorer, fremgangsmåte for å fremstille en fosforester demulgator, og fremgangsmåte for å gjenoppløse en vann-i-oljeemulsjon	20054747	10/14/2005	336246	6/29/2015
United States	PHOSPHATE ESTERS DEMULSIFIER COMPOSITION	10389447	3/14/2003	7217779	5/15/2007
United States	METHOD OF PREPARING QUATERNIZED AMIDAMINE SURFACTANTS	10338442	1/8/2003	6964940	11/15/2005
United States	QUATERNIZED AMIDO CYCLIC AMINE SURFACTANT	10244651	9/16/2002	7053127	5/30/2006
Angola	POLYETHER POLYESTERS HAVING ANIONIC FUNCTIONALITY	8651	1/24/2004	603A	2/2/2009
Azerbaijan	POLYETHER POLYESTERS HAVING ANIONIC FUNCTIONALITY	a20050181	1/22/2004	I20080153	9/9/2008

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Canada	POLYETHER POLYESTERS HAVING ANIONIC FUNCTIONALITY	2510351	1/22/2004	2510351	6/14/2011
	POLYETHER POLYESTERS HAVING ANIONIC FUNCTIONALITY	47044912	1/22/2004	1587598	7/24/2019
Kazakhstan	POLYETHER POLYESTERS HAVING ANIONIC FUNCTIONALITY	200515461	1/22/2004	19578	1/17/2011
Russia	POLYESTERS, CONTAINING ESTER AND ETHER GROUPS, WITH ANIONIC FUNCTIONALITY	2005126727	1/22/2004	2361893	7/20/2009
United States	POLYETHER POLYESTERS HAVING ANIONIC FUNCTIONALITY	10350462	1/24/2003	7041707	5/9/2006
Canada	METHOD AND COMPOSITION FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	2538753	9/10/2004	2538753	4/16/2013
Great Britain	METHOD AND COMPOSITION FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	20060005214	9/10/2004	2423989	2/27/2008
India	METHOD AND COMPOSITION FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	750KOLNP06	9/10/2004	236703	11/17/2009
Mexico	METHOD AND COMPOSITION FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	2006PA02801	9/10/2004	337349	2/29/2016
Malaysia	METHOD AND COMPOSITION FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	PI20043702	9/12/2003	MY140843A	1/29/2010

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Oman	METHOD AND COMPOSITION FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	OMP200600014	9/10/2004		
Russia	METHOD AND COMPOSITION FOR EXTRACTING HYDROCARBON FLUIDS OUT OF UNDERGROUND FORMATION	2006112006	9/10/2004	2383560	3/10/2010
United States	METHOD AND COMPOSITION FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	10661669	9/12/2003	7417011	8/26/2008
Brazil	CLAY STABILIZATION IN SUB-SURFACE FORMATIONS	PI05090431	3/24/2005		
United States	BIS-QUATERNARY AMMONIUM SALT CORROSION INHIBITORS	10891575	7/15/2004	8999315	4/7/2015
United States	ENVIRONMENTALLY FRIENDLY DEMULSIFIERS FOR CRUDE OIL EMULSIONS	12489079	6/22/2009	8802740	8/12/2014
Angola	ENVIRONMENTALLY FRIENDLY DEMULSIFIERS FOR CRUDE OIL EMULSIONS	831	12/20/2005		
Brazil	A water-in-oil type demulsifier, and a method for decomposing an emulsion comprising oil and water	2005PI17206	11/2/2005	PI0517206-3	5/9/2017
Canada	ENVIRONMENTALLY FRIENDLY DEMULSIFIERS FOR CRUDE OIL EMULSIONS	2591450	11/2/2005	2591450	5/8/2012
Nigeria	ENVIRONMENTALLY FRIENDLY DEMULSIFIERS FOR CRUDE OIL EMULSIONS	37005	12/15/2006	RP16473	3/26/2009
Norway	Miljøvennlige demulgatorer for råolje emulsjoner.	20072956	6/11/2007	343001	9/24/2018
United States	ENVIRONMENTALLY FRIENDLY DEMULSIFIERS FOR CRUDE OIL EMULSIONS	11017390	12/20/2004	7566744	7/28/2009

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
United States	MONO AND BIS-ESTER DERIVATIVES OF PYRIDINIUM AND QUINOLINIUM COMPOUNDS AS ENVIRONMENTALLY FRIENDLY CORROSION INHIBITORS	12882686	9/15/2010	8585930	11/19/2013
Brazil	SILOXANE CROSS-LINKED DEMULSIFIERS	PI07152868	3/20/2009	PI07152868	12/26/2017
Canada	SILOXANE CROSS-LINKED DEMULSIFIERS	2663575	9/21/2007	2663575	4/15/2014
European Patent Office	SILOXANE CROSS-LINKED DEMULSIFIERS	78429792	9/21/2007	2063971	6/28/2017
Great Britain	SILOXANE CROSS-LINKED DEMULSIFIERS	78429792	9/21/2007	2063971	6/28/2017
Nigeria	SILOXANE CROSS-LINKED DEMULSIFIERS	NGC200946	4/2/2009	NG/C/2009/4 6	7/6/2009
Netherlands	SILOXANE CROSS-LINKED DEMULSIFIERS	78429792	9/21/2007	2063971	6/28/2017
Norway	Siloksan kryssbundede demulgatorer	20091135	3/17/2009	341621	12/11/2017
United States	SILOXANE CROSS-LINKED DEMULSIFIERS	11858602	9/20/2007	7981979	7/19/2011
Australia	DEPOSIT REMOVAL PROBE AND METHOD OF USE	2007333301	12/4/2007	2007333301	8/15/2013
Brazil	DEPOSIT REMOVAL PROBE AND METHOD OF USE	PI07178999	6/4/2009		
Canada	DEPOSIT REMOVAL PROBE AND METHOD OF USE	2671486	12/4/2007	2671486	1/17/2017
European Patent Office	DEPOSIT REMOVAL PROBE AND METHOD OF USE	78549177	12/4/2007		
United States	DEPOSIT REMOVAL PROBE AND METHOD OF USE	11608065	12/7/2006	7628060	12/8/2009
United States	CORROSION INHIBITOR COMPOSITION COMPRISING A BUILT-IN INTENSIFIER	11612770	12/19/2006	7842127	11/30/2010
United States	ALKOXYLATED SORBITAN ESTERS AS CRUDE OIL EMULSION BREAKERS	13753011	1/29/2013	9102791	8/11/2015
Canada	PURIFICATION OF OIL SANDS POND WATER	2704741	10/10/2008	2704741	5/2/2017

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
	METHOD OF INCREASING FLOW OF WATER FROM SETTLING TANK OF PROCESS OF TREATING TAR SANDS THROUGH MEMBRANE SEPARATION AND WATER TREATMENT SYSTEM	2010115218	10/10/2008	2487085	7/10/2013
Russia		2010115218	10/10/2008	2487085	7/10/2013
Venezuela	PURIFICATION OF OIL SANDS POND WATER	20922008	10/15/2008		
United States	PURIFICATION OF OIL SANDS POND WATER	12881303	10/4/2010	8597515	12/3/2013
European Patent Office	METHOD FOR FOAMING A FLUID IN A WELL	88503594	11/11/2008	2217673	8/15/2018
Australia	IMIDAZOLINE-BASED HETEROCYCLIC FOAMERS FOR DOWNHOLE INJECTION	2008321109	11/11/2008	2008321109	10/3/2013
	IMIDAZOLINE-BASED HETEROCYCLIC FOAMERS FOR DOWNHOLE INJECTION	PI08190690	5/14/2010	PI08190690	6/4/2019
Canada	IMIDAZOLINE-BASED HETEROCYCLIC FOAMERS FOR DOWNHOLE INJECTION	2703883	11/11/2008	2703883	7/12/2016
United States	IMIDAZOLINE-BASED HETEROCYCLIC FOAMERS FOR DOWNHOLE INJECTION	11940777	11/15/2007	8551925	10/8/2013
Angola	METHOD OF CONTROLLING GAS HYDRATES IN FLUID SYSTEMS	1857	10/16/2009		
Brazil	METHOD OF CONTROLLING GAS HYDRATES IN FLUID SYSTEMS	PI09205780	4/18/2011		
Canada	METHOD OF CONTROLLING GAS HYDRATES IN FLUID SYSTEMS	2740235	10/16/2009	2740235	3/14/2017
Egypt	METHOD OF CONTROLLING GAS HYDRATES IN FLUID SYSTEMS	20091001520	10/15/2009	26872	11/11/2014

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
GCC (Gulf Co-op Council)	METHOD OF CONTROLLING GAS HYDRATES IN FLUID SYSTEMS	P200914507	10/17/2009	GC0004790	5/1/2017
Kazakhstan	METHOD OF CONTROLLING GAS HYDRATES IN FLUID SYSTEMS	201115291	10/16/2009	28165	1/21/2014
New Zealand	METHOD OF CONTROLLING GAS HYDRATES IN FLUID SYSTEMS	592109	10/16/2009	592109	8/6/2012
African Intellectual Property Organization	METHOD OF CONTROLLING GAS HYDRATES IN FLUID SYSTEMS	1200900346	10/16/2009	14732	6/30/2010
Argentina	METHOD OF CONTROLLING GAS HYDRATES IN FLUID SYSTEMS	20090104003	10/16/2009	AR073899B1	5/24/2017
Australia	METHOD OF CONTROLLING GAS HYDRATES IN FLUID SYSTEMS	2016210594	10/16/2009		
Australia	METHOD OF CONTROLLING GAS HYDRATES IN FLUID SYSTEMS	2018250400	10/16/2009		
Germany	METHOD OF CONTROLLING GAS HYDRATES IN FLUID SYSTEMS	97641146	10/16/2009	2350238	12/31/2014
European Patent Office	METHOD OF CONTROLLING GAS HYDRATES IN FLUID SYSTEMS	97641146	10/16/2009	2350238	12/31/2014
France	METHOD OF CONTROLLING GAS HYDRATES IN FLUID SYSTEMS	97641146	10/16/2009	2350238	12/31/2014
Great Britain	METHOD OF CONTROLLING GAS HYDRATES IN FLUID SYSTEMS	97641146	10/16/2009	2350238	12/31/2014



Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Netherlands	METHOD OF CONTROLLING GAS HYDRATES IN FLUID SYSTEMS	97641146	10/16/2009	2350238	12/31/2014
Norway	METHOD OF CONTROLLING GAS HYDRATES IN FLUID SYSTEMS	97641146	10/16/2009	2350238	12/31/2014
Sweden	METHOD OF CONTROLLING GAS HYDRATES IN FLUID SYSTEMS	97641146	10/16/2009	2350238	12/31/2014
United States	METHOD OF CONTROLLING GAS HYDRATES IN FLUID SYSTEMS	12253529	10/17/2008		
China	COMPOSITIONS AND METHODS FOR INHIBITING THE AGGLOMERATION OF HYDRATES IN A PROCESS	201080011809 4	3/4/2010	102348695	11/19/2014
Malaysia	COMPOSITIONS AND METHODS FOR INHIBITING THE AGGLOMERATION OF HYDRATES IN A PROCESS	2011P104221	3/4/2010	MY-152012- A	8/15/2014
Nigeria	COMPOSITIONS AND METHODS FOR INHIBITING THE AGGLOMERATION OF HYDRATES IN A PROCESS	NCC2010192	2/25/2010	NG/C/2010/1 92	4/29/2010
New Zealand	COMPOSITIONS AND METHODS FOR INHIBITING THE AGGLOMERATION OF HYDRATES IN A PROCESS	594671	3/4/2010	594671	9/3/2013
United States	COMPOSITIONS AND METHODS FOR INHIBITING THE AGGLOMERATION OF HYDRATES IN A PROCESS	12400428	3/9/2009	8334240	12/18/2012
Argentina	COMPOSICIONES Y METODOS PARA INHIBIR LA AGLOMERACION DE HIDRATOS	20090103847	10/6/2009		
Australia	COMPOSITIONS AND METHODS FOR INHIBITING THE AGGLOMERATION OF HYDRATES	2009302583	10/6/2009	2009302583	11/6/2014
Brazil	COMPOSITIONS AND METHODS FOR INHIBITING THE AGGLOMERATION OF HYDRATES	P109204210	10/6/2009	0920421-0	8/1/2017

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Canada	COMPOSITIONS AND METHODS FOR INHIBITING THE AGGLOMERATION OF HYDRATES	2738667	10/6/2009	2738667	11/15/2016
Egypt	COMPOSITIONS AND METHODS FOR INHIBITING THE AGGLOMERATION OF HYDRATES	20091463	10/4/2009	26471	11/25/2013
GCC (Gulf Co-op Council)	COMPOSITIONS AND METHODS FOR INHIBITING THE AGGLOMERATION OF HYDRATES	P200914426	10/4/2009	GC0004143	9/1/2017
Nigeria	COMPOSITIONS AND METHODS FOR INHIBITING THE AGGLOMERATION OF HYDRATES	NGC2009555	10/4/2009	NG C 2010193	4/29/2010
New Zealand	COMPOSITIONS AND METHODS FOR INHIBITING THE AGGLOMERATION OF HYDRATES	591920	10/6/2009	591920	8/6/2012
African Intellectual Property Organization	COMPOSITIONS AND METHODS FOR INHIBITING THE AGGLOMERATION OF HYDRATES	1200900326	10/2/2009	14718	6/30/2011
United States	COMPOSITIONS AND METHODS FOR INHIBITING THE AGGLOMERATION OF HYDRATES	12245849	10/6/2008	8329620	12/11/2012
Angola	COMPOSITIONS AND METHODS FOR DIVERTING INJECTED FLUIDS TO ACHIEVE IMPROVED HYDROCARBON FLUID RECOVERY	1697	4/15/2009		
Argentina	COMPOSICIONES Y METODOS PARA DESVIAR LOS FLUIDOS INYECTADOS Y ALCANZAR UNA RECUPERACION MEJORADA DE HIDROCARBUROS	90101409	4/21/2009	AR073341B1	11/30/2016
Australia	COMPOSITIONS AND METHODS FOR DIVERTING INJECTED FLUIDS TO ACHIEVE IMPROVED HYDROCARBON FLUID RECOVERY	2009238422	4/15/2009	2009238422	3/27/2014

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Brazil	COMPOSITIONS AND METHODS FOR DIVERTING INJECTED FLUIDS TO ACHIEVE IMPROVED HYDROCARBON FLUID RECOVERY	PI09073086	4/15/2009		
Canada	COMPOSITIONS AND METHODS FOR DIVERTING INJECTED FLUIDS TO ACHIEVE IMPROVED HYDROCARBON FLUID RECOVERY	2721948	4/15/2009	2721948	12/13/2016
Great Britain	COMPOSITIONS AND METHODS FOR DIVERTING INJECTED FLUIDS TO ACHIEVE IMPROVED HYDROCARBON FLUID RECOVERY	20100019397	4/15/2009	2472722	12/12/2012
Indonesia	COMPOSITIONS AND METHODS FOR DIVERTING INJECTED FLUIDS TO ACHIEVE IMPROVED HYDROCARBON FLUID RECOVERY	W00201003978	4/15/2009	IDP0035189	12/13/2013
India	COMPOSITIONS AND METHODS FOR DIVERTING INJECTED FLUIDS TO ACHIEVE IMPROVED HYDROCARBON FLUID RECOVERY	8003DELNP2010	11/12/2010	276912	11/11/2016
Russia	COMPOSITION AND METHOD FOR DIVERTING INJECTED FLUIDS TO ACHIEVE IMPROVED HYDROCARBON FLUID RECOVERY	2010142188	4/15/2009	2511444	4/10/2014
United States	COMPOSITIONS AND METHODS FOR DIVERTING INJECTED FLUIDS TO ACHIEVE IMPROVED HYDROCARBON FLUID RECOVERY	12424244	4/15/2009	8889603	11/18/2014
United States	COMPOSITIONS AND METHODS FOR DIVERTING INJECTED FLUIDS TO ACHIEVE IMPROVED HYDROCARBON FLUID RECOVERY	14543417	11/17/2014	9206346	12/8/2015

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Angola	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	1695	10/18/2010		
Argentina	COMPOSICION Y METODO PARA RECUPERAR FLUIDOS DE HIDROCARBUROS DE UN RESERVORIO SUBTERRANEO	90101403	4/21/2009	AR073443B1	5/27/2015
Australia	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	2009239528	4/21/2009	2009239528	12/12/2013
Brazil	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	PI09072624	4/21/2009		
Canada	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	2721970	4/21/2009	2721970	12/2/2014
Colombia	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	10144783	11/18/2010	62427	10/25/2013
Great Britain	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	20100019393	4/21/2009	2472721	3/6/2013
Indonesia	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	W0020100397 7	4/21/2009	IDP00003493 7	11/11/2013
Russia	COMPOSITION AND METHOD OF HYDROCARBON FLUID EXTRACTION AT UNDERGROUND DEPOSIT	2010142191	4/21/2009	2499021	11/20/2013

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
United States	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	12426569	4/20/2009	7888296	2/15/2011
India	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	8002DELNP2010	4/21/2009	285154	7/13/2017
Angola	BLOCK COPOLYMERS FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	1700	4/17/2009		
Argentina	COMPOSICIONES Y METODOS PARA DESVIAR LOS FLUIDOS INYECTADOS Y ALCANZAR UNA RECUPERACION MEJORADA DE HIDROCARBUROS	90101408	4/21/2009	AR073340B1	11/30/2016
Australia	BLOCK COPOLYMERS FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	2009239549	4/17/2009	2009239549	5/24/2014
Brazil	BLOCK COPOLYMERS FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	PI09073132	10/20/2010		
Canada	BLOCK COPOLYMERS FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	2721949	4/17/2009	2721949	6/2/2015
Great Britain	BLOCK COPOLYMERS FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	20100019406	4/17/2009	2471980	3/6/2013
Indonesia	BLOCK COPOLYMERS FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	W00201004003	11/19/2010	IDP000037814	2/2/2015
India	BLOCK COPOLYMERS FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	7719DELNP2010	11/1/2010	279615	2/3/2017
Russia	BLOCK COPOLYMERS FOR EXTRACTION OF HYDROCARBON FLUIDS FROM UNDERGROUND DEPOSIT	2010142190	4/17/2009	2502775	12/27/2013

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
United States	BLOCK COPOLYMERS FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	12425047	4/16/2009	7989401	8/2/2011
Angola	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	1694	4/20/2009		
Argentina	COMPOSICION Y METODO PARA RECUPERAR FLUIDOS DE HIDROCARBUROS DE UN RESERVORIO SUBTERRANEO	90101405	4/21/2009	AR073338B1	6/29/2015
Australia	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	2009239586	4/20/2009	2009239586	1/16/2014
	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	PI09072632	10/20/2010	PI09072632	5/7/2019
Canada	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	2721960	4/20/2009	2721960	11/1/2016
Great Britain	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	1019403	4/20/2009	2471642	12/12/2012
Indonesia	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	W00201003999	11/19/2010	IDP0000033942	6/19/2013
India	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	7922DELNP2010	11/10/2010	276649	11/4/2016

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Russia	COMPOSITION AND METHOD FOR EXTRACTION OF HYDROCARBON FLUIDS FROM UNDERGROUND DEPOSIT	2010142192	4/20/2009	2501830	12/20/2013
United States	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	12426485	4/20/2009	7902127	3/8/2011
Angola	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	1699	10/18/2010		
Argentina	COMPOSICION Y METODO PARA RECUPERAR FLUIDOS DE HIDROCARBUROS DE UN RESERVORIO SUBTERRANEO	90101406	4/21/2009	AR073444B1	7/30/2015
Australia	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	2009239566	4/20/2009	2009239566	6/19/2014
Brazil	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	PI09073310	10/19/2010		
Canada	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	2721957	4/20/2009	2721957	4/19/2016
Colombia	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	10144768	11/18/2010	62430	10/25/2013
Great Britain	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	1019398	4/20/2009	2471978	10/24/2012

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
India	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	7714DELNP201 0	11/1/2010	278163	12/23/2016
Russia	COMPOSITION AND METHOD OF HYDROCARBON FLUID EXTRACTION AT UNDERGROUND DEPOSIT	2010142189	4/20/2009	2500712	12/10/2013
United States	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	12425900	4/17/2009	7897546	3/1/2011
Angola	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	1696	10/18/2010		
Argentina	COMPOSICION Y METODO PARA RECUPERAR FLUIDOS DE HIDROCARBUROS DE UN RESERVORIO SUBTERRANEO	90101404	4/21/2009	AR073337B1	6/22/2015
Australia	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	2009239543	4/21/2009	2009239543	12/24/2013
	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	PI09073140	10/20/2010	PI09073140	4/24/2019
Canada	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	2721973	4/21/2009	2721973	12/2/2014
Colombia	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	10144777	11/18/2010	62428	10/25/2013



Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Great Britain	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	20100019392	4/21/2009	GB2471977	10/24/2012
Indonesia	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	W0020100400 2	11/19/2010	IDP00004321 0	10/12/2016
India	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	7702DELNP201 0	11/1/2010	274632	7/30/2016
Russia	COMPOSITION AND METHOD OF HYDROCARBON FLUID EXTRACTION AT UNDERGROUND DEPOSIT	2010142187	4/21/2009	2500711	12/10/2013
United States	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	12427064	4/21/2009	7928042	4/19/2011
Angola	COMPOSITIONS AND METHODS FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	1698	4/17/2009		
Argentina	COMPOSICIONES Y METODOS PARA RECUPERAR FLUIDOS DE HIDROCARBUROS DE UN RESERVOIRIO SUBTERRANEO	90101407	4/21/2009	AR073339B1	11/30/2016
Australia	COMPOSITIONS AND METHODS FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	2009239550	4/17/2009	2009239550	1/2/2014

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Brazil	COMPOSITIONS AND METHODS FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	PI09073159	10/20/2010		
Canada	COMPOSITIONS AND METHODS FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	2721953	4/17/2009	2721953	6/2/2015
Colombia	COMPOSITIONS AND METHODS FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	10130861	10/22/2010	48045	8/14/2013
Great Britain	COMPOSITIONS AND METHODS FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	20100019400	4/17/2009	2471979	4/25/2012
Indonesia	COMPOSITIONS AND METHODS FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	W0020100400 1	11/19/2010	IDP00003772 3	1/21/2015
India	COMPOSITIONS AND METHODS FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	8006DELNP201 0	11/12/2010	278924	1/6/2017
Russia	COMPOSITION AND METHOD FOR EXTRACTION OF HYDROCARBON FLUIDS FROM UNDERGROUND DEPOSIT	2010142193	4/17/2009	2505578	1/27/2014
United States	COMPOSITIONS COMPRISING AT LEAST TWO DIFFERENT POLYMERIC MICROPARTICLES AND METHODS FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	12425089	4/16/2009	7947630	5/24/2011

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Australia	ANHYDRIDE DEMULSIFIER FORMULATIONS FOR RESOLVING EMULSIONS OF WATER AND OIL	2009256412	5/30/2009	2009256412	10/16/2014
Brazil	UTILIZATION OF AN ANHYDRIDE AS A DEMULSIFIER AND A SOLVENT FOR DEMULSIFIER FORMULATIONS	PI09095373	5/30/2009		
Brazil	ANHYDRIDE DEMULSIFIER FORMULATIONS FOR RESOLVING EMULSIONS OF WATER AND OIL	PI09187839	9/11/2009		
Canada	UTILIZATION OF AN ANHYDRIDE AS A DEMULSIFIER AND A SOLVENT FOR DEMULSIFIER FORMULATIONS	2726605	5/30/2009	2726605	4/19/2016
Canada	ANHYDRIDE DEMULSIFIER FORMULATIONS FOR RESOLVING EMULSIONS OF WATER AND OIL	2736367	9/11/2009	2736367	10/25/2016
Colombia	ANHYDRIDE DEMULSIFIER FORMULATIONS FOR RESOLVING EMULSIONS OF WATER AND OIL	11033378	9/11/2009	4349	1/31/2014
European Patent Office	UTILIZATION OF AN ANHYDRIDE AS A DEMULSIFIER AND A SOLVENT FOR DEMULSIFIER FORMULATIONS	97591408	5/30/2009	2303443	3/7/2018
European Patent Office	ANHYDRIDE DEMULSIFIER FORMULATIONS FOR RESOLVING EMULSIONS OF WATER AND OIL	97924575	9/11/2009	2370547	10/25/2017
Great Britain	ANHYDRIDE DEMULSIFIER FORMULATIONS FOR RESOLVING EMULSIONS OF WATER AND OIL AND ITS METHOD FOR DEMULSIFYING	97591408	5/30/2009	2303443	3/7/2018
Great Britain	Use of an anhydride demulsifier formulation for resolving a water external emulsion of water and oil or a complex emulsion of water and oil and a method for resolving a water external emulsion of water and oil or a complex emulsion of water and oil using an anhydride demulsifier formulation	97924575	9/11/2009	2370547	10/25/2017

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Mexico	ANHDRIDE DEMULSIFIER FORMULATIONS FOR RESOLVING EMULSIONS OF WATER AND OIL	Mxa201100263 3	3/10/2011	334570	11/4/2015
United States	UTILIZATION OF AN ANHYDRIDE AS A DEMULSIFIER AND A SOLVENT FOR DEMULSIFIER FORMULATIONS	12132842	6/4/2008	8969262	3/3/2015
United States	ANHDRIDE DEMULSIFIER FORMULATIONS FOR RESOLVING EMULSIONS OF WATER AND OIL	12209845	9/12/2008	9096805	8/4/2015
European Patent Office	FOAMERS FOR DOWNHOLE INJECTION	108192907	9/20/2010	2480624	3/4/2015
Great Britain	FOAMERS FOR DOWNHOLE INJECTION	108192907	9/20/2010	2480624	3/4/2015
Australia	FOAMERS FOR DOWNHOLE INJECTION	2010298509	9/20/2010	2010298509	9/25/2014
Brazil	espumantes para injeção de downhole	112012006683 8	9/20/2010		
Canada	FOAMERS FOR DOWNHOLE INJECTION	2771296	9/20/2010	2771296	2/27/2018
GCC (Gulf Co-op Council)	FOAMERS FOR DOWNHOLE INJECTION	201016733	9/21/2010	GCC0004120	7/31/2017
Israel	FOAMERS FOR DOWNHOLE INJECTION	218461	3/4/2012	218461	4/1/2015
United States	FOAMERS FOR DOWNHOLE INJECTION	12565425	9/23/2009		
Netherlands	FOAMERS FOR DOWNHOLE INJECTION	108192907	9/20/2010	2480624	3/4/2015
Norway	FOAMERS FOR DOWNHOLE INJECTION	108192907	9/20/2010	2480624	3/4/2015
United States	FOAMERS FOR DOWNHOLE INJECTION	14608845	1/29/2015	9631133	4/25/2017
Australia	FOAMERS FOR DOWNHOLE INJECTION	2010298492	9/17/2010	2010298492	4/28/2016
Canada	IMIDAZOLINE-BASED FOAMERS FOR DOWNHOLE INJECTION	2771294	9/17/2010	2771294	11/22/2016
GCC (Gulf Co-op Council)	FOAMERS FOR DOWNHOLE INJECTION	P201016736	9/21/2010		
Israel	FOAMERS FOR DOWNHOLE INJECTION	218462	3/4/2012	218462	1/31/2015

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
United States	FOAMERS FOR DOWNHOLE INJECTION	12565433	9/23/2009	8399386	3/19/2013
Angola	METHOD OF CONTROLLING GAS HYDRATES IN FLUID SYSTEMS	1858	4/5/2011		
Argentina	METHOD OF CONTROLLING GAS HYDRATES IN FLUID SYSTEMS	20090104001	10/16/2009	AR073897B1	3/20/2017
Australia	METHOD OF CONTROLLING GAS HYDRATES IN FLUID SYSTEMS	2016202902	10/16/2009	2016202902	3/8/2018
Australia	METHOD OF CONTROLLING GAS HYDRATES IN FLUID SYSTEMS	2009305650	10/16/2009	2009305650	8/4/2016
Brazil	METHOD OF CONTROLLING GAS HYDRATES IN FLUID SYSTEMS	PI09205810	10/16/2009		
Canada	METHOD OF CONTROLLING GAS HYDRATES IN FLUID SYSTEMS	2740371	10/16/2009	2740371	4/24/2018
Egypt	METHOD OF CONTROLLING GAS HYDRATES IN FLUID SYSTEMS	20091001591	10/15/2009	26127	3/11/2013
European Patent Office	METHOD OF CONTROLLING GAS HYDRATES IN FLUID SYSTEMS	97649453	10/16/2009	2352805	7/30/2014
Great Britain	METHOD OF CONTROLLING GAS HYDRATES IN FLUID SYSTEMS	97649453	10/16/2009	2352805	7/30/2014
GCC (Gulf Co-op Council)	METHOD OF CONTROLLING GAS HYDRATES IN FLUID SYSTEMS	P200914506	10/17/2009		
Kazakhstan	METHOD OF CONTROLLING GAS HYDRATES IN FLUID SYSTEMS	201115281	10/16/2009	28089	12/27/2013
Nigeria	METHOD OF CONTROLLING GAS HYDRATES IN FLUID SYSTEMS	NGC2009578	10/14/2009	RPNGC2009578	10/23/2017

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Netherlands	METHOD OF CONTROLLING GAS HYDRATES IN FLUID SYSTEMS	97649453	10/16/2009	2352805	7/30/2014
Norway	METHOD OF CONTROLLING GAS HYDRATES IN FLUID SYSTEMS	97649453	10/16/2009	2352805	7/30/2014
New Zealand	METHOD OF CONTROLLING GAS HYDRATES IN FLUID SYSTEMS	592108	10/16/2009	592108	6/5/2012
African Intellectual Property Organization	METHOD OF CONTROLLING GAS HYDRATES IN FLUID SYSTEMS	1200900347	10/16/2009	14733	6/30/2010
Poland	METHOD OF CONTROLLING GAS HYDRATES IN FLUID SYSTEMS	97649453	10/16/2009	2352805	7/30/2014
United States	METHOD OF CONTROLLING GAS HYDRATES IN FLUID SYSTEMS	12253504	10/17/2008	8921478	12/30/2014
United States	METHOD OF CONTROLLING GAS HYDRATES IN FLUID SYSTEMS	14582618	12/24/2014	9550935	1/24/2017
United States	APPARATUS AND METHOD FOR INCREASING WELL PRODUCTION	11983719	11/9/2007	7909101	3/22/2011
United States	APPARATUS AND METHOD FOR INCREASING WELL PRODUCTION USING SURFACTANT INJECTION	10905993	1/28/2005	7311144	12/25/2007
Angola	METHOD OF REDUCING THE VISCOSITY OF HYDROCARBON FLUIDS	1878	11/4/2009		
Australia	METHOD OF REDUCING THE VISCOSITY OF HYDROCARBON FLUIDS	2009313598	11/4/2009	2009313598	5/21/2015

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Brazil	METHOD OF REDUCING THE VISCOSITY OF HYDROCARBON FLUIDS	PI09216057	11/4/2009		
China	METHOD OF REDUCING THE VISCOSITY OF HYDROCARBON FLUIDS	2009801446110	11/4/2009	102203210	11/27/2013
Colombia	METHOD OF REDUCING THE VISCOSITY OF HYDROCARBON FLUIDS	11056534	11/4/2009		12/27/2013
Egypt	METHOD OF REDUCING THE VISCOSITY OF HYDROCARBON FLUIDS	6882011	11/4/2009	27349	11/29/2015
India	METHOD OF REDUCING THE VISCOSITY OF HYDROCARBON FLUIDS	3527CHENP2011	11/4/2009	288095	10/13/2017
United States	METHOD OF REDUCING THE VISCOSITY OF HYDROCARBON FLUIDS	12265859	11/6/2008	7923416	4/12/2011
United States	CORROSION INHIBITORS FOR A FLUID	12400457	3/9/2009	8105988	1/31/2012
United States	CORROSION INHIBITORS FOR AN AQUEOUS MEDIUM	12245806	10/6/2008	8105987	1/31/2012
United States	COMPOSITIONS FOR INHIBITING THE FORMATION OF HYDRATE AGGLOMERATES	13651513	10/15/2012	9212305	12/15/2015
Germany	COMPOSITIONS CONTAINING AMIDE SURFACTANTS AND METHODS FOR INHIBITING THE FORMATION OF HYDRATE AGGLOMERATES	107077497	3/2/2010	2403838	4/27/2016
France	COMPOSITIONS CONTAINING AMIDE SURFACTANTS AND METHODS FOR INHIBITING THE FORMATION OF HYDRATE AGGLOMERATES	107077497	3/2/2010	2403838	4/27/2016
Great Britain	COMPOSITIONS CONTAINING AMIDE SURFACTANTS AND METHODS FOR INHIBITING THE FORMATION OF HYDRATE AGGLOMERATES	107077497	3/2/2010	2403838	4/27/2016

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Italy	COMPOSITIONS CONTAINING AMIDE SURFACTANTS AND METHODS FOR INHIBITING THE FORMATION OF HYDRATE AGGLOMERATES	20100707749	3/2/2010	2403838	4/27/2016
Angola	COMPOSITIONS CONTAINING AMIDE SURFACTANTS AND METHODS FOR INHIBITING THE FORMATION OF HYDRATE AGGLOMERATES	1951	3/2/2010		
Argentina	COMPOSICIONES QUE CONTIENEN SURFACTANTES DE AMIDA Y METODOS PARA INHIBIR LA FORMACION DE AGLOMERADOS DE HIDRATO	P100100570	2/26/2010	AR075622B1	8/30/2018
Australia	COMPOSITIONS CONTAINING AMIDE SURFACTANTS AND METHODS FOR INHIBITING THE FORMATION OF HYDRATE AGGLOMERATES	2010221497	3/2/2010	2010221497	7/16/2015
Brazil	COMPOSITIONS CONTAINING AMIDE SURFACTANTS AND METHODS FOR INHIBITING THE FORMATION OF HYDRATE AGGLOMERATES	P110095047	9/2/2011		
Canada	COMPOSITIONS CONTAINING AMIDE SURFACTANTS AND METHODS FOR INHIBITING THE FORMATION OF HYDRATE AGGLOMERATES	2754016	3/2/2010	2754016	9/15/2015
China	COMPOSITIONS CONTAINING AMIDE SURFACTANTS AND METHODS FOR INHIBITING THE FORMATION OF HYDRATE AGGLOMERATES	2010800106190	3/2/2010	102341377	7/2/2014
Egypt	Compositions containing amide surfactants and methods for inhiting the formation of hydrate agglomerates	20100200240	2/14/2010	25743	6/21/2012



Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
European Patent Office	COMPOSITIONS CONTAINING AMIDE SURFACTANTS AND METHODS FOR INHIBITING THE FORMATION OF HYDRATE AGGLOMERATES	107077497	3/2/2010	2403838	4/27/2016
GCC (Gulf Co-op Council)	COMPOSITIONS CONTAINING AMIDE SURFACTANTS AND METHODS FOR INHIBITING THE FORMATION OF HYDRATE AGGLOMERATES	201015348	2/28/2010	GC0006393	11/30/2018
Malaysia	COMPOSITION CONTAINING AMIDE SURFACTANTS AND METHODS FOR INHIBITING THE FORMATION OF HYDRATE AGGLOMERATES	2011P104106	3/2/2010	MY155659A	11/13/2015
Nigeria	COMPOSITIONS CONTAINING AMIDE SURFACTANTS AND METHODS FOR INHIBITING THE FORMATION OF HYDRATE AGGLOMERATES	NGC2010193	2/25/2010	NGC2010193	4/29/2010
New Zealand	COMPOSITIONS CONTAINING AMIDE SURFACTANTS AND METHODS FOR INHIBITING THE FORMATION OF HYDRATE AGGLOMERATES	594737	3/2/2010	594737	1/29/2013
African Intellectual Property Organization	COMPOSITIONS CONTAINING AMIDE SURFACTANTS AND METHODS FOR INHIBITING THE FORMATION OF HYDRATE AGGLOMERATES	1201000071	2/26/2010	14952	12/30/2010
Tunisia	COMPOSITIONS CONTAINING AMIDE SURFACTANTS AND METHODS FOR INHIBITING THE FORMATION OF HYDRATE AGGLOMERATES	TN20110435	8/19/2011		
United States	COMPOSITIONS CONTAINING AMIDE SURFACTANTS AND METHODS FOR INHIBITING THE FORMATION OF HYDRATE AGGLOMERATES	12396076	3/2/2009	8288323	10/16/2012

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Netherlands	COMPOSITIONS CONTAINING AMIDE SURFACTANTS AND METHODS FOR INHIBITING THE FORMATION OF HYDRATE AGGLOMERATES	107077497	3/2/2010	2403838	4/27/2016
Norway	COMPOSITIONS CONTAINING AMIDE SURFACTANTS AND METHODS FOR INHIBITING THE FORMATION OF HYDRATE AGGLOMERATES	107077497	3/2/2010	2403838	4/27/2016
Poland	COMPOSITIONS CONTAINING AMIDE SURFACTANTS AND METHODS FOR INHIBITING THE FORMATION OF HYDRATE AGGLOMERATES	107077497	3/2/2010	2403838	4/27/2016
United States	CORROSION INHIBITORS CONTAINING AMIDE SURFACTANTS FOR A FLUID	12396096	3/2/2009	7989403	8/2/2011
Great Britain	METHOD OF REDUCING THE VISCOSITY OF HYDROCARBON FLUIDS	107978850	7/9/2010	2454339	9/27/2017
Argentina	METHOD OF REDUCING THE VISCOSITY OF HYDROCARBON FLUIDS	P100102443	7/7/2010	AR077397B1	6/21/2017
Australia	METHOD OF REDUCING THE VISCOSITY OF HYDROCARBON FLUIDS	2010271311	7/9/2010	2010271311	2/12/2015
Brazil	METHOD OF REDUCING THE VISCOSITY OF HYDROCARBON FLUIDS	112012000598 7	1/10/2012		
Canada	METHOD OF REDUCING THE VISCOSITY OF HYDROCARBON FLUIDS	2767637	7/9/2010	2767637	8/30/2016
China	METHOD OF REDUCING THE VISCOSITY OF HYDROCARBON FLUIDS	201080038260 8	7/9/2010	102482567	3/19/2014
Colombia	METHOD OF REDUCING THE VISCOSITY OF HYDROCARBON FLUIDS	12014884	7/9/2010	4785	1/17/2014

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
European Patent Office	METHOD OF REDUCING THE VISCOSITY OF HYDROCARBON FLUIDS	107978850	7/9/2010	2454339	9/27/2017
Libya	METHOD OF REDUCING THE VISCOSITY OF HYDROCARBON FLUIDS	43312012	1/10/2012		
Mexico	METHOD OF REDUCING THE VISCOSITY OF HYDROCARBON FLUIDS	MXa20120004 47	7/9/2010	313349	9/17/2013
Russia	METHOD FOR REDUCTION OF HYDROCARBON FLUIDS VISCOSITY	2012102109	7/9/2010	2545193	3/27/2015
	METHOD OF REDUCING THE VISCOSITY OF HYDROCARBON FLUIDS	1001000906	6/18/2010	67859	2/1/2019
United States	METHOD OF REDUCING THE VISCOSITY OF HYDROCARBON FLUIDS	12500644	7/10/2009	8394872	3/12/2013
Algeria	METHOD OF REDUCING THE VISCOSITY OF HYDROCARBON FLUIDS	120030	7/9/2010		
Norway	METHOD OF REDUCING THE VISCOSITY OF HYDROCARBON FLUIDS	107978850	7/9/2010	2454339	9/27/2017
Australia	ACID GAS SCRUBBING COMPOSITION	2010273773	6/29/2010	2010273773	10/1/2015
Brazil	ACID GAS SCRUBBING COMPOSITION	PI10119337	6/29/2010		
Canada	ACID GAS SCRUBBING COMPOSITION	2767003	6/29/2010	2767003	9/15/2015
China	ACID GAS SCRUBBING COMPOSITION	201080036767 X	6/29/2010	102481518	12/24/2014
Eurasian Regional Patent	ACID GAS SCRUBBING COMPOSITION	201290015	6/29/2010	22454	1/29/2016
	ACID GAS SCRUBBING COMPOSITION	108002882	6/29/2010	2448654	5/1/2019

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
	ACID GAS SCRUBBING COMPOSITION	108002882	6/29/2010	2448654	5/1/2019
	ACID GAS SCRUBBING COMPOSITION	MXa20120001 68	1/2/2012	362738	2/6/2019
	ACID GAS SCRUBBING COMPOSITION	108002882	6/29/2010	2448654	5/1/2019
	ACID GAS SCRUBBING COMPOSITION	108002882	6/29/2010	2448654	5/1/2019
United States	ACID GAS SCRUBBING COMPOSITION	12494521	6/30/2009	8461335	6/11/2013
United States	PROCESS FOR REDUCING CONTAMINANTS IN AN INDUSTRIAL FLUID STREAM	13397131	2/15/2012	8551435	10/8/2013
United States	ACID GAS SCRUBBING COMPOSITION	13966404	8/14/2013	9555364	1/31/2017
Canada	METHOD OF REDUCING THE VISCOSITY OF HYDROCARBONS	2775964	10/19/2010	2775964	4/24/2018
Argentina	METHOD OF REDUCING THE VISCOSITY OF HYDROCARBONS	P100103793	10/18/2010		
Brazil	METHOD OF REDUCING THE VISCOSITY OF HYDROCARBONS	112012009507 2	4/20/2012		
European Patent Office	METHOD OF REDUCING THE VISCOSITY OF HYDROCARBONS	108255043	10/19/2010		
Mexico	METHOD OF REDUCING THE VISCOSITY OF HYDROCARBONS	MXa20120043 05	10/19/2010	345154	1/18/2017
Russia	METHOD FOR REDUCTION OF HYDROCARBON VISCOSITY	2012112656	10/19/2010	2528344	9/10/2014
United States	METHOD OF REDUCING THE VISCOSITY OF HYDROCARBONS	12582329	10/20/2009	9315715	4/19/2016
Azerbaijan	ACID GAS SCRUBBING COMPOSITION		6/29/2010	23759	7/29/2016
Belarus	ACID GAS SCRUBBING COMPOSITION		6/29/2010	23759	7/29/2016
Kyrgyzstan	ACID GAS SCRUBBING COMPOSITION		6/29/2010	23759	7/29/2016

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Kazakhstan	ACID GAS SCRUBBING COMPOSITION		6/29/2010	23759	7/29/2016
Australia	ACID GAS SCRUBBING COMPOSITION	2010266423	6/29/2010	2010266423	10/1/2015
Brazil	ACID GAS SCRUBBING COMPOSITION	PI10141480	6/29/2010		
Canada	ACID GAS SCRUBBING COMPOSITION	2765825	6/29/2010	2765825	9/27/2016
China	ACID GAS SCRUBBING COMPOSITION	2010800302270	6/29/2010	ZI201080030227.0	8/3/2016
Eurasian Regional Patent	ACID GAS SCRUBBING COMPOSITION	201290005	6/29/2010	23759	7/29/2016
	ACID GAS SCRUBBING COMPOSITION	107946352	6/29/2010	2448667	6/26/2019
Mexico	ACID GAS SCRUBBING COMPOSITION	MXa2011013617	6/29/2010	324731	10/22/2014
United States	ACID GAS SCRUBBING COMPOSITION	12494533	6/30/2009	8541622	9/24/2013
Russia	ACID GAS SCRUBBING COMPOSITION		6/29/2010	23759	7/29/2016
Tajikistan	ACID GAS SCRUBBING COMPOSITION		6/29/2010	23759	7/29/2016
Turkmenistan	ACID GAS SCRUBBING COMPOSITION		6/29/2010	23759	7/29/2016
Australia	BETA-AMINO ESTER GAS HYDRATE INHIBITORS	2013370592	12/20/2013	2013370592	12/18/2017
Brazil	inibidores de hidrato de gás beta-amino éster	BR1120150123007	12/20/2013		
European Patent Office	BETA-AMINO ESTER GAS HYDRATE INHIBITORS	138674296	12/20/2013	2938604	5/30/2018
GCC (Gulf Co-op Council)	BETA-AMINO ESTER GAS HYDRATE INHIBITORS	P201326162	12/29/2013	GC000903	11/1/2018
United States	BETA-AMINO ESTER GAS HYDRATE INHIBITORS	15111443	12/20/2013	10047273	8/14/2018
United States	RECOVERY AND SEPARATION OF CRUDE OIL AND WATER FROM EMULSIONS	12757008	4/8/2010	8911615	12/16/2014

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
China	RECOVERY AND SEPARATION OF CRUDE OIL AND WATER FROM EMULSIONS	201180017686 X	4/4/2011	102869422	8/26/2015
Russia	RAW OIL AND WATER EXTRACTION AND SEPARATION FROM EMULSIONS	2012143362	4/4/2011	2577267	3/10/2016
European Patent Office	QUATERNARY FATTY ACID ESTERS AS CORROSION INHIBITORS	157923400	2/17/2015		
United States	QUATERNARY FATTY ACID ESTERS AS CORROSION INHIBITORS	14191983	2/27/2014	9284650	3/15/2016
United States	PROCESSING AIDS TO IMPROVE THE BITUMEN RECOVERY AND FROTH QUALITY IN OIL SANDS EXTRACTION PROCESSES	12762004	4/16/2010	8764974	7/1/2014
United Arab Emirates	FOAMERS FOR DOWNHOLE INJECTION	P5362013	11/17/2011		
Australia	FOAMERS FOR DOWNHOLE INJECTION	2011329885	11/17/2011	2011329885	8/20/2015
Brazil	"método de formação de espuma em um fluido"	112013012170 0	11/17/2011		
Canada	FOAMERS FOR DOWNHOLE INJECTION	2817627	11/17/2011	2817627	1/17/2017
European Patent Office	FOAMERS FOR DOWNHOLE INJECTION	118410208	11/17/2011	2640803	6/29/2016
Great Britain	FOAMERS FOR DOWNHOLE INJECTION	118410208	11/17/2011	2640803	6/29/2016
Netherlands	FOAMERS FOR DOWNHOLE INJECTION	118410208	11/17/2011	2640803	6/29/2016
New Zealand	FOAMERS FOR DOWNHOLE INJECTION	610328	11/17/2011	610328	1/27/2015
African Intellectual Property Organization	FOAMERS FOR DOWNHOLE INJECTION	1201300211	11/17/2011	16432	5/30/2014

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Portugal	FOAMERS FOR DOWNHOLE INJECTION	118410208	11/17/2011	2640803	6/29/2016
Romania	FOAMERS FOR DOWNHOLE INJECTION	118410208	11/17/2011	2640803	6/29/2016
United States	FOAMERS FOR DOWNHOLE INJECTION	12950334	11/19/2010	8950494	2/10/2015
Angola	METHOD FOR RESOLVING EMULSIONS IN ENHANCED OIL RECOVERY OPERATIONS	2784	6/21/2011		
Argentina	METODO PARA RESOLVER EMULSIONES EN OPERACIONES DE RECUPERACION MEJORADA DE PETROLEO	P110102186	6/23/2011	AR081985B1	9/28/2018
Austria	METHOD FOR RESOLVING EMULSIONS IN ENHANCED OIL RECOVERY OPERATIONS	117987222	6/21/2011	2585559	7/18/2018
Australia	METHOD FOR RESOLVING EMULSIONS IN ENHANCED OIL RECOVERY OPERATIONS	2011271164	6/21/2011	2011271164	6/30/2016
Brazil	METHOD FOR RESOLVING EMULSIONS IN ENHANCED OIL RECOVERY OPERATIONS	112012033025 0	6/21/2011		
	METHOD FOR RESOLVING EMULSIONS IN ENHANCED OIL RECOVERY OPERATIONS	2803318	6/21/2011	2803318	1/8/2019
China	METHOD FOR RESOLVING EMULSIONS IN ENHANCED OIL RECOVERY OPERATIONS	201180031154 1	6/21/2011	102959052	12/24/2014
Colombia	METHOD FOR RESOLVING EMULSIONS IN ENHANCED OIL RECOVERY OPERATIONS	13012316	6/21/2011	13-12316	5/29/2015
Denmark	METHOD FOR RESOLVING EMULSIONS IN ENHANCED OIL RECOVERY OPERATIONS	117987222	6/21/2011	2585559	7/18/2018
Eurasian Regional Patent	METHOD FOR RESOLVING EMULSIONS IN ENHANCED OIL RECOVERY OPERATIONS	201291321	6/21/2011	23416	6/30/2016

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
European Patent Office	METHOD FOR RESOLVING EMULSIONS IN ENHANCED OIL RECOVERY OPERATIONS	117987222	6/21/2011	2585559	7/18/2018
Great Britain	METHOD FOR RESOLVING EMULSIONS IN ENHANCED OIL RECOVERY OPERATIONS	117987222	6/21/2011	2585559	7/18/2018
GCC (Gulf Co- op Council)	METHOD FOR RESOLVING EMULSIONS IN ENHANCED OIL RECOVERY OPERATIONS	GC201118633	6/21/2011	GC0005333	4/9/2017
Indonesia	METHOD FOR RESOLVING EMULSIONS IN ENHANCED OIL RECOVERY OPERATIONS	W0020120533 4	6/21/2011	IDP00004262 6	8/31/2016
India	METHOD FOR RESOLVING EMULSIONS IN ENHANCED OIL RECOVERY OPERATIONS	4084KOLNP201 2	6/21/2011	299730	8/6/2018
Libya	METHOD FOR RESOLVING EMULSIONS IN ENHANCED OIL RECOVERY OPERATIONS	46042012	6/21/2011		
Mexico	METHOD FOR RESOLVING EMULSIONS IN ENHANCED OIL RECOVERY OPERATIONS	MXa20120152 76	6/21/2011		
Malaysia	METHOD FOR RESOLVING EMULSIONS IN ENHANCED OIL RECOVERY OPERATIONS	2012PI05520	6/21/2011	MY162575A	6/30/2017
Nigeria	METHOD FOR RESOLVING EMULSIONS IN ENHANCED OIL RECOVERY OPERATIONS	NGC2012745	6/21/2011	RP:NG/C/201 2/745	3/6/2015
Netherlands	METHOD FOR RESOLVING EMULSIONS IN ENHANCED OIL RECOVERY OPERATIONS	117987222	6/21/2011	2585559	7/18/2018
Norway	METHOD FOR RESOLVING EMULSIONS IN ENHANCED OIL RECOVERY OPERATIONS	117987222	6/21/2011	2585559	7/18/2018
Poland	METHOD FOR RESOLVING EMULSIONS IN ENHANCED OIL RECOVERY OPERATIONS	117987222	6/21/2011	2585559	7/18/2018



Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
United States	METHOD FOR RESOLVING EMULSIONS IN ENHANCED OIL RECOVERY OPERATIONS	14721805	5/26/2015	9663705	5/30/2017
United States	Quaternary foamers for downhole injection	13102251	5/6/2011	8746341	6/10/2014
Argentina	COMPOSICION Y METODO PARA RECUPERAR FLUIDOS DE HIDROCARBUROS DE UN RESERVOIRIO SUBTERRANEO	130100239	1/25/2013		
Argentina	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	160101932	1/25/2013		
Australia	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	2016204046	1/24/2013	2016204046	5/3/2018
Australia	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	2013212130	1/24/2013	2013212130	7/14/2016
Bahrain	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	20140101	1/24/2013		
Brazil	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	BR1120140182 450	1/24/2013		
Canada	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	2858435	1/24/2013		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	2016105828027	1/24/2013	2.01611E+12	3/1/2019
China	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	2013800054950	1/24/2013	ZL201380005495.0	8/8/2017
European Patent Office	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	181992975	1/24/2013		
	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	137406211	1/24/2013	2807228	3/27/2019
	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	137406211	1/24/2013	2807228	3/27/2019
	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	P00201900561	1/24/2013		
Indonesia	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	P00201403571	1/24/2013		
United States	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	13359596	1/27/2012	9120965	9/1/2015

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	137406211	1/24/2013	2807228	3/27/2019
New Zealand	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	722950	1/24/2013		
New Zealand	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	625655	1/24/2013	625655	8/2/2016
Russia	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	2017113352	1/24/2013	2670295	10/22/2018
Russia	COMPOSITION AND METHOD FOR SELECTION OF HYDROCARBON FLUIDS FROM UNDERGROUND RESERVOIR	2014134878	1/24/2013	2618239	5/3/2017
	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	14804973	7/21/2015	10214679	2/26/2019
United States	COMPOSITION AND METHOD FOR RECOVERING HYDROCARBON FLUIDS FROM A SUBTERRANEAN RESERVOIR	16208775	12/4/2018		
United States	METHOD FOR RESOLVING EMULSIONS IN ENHANCED OIL RECOVERY OPERATIONS.	12756647	4/8/2010	8741130	6/3/2014
United States	COMPOSITION FOR TREATING ACID GAS	13680544	11/19/2012	9233338	1/12/2016
United States	COMPOSITION FOR TREATING ACID GAS	12761939	4/16/2010	8318114	11/27/2012

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
United States	METHOD AND COMPOSITION FOR OIL ENHANCED RECOVERY	13048131	3/15/2011	8662171	3/4/2014
United States	CORROSION INHIBITORS FOR OIL AND GAS APPLICATIONS	12963036	12/8/2010	8618027	12/31/2013
United States	CORROSION INHIBITORS FOR OIL AND GAS APPLICATIONS	14086668	11/21/2013	9382467	7/5/2016
Australia	TEMPERATURE SENSITIVE VISCOELASTIC WELL-TREATMENT FLUIDS	2014249683	3/4/2014	2014249683	2/15/2018
Brazil	fluidos viscoelásticos de tratamento de poço sensíveis a temperatura	BR1120150222501	3/4/2014		
Canada	TEMPERATURE SENSITIVE VISCOELASTIC WELL-TREATMENT FLUIDS	2904637	3/4/2014		
China	TEMPERATURE SENSITIVE VISCOELASTIC WELL-TREATMENT FLUIDS	2014800136156	3/4/2014		
European Patent Office	TEMPERATURE SENSITIVE VISCOELASTIC WELL-TREATMENT FLUIDS	147798961	3/4/2014		
United States	TEMPERATURE SENSITIVE VISCOELASTIC WELL-TREATMENT FLUIDS	13797295	3/12/2013	9228123	1/5/2016
United States	TEMPERATURE SENSITIVE VISCOELASTIC WELL-TREATMENT FLUIDS	14985750	12/31/2015		
Canada	FOULING MITIGATION IN EQUIPMENT USED DURING HYDROCARBON PRODUCTION	2904560	2/12/2014		
GCC (Gulf Co-op Council)	FOULING MITIGATION IN EQUIPMENT USED DURING HYDROCARBON PRODUCTION	P201426680	3/12/2014		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
	FOULING MITIGATION IN EQUIPMENT USED DURING HYDROCARBON PRODUCTION	13798572	3/13/2013	10196287	2/5/2019
Armenia	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION		12/14/2011	24680	10/31/2016
Azerbaijan	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION		12/14/2011	24680	10/31/2016
Belarus	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION		12/14/2011	24680	10/31/2016
Germany	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION	118494202	12/14/2011	2651877	3/9/2016
Angola	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION	2499	12/14/2011		
Brazil	composição para reduzir a aglomeração de hidratos e método para reduzir a aglomeração de hidratos	112013015062 9	12/14/2011		
Canada	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION	2821730	12/14/2011		
China	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION	201180060178 X	12/14/2011	103261149	7/15/2015
Eurasian Regional Patent	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION	201390709	12/14/2011	24680	10/31/2016
European Patent Office	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION	118494202	12/14/2011	2651877	3/9/2016
India	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION	1903KOLNP201 3	12/14/2011	301959	10/8/2018

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Kazakhstan	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION	201315841	12/14/2011	2013/1584.1	11/20/2014
Mexico	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION	MXa20130069 47	12/14/2011	340173	6/29/2016
Nigeria	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION	NGC2013409	12/14/2011	NG/C/2013/4 09	8/27/2013
Tunisia	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION	TN20130260	12/14/2011		
France	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION	118494202	12/14/2011	2651877	3/9/2016
Great Britain	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION	118494202	12/14/2011	2651877	3/9/2016
Italy	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION	20110849420	12/14/2011	2651877	3/9/2016
Kyrgyzstan	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION		12/14/2011	24680	10/31/2016
Kazakhstan	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION		12/14/2011	24680	10/31/2016
Moldova	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION		12/14/2011	24680	10/31/2016
United States	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION	12970280	12/16/2010	8618025	12/31/2013
Netherlands	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION	118494202	12/14/2011	2651877	3/9/2016

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Norway	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION	118494202	12/14/2011	2651877	3/9/2016
African Intellectual Property Organization	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION	1201300242	12/14/2011		
Poland	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION	118494202	12/14/2011	2651877	3/9/2016
Russia	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION		12/14/2011	24680	10/31/2016
Tajikistan	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION		12/14/2011	24680	10/31/2016
Turkmenistan	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION		12/14/2011	24680	10/31/2016
United States	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION	14098139	12/5/2013	9458373	10/4/2016
	UN METODO PARA INHIBIR LA CORROSION DE UNA SUPERFICIE EN CONTACTO CON UN ENTORNO CORROSIVO ENCONTRADO EN OPERACIONES DE PETROLEO Y GAS	120104206	11/8/2012	AR089176B1	1/31/2019
Australia	Environmentally friendly corrosion inhibitors	2012336054	11/5/2012	2012336054	3/16/2017
Brazil	inibidores de corrosão ambientalmente amigáveis	112014007604 9	11/5/2012		
Canada	ENVIRONMENTALLY FRIENDLY CORROSION INHIBITORS	2846979	11/5/2012		
Denmark	ENVIRONMENTALLY FRIENDLY CORROSION INHIBITORS	128471216	11/5/2012	2776605	2/1/2017

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
European Patent Office	ENVIRONMENTALLY FRIENDLY CORROSION INHIBITOR	171525595	11/5/2012		
European Patent Office	ENVIRONMENTALLY FRIENDLY CORROSION INHIBITORS	128471216	11/5/2012	2776605	2/1/2017
Great Britain	ENVIRONMENTALLY FRIENDLY CORROSION INHIBITORS	128471216	11/5/2012	2776605	2/1/2017
United States	ENVIRONMENTALLY FRIENDLY CORROSION INHIBITOR	13291665	11/8/2011	9074289	7/7/2015
Netherlands	ENVIRONMENTALLY FRIENDLY CORROSION INHIBITORS	128471216	11/5/2012	2776605	2/1/2017
Norway	ENVIRONMENTALLY FRIENDLY CORROSION INHIBITORS	128471216	11/5/2012	2776605	2/1/2017
Australia	ACID GAS ABSORBENT COMPOSITION	2011329882	11/17/2011	2011329882	10/6/2016
Azerbaijan	ACID GAS ABSORBENT COMPOSITION		11/17/2011	24196	8/31/2016
	'composição de líquido de lavagem para absorção de contaminantes ácidos de fluidos em um processo industrial e processo de redução de contaminantes ácidos em um fluxo de fluidos industrial"	112013012169 6	11/17/2011		
Brazil					
Belarus	ACID GAS ABSORBENT COMPOSITION		11/17/2011	24196	8/31/2016
Canada	ACID GAS ABSORBENT COMPOSITION	2817549	11/17/2011	2817549	10/2/2018
China	ACID GAS ABSORBENT COMPOSITION	201180055449 2	11/17/2011	ZL201180055 449.2	8/24/2016
Eurasian Regional Patent	ACID GAS ABSORBENT COMPOSITION	201390548	11/17/2011	24196	8/31/2016
	ACID GAS ABSORBENT COMPOSITION	118421858	11/17/2011	2640507	5/8/2019
	ACID GAS ABSORBENT COMPOSITION	118421858	11/17/2011	2640507	5/8/2019
Kyrgyzstan	ACID GAS ABSORBENT COMPOSITION		11/17/2011	24196	8/31/2016
Kazakhstan	ACID GAS ABSORBENT COMPOSITION		11/17/2011	24196	8/31/2016



Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Mexico	ACID GAS ABSORBENT COMPOSITION	MXa20180100 46	11/17/2011		
Mexico	ACID GAS ABSORBENT COMPOSITION	MXa20130054 40	11/17/2011		
	ACID GAS ABSORBENT COMPOSITION	118421858	11/17/2011	2640507	5/8/2019
	ACID GAS ABSORBENT COMPOSITION	118421858	11/17/2011	2640507	5/8/2019
Russia	ACID GAS ABSORBENT COMPOSITION		11/17/2011	24196	8/31/2016
Tajikistan	ACID GAS ABSORBENT COMPOSITION		11/17/2011	24196	8/31/2016
Turkmenistan	ACID GAS ABSORBENT COMPOSITION		11/17/2011	24196	8/31/2016
United States	ACID GAS ABSORBENT COMPOSITION	12950518	11/19/2010	8765083	7/1/2014
United States	ACID GAS ABSORBENT COMPOSITION	13874591	5/1/2013	8765951	7/1/2014
European Patent Office	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION	118774967	12/22/2011	2718259	1/23/2019
Angola	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION	2504	12/22/2011		
Australia	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION	2011383248	12/22/2011	2011383248	8/6/2015
Brazil	composição para inibir a formação de aglomerados de hidratos em um fluido e método para inibir a formação de aglomerados de hidratos em um fluido	112013016103 5	12/22/2011		
India	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION	5622DELNP201 3	12/22/2011	289646	11/16/2017
Kazakhstan	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION	201315761	12/22/2011	29669	2/24/2015

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Mexico	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION	MXa20130074 20	12/22/2011		
Malaysia	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION	2013PI02365	12/22/2011	MY162724A	7/14/2017
Nigeria	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION	NGC2013406	12/22/2011	NG/C/2013/4 06	8/27/2013
New Zealand	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION	612342	12/22/2011	612342	9/29/2015
African Intellectual Property Organization	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION	1201300266	12/22/2011	16465	5/30/2014
Russia	COMPOSITION AND METHOD OF REDUCING AGGLOMERATION OF HYDRATES	2013128427	12/22/2011	2562974	9/10/2015
Tunisia	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION	TN20130272	12/22/2011		
GCC (Gulf Co- op Council)	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION	P201120121	12/24/2011		
United States	COMPOSITION AND METHOD FOR REDUCING HYDRATE AGGLOMERATION	13326910	12/15/2011	9505707	11/29/2016
	AN ENVIRONMENTALLY FRIENDLY DISPERSION SYSTEM USEFUL FOR THE PREPARATION OF INVERSE EMULSION POLYMERS	1220102000	6/6/2012	AR086690B1	3/29/2019

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Australia	AN ENVIRONMENTALLY FRIENDLY DISPERSION SYSTEM USED IN THE PREPARATION OF INVERSE EMULSION POLYMERS	2012268422	6/5/2012	2012268422	4/21/2016
Brazil	sistema de dispersão ecologicamente correto utilizado na preparação de polímeros de emulsão inversa	BR1120130302968	6/5/2012		
	AN ENVIRONMENTALLY FRIENDLY DISPERSION SYSTEM USED IN THE PREPARATION OF INVERSE EMULSION POLYMERS	2835867	6/5/2012	2835867	4/2/2019
European Patent Office	AN ENVIRONMENTALLY FRIENDLY DISPERSION SYSTEM USED IN THE PREPARATION OF INVERSE EMULSION POLYMERS	127963999	6/5/2012		
United States	Environmentally friendly dispersion system used in the preparation of inverse emulsion polymers	13155848	6/8/2011	9193898	11/24/2015
Argentina	UN METODO PARA INHIBIR LA CORROSION EN UNA SUPERFICIE	130103537	9/30/2013		
United States	QUATERNARY AND CATIONIC AMMONIUM SURFACTANTS AS CORROSION INHIBITORS	13630926	9/28/2012	10006128	6/26/2018
	ADITIVOS PARA MEJORAR LA RECUPERACION DE HIDROCARBUROS	20120102071	6/11/2012	AR086902B1	2/8/2019
Canada	ADDITIVES FOR IMPROVING HYDROCARBON RECOVERY	2835872	6/12/2012	2835872	7/4/2017
China	ADDITIVES FOR IMPROVING HYDROCARBON RECOVERY	2012800212269	6/12/2012	ZL201280021226.9	1/18/2017
Eurasian Regional Patent	ADDITIVES FOR IMPROVING HYDROCARBON RECOVERY	201391593	6/12/2012	29233	2/28/2018

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
European Patent Office	ADDITIVES FOR IMPROVING HYDROCARBON RECOVERY	12/7997625	6/12/2012	2718541	9/12/2018
GCC (Gulf Co-op Council)	METHOD TO ENHANCE BITUMEN RECOVERY IN STEAM ASSISTED GRAVITY DRAINAGE PROCESSES	P201221429	6/5/2012	GC0006565	11/26/2017
India	ADDITIVES FOR IMPROVING HYDROCARBON RECOVERY	2747KOLNP2013	6/12/2012	300671	9/4/2018
Thailand	ADDITIVES FOR IMPROVING HYDROCARBON RECOVERY	1301007039	6/12/2012		
United States	METHOD TO ENHANCE BITUMEN RECOVERY IN STEAM ASSISTED GRAVITY DRAINAGE PROCESSES	13158919	6/13/2011	9150776	10/6/2015
	ADDITIVES FOR IMPROVING HYDROCARBON RECOVERY	1201303890	6/12/2012	20714	3/5/2019
Argentina	ADITIVOS PARA MEJORARA LA RECUPERACION DE HIDROCARBUROS	20120102072	6/11/2012		
GCC (Gulf Co-op Council)	FLUORINATED ADDITIVES TO IMPROVE THE BITUMEN RECOVERY IN STEAM ASSISTED GRAVITY DRAINAGE PROCESSES	P201221430	6/5/2012	GC0007150	2/25/2018
Canada	ADDITIVES FOR IMPROVING HYDROCARBON RECOVERY	2821184	7/16/2013		
Canada	ADDITIVES FOR IMPROVING HYDROCARBON RECOVERY	2835884	6/12/2012	2835884	3/13/2018
	ADDITIVES FOR IMPROVING HYDROCARBON RECOVERY	2017100450219	6/12/2012	ZL2017100450219	4/23/2019
China	ADDITIVES FOR IMPROVING HYDROCARBON RECOVERY	2012800212235	6/12/2012	ZL201280021223.5	3/29/2017
Russia	ADDITIVES FOR IMPROVING HYDROCARBON RECOVERY	2013152338	6/12/2012	2599999	10/20/2016
United States	FLUORINATED ADDITIVES TO IMPROVE THE BITUMEN RECOVERY IN STEAM ASSISTED GRAVITY DRAINAGE PROCESSES	13158905	6/13/2011	8939208	1/27/2015
United States	ADDITIVES FOR IMPROVING HYDROCARBON RECOVERY	13554515	7/20/2012	9879512	1/30/2018

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
United States	ADDITIVES FOR IMPROVING HYDROCARBON RECOVERY	15839572	12/12/2017		
United States	Composite materials for reversible CO2 capture	13881428	10/25/2011	9283511	3/15/2016
Australia	COMPOSITION AN DMETHOD FOR WELL STIMULATION AND REMEDIATION	2016225821	4/19/2013	2016225821	10/25/2018
Australia	Demulsifier composition and method of using same	2013249130	4/19/2013	2013249130	10/13/2016
Australia	MICROEMULSION FLOWBACK AID COMPOSITION AND METHOD OF USING SAME	2013239828	3/27/2013	2013239828	4/21/2016
Brazil	COMPOSITION AN DMETHOD FOR WELL STIMULATION AND REMEDIATION	1120140225150	4/19/2013		
Brazil	MICROEMULSION FLOWBACK AID COMPOSITION AND METHOD OF USING SAME	BR1120140202648	3/27/2013		
Canada	DEMULSIFIER COMPOSITION AND METHOD OF USING SAME	2867595	4/19/2013	2867595	1/10/2017
Canada	MICROEMULSION FLOWBACK AID COMPOSITION AND METHOD OF USING SAME	2864308	3/27/2013		
European Patent Office	DEMULSIFIER COMPOSITION AND METHOD OF USING SAME	137786406	4/19/2013		
	MICROEMULSION FLOWBACK AID COMPOSITION AND METHOD OF USING SAME	137675013	3/27/2013	2831195	3/6/2019
United States	COMPOSITION AN DMETHOD FOR WELL STIMULATION AND REMEDIATION	13431003	3/27/2012	9701888	7/11/2017
United States	DEMULSIFIER COMPOSITION AND METHOD OF USING SAME	15137610	4/25/2016	10041007	8/7/2018
United States	COMPOSITION AN DMETHOD FOR WELL STIMULATION AND REMEDIATION	13452222	4/20/2012	9353261	5/31/2016

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Australia	CHEMICAL TREATMENT METHOD AND ADDITIVE USED TO TREAT FINES MIGRATION AND FLOW THROUGH POROUS MEDIA	20133338370	10/18/2013	20133338370	9/22/2016
Brazil	método de tratamento químico e aditivo usado para tratar migração e fluxo de finos através de meios porosos	BR1120150095488	10/18/2013		
Canada	CHEMICAL TREATMENT METHOD AND ADDITIVE USED TO TREAT FINES MIGRATION AND FLOW THROUGH POROUS MEDIA	2885191	10/18/2013		
	CHEMICAL TREATMENT METHOD AND ADDITIVE USED TO TREAT FINES MIGRATION AND FLOW THROUGH POROUS MEDIA	138510367	10/18/2013	2914685	5/9/2019
United States	CHEMICAL TREATMENT METHOD AND ADDITIVE USED TO TREAT FINES MIGRATION AND FLOW THROUGH POROUS MEDIA	13663604	10/30/2012	9169430	10/27/2015
Canada	PROCESS AND SYSTEM FOR DEWATERING OIL SANDS FINE TAILINGS	2878260	8/21/2013		
United States	PROCESS AND SYSTEM FOR DEWATERING OIL SANDS FINE TAILINGS	13800808	3/13/2013	9963365	5/8/2018
Canada	MONITORING PRODUCED WATER	2904577	3/9/2014		
United States	MONITORING PRODUCED WATER	13804950	3/14/2013	9341058	5/17/2016
United States	MONITORING HYDRAULIC FRACTURING	13833115	3/15/2013	9477238	10/25/2016
India	DEVELOPMENT OF NOVEL TEST PROTOCOL AND ANALYSIS TECHNIQUE TO EVALUATE ASPHALTENE INHIBITOR PERFORMANCE IN EMULSIFIED CRUDE OIL	629MUM2013	12/21/2012		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Australia	PREVENTION OF SLUDGE FORMATION DURING ACIDIZING PROCEDURES	2014238310	2/18/2014	2014238310	4/20/2017
Brazil	prevenção de formação de lama durante procedimentos de acidificação	BR1120150222 455	2/18/2014		
Canada	PREVENTION OF SLUDGE FORMATION DURING ACIDIZING PROCEDURES	2904570	2/18/2014		
China	PREVENTION OF SLUDGE FORMATION DURING ACIDIZING PROCEDURES	201480014371 3	2/18/2014	ZL201480014 3713	6/22/2018
European Patent Office	PREVENTION OF SLUDGE FORMATION DURING ACIDIZING PROCEDURES	147700934	2/18/2014	297055	11/14/2018
United States	CORROSION CONTROL	13662660	10/29/2012	8557338	10/15/2013
Brazil	CORROSION CONTROL	102013033609 2	10/14/2013		
Brazil	polímeros de controle da mobilidade para recuperação melhorada de óleo	BR1120150165 338	1/14/2014		
China	MOBILITY CONTROL POLYMERS FOR ENHANCED OIL RECOVERY	201810928322 0	1/14/2014		
China	MOBILITY CONTROL POLYMERS FOR ENHANCED OIL RECOVERY	201480006136 1	1/14/2014	105121591	9/18/2018
European Patent Office	MOBILITY CONTROL POLYMERS FOR ENHANCED OIL RECOVERY	147466700	1/14/2014		
	MOBILITY CONTROL POLYMERS FOR ENHANCED OIL RECOVERY	14744757	6/19/2015	10323114	6/18/2019
United States	MOBILITY CONTROL POLYMERS FOR ENHANCED OIL RECOVERY	14154701	1/14/2014		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Brazil	espumadores para remoção líquida	BR1120150222 552	3/5/2014		
Canada	FOAMERS FOR LIQUID REMOVAL	2904599	3/5/2014		
Denmark	FOAMERS FOR LIQUID REMOVAL	147796668	3/5/2014	2970748	12/20/2017
European Patent Office	FOAMERS FOR LIQUID REMOVAL	147796668	3/5/2014	2970748	12/20/2017
Great Britain	FOAMERS FOR LIQUID REMOVAL	147796668	3/5/2014	2970748	12/20/2017
Netherlands	FOAMERS FOR LIQUID REMOVAL	147796668	3/5/2014	2970748	12/20/2017
Norway	FOAMERS FOR LIQUID REMOVAL	147796668	3/5/2014	2970748	12/20/2017
United States	FOAMERS FOR LIQUID REMOVAL	14197870	3/5/2014	9702234	7/11/2017
Angola	METHOD OF ASSESSING ASPHALTENE INHIBITOR EFFICIENCY	3081	3/5/2014		
Brazil	método de avaliar a eficiência do inibidor de asfalto	BR1120150166 296	3/5/2014		
Canada	METHOD OF ASSESSING ASPHALTENE INHIBITOR EFFICIENCY	2896724	3/5/2014		
	METHOD OF ASSESSING ASPHALTENE INHIBITOR EFFICIENCY	147698732	3/5/2014	2970798	1/2/2019
Russia	ASSESSMENT METHOD effective inhibitors of asphalt	2015144275	3/5/2014		
United States	METHOD OF ASSESSING ASPHALTENE INHIBITOR EFFICIENCY	15400489	1/6/2017		
United States	METHOD OF ASSESSING ASPHALTENE INHIBITOR EFFICIENCY	14197853	3/5/2014	9574981	2/21/2017
Australia	CHOLINE-BASED CROSSLINKER COMPOSITIONS FOR FRACTURING FLUIDS	2014251001	4/9/2014	2014251001	5/31/2018



Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Brazil	composição para reticular polímeros em solução aquosa, fluido de fratura ou composição de fluido de serviço de poço, e, método para recuperar hidrocarbonetos	BR1120150255787	4/9/2014		
Canada	CHOLINE-BASED CROSSLINKER COMPOSITIONS FOR FRACTURING FLUIDS	2908866	4/9/2014		
European Patent Office	CHOLINE-BASED CROSSLINKER COMPOSITIONS FOR FRACTURING FLUIDS	147829923	4/9/2014		
United States	CHOLINE-BASED CROSSLINKER COMPOSITIONS FOR FRACTURING FLUIDS	14248906	4/9/2014	9790421	10/17/2017
Canada	RHEOLOGY MODIFYING AGENTS FOR SLURRIES	2909528	4/23/2014		
European Patent Office	RHEOLOGY MODIFYING AGENTS FOR SLURRIES	147921035	4/23/2014		
Japan	RHEOLOGY MODIFYING AGENTS FOR SLURRIES	2016511765	4/23/2014	6362676	7/6/2018
South Korea	RHEOLOGY MODIFYING AGENTS FOR SLURRIES	1020157033962	4/23/2014		
Singapore	RHEOLOGY MODIFYING AGENTS FOR SLURRIES	11201508557P	4/23/2014	11201508557P	6/30/2017
United States	RHEOLOGY MODIFYING AGENTS FOR SLURRIES	13875061	5/1/2013	9656914	5/23/2017
United States	RHEOLOGY MODIFYING AGENTS FOR SLURRIES	15490120	4/18/2017	10017624	7/10/2018
Canada	OILFIELD CLEANER AND CORROSION INHIBITOR	2917104	7/1/2014		
United States	Oilfield cleaner and corrosion inhibitor comprising a polyamine sulfonic acid salt	15056355	2/29/2016	9434911	9/6/2016
United States	Oilfield cleaner and corrosion inhibitor comprising a polyamine sulfonic acid salt	14321461	7/1/2014	9303236	4/5/2016

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Angola	ORGANIC DISULFIDE BASED CORROSION INHIBITORS	3189	7/29/2014		
	ORGANIC DISULFIDE BASED CORROSION INHIBITORS	2014296417	7/29/2014	2014296417	5/9/2019
		BR1120160021			
Brazil	método para inibir a corrosão em uma superfície	606	7/29/2014		
Canada	ORGANIC DISULFIDE BASED CORROSION INHIBITORS	2917168	7/29/2014		
		201480043528			
China	ORGANIC DISULFIDE BASED CORROSION INHIBITORS	5	7/29/2014		
Colombia	ORGANIC DISULFIDE BASED CORROSION INHIBITORS	16006509	7/29/2014		
Eurasian Regional Patent	ИНГИБИТОРЫ КОРРОЗИИ НА ОСНОВЕ ОПТАНИЧЕСКИХ ДИСУЛФИДОВ	201690022	7/29/2014		
European Patent Office	ORGANIC DISULFIDE BASED CORROSION INHIBITORS	148328834	7/29/2014		
Nigeria	ORGANIC DISULFIDE BASED CORROSION INHIBITORS	NGPTC2016169 4	7/29/2014	NG/PT/C/16/ 1694	6/5/2018
Qatar	ORGANIC DISULFIDE BASED CORROSION INHIBITORS	QA2016010004 5	7/29/2014		
Saudi Arabia	ORGANIC DISULFIDE BASED CORROSION INHIBITORS	516370473	7/29/2014	5318	4/18/2017
Thailand	ORGANIC DISULFIDE BASED CORROSION INHIBITORS	1601000583	7/29/2014		
United States	ORGANIC DISULFIDE BASED CORROSION INHIBITORS	13958365	8/2/2013	9238588	1/19/2016
	REDUCTION OF HYDROGEN SULFIDE AND/OR MALODOR GASSING FROM WATER VIA THE ADDITION OF PEROXYACETIC ACID/HYDROGEN PEROXIDE PRODUCT				
United States	REDUCTION OF HYDROGEN SULFIDE AND/OR MALODOR GASSING FROM WATER VIA THE ADDITION OF PEROXYACETIC ACID/HYDROGEN PEROXIDE PRODUCT	13891908	5/10/2013	8992780	3/31/2015
United States	REDUCTION OF HYDROGEN SULFIDE AND/OR MALODOR GASSING FROM WATER VIA THE ADDITION OF PEROXYACETIC ACID/HYDROGEN PEROXIDE PRODUCT	14665839	3/23/2015	9663390	5/30/2017

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
United States	REDUCTION OF HYDROGEN SULFIDE AND/OR MALODOR GASSING FROM WATER VIA THE ADDITION OF PEROXYACETIC ACID/HYDROGEN PEROXIDE PRODUCT	15494645	4/24/2017	10081561	9/25/2018
Canada	USE OF EMULSION POLYMERS TO FLOCCULATE SOLIDS IN ORGANIC LIQUIDS	2936656	1/15/2015		
United States	USE OF EMULSION POLYMERS TO FLOCCULATE SOLIDS IN ORGANIC LIQUIDS	144162171	1/23/2014	9834730	12/5/2017
India	PROCESS FOR SCAVENGING HYDROGEN SULFIDE PRESENT IN A FLUID STREAM	668CHE2014	2/13/2014		
	PROCESS FOR SCAVENGING HYDROGEN SULFIDE PRESENT IN A FLUID STREAM	15118588	2/11/2015		
United States	PROCESS FOR SCAVENGING HYDROGEN SULFIDE PRESENT IN A FLUID STREAM	15118588	2/11/2015		
Brazil	METHODS OF DETERMINING BIOCID Efficacy OR MECHANISM OF ACTION USING FLOW CYTOMETRY	BR1120160037162	8/22/2014		
Canada	METHODS OF DETERMINING BIOCID Efficacy OR MECHANISM OF ACTION USING FLOW CYTOMETRY	2921812	8/22/2014		
European Patent Office	METHODS OF DETERMINING BIOCID Efficacy OR MECHANISM OF ACTION USING FLOW CYTOMETRY	148383193	8/22/2014	3036337	9/19/2018
Great Britain	METHODS OF DETERMINING BIOCID Efficacy OR MECHANISM OF ACTION USING FLOW CYTOMETRY	148383193	8/22/2014	3036337	9/19/2018
Netherlands	METHODS OF DETERMINING BIOCID Efficacy OR MECHANISM OF ACTION USING FLOW CYTOMETRY	148383193	8/22/2014	3036337	9/19/2018
United States	METHODS OF DETERMINING BIOCID Efficacy OR MECHANISM OF ACTION USING FLOW CYTOMETRY	14466232	8/22/2014	9382572	7/5/2016

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Argentina	METODOS PARA LA INHIBICION DE LA FORMACION DE OBSTRUCCIONES DE GAS HIDRATO EN CONDUCTOS QUE CONTIENEN UNA MEZCLA DE HIDROCARBURO Y AGUA	2004P103800	10/20/2004	AR046549B1	7/13/2012
Argentina	UN METODO PARA LA INHIBICION DE LA FORMACION DE OBSTRUCCIONES DE HIDRATO DE GAS EN CONDUCTOS QUE CONTIENEN UNA MEZCLA DE HIDROCARBUROS Y AGUA	P120100757	3/8/2012	AR085630B2	3/28/2014
Australia	METHODS FOR INHIBITTING HYDRATE BLOCKAGE IN OIL AND GAS PIPELINES USING SIMPLE QUATERNARY AMMONIUM AND PHOSPHONIUM COMPOUNDS	2004285117	10/14/2004	2004285117	3/11/2010
Canada	METHODS FOR INHIBITTING HYDRATE BLOCKAGE IN OIL AND GAS PIPELINES USING SIMPLE QUATERNARY AMMONIUM AND PHOSPHONIUM COMPOUNDS	2543426	10/14/2004	2543426	12/7/2010
Great Britain	METHODS FOR INHIBITTING HYDRATE BLOCKAGE IN OIL AND GAS PIPELINES USING SIMPLE QUATERNARY AMMONIUM AND PHOSPHONIUM COMPOUNDS	20060009874	10/14/2004	2422840	8/27/2008
Norway	METHODS FOR INHIBITTING HYDRATE BLOCKAGE IN OIL AND GAS PIPELINES USING SIMPLE QUATERNARY AMMONIUM AND PHOSPHONIUM COMPOUNDS	20062235	10/14/2004		
United States	METHODS FOR INHIBITTING HYDRATE BLOCKAGE IN OIL AND GAS PIPELINES USING SIMPLE QUATERNARY AMMONIUM AND PHOSPHONIUM COMPOUNDS	10918191	8/13/2004	7264653	9/4/2007
Venezuela	METHODS FOR INHIBITTING HYDRATE BLOCKAGE IN OIL AND GAS PIPELINES USING SIMPLE QUATERNARY AMMONIUM AND PHOSPHONIUM COMPOUNDS	2004001741	10/20/2004		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Venezuela	Processing aids for enhanced hydrocarbon recovery from oil sands, oil shale and other petroleum residues	2004001576	9/22/2004		
United States	CHEMICAL TREATMENT FOR HYDROSTATIC TEST	10293764	11/13/2002	6815208	11/9/2004
Brunei Darussalam	LOW DOSAGE NAPHTHENATE INHIBITORS	RP202009	6/16/2005	RP/20/2009	10/14/2008
Brazil	METHOD OF INHIBITING THE ORGANIC SOAPS TRAINING.	2005PI12114	6/16/2005	PI0512114-0	12/11/2012
Canada	LOW DOSAGE NAPHTHENATE INHIBITORS	2566563	6/16/2005	2566563	5/17/2011
Switzerland	LOW DOSAGE NAPHTHENATE INHIBITORS	58148420	6/16/2005	1751395	2/11/2009
	METHODS FOR INHIBITING NAPHTHENATE SALT PRECIPITATES AND NAPHTHENATE-STABILIZED EMULSIONS	200580020030	6/16/2005	1977089	5/30/2012
China					
Germany	LOW DOSAGE NAPHTHENATE INHIBITORS	58148420	6/16/2005	1751395	2/11/2009
Denmark	LOW DOSAGE NAPHTHENATE INHIBITORS	58148420	6/16/2005	1751395	2/11/2009
European Patent Office	LOW DOSAGE NAPHTHENATE INHIBITORS	58148420	6/16/2005	1751395	2/11/2009
	METHODS FOR INHIBITING NAPHTHENATE SALT PRECIPITATES AND NAPHTHENATE-STABILIZED EMULSIONS	6005581	1/12/2006	2421245	11/12/2008
Great Britain					
	METHODS FOR INHIBITING NAPHTHENATE SALT PRECIPITATES AND NAPHTHENATE-STABILIZED EMULSIONS	6005581	1/12/2006	2421245	11/12/2008
Great Britain					
	METHODS FOR INHIBITING NAPHTHENATE SALT PRECIPITATES AND NAPHTHENATE-STABILIZED EMULSIONS	PAa2006014087	6/16/2005	262328	11/20/2008
Mexico					

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Netherlands	LOW DOSAGE NAPHTHENATE INHIBITORS	58148420	6/16/2005	1751395	2/11/2009
Norway	Fremgangsmåte for å inhibere dannelsen av naftenatutfellingler eller naftenatstabiliserte emulsjoner	20070177	1/10/2007	341486	11/27/2017
United States	METHODS FOR INHIBITING NAPHTHENATE SALT PRECIPITATES AND NAPHTHENATE-STABILIZED EMULSIONS	10869826	6/16/2004	7776930	8/17/2010
United States	LOW DOSAGE NAPHTHENATE INHIBITORS	10944288	9/17/2004	7776931	8/17/2010
Venezuela	METHODS FOR INHIBITING NAPHTHENATE SALT PRECIPITATES AND NAPHTHENATE-STABILIZED EMULSIONS	2005001188	6/16/2005		
United States	QUANTITATIVE EVALUATION OF EMULSION STABILITY BASED ON CRITICAL ELECTRIC FIELD MEASUREMENTS	11302800	12/13/2005	7373276	5/13/2008
Brazil	PARTIAL PHOSPHONOALKYLATION OF AMINES TO ENHANCE ENVIRONMENTAL PROPERTIES WHILE MAINTAINING SCALE INHIBITOR PERFORMANCE	PI09149414	6/26/2009		
European Patent Office	PREPARATION OF ENVIRONMENTALLY ACCEPTABLE SCALE INHIBITORS	97741896	6/26/2009	2318321	7/18/2018
Great Britain	PREPARATION OF ENVIRONMENTALLY ACCEPTABLE SCALE INHIBITORS	97741896	6/26/2009	2318321	7/18/2018
Norway	PREPARATION OF ENVIRONMENTALLY ACCEPTABLE SCALE INHIBITORS	97741896	6/26/2009	2318321	7/18/2018
Philippines	PARTIAL PHOSPHONOALKYLATION OF AMINES TO ENHANCE ENVIRONMENTAL PROPERTIES WHILE MAINTAINING SCALE INHIBITOR PERFORMANCE	12011500004	6/26/2009		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Singapore	PARTIAL PHOSPHONOALKYLATION OF AMINES TO ENHANCE ENVIRONMENTAL PROPERTIES WHILE MAINTAINING SCALE INHIBITOR PERFORMANCE	2010097202	6/26/2009		
United States	Preparation of environmentally acceptable scale inhibitors	12492825	6/26/2009	9296631	3/29/2016
Canada	INHIBITORS FOR ORGANICS SOLUBILIZED IN PRODUCED WATER	2879167	8/28/2013		
United States	INHIBITORS FOR ORGANICS SOLUBILIZED IN PRODUCED WATER	14012260	8/28/2013	9656889	5/23/2017
Canada	EMULSION BREAKERS INCLUDING POLYESTER FUNCTIONALITIES	2869951	5/15/2013		
European Patent Office	EMULSION BREAKERS INCLUDING POLYESTER FUNCTIONALITIES, ITS METHOD FOR PREPARATION AND A METHOD FOR BREAKING AN EMULSION USING THE EMULSION BREAKER	137291274	5/15/2013	2850158	9/26/2018
United States	EMULSION BREAKERS INCLUDING POLYESTER FUNCTIONALITIES	15450953	3/6/2017		
United States	EMULSION BREAKERS INCLUDING POLYESTER FUNCTIONALITIES	13894563	5/15/2013	9587155	3/7/2017
Australia	LOW DOSAGE POLYMERIC NAPHTHENATE INHIBITORS	2012254007	4/19/2012	2012254007	10/29/2015
Brazil	inibidores de nafenato poliméricos de baixa dosagem	1120130286628	4/19/2012		
China	LOW DOSAGE POLYMERIC NAPHTHENATE INHIBITORS	2012800290484	4/19/2012	ZL201280029048.4	10/19/2016
Denmark	LOW DOSAGE POLYMERIC NAPHTHENATE INHIBITORS	127259018	4/19/2012	2705113	7/8/2015

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
European Patent Office	LOW DOSAGE POLYMERIC NAPHTHENATE INHIBITORS	127259018	4/19/2012	2705113	7/8/2015
Great Britain	LOW DOSAGE POLYMERIC NAPHTHENATE INHIBITORS	127259018	4/19/2012	2705113	7/8/2015
Indonesia	LOW DOSAGE POLYMERIC NAPHTHENATE INHIBITORS	W0020130518 3	4/19/2012	IDP00004202 3	6/30/2016
Netherlands	LOW DOSAGE POLYMERIC NAPHTHENATE INHIBITORS	127259018	4/19/2012	2705113	7/8/2015
Norway	LOW DOSAGE POLYMERIC NAPHTHENATE INHIBITORS	127259018	4/19/2012	2705113	7/8/2015
United States	LOW DOSAGE POLYMERIC NAPHTHENATE INHIBITORS	13450892	4/19/2012	9567509	2/14/2017
Azerbaijan	THERMAL PHASE SEPARATION SIMULATOR	A20130099	2/17/2012		
Brazil	simulador de separação de fase térmico, e, método para utilizar o simulador de separação de fase térmico	112013020883 0	2/17/2012		
Canada	THERMAL PHASE SEPARATION SIMULATOR	2827517	2/17/2012	2827517	7/21/2015
China	THERMAL PHASE SEPARATION SIMULATOR	201280015323 7	2/17/2012	103442778	4/8/2015
Colombia	Simulador térmico de separación de fases	13214732	9/10/2013	13-214732	12/16/2014
European Patent Office	THERMAL PHASE SEPARATION SIMULATOR	127167294	2/17/2012	2675542	11/19/2014
Great Britain	THERMAL PHASE SEPARATION SIMULATOR	127167294	2/17/2012	2675542	11/19/2014
Indonesia	THERMAL PHASE SEPARATION SIMULATOR	W0020130372 2	2/17/2012	IDP00004418 9	1/23/2017
Kazakhstan	THERMAL PHASE SEPARATION SIMULATOR	201316181	2/17/2012	29542	1/23/2015
Mexico	THERMAL PHASE SEPARATION SIMULATOR	20130009410	2/17/2012	337386	3/1/2016
Norway	THERMAL PHASE SEPARATION SIMULATOR	127167294	2/17/2012	2675542	11/19/2014
Oman	THERMAL PHASE SEPARATION SIMULATOR	P2013000196	2/17/2012		
Russia	THERMAL PHASE SEPARATION SIMULATOR	2013138018	2/17/2012	2586094	6/10/2016
United States	THERMAL PHASE SEPARATION SIMULATOR	13399663	2/17/2012	8888362	11/18/2014



Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Australia	WELL TREATMENT	2008263581	6/11/2008	2008263581	5/16/2013
Germany	WELL TREATMENT	87625422	6/11/2008	2173831	6/6/2012
Denmark	WELL TREATMENT	87625422	6/11/2008	2173831	6/6/2012
European Patent Office	WELL TREATMENT	87625422	6/11/2008	2173831	6/6/2012
France	WELL TREATMENT	87625422	6/11/2008	2173831	6/6/2012
Great Britain	WELL TREATMENT	7113426	6/12/2007		
Great Britain	WELL TREATMENT	87625422	6/11/2008	2173831	6/6/2012
Italy	WELL TREATMENT	87625422	6/11/2008	2173831	6/6/2012
Netherlands	WELL TREATMENT	87625422	6/11/2008	2173831	6/6/2012
Turkey	WELL TREATMENT	87625422	6/11/2008	2173831	6/6/2012
United States	WELL TREATMENT	12664023	6/11/2008	8653008	2/18/2014
Austria	SCALE INHIBITING WELL TREATMENT	67651885	8/2/2006	1910495	11/19/2014
Australia	Scale inhibiting well treatment	2006274668	8/2/2006	2006274668	10/6/2011
Canada	SCALE INHIBITING WELL TREATMENT	2614868	8/2/2006	2614868	2/17/2015
Germany	SCALE INHIBITING WELL TREATMENT	67651885	8/2/2006	1910495	11/19/2014
Denmark	SCALE INHIBITING WELL TREATMENT	67651885	8/2/2006	1910495	11/19/2014
European Patent Office	SCALE INHIBITING WELL TREATMENT	67651885	8/2/2006	1910495	11/19/2014
Spain	SCALE INHIBITING WELL TREATMENT	67651885	8/2/2006	1910495	11/19/2014
France	SCALE INHIBITING WELL TREATMENT	67651885	8/2/2006	1910495	11/19/2014
Great Britain	SCALE INHIBITING WELL TREATMENT	67651885	8/2/2006	1910495	11/19/2014
Ireland	SCALE INHIBITING WELL TREATMENT	67651885	8/2/2006	1910495	11/19/2014
Netherlands	SCALE INHIBITING WELL TREATMENT	67651885	8/2/2006	1910495	11/19/2014
Norway	Skjellhindrende brønnbehandling	20081023	2/26/2008	340799	6/19/2017

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
United States	Scale inhibiting well treatment	11997879	8/2/2006	8586511	11/19/2013
Angola	METHOD AND COMPOSITION FOR PREVENTING CORROSION OF METAL SURFACES (AMPHOACETATES )	2448	11/8/2011		
Australia	Method and composition for preventing corrosion of metal surfaces	2011327873	11/8/2011	2011327873	5/4/2017
Brazil	método e composição para prevenir a corrosão de superfícies de metal	1120130113570	11/8/2011		
Canada	METHOD AND COMPOSITION FOR PREVENTING CORROSION OF METAL SURFACES	2817456	11/8/2011		
European Patent Office	METHOD AND COMPOSITION FOR PREVENTING CORROSION OF METAL SURFACES	117826644	11/8/2011		
United States	METHOD AND COMPOSITION FOR PREVENTING CORROSION OF METAL SURFACES	13884380	5/9/2013	10000641	6/19/2018
Canada	HYDROCARBON MOBILITY AND RECOVERY THROUGH IN-SITU COMBUSTION WITH THE ADDITION OF AMMONIA	2846953	9/21/2012		
Indonesia	HYDROCARBON MOBILITY AND RECOVERY THROUGH IN-SITU COMBUSTION WITH THE ADDITION OF AMMONIA	P00201402195	9/21/2012		
Oman	HYDROCARBON MOBILITY AND RECOVERY THROUGH IN-SITU COMBUSTION WITH THE ADDITION OF AMMONIA	P201400053	9/21/2012		
United States	HYDROCARBON MOBILITY AND RECOVERY THROUGH IN-SITU COMBUSTION WITH THE ADDITION OF AMMONIA	14241390	9/21/2012	9574429	2/21/2017
Russia	IN SITU EXTRACTION FROM OIL-BEARING SAND BY AMMONIA	2014153492	5/31/2013	2618798	5/11/2017
Venezuela	IN SITU EXTRACTION OF OILSAND WITH AMMONIA	2013000669	6/4/2013		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Brazil	tratamento por compressão para purga de sulfeto de hidrogênio	BR1120150112 323	12/17/2013		
European Patent Office	SQUEEZE TREATMENT FOR IN SITU SCAVENGING OF HYDROGEN SULFIDE	138647573	12/17/2013		
United States	SQUEEZE TREATMENT FOR IN SITU SCAVENGING OF HYDROGEN SULFIDE	15494728	4/24/2017	9896924	2/20/2018
	SQUEEZE TREATMENT FOR IN SITU SCAVENGING OF HYDROGEN SULFIDE	15899017	2/19/2018	10370951	8/6/2019
United States	SQUEEZE TREATMENT FOR IN SITU SCAVENGING OF HYDROGEN SULFIDE	14108587	12/17/2013	9631467	4/25/2017
Australia	SCAVENGING HYDROGEN SULFIDE	2013361681	12/17/2013	2013361681	7/12/2018
Canada	SCAVENGING HYDROGEN SULFIDE	2889615	12/17/2013		
European Patent Office	SCAVENGING HYDROGEN SULFIDE	138663836	12/17/2013	2935193	10/10/2018
Great Britain	SCAVENGING HYDROGEN SULFIDE	138663836	12/17/2013	2935193	10/10/2018
Netherlands	SCAVENGING HYDROGEN SULFIDE	138663836	12/17/2013	2935193	10/10/2018
Norway	SCAVENGING HYDROGEN SULFIDE	138663836	12/17/2013	2935193	10/10/2018
United States	SCAVENGING HYDROGEN SULFIDE	14108617	12/17/2013	9638018	5/2/2017
Australia	METHOD	2012314144	9/25/2012	2012314144	2/18/2016
Canada	METHOD	2844416	9/25/2012		
European Patent Office	METHOD	127701936	9/25/2012		
United States	METHOD OF INCREASING SCALE INHIBITOR RETENTION	15191201	6/23/2016	10072203	9/11/2018
United States	METHOD OF INCREASING SCALE INHIBITOR RETENTION	16124359	9/7/2018		
United States	METHOD OF INCREASING SCALE INHIBITOR RETENTION	16124359	9/7/2018		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
	METHOD	14239034	2/14/2014		
United States	CORROSION INHIBITORS WITH LOW ENVIRONMENTAL TOXICITY	9288893	4/9/1999	6475431	11/5/2002
United States	SCALE INHIBITORS	9361468	7/27/1999	6379612	4/30/2002
Australia	SCALE INHIBITING WELL TREATMENT	2007204243	1/15/2007	2007204243	1/3/2013
Canada	SCALE INHIBITING WELL TREATMENT	2635032	1/15/2007	2635032	12/10/2013
China	Inhibiting scale of well treatment	200780003107 X	1/15/2007	101374923	1/20/2016
Denmark	SCALE INHIBITING WELL TREATMENT	77049054	1/15/2007	1981947	11/27/2013
European Patent Office	SCALE INHIBITING WELL TREATMENT	77049054	1/15/2007	1981947	11/27/2013
France	SCALE INHIBITING WELL TREATMENT	77049054	1/15/2007	1981947	11/27/2013
Great Britain	SCALE INHIBITING WELL TREATMENT	77049054	1/15/2007	1981947	11/27/2013
Ireland	SCALE INHIBITING WELL TREATMENT	77049054	1/15/2007	1981947	11/27/2013
Netherlands	SCALE INHIBITING WELL TREATMENT	77049054	1/15/2007	1981947	11/27/2013
Norway	SCALE INHIBITING WELL TREATMENT	20083433	1/15/2007		
United States	SCALE INHIBITING WELL TREATMENT	12160104	1/15/2007	8343897	1/1/2013
Australia	WELL TREATMENT	2007285556	8/16/2007	2007285556	1/24/2013
Canada	WELL TREATMENT COMPOSITION FOR INCREASING LIFETIME OF SCALE INHIBITING TREATMENTS	2660097	8/16/2007	2660097	7/10/2012
Germany	WELL TREATMENT	77892453	8/16/2007	2052050	12/15/2010
Denmark	WELL TREATMENT	77892453	8/16/2007	2052050	12/15/2010
European Patent Office	WELL TREATMENT	77892453	8/16/2007	2052050	12/15/2010
France	WELL TREATMENT	77892453	8/16/2007	2052050	12/15/2010

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Great Britain	WELL TREATMENT	77892453	8/16/2007	2052050	12/15/2010
Italy	WELL TREATMENT	77892453	8/16/2007	2052050	12/15/2010
Netherlands	WELL TREATMENT	77892453	8/16/2007	2052050	12/15/2010
Norway	Brønbehending	20091114	3/13/2009	341276	10/2/2017
Turkey	WELL TREATMENT	77892453	8/16/2007	2052050	12/15/2010
United States	WELL TREATMENT COMPRISING A POLYMER FORMED FROM A DIALYL AMMONIUM SALT AND A SCALE INHIBITOR	12377331	8/16/2007	8101554	1/24/2012
Great Britain	METHOD OF MOUNTING AN ARTICLE TO AN OBJECT	20070000225	1/8/2007	2434022	9/29/2010
Great Britain	APPARATUS AND METHOD FOR MOUNTING ANTIFOULING MARKERS	20100012254	7/21/2010	2473526	8/8/2012
Great Britain	Retaining a proppant by use of an organosilane	20070016784	8/29/2007	2453317	12/19/2012
Australia	FRACTURING FLUIDS INCLUDING AMINE OXIDES AS FLOWBACK AIDS	2016203167	1/12/2013	2016203167	2/8/2018
Canada	FRACTURING FLUIDS INCLUDING AMINE OXIDES AS FLOWBACK AIDS	2892816	1/7/2014		
United States	FRACTURING FLUIDS INCLUDING AMINE OXIDES AS FLOWBACK AIDS	13739172	1/11/2013		
Australia	THE USE OF OLIGO-QUATERNARY COMPOSITIONS TO INCREASE SCALE INHIBITOR LIFETIME IN A SUBTERRANEAN FORMATION	2013266411	5/22/2013	2013266411	10/6/2016
Brazil	uso de composições oligo-quaternárias para aumentar tempo de vida do inibidor de incrustação em uma formação subterrânea	112014029138 1	5/22/2013		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
European Patent Office	THE USE OF OLIGO-QUATERNARY COMPOSITIONS TO INCREASE SCALE INHIBITOR LIFETIME IN A SUBTERRANEAN FORMATION	137263869	5/22/2013		
Mexico	THE USE OF OLIGO-QUATERNARY COMPOSITIONS TO INCREASE SCALE INHIBITOR LIFETIME IN A SUBTERRANEAN FORMATION	MXa2014013456	5/22/2013		
Nigeria	THE USE OF OLIGO-QUATERNARY COMPOSITIONS TO INCREASE SCALE INHIBITOR LIFETIME IN A SUBTERRANEAN FORMATION	NGPTC2014551	5/22/2013	NG/PT/C/2014/551	9/5/2016
United States	Use of oligo-quaternary compositions to increase scale inhibitor lifetime in a subterranean formation	13899631	5/22/2013	9803450	10/31/2017
United States	Use of oligo-quaternary compositions to increase scale inhibitor lifetime in a subterranean formation	13899643	5/22/2013	9624758	4/18/2017
Australia	ENVIRONMENTALLY BENEFICIAL RECYCLING OF BRINES IN THE PROCESS OF REDUCING FRICTION RESULTING FROM TURBULENT FLOW	2013302472	8/16/2013	2013302472	5/11/2017
Brazil	ENVIRONMENTALLY BENEFICIAL RECYCLING OF BRINES IN THE PROCESS OF REDUCING FRICTION RESULTING FROM TURBULENT FLOW	BR1120150022669	8/16/2013		
	ENVIRONMENTALLY BENEFICIAL RECYCLING OF BRINES IN THE PROCESS OF REDUCING FRICTION RESULTING FROM TURBULENT FLOW	2880166	8/16/2013	2880166	6/18/2019
European Patent Office	ENVIRONMENTALLY BENEFICIAL RECYCLING OF BRINES IN THE PROCESS OF REDUCING FRICTION RESULTING FROM TURBULENT FLOW	138297510	8/16/2013		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
United States	ENVIRONMENTALLY BENEFICIAL RECYCLING OF BRINES IN THE PROCESS OF REDUCING FRICTION RESULTING FROM TURBULENT FLOW	13968483	8/16/2013	9404033	8/2/2016
Australia	ANTI-AGGLOMERANTS FOR CONTROLLING GAS HYDRATES	2018211357	10/8/2014		
Australia	ANTI-AGGLOMERANTS FOR CONTROLLING GAS HYDRATES	2014355141	10/8/2014	2014355141	8/23/2018
Brazil	ANTI-AGGLOMERANTS FOR CONTROLLING GAS HYDRATES	BR1120160117 980	10/8/2014		
Canada	ANTI-AGGLOMERANTS FOR CONTROLLING GAS HYDRATES	2931192	10/8/2014		
Mexico	ANTI-AGGLOMERANTS FOR CONTROLLING GAS HYDRATES	MXa20160068 52	10/8/2014		
	ANTI-AGGLOMERANTS FOR CONTROLLING GAS HYDRATES	NGPTC2016190 8	10/8/2014	NGPTC20161 908	1/21/2019
African Intellectual Property Organization	ANTI-AGGLOMERANTS FOR CONTROLLING GAS HYDRATES	1201600189	10/8/2014		
United States	ANTI-AGGLOMERANTS FOR CONTROLLING GAS HYDRATES	14090621	11/26/2013	9410073	8/9/2016
	ANTI-AGGLOMERANTS FOR CONTROLLING GAS HYDRATES	15231424	8/8/2016	10281086	5/7/2019
Australia	LOW DOSE GAS HYDRATE INHIBITOR COMPOSITIONS	2015374274	12/28/2015		
Brazil	composições inibidoras de hidrato de gás de baixa dose	BR1120170140 934	12/28/2015		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Canada	LOW DOSE GAS HYDRATE INHIBITOR COMPOSITIONS	2972111	12/28/2015		
European Patent Office	LOW DOSE GAS HYDRATE INHIBITOR COMPOSITIONS	158760801	12/28/2015		
Saudi Arabia	LOW DOSE GAS HYDRATE INHIBITOR COMPOSITIONS	517381869	12/28/2015		
United States	LOW DOSE GAS HYDRATE INHIBITOR COMPOSITIONS	14587777	12/31/2014	9834720	12/5/2017
Brazil	?método para aumentar a recuperação de óleo bruto a partir de uma formação subterrânea contendo hidrocarboneto?	BR1120160251490	4/22/2015		
Saudi Arabia	IMPROVED PERMEABILITY OF SUBTERRANEAN RESERVOIRS USING ACID DIVERSION	516380153	4/22/2015		
	PERMEABILITY OF SUBTERRANEAN RESERVOIRS USING ACID DIVERSION	14264664	4/29/2014	10253609	4/9/2019
	QUANTIFICATION OF ASPHALTENE INHIBITORS IN CRUDE OIL USING THERMAL ANALYSIS COUPLED WITH MASS SPECTROMETRY	14473287	8/29/2014	9453830	9/27/2016
United States					
Australia	SURFACTANT ASSISTED OIL RECOVERY USING ALCOHOL ETHER SULFONATES AND CATIONIC SURFACTANTS	2015241338	3/24/2015		
Brazil	SURFACTANT ASSISTED OIL RECOVERY USING ALCOHOL ETHER SULFONATES AND CATIONIC SURFACTANTS	BR1120160226380	3/24/2015		
Canada	SURFACTANT ASSISTED OIL RECOVERY USING ALCOHOL ETHER SULFONATES AND CATIONIC SURFACTANTS	2944356	3/24/2015		
China	SURFACTANT ASSISTED OIL RECOVERY USING ALCOHOL ETHER SULFONATES AND CATIONIC SURFACTANTS	2015800218485	3/24/2015		
Colombia	SURFACTANT ASSISTED OIL RECOVERY USING ALCOHOL ETHER SULFONATES AND CATIONIC SURFACTANTS	NC20160002620	3/24/2015		



Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
European Patent Office	SURFACTANT ASSISTED OIL RECOVERY USING ALCOHOL ETHER SULFONATES AND CATIONIC SURFACTANTS	157734195	3/24/2015		
Mexico	SURFACTANT ASSISTED OIL RECOVERY USING ALCOHOL ETHER SULFONATES AND CATIONIC SURFACTANTS	MXa20160129 81	3/24/2015		
	EXTRACTION OF OIL BY THE SURFACE-ACTIVE SUBSTANCES BY USING THE ESTERS OF SULFONATE AND ALCOHOL AND CATION SURFACE-ACTIVE SUBSTANCES	2016142368	3/24/2015	2690986	6/7/2019
United States	SURFACTANT ASSISTED OIL RECOVERY USING ALCOHOL ETHER SULFONATES AND CATIONIC SURFACTANTS	14231307	3/31/2014	9926486	3/27/2018
United States	SURFACTANT ASSISTED OIL RECOVERY USING ALCOHOL ETHER SULFONATES AND CATIONIC SURFACTANTS	15839523	12/12/2017		
United Arab Emirates	POLYMER EMULSIONS FOR USE IN CRUDE OIL RECOVERY	P60000682017	7/29/2015		
Angola	POLYMER EMULSIONS FOR USE IN CRUDE OIL RECOVERY	3407	7/29/2015		
Australia	POLYMER EMULSIONS FOR USE IN CRUDE OIL RECOVERY	2015296573	7/29/2015		
Bahrain	POLYMER EMULSIONS FOR USE IN CRUDE OIL RECOVERY	20170015	7/29/2015		
Brazil	emulsões de polímero para uso em restauração de óleo cru	BR1120170019 515	7/29/2015		
Canada	POLYMER EMULSIONS FOR USE IN CRUDE OIL RECOVERY	2956444	7/29/2015		
China	POLYMER EMULSIONS FOR USE IN CRUDE OIL RECOVERY	201580049742 6	7/29/2015		
Colombia	POLYMER EMULSIONS FOR USE IN CRUDE OIL RECOVERY	NC2017000072 6	7/29/2015		
Eurasian Regional Patent	ПОЛИМЕРНЫЕ ЭМУЛЬСИИ ДЛЯ ПРИМЕНЕНИЯ ПРИ ИЗВЛЕЧЕНИИ СЫРОЙ НЕФТИ	201790081	7/29/2015		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Ecuador	POLYMER EMULSIONS FOR USE IN CRUDE OIL RECOVERY	IEPI20175887	7/29/2015		
Egypt	POLYMER EMULSIONS FOR USE IN CRUDE OIL RECOVERY	2017141	7/29/2015		
European Patent Office	POLYMER EMULSIONS FOR USE IN CRUDE OIL RECOVERY	158273011	7/29/2015		
Israel	POLYMER EMULSIONS FOR USE IN CRUDE OIL RECOVERY	250283	7/29/2015		
India	POLYMER EMULSIONS FOR USE IN CRUDE OIL RECOVERY	201717003169	7/29/2015		
Mexico	POLYMER EMULSIONS FOR USE IN CRUDE OIL RECOVERY	MXa20170012 82	7/29/2015		
African Intellectual Property Organization	POLYMER EMULSIONS FOR USE IN CRUDE OIL RECOVERY	1201700032	7/29/2015		
Oman	POLYMER EMULSIONS FOR USE IN CRUDE OIL RECOVERY	OMP20170002 9	7/29/2015		
Qatar	POLYMER EMULSIONS FOR USE IN CRUDE OIL RECOVERY	QA2017010004 6	7/29/2015		
Saudi Arabia	POLYMER EMULSIONS FOR USE IN CRUDE OIL RECOVERY	517380794	7/29/2015		
United States	POLYMER EMULSIONS FOR USE IN CRUDE OIL RECOVERY	14445599	7/29/2014		
Argentina	WEAK GEL SYSTEM FOR CHEMICAL ENHANCED OIL RECOVERY	P160103563	11/21/2016		
Australia	WEAK GEL SYSTEM FOR CHEMICAL ENHANCED OIL RECOVERY	2016359679	11/23/2016		
Brazil	WEAK GEL SYSTEM FOR CHEMICAL ENHANCED OIL RECOVERY	BR1120180102 946	11/23/2016		
Canada	WEAK GEL SYSTEM FOR CHEMICAL ENHANCED OIL RECOVERY	3005976	11/23/2016		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Colombia	Sistema de gel débil para la recuperación de petróleo mejorado químico	20180005362	5/23/2018		
European Patent Office	WEAK GEL SYSTEM FOR CHEMICAL ENHANCED OIL RECOVERY	168692143	11/23/2016		
Mexico	WEAK GEL SYSTEM FOR CHEMICAL ENHANCED OIL RECOVERY	MXa2018006395	11/23/2016		
Russia	WEAK GEL SYSTEM FOR CHEMICAL ENHANCED OIL RECOVERY	2018122762	11/23/2016		
	WEAK GEL SYSTEM FOR CHEMICAL ENHANCED OIL RECOVERY	16449766	6/24/2019		
	WEAK GEL SYSTEM FOR CHEMICAL ENHANCED OIL RECOVERY	15360148	11/23/2016	10370585	8/6/2019
World Intellectual Patent Organization	WEAK GEL SYSTEM FOR CHEMICAL ENHANCED OIL RECOVERY	PCTUS2016063469	11/23/2016		
Canada	REVERSE EMULSION BREAKER POLYMERS	2913606	12/1/2015		
United States	REVERSE EMULSION BREAKER POLYMERS	14598034	1/15/2015	9260545	2/16/2016
United States	REVERSE EMULSION BREAKER POLYMERS	15043017	2/12/2016	9434803	9/6/2016
Australia	USE OF ANTI-AGGLOMERANTS IN HIGH GAS TO OIL RATIO FORMATIONS	2015380352	12/10/2015		
European Patent Office	USE OF ANTI-AGGLOMERANTS IN HIGH GAS TO OIL RATIO FORMATIONS	158806422	12/10/2015		
GCC (Gulf Co-op Council)	USE OF ANTI-AGGLOMERANTS IN HIGH GAS TO OIL RATIO FORMATIONS	GC201630801	1/28/2016		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
United States	USE OF ANTI-AGGLOMERANTS IN HIGH GAS TO OIL RATIO FORMATIONS	14610789	1/30/2015	9988568	6/5/2018
United States	SOLID ANTIMICROBIAL GLUTARALDEHYDE COMPOSITIONS AND THEIR USES	15450257	3/6/2017		
World Intellectual Patent Organization	SOLID ANTIMICROBIAL GLUTARALDEHYDE COMPOSITIONS AND THEIR USES	PCTUS2017020 862	3/6/2017		
Australia	CATIONIC AMMONIUM SURFACTANTS AS LOW DOSAGE HYDRATE INHIBITORS	2015339100	10/30/2015		
Brazil	composição inibidora de hidrato, e, método para inibição da formulação de aglomerantes de hidrato.	BR1120170088 614	10/30/2015		
Saudi Arabia	CATIONIC AMMONIUM SURFACTANTS AS LOW DOSAGE HYDRATE INHIBITORS	517381415	10/30/2015		
United States	CATIONIC AMMONIUM SURFACTANTS AS LOW DOSAGE HYDRATE INHIBITORS	14528877	10/30/2014	9765254	9/19/2017
United States	CATIONIC AMMONIUM SURFACTANTS AS LOW DOSAGE HYDRATE INHIBITORS	15522906	10/30/2015		
Australia	THERMALLY STABLE POLYMERS FOR ENHANCED OIL RECOVERY	2015376872	12/28/2015		
Brazil	polímeros termicamente estáveis para recuperação de petróleo realçada	BR1120170133 229	12/28/2015		
China	THERMALLY STABLE POLYMERS FOR ENHANCED OIL RECOVERY	201580069704 7	12/28/2015		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
European Patent Office	THERMALLY STABLE POLYMERS FOR ENHANCED OIL RECOVERY	158782946	12/28/2015		
United States	THERMALLY STABLE POLYMERS FOR ENHANCED OIL RECOVERY	14594706	1/12/2015		
Argentina	SALES DE DIFENILIODONIO COMO INHIBIDORAS DE LA SULFIDOGENESIS Y ANTIMICROBIANAS	P160100305	2/3/2016		
Australia	DIPHENYLIODONIUM SALTS AS SULFIDOGENESIS INHIBITORS AND ANTIMICROBIALS	2016215527	2/2/2016		
Brazil	métodos para reduzir ou impedir crescimento de um micróbio e para reduzir a concentração de sulfeto de hidrogênio, e, composição.	BR1120170163985	2/2/2016		
Canada	DIPHENYLIODONIUM SALTS AS SULFIDOGENESIS INHIBITORS AND ANTIMICROBIALS	2975910	2/2/2016		
Colombia	DIPHENYLIODONIUM SALTS AS SULFIDOGENESIS INHIBITORS AND ANTIMICROBIALS	NC20170006946	2/2/2016		
Ecuador	DIPHENYLIODONIUM SALTS AS SULFIDOGENESIS INHIBITORS AND ANTIMICROBIALS	IEPI201743927	2/2/2016		
European Patent Office	DIPHENYLIODONIUM SALTS AS SULFIDOGENESIS INHIBITORS AND ANTIMICROBIALS	167470707	2/2/2016		
Nigeria	DIPHENYLIODONIUM SALTS AS SULFIDOGENESIS INHIBITORS AND ANTIMICROBIALS	NGPTC20172328	2/2/2016		
African Intellectual Property Organization	DIPHENYLIODONIUM SALTS AS SULFIDOGENESIS INHIBITORS AND ANTIMICROBIALS	1201700308	2/2/2016		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Russia	DIPHENYLIODONIUM SALTS AS SULFIDOGENESIS INHIBITORS AND ANTIMICROBIALS	2017127510	2/2/2016	2673483	11/27/2018
United States	DIPHENYLIODONIUM SALTS AS SULFIDOGENESIS INHIBITORS AND ANTIMICROBIALS	15013595	2/2/2016	10098346	10/16/2018
Argentina	POLÍMEROS PARA RUPTURA DE EMULSIÓN INVERSA	P160100578	3/4/2016		
Canada	REVERSE EMULSION BREAKER POLYMERS	2978434	3/1/2016		
United States	REVERSE EMULSION BREAKER POLYMERS	15058113	3/1/2016	9914882	3/13/2018
Argentina	POLÍMEROS PARA RUPTURA DE EMULSIÓN INVERSA	P160100579	3/4/2016		
Canada	REVERSE EMULSION BREAKER POLYMERS	2978437	3/2/2016		
United States	REVERSE EMULSION BREAKER POLYMERS	15058786	3/2/2016	10072217	9/11/2018
Argentina	EXTRACCIÓN DE LÍQUIDO ASISTIDA POR ESPUMA UTILIZANDO SULFONATOS DE ALCOHOL ÉTER	P160100533	3/1/2016		
Australia	FOAM ASSISTED LIQUID REMOVAL USING ALCOHOL ETHER SULFONATES	2016226361	3/1/2016		
Brazil	método para remover um fluido de um poço de gás ou petróleo, um furo de poço ou uma tubulação.	BR1120170186578	3/1/2016		
Canada	FOAM ASSISTED LIQUID REMOVAL USING ALCOHOL ETHER SULFONATES	2978559	3/1/2016		
European Patent Office	FOAM ASSISTED LIQUID REMOVAL USING ALCOHOL ETHER SULFONATES	167593524	3/1/2016		
Russia	FOAM ASSISTED LIQUID REMOVAL USING ALCOHOL ETHER SULFONATES	2017130862	3/1/2016		
United States	FOAM ASSISTED LIQUID REMOVAL USING ALCOHOL ETHER SULFONATES	15057772	3/1/2016	9862882	1/9/2018

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
United States	FLUORINE-CONTAINING AGENTS FOR ENHANCING HYDRATE INHIBITORS	15087237	3/31/2016	10113128	10/30/2018
European Patent Office	CORROSION INHIBITORS AND KINETIC HYDRATE INHIBITORS	167496645	2/8/2016		
GCC (Gulf Cooperation Council)	CORROSION INHIBITORS AND KINETIC HYDRATE INHIBITORS	GC201630849	2/9/2016		
Tunisia	CORROSION INHIBITORS AND KINETIC HYDRATE INHIBITORS	TN20170314	2/8/2016		
United States	CORROSION INHIBITORS AND KINETIC HYDRATE INHIBITORS	15018281 BR1120170269 988	2/8/2016		
Brazil	REVERSE EMULSION BREAKER COPOLYMERS	2989627	6/16/2016		
Canada	REVERSE EMULSION BREAKER COPOLYMERS	20170012895	12/15/2017		
Colombia	Copolímeros de rompedores de emulsión inversa	IEPI201783245	6/16/2016		
Ecuador	REVERSE EMULSION BREAKER COPOLYMERS	MXa20170166 92	6/16/2016		
Mexico	REVERSE EMULSION BREAKER COPOLYMERS	15184240	6/16/2016	10190055	1/29/2019
United States	PREPARATION OF NEW STABLE HYDROGEN SULFIDE SCAVENGERS USEFUL IN BOTH WATER AS WELL AS OIL MEDIUM APPLICATIONS	15717338	9/27/2017		
World Intellectual Patent Organization	PREPARATION OF NEW STABLE HYDROGEN SULFIDE SCAVENGERS USEFUL IN BOTH WATER AS WELL AS OIL MEDIUM APPLICATIONS	PCTUS2017053 680	9/27/2017		
United States	METAL-CATALYZED OXIDATIVE COUPLING OF THIOLS	15228364	8/4/2016	9834509	12/5/2017

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
World Intellectual Patent Organization	METAL-CATALYZED OXIDATIVE COUPLING OF THIOLS	PCTUS2016045 464	8/4/2016		
Argentina	METHODS OF MAKING ACRYLAMIDE-ACRYLIC ACID COPOLYMERS	P160101887	6/23/2016		
Argentina	COPOLÍMEROS ACRILAMIDA-ÁCIDO ACRÍLICO SUMAMENTE ALEATORIOS	P160101942	6/28/2016		
Australia	METHODS OF MAKING ACRYLAMIDE-ACRYLIC ACID COPOLYMERS	2016285545	6/23/2016		
Australia	HIGHLY RANDOM ACRYLAMIDE-ACRYLIC ACID COPOLYMERS	2016285546	6/23/2016		
Brazil	METHODS OF MAKING ACRYLAMIDE-ACRYLIC ACID COPOLYMERS	BR1120170271 516	6/23/2016		
Brazil	composição, método para formação de uma composição de polímero reticulado diluída, e, uso de uma composição	112017028261 5	6/23/2016		
Canada	METHODS OF MAKING ACRYLAMIDE-ACRYLIC ACID COPOLYMERS	2989873	6/23/2016		
Canada	HIGHLY RANDOM ACRYLAMIDE-ACRYLIC ACID COPOLYMERS	2989875	6/23/2016		
China	METHODS OF MAKING ACRYLAMIDE-ACRYLIC ACID COPOLYMERS	201680035623 X	6/23/2016		
China	HIGHLY RANDOM ACRYLAMIDE-ACRYLIC ACID COPOLYMERS	201680036453 7	6/23/2016		



Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
European Patent Office	METHODS OF MAKING ACRYLAMIDE-ACRYLIC ACID COPOLYMERS	EP168184927	6/23/2016		
European Patent Office	HIGHLY RANDOM ACRYLAMIDE-ACRYLIC ACID COPOLYMERS	20160818493	6/23/2016		
Mexico	METHODS OF MAKING ACRYLAMIDE-ACRYLIC ACID COPOLYMERS	MXa20170168 69	6/23/2016		
Mexico	HIGHLY RANDOM ACRYLAMIDE-ACRYLIC ACID COPOLYMERS	MXa20170168 64	6/23/2016		
	METHODS OF MAKING ACRYLAMIDE-ACRYLIC ACID COPOLYMERS	15190364	6/23/2016	10179855	1/15/2019
United States	HIGHLY RANDOM ACRYLAMIDE-ACRYLIC ACID COPOLYMERS	15190381	6/23/2016		
Australia	INVERTIBLE WATER-IN-OIL LATICES AND METHODS OF USE	2016261924	5/12/2016		
Brazil	látex invertível, métodos para formar um látex invertível e para recuperar compostos de hidrocarboneto, e, uso de um látex invertível.	BR1120170241 200	5/12/2016		
Canada	INVERTIBLE WATER-IN-OIL LATICES AND METHODS OF USE	2985503	5/12/2016		
China	INVERTIBLE WATER-IN-OIL LATICES AND METHODS OF USE	201680027663 X	5/12/2016		
European Patent Office	INVERTIBLE WATER-IN-OIL LATICES AND METHODS OF USE	EP167935089	5/12/2016		
Mexico	INVERTIBLE WATER-IN-OIL LATICES AND METHODS OF USE	MXa20170145 23	5/12/2016		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
United States	INVERTIBLE WATER-IN-OIL LATICES AND METHODS OF USE	15152833	5/12/2016	9822297	11/21/2017
Argentina	APPARATUS AND METHOD FOR INVERTING POLYMER LATICES	P160101377	5/12/2016		
Australia	APPARATUS AND METHOD FOR INVERTING POLYMER LATICES	2016262083	5/12/2016		
	métodos para inversão de um látex de água em óleo e para recuperação de um fluido de hidrocarboneto a partir de um reservatório subterrâneo, sistema para inversão, e, uso de um sistema para inversão	BR1120170242 192	5/12/2016		
Brazil	APPARATUS AND METHOD FOR INVERTING POLYMER LATICES	2985513	5/12/2016		
Canada	APPARATUS AND METHOD FOR INVERTING POLYMER LATICES	201680027561 8	5/12/2016		
China	APPARATUS AND METHOD FOR INVERTING POLYMER LATICES	167935360	5/12/2016		
European Patent Office	APPARATUS AND METHOD FOR INVERTING POLYMER LATICES	MXa20170145 26	5/12/2016		
Mexico	APPARATUS AND METHOD FOR INVERTING POLYMER LATICES	15152852	5/12/2016	10047274	8/14/2018
United States	CARBONYL FUNCTIONAL INVERSION AGENTS FOR WATER-IN-OIL LATICES AND METHODS OF USE	2016304757	8/4/2016		
Australia	NONIONIC INVERSION AGENTS FOR WATER-IN-OIL LATICES AND METHODS OF USE	2016304759	8/4/2016		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Australia	PHOSPHORUS FUNCTIONAL INVERSION AGENTS FOR WATER-IN-OIL LATICES AND METHODS OF USE	2016307432	8/4/2016		
Brazil	látex de água em óleo, métodos para formar um látex invertível e para recuperar compostos de hidrocarboneto, e, uso de um látex	BR1120180024 767	8/4/2016		
Brazil	látex de água em óleo, métodos para formar um látex invertível e para recuperar compostos de hidrocarboneto, e, uso de um látex.	BR1120180024 694	8/4/2016		
Brazil	látex de água em óleo, métodos para formar um látex reversível e para recuperar compostos de hidrocarboneto, e, uso de um látex	BR1120180024 678	8/4/2016		
Canada	CARBONYL FUNCTIONAL INVERSION AGENTS FOR WATER-IN-OIL LATICES AND METHODS OF USE	2994677	8/4/2016		
Canada	NONIONIC INVERSION AGENTS FOR WATER-IN-OIL LATICES AND METHODS OF USE	2994681	8/4/2016		
Canada	PHOSPHORUS FUNCTIONAL INVERSION AGENTS FOR WATER-IN-OIL LATICES AND METHODS OF USE	2994684	8/4/2016		
China	CARBONYL FUNCTIONAL INVERSION AGENTS FOR WATER-IN-OIL LATICES AND METHODS OF USE	201680046401 8	8/4/2016		
China	NONIONIC INVERSION AGENTS FOR WATER-IN-OIL LATICES AND METHODS OF USE	201680046353 2	8/4/2016		
China	PHOSPHORUS FUNCTIONAL INVERSION AGENTS FOR WATER-IN-OIL LATICES AND METHODS OF USE	201680046395 6	8/4/2016		
European Patent Office	CARBONYL FUNCTIONAL INVERSION AGENTS FOR WATER-IN-OIL LATICES AND METHODS OF USE	168356608	8/4/2016		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
European Patent Office	NONIONIC INVERSION AGENTS FOR WATER-IN-OIL LATICES AND METHODS OF USE	168356616	8/4/2016		
European Patent Office	PHOSPHORUS FUNCTIONAL INVERSION AGENTS FOR WATER-IN-OIL LATICES AND METHODS OF USE	168356665	8/4/2016		
Mexico	CARBONYL FUNCTIONAL INVERSION AGENTS FOR WATER-IN-OIL LATICES AND METHODS OF USE	MXa2018001619	8/4/2016		
Mexico	NONIONIC INVERSION AGENTS FOR WATER-IN-OIL LATICES AND METHODS OF USE	MXa2018001621	8/4/2016		
Mexico	PHOSPHORUS FUNCTIONAL INVERSION AGENTS FOR WATER-IN-OIL LATICES AND METHODS OF USE	MXa2018001622	8/4/2016		
United States	CARBONYL FUNCTIONAL INVERSION AGENTS FOR WATER-IN-OIL LATICES AND METHODS OF USE	15228446	8/4/2016	9957437	5/1/2018
	NONIONIC INVERSION AGENTS FOR WATER-IN-OIL LATICES AND METHODS OF USE	15228473	8/4/2016	10577532	6/11/2019
United States	PHOSPHORUS FUNCTIONAL INVERSION AGENTS FOR WATER-IN-OIL LATICES AND METHODS OF USE	15228490	8/4/2016		
World Intellectual Patent Organization	CARBONYL FUNCTIONAL INVERSION AGENTS FOR WATER-IN-OIL LATICES AND METHODS OF USE	PCTUS2016045541	8/4/2016		
World Intellectual Patent Organization	NONIONIC INVERSION AGENTS FOR WATER-IN-OIL LATICES AND METHODS OF USE	PCTUS2016045546	8/4/2016		
World Intellectual	PHOSPHORUS FUNCTIONAL INVERSION AGENTS FOR WATER-IN-OIL LATICES AND METHODS OF USE	PCTUS2016045590	8/4/2016		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Patent Organization					
Australia	COMPOSITIONS FOR ENHANCED OIL RECOVERY	2016222831	2/24/2016		
Brazil	composição, método para aumentar recuperação de óleo cru, e, usos de uma composição e de uma emulsão.	BR1120170174 049	2/24/2016		
Canada	COMPOSITIONS FOR ENHANCED OIL RECOVERY	2976263	2/24/2016		
European Patent Office	COMPOSITIONS FOR ENHANCED OIL RECOVERY	167562396	2/24/2016		
Russia	COMPOSITIONS FOR ENHANCED OIL RECOVERY	2017129837	2/24/2016		
United States	COMPOSITIONS FOR ENHANCED OIL RECOVERY	16004889	6/11/2018		
Argentina	FLUIDOS DE PERFORACIÓN Y MÉTODOS DE USO	P160101741	6/10/2016		
Australia	DRILLING FLUIDS AND METHODS OF USE	2016276716	6/9/2016		
Brazil	DRILLING FLUIDS AND METHODS OF USE	BR1120170263 696	6/9/2016		
Canada	DRILLING FLUIDS AND METHODS OF USE	2987773	6/9/2016		
Colombia	DRILLING FLUIDS AND METHODS OF USE	NC2017001226 5	6/9/2016		
European Patent Office	DRILLING FLUIDS AND METHODS OF USE	EP168082618	6/9/2016		
Mexico	DRILLING FLUIDS AND METHODS OF USE	MXa20170160 22	6/9/2016		
Russia	DRILLING FLUIDS AND METHODS OF USE	2018100267	6/9/2016		
United States	DRILLING FLUIDS AND METHODS OF USE	15177808	6/9/2016		
Argentina	CROSSLINKER COMPOSITION INCLUDING SYNTHETIC LAYERED SILICATE	P160101355	5/11/2016		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Australia	CROSSLINKER COMPOSITION INCLUDING SYNTHETIC LAYERED SILICATE	2016261823	5/11/2016		
Brazil	composição, métodos para formar uma composição injetável e para recuperar compostos de hidrocarboneto, e, uso de uma composição.	BR1120170242290	5/11/2016		
Canada	CROSSLINKER COMPOSITION INCLUDING SYNTHETIC LAYERED SILICATE	2985488	5/11/2016		
Colombia	Composición reticulante que incluye silicato sintético en capas	20170011493	11/9/2017		
European Patent Office	CROSSLINKER COMPOSITION INCLUDING SYNTHETIC LAYERED SILICATE	167934363	5/11/2016		
Mexico	CROSSLINKER COMPOSITION INCLUDING SYNTHETIC LAYERED SILICATE	MXa2017014464	5/11/2016		
Russia	CROSSLINKER COMPOSITION INCLUDING SYNTHETIC LAYERED SILICATE	2017143126	5/11/2016		
	CROSSLINKER COMPOSITION INCLUDING SYNTHETIC LAYERED SILICATE	15151950	5/11/2016	10240081	3/26/2019
Argentina	CHEMICAL ENHANCED OIL RECOVERY	P160101943	6/28/2016		
Brazil	processo e aparelho para tratamento de água, e, uso.	1120170276100	6/24/2016		
Canada	PROCESS FOR THE TREATMENT OF PRODUCED WATER FROM CHEMICAL ENHANCED OIL RECOVERY	2990554	6/24/2016		
European Patent Office	PROCESS FOR THE TREATMENT OF PRODUCED WATER FROM CHEMICAL ENHANCED OIL RECOVERY	167344647	6/24/2016		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
United States	PROCESS FOR THE TREATMENT OF PRODUCED WATER FROM CHEMICAL ENHANCED OIL RECOVERY	15741050	6/24/2016		
European Patent Office	NON-CORROSIVE COMBINATION FOAMER	161736038	6/8/2016		
Netherlands	Non-Corrosive Foaming Composition.	20152015267	8/5/2015	2015267	4/10/2018
Argentina	SOLID CHEMICALS INJECTION SYSTEM FOR OIL FIELD APPLICATIONS	P160103540	11/18/2016		
Australia	SOLID CHEMICALS INJECTION SYSTEM FOR OIL FIELD APPLICATIONS	2016358092	11/18/2016		
Brazil	SOLID CHEMICALS INJECTION SYSTEM FOR OIL FIELD APPLICATIONS	BR1120180099880	11/18/2016		
Canada	SOLID CHEMICALS INJECTION SYSTEM FOR OIL FIELD APPLICATIONS	3005350	11/18/2016		
China	SOLID CHEMICALS INJECTION SYSTEM FOR OIL FIELD APPLICATIONS	2016800667578	11/18/2016		
European Patent Office	SOLID CHEMICALS INJECTION SYSTEM FOR OIL FIELD APPLICATIONS	168672012	11/18/2016		
Mexico	SOLID CHEMICALS INJECTION SYSTEM FOR OIL FIELD APPLICATIONS	MXa2018006248	11/18/2016		
	SOLID CHEMICALS INJECTION SYSTEM FOR OIL FIELD APPLICATIONS	14946244	11/19/2015	10280714	5/7/2019
World Intellectual Patent Organization	SOLID CHEMICALS INJECTION SYSTEM FOR OIL FIELD APPLICATIONS	PCTUS2016062711	11/18/2016		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Argentina	CLEANING AND REMOVAL OF WAX DEPOSITS IN OIL AND GAS WELLS USING CATIONIC POLYMERS	P160102272	7/26/2016		
Canada	CLEANING AND REMOVAL OF WAX DEPOSITS IN OIL AND GAS WELLS USING CATIONIC POLYMERS	2993189	7/26/2016		
Mexico	CLEANING AND REMOVAL OF WAX DEPOSITS IN OIL AND GAS WELLS USING CATIONIC POLYMERS	MXa2018001107	7/26/2016		
United States	CLEANING AND REMOVAL OF WAX DEPOSITS IN OIL AND GAS WELLS USING CATIONIC POLYMERS	15219919	7/26/2016		
Brazil	METHODS OF AND COMPOSITIONS FOR TREATING A STREAM COMPRISING CRUDE OIL AND WATER	1120180109282	12/2/2016		
Canada	METHODS OF AND COMPOSITIONS FOR TREATING A STREAM COMPRISING CRUDE OIL AND WATER	3007130	12/2/2016		
Colombia	METHODS OF AND COMPOSITIONS FOR TREATING A STREAM COMPRISING CRUDE OIL AND WATER	NC20180006865	12/2/2016		
Mexico	METHODS OF AND COMPOSITIONS FOR TREATING A STREAM COMPRISING CRUDE OIL AND WATER	MXa2018006775	12/2/2016		
United States	Methods of Treating a Stream Comprising Crude Oil and Water	15367409	12/2/2016		
World Intellectual Patent Organization	METHODS OF AND COMPOSITIONS FOR TREATING A STREAM COMPRISING CRUDE OIL AND WATER	PCTUS2016064561	12/2/2016		
Argentina	METHOD FOR SIMULATING HIGH PRESSURE PARAFFINIC FROTH TREATMENTS	20160102953	9/28/2016		



Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Canada	METHOD FOR SIMULATING HIGH PRESSURE PARAFFINIC FROTH TREATMENTS	2999048	9/30/2016		
United States	METHOD FOR SIMULATING HIGH PRESSURE PARAFFINIC FROTH TREATMENTS	15282285	9/30/2016		
World Intellectual Patent Organization	METHOD FOR SIMULATING HIGH PRESSURE PARAFFINIC FROTH TREATMENTS	PCTUS2016054 932	9/30/2016		
United Arab Emirates	MULTIFUNCTIONAL PRODUCT WITH HYDROGEN SULFIDE SCAVENGING AND HYDRATE INHIBITION CAPACITY	P60009332018	1/6/2017		
Australia	MULTIFUNCTIONAL PRODUCT WITH HYDROGEN SULFIDE SCAVENGING AND HYDRATE INHIBITION CAPACITY	AU2017205504	1/6/2017		
Brazil	MULTIFUNCTIONAL PRODUCT WITH HYDROGEN SULFIDE SCAVENGING AND HYDRATE INHIBITION CAPACITY	112018013927 0	1/6/2017		
Canada	MULTIFUNCTIONAL PRODUCT WITH HYDROGEN SULFIDE SCAVENGING AND HYDRATE INHIBITION CAPACITY		1/6/2017		
China	MULTIFUNCTIONAL PRODUCT WITH HYDROGEN SULFIDE SCAVENGING AND HYDRATE INHIBITION CAPACITY	201780005985 9	1/6/2017		
Colombia	MULTIFUNCTIONAL PRODUCT WITH HYDROGEN SULFIDE SCAVENGING AND HYDRATE INHIBITION CAPACITY	NC2018000722 3	1/6/2017		
European Patent Office	MULTIFUNCTIONAL PRODUCT WITH HYDROGEN SULFIDE SCAVENGING AND HYDRATE INHIBITION CAPACITY	177364429	1/6/2017		
Oman	MULTIFUNCTIONAL PRODUCT WITH HYDROGEN SULFIDE SCAVENGING AND HYDRATE INHIBITION CAPACITY	OMP20180020 4	1/6/2017		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Qatar	MULTIFUNCTIONAL PRODUCT WITH HYDROGEN SULFIDE SCAVENGING AND HYDRATE INHIBITION CAPACITY	QA2018070029 9	1/6/2017		
	MULTIFUNCTIONAL PRODUCT WITH HYDROGEN SULFIDE SCAVENGING AND HYDRATE INHIBITION CAPACITY	2018128771	1/6/2017	2689754	5/28/2019
Saudi Arabia	MULTIFUNCTIONAL PRODUCT WITH HYDROGEN SULFIDE SCAVENGING AND HYDRATE INHIBITION CAPACITY	518391984	1/6/2017		
United States	MULTIFUNCTIONAL PRODUCT WITH HYDROGEN SULFIDE SCAVENGING AND HYDRATE INHIBITION CAPACITY	15400652	1/6/2017		
World Intellectual Patent Organization	MULTIFUNCTIONAL PRODUCT WITH HYDROGEN SULFIDE SCAVENGING AND HYDRATE INHIBITION CAPACITY	PCTUS2017012 554	1/6/2017		
United Arab Emirates	CONTROLLED RELEASE SOLID SCALE INHIBITORS	P600074918	12/2/2016		
Argentina	CONTROLLED RELEASE SOLID SCALE INHIBITORS	P160103702	12/2/2016		
Australia	CONTROLLED RELEASE SOLID SCALE INHIBITORS	2016362407	12/2/2016		
Brazil	CONTROLLED RELEASE SOLID SCALE INHIBITORS	BR1120180111 180	12/2/2016		
Canada	CONTROLLED RELEASE SOLID SCALE INHIBITORS	3007217	12/2/2016		
		201680070770 0			
China	CONTROLLED RELEASE SOLID SCALE INHIBITORS		12/2/2016		
Colombia	Inhibidores de incrustaciones sólidas de liberación controlada	20180005652	5/29/2018		
European Patent Office	CONTROLLED RELEASE SOLID SCALE INHIBITORS	168715571	12/2/2016		
Indonesia	CONTROLLED RELEASE SOLID SCALE INHIBITORS	P00201804034	12/2/2016		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Kazakhstan	CONTROLLED RELEASE SOLID SCALE INHIBITORS	201804501	12/2/2016		
Mexico	CONTROLLED RELEASE SOLID SCALE INHIBITORS	MXa20180068 29	12/2/2016		
African Intellectual Property Organization	CONTROLLED RELEASE SOLID SCALE INHIBITORS	1201800219	12/2/2016		
Qatar	CONTROLLED RELEASE SOLID SCALE INHIBITORS	20180600226	12/2/2016		
Russia	CONTROLLED RELEASE SOLID SCALE INHIBITORS	2018122209	12/2/2016		
Saudi Arabia	CONTROLLED RELEASE SOLID SCALE INHIBITORS	518391718	12/2/2016		
United States	CONTROLLED RELEASE SOLID SCALE INHIBITORS	14959827	12/4/2015	10081758	9/25/2018
World Intellectual Patent Organization	CONTROLLED RELEASE SOLID SCALE INHIBITORS	PCTUS2016064 559	12/2/2016		
Argentina	COMPOSICIONES Y MÉTODOS PARA EL ENTRECRUZAMIENTO RETARDADO EN FLUIDOS DE FRACTURA HIDRÁULICOS	P160102375	8/3/2016		
Australia	COMPOSITIONS AND METHODS FOR DELAYED CROSSLINKING IN HYDRAULIC FRACTURING FLUIDS	2016301235	8/2/2016		
Canada	COMPOSITIONS AND METHODS FOR DELAYED CROSSLINKING IN HYDRAULIC FRACTURING FLUIDS	2994540	8/2/2016		
United States	COMPOSITIONS AND METHODS FOR DELAYED CROSSLINKING IN HYDRAULIC FRACTURING FLUIDS	15225879	8/2/2016		
World Intellectual	COMPOSITIONS AND METHODS FOR DELAYED CROSSLINKING IN HYDRAULIC FRACTURING FLUIDS	PCTUS2016045 169	8/2/2016		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Patent Organization					
Canada	NANOCRYSTALLINE CELLULOSE AND POLYMER-GRAFTED NANOCRYSTALLINE CELLULOSE AS RHEOLOGY MODIFYING AGENTS FOR MAGNESIUM OXIDE AND LIME SLURRIES	3001717	10/14/2016		
United States	NANOCRYSTALLINE CELLULOSE AND POLYMER-GRAFTED NANOCRYSTALLINE CELLULOSE AS RHEOLOGY MODIFYING AGENTS FOR MAGNESIUM OXIDE AND LIME SLURRIES	15293688	10/14/2016		
World Intellectual Patent Organization	NANOCRYSTALLINE CELLULOSE AND POLYMER-GRAFTED NANOCRYSTALLINE CELLULOSE AS RHEOLOGY MODIFYING AGENTS FOR MAGNESIUM OXIDE AND LIME SLURRIES	PCTUS2016057001	10/14/2016		
Great Britain	IMPROVED NAPHTHENATE INHIBITOR FORMULATIONS	GB17097676	6/19/2017		
World Intellectual Patent Organization	IMPROVED NAPHTHENATE INHIBITOR FORMULATIONS	PCTIB2018053743	5/25/2018		
Argentina	HEAVY OIL RHEOLOGY MODIFIERS FOR FLOW IMPROVEMENT DURING PRODUCTION AND TRANSPORTATION OPERATIONS	P170100038	1/6/2017		
Brazil	HEAVY OIL RHEOLOGY MODIFIERS FOR FLOW IMPROVEMENT DURING PRODUCTION AND TRANSPORTATION OPERATIONS	BR1120180137308	1/6/2017		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Colombia	Modificadores de la reología de petróleo pesado para la mejora del flujo durante las operaciones de producción y transporte	20180007005	7/4/2018		
United States	HEAVY OIL RHEOLOGY MODIFIERS FOR FLOW IMPROVEMENT DURING PRODUCTION AND TRANSPORTATION OPERATIONS	15400373	1/6/2017		
World Intellectual Patent Organization	HEAVY OIL RHEOLOGY MODIFIERS FOR FLOW IMPROVEMENT DURING PRODUCTION AND TRANSPORTATION OPERATIONS	PCTUS2017012 510	1/6/2017		
United States	CORN SYRUP, AN INVERSION AID FOR WATER-IN-OIL POLYMER EMULSIONS	15435414	2/17/2017		
World Intellectual Patent Organization	CORN SYRUP, AN INVERSION AID FOR WATER-IN-OIL POLYMER EMULSIONS	PCTUS2017018 297	2/17/2017		
United Arab Emirates	CORROSION INHIBITTING COMPOSITIONS TO MITIGATE CORROSION IN ENVIRONMENTS CONTAINING ELEMENTAL SULFUR AND/OR POLYSULFIDES	P60011562018	2/24/2017		
Australia	CORROSION INHIBITTING COMPOSITIONS TO MITIGATE CORROSION IN ENVIRONMENTS CONTAINING ELEMENTAL SULFUR AND/OR POLYSULFIDES	2017222670	2/24/2017		
Brazil	CORROSION INHIBITTING COMPOSITIONS TO MITIGATE CORROSION IN ENVIRONMENTS CONTAINING ELEMENTAL SULFUR AND/OR POLYSULFIDES	BR1120180674 044	2/24/2017		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Canada	CORROSION INHIBITTING COMPOSITIONS TO MITIGATE CORROSION IN ENVIRONMENTS CONTAINING ELEMENTAL SULFUR AND/OR POLYSULFIDES	3015637	2/24/2017		
China	CORROSION INHIBITTING COMPOSITIONS TO MITIGATE CORROSION IN ENVIRONMENTS CONTAINING ELEMENTAL SULFUR AND/OR POLYSULFIDES	201780013140 4	2/24/2017		
Colombia	Composiciones inhibidoras de corrosión para mitigar la corrosión en ambientes que contienen azufre elemental y/o polisulfuros	20180008498	8/14/2018		
European Patent Office	CORROSION INHIBITTING COMPOSITIONS TO MITIGATE CORROSION IN ENVIRONMENTS CONTAINING ELEMENTAL SULFUR AND/OR POLYSULFIDES	177573474	2/24/2017		
Oman	CORROSION INHIBITTING COMPOSITIONS TO MITIGATE CORROSION IN ENVIRONMENTS CONTAINING ELEMENTAL SULFUR AND/OR POLYSULFIDES	OMP20180025 6	2/24/2017		
Qatar	CORROSION INHIBITTING COMPOSITIONS TO MITIGATE CORROSION IN ENVIRONMENTS CONTAINING ELEMENTAL SULFUR AND/OR POLYSULFIDES	QA2018080036 9	2/24/2017		
Russia	CORROSION INHIBITTING COMPOSITIONS TO MITIGATE CORROSION IN ENVIRONMENTS CONTAINING ELEMENTAL SULFUR AND/OR POLYSULFIDES	2018133002	2/24/2017		
Saudi Arabia	CORROSION INHIBITTING COMPOSITIONS TO MITIGATE CORROSION IN ENVIRONMENTS CONTAINING ELEMENTAL SULFUR AND/OR POLYSULFIDES	518392243	2/24/2017		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
United States	CORROSION INHIBITING COMPOSITIONS TO MITIGATE CORROSION IN ENVIRONMENTS CONTAINING ELEMENTAL SULFUR AND/OR POLYSULFIDES	15442198	2/24/2017		
World Intellectual Patent Organization	CORROSION INHIBITING COMPOSITIONS TO MITIGATE CORROSION IN ENVIRONMENTS CONTAINING ELEMENTAL SULFUR AND/OR POLYSULFIDES	PCTUS2017019 447	2/24/2017		
Argentina	ALQUIL DIOLES PARA TRATAMIENTO DE PETRÓLEO CRUDO	P170100412	2/17/2017		
Canada	ALKYL DIOIS FOR CRUDE OIL TREATMENT	3014358	2/17/2017		
Malaysia	ALKYL DIOIS FOR CRUDE OIL TREATMENT	P12018001397	2/17/2017		
Singapore	ALKYL DIOIS FOR CRUDE OIL TREATMENT	11201806673Q	2/17/2017		
United States	ALKYL DIOIS FOR CRUDE OIL TREATMENT	15435464	2/17/2017		
World Intellectual Patent Organization	ALKYL DIOIS FOR CRUDE OIL TREATMENT	PCTUS2017018 288	2/17/2017		
Argentina	FATTY ALCOHOLS AND ESTERS FOR CRUDE OIL TREATMENT	P170102557	9/15/2017		
	FATTY ALCOHOLS AND ESTERS FOR CRUDE OIL TREATMENT	3036559	9/15/2017		
	FATTY ALCOHOLS AND ESTERS FOR CRUDE OIL TREATMENT	15705762	9/15/2017	10344230	7/9/2019
World Intellectual	FATTY ALCOHOLS AND ESTERS FOR CRUDE OIL TREATMENT	PCTUS2017051 756	9/15/2017		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Patent Organization					
Argentina	FRICTION-REDUCING COMPOSITIONS FORMULATED WITH HIGHLY CONCENTRATED BRINE	P160103353	11/3/2016		
Australia	FRICTION-REDUCING COMPOSITIONS FORMULATED WITH HIGHLY CONCENTRATED BRINE	2016348440	11/4/2016		
Brazil	FRICTION-REDUCING COMPOSITIONS FORMULATED WITH HIGHLY CONCENTRATED BRINE	BR1120180085863	11/4/2016		
Canada	FRICTION-REDUCING COMPOSITIONS FORMULATED WITH HIGHLY CONCENTRATED BRINE	3003457	11/4/2016		
European Patent Office	FRICTION-REDUCING COMPOSITIONS FORMULATED WITH HIGHLY CONCENTRATED BRINE	168630622	11/4/2016		
Mexico	FRICTION-REDUCING COMPOSITIONS FORMULATED WITH HIGHLY CONCENTRATED BRINE	MXa2018005684	11/4/2016		
Russia	FRICTION-REDUCING COMPOSITIONS FORMULATED WITH HIGHLY CONCENTRATED BRINE	2018120325	11/4/2016		
United States	FRICTION-REDUCING COMPOSITIONS FORMULATED WITH HIGHLY CONCENTRATED BRINE	15343413	11/4/2016		
World Intellectual Patent Organization	FRICTION-REDUCING COMPOSITIONS FORMULATED WITH HIGHLY CONCENTRATED BRINE	PCTUS2016060578	11/4/2016		
United Arab Emirates	A LOW COST CORROSION INHIBITOR/MITIGATION APPROACH FOR CARBON STEEL IN OIL AND GAS PRODUCTION AND TRANSPORTATION ENVIRONMENTS	P600146718	4/25/2017		



Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Australia	A LOW COST CORROSION INHIBITOR/MITIGATION APPROACH FOR CARBON STEEL IN OIL AND GAS PRODUCTION AND TRANSPORTATION ENVIRONMENTS	2017257627	4/25/2017		
Canada	A LOW COST CORROSION INHIBITOR/MITIGATION APPROACH FOR CARBON STEEL IN OIL AND GAS PRODUCTION AND TRANSPORTATION ENVIRONMENTS	3021971	4/25/2017		
European Patent Office	A LOW COST CORROSION INHIBITOR/MITIGATION APPROACH FOR CARBON STEEL IN OIL AND GAS PRODUCTION AND TRANSPORTATION ENVIRONMENTS	177397213	4/25/2017		
Qatar	A LOW COST CORROSION INHIBITOR/MITIGATION APPROACH FOR CARBON STEEL IN OIL AND GAS PRODUCTION AND TRANSPORTATION ENVIRONMENTS	QA2018100046 2	4/25/2017		
United States	CORROSION INHIBITOR COMPOSITIONS AND METHODS OF USING SAME	15496523	4/25/2017		
United States	CORROSION INHIBITOR COMPOSITIONS AND METHODS OF USING SAME	16305967	4/25/2017		
World Intellectual Patent Organization	CORROSION INHIBITOR COMPOSITIONS AND METHODS OF USING SAME	PCTUS2017029 336	4/25/2017		
United Arab Emirates	COMPOSITIONS AND METHODS FOR CORROSION INHIBITOR MONITORING	P600168918	6/8/2017		
Australia	COMPOSITIONS AND METHODS FOR CORROSION INHIBITOR MONITORING	2017277654	6/8/2017		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Canada	COMPOSITIONS AND METHODS FOR CORROSION INHIBITOR MONITORING	3026380	6/8/2017		
European Patent Office	COMPOSITIONS AND METHODS FOR CORROSION INHIBITOR MONITORING	177393865	6/8/2017		
Qatar	COMPOSITIONS AND METHODS FOR CORROSION INHIBITOR MONITORING	QA20181200532	6/8/2017		
United States	COMPOSITIONS AND METHODS FOR CORROSION INHIBITOR MONITORING	15617559	6/8/2017		
World Intellectual Patent Organization	COMPOSITIONS AND METHODS FOR CORROSION INHIBITOR MONITORING	PCTUS2017036540	6/8/2017		
Canada	PARAFFIN SUPPRESSANT COMPOSITIONS, AND METHODS OF MAKING AND USING THEREOF	3026369	6/8/2017		
Canada	PARAFFIN SUPPRESSANT COMPOSITIONS, AND METHODS OF MAKING AND USING THEREOF	3026390	6/8/2017		
European Patent Office	PARAFFIN SUPPRESSANT COMPOSITIONS, AND METHODS OF MAKING AND USING THEREOF	177393873	6/8/2017		
Russia	PARAFFIN SUPPRESSANT COMPOSITIONS, AND METHODS OF MAKING AND USING THEREOF	2018145990	6/8/2017		
	PARAFFIN SUPPRESSANT COMPOSITIONS, AND METHODS OF MAKING AND USING	15617627	6/8/2017	10233273	3/19/2019
United States	FLUORESCENT WATER TREATMENT COMPOUNDS AND METHOD OF USE	15617658	6/8/2017		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
World Intellectual Patent Organization	PARAFFIN SUPPRESSANT COMPOSITIONS, AND METHODS OF MAKING AND USING	PCTUS2017036 550	6/8/2017		
World Intellectual Patent Organization	PARAFFIN SUPPRESSANT COMPOSITIONS, AND METHODS OF MAKING AND USING THEREOF	PCTUS2017036 545	6/8/2017		
Angola	REMOVAL OF HYDRATE INHIBITORS FROM WASTE STREAMS	3683	2/3/2017		
Brazil	REMOVAL OF HYDRATE INHIBITORS FROM WASTE STREAMS	BR1120180158 275	2/3/2017		
Great Britain	REMOVAL OF HYDRATE INHIBITORS FROM WASTE STREAMS	18127480	2/3/2017		
Nigeria	REMOVAL OF HYDRATE INHIBITORS FROM WASTE STREAMS	NGPTC2018305 6	2/3/2017		
African Intellectual Property Organization	REMOVAL OF HYDRATE INHIBITORS FROM WASTE STREAMS	1201800288	2/3/2017		
United States	REMOVAL OF HYDRATE INHIBITORS FROM WASTE STREAMS	15423797	2/3/2017		
World Intellectual Patent Organization	REMOVAL OF HYDRATE INHIBITORS FROM WASTE STREAMS	PCTUS2017016 413	2/3/2017		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Australia	KINETIC HYDRATE INHIBITORS FOR CONTROLLING GAS HYDRATE FORMATION IN WET GAS SYSTEMS	2017222630	2/24/2017		
Brazil	KINETIC HYDRATE INHIBITORS FOR CONTROLLING GAS HYDRATE FORMATION IN WET GAS SYSTEMS	BR1120180172 537	2/24/2017		
Canada	KINETIC HYDRATE INHIBITORS FOR CONTROLLING GAS HYDRATE FORMATION IN WET GAS SYSTEMS	3014448	2/24/2017		
European Patent Office	KINETIC HYDRATE INHIBITORS FOR CONTROLLING GAS HYDRATE FORMATION IN WET GAS SYSTEMS	177573045	2/24/2017		
Saudi Arabia	KINETIC HYDRATE INHIBITORS FOR CONTROLLING GAS HYDRATE FORMATION IN WET GAS SYSTEMS	518392248	2/24/2017		
	KINETIC HYDRATE INHIBITORS FOR CONTROLLING GAS HYDRATE FORMATION IN WET GAS SYSTEMS	16527806	7/31/2019		
United States	KINETIC HYDRATE INHIBITORS FOR CONTROLLING GAS HYDRATE FORMATION IN WET GAS SYSTEMS	15441656	2/24/2017		
World Intellectual Patent Organization	KINETIC HYDRATE INHIBITORS FOR CONTROLLING GAS HYDRATE FORMATION IN WET GAS SYSTEMS	PCTUS2017019 358	2/24/2017		
Argentina	TEMPERATURE-STABLE PARAFFIN INHIBITOR COMPOSITIONS	P170100030	1/5/2017		
Australia	TEMPERATURE-STABLE PARAFFIN INHIBITOR COMPOSITIONS	2017205434	1/5/2017		
Brazil	TEMPERATURE-STABLE PARAFFIN INHIBITOR COMPOSITIONS	BR1120180138 118	1/5/2017		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Canada	TEMPERATURE-STABLE PARAFFIN INHIBITOR COMPOSITIONS	3009801	1/5/2017		
European Patent Office	TEMPERATURE-STABLE PARAFFIN INHIBITOR COMPOSITIONS	177362944	1/5/2017		
Russia	TEMPERATURE-STABLE PARAFFIN INHIBITOR COMPOSITIONS	2018128281	1/5/2017		
United States	TEMPERATURE-STABLE PARAFFIN INHIBITOR COMPOSITIONS	15399025	1/5/2017		
World Intellectual Patent Organization	TEMPERATURE-STABLE PARAFFIN INHIBITOR COMPOSITIONS	PCTUS2017012260	1/5/2017		
United States	PARAFFIN DEPOSITION INHIBITOR COATINGS	15632963	6/26/2017		
World Intellectual Patent Organization	PARAFFIN DEPOSITION INHIBITOR COATINGS	2017US39232	6/26/2017		
United States	CORROSION INHIBITOR COMPOSITIONS AND METHODS OF USING SAME	15591466	5/10/2017		
World Intellectual Patent Organization	CORROSION INHIBITOR COMPOSITIONS AND METHODS OF USING SAME	PCTUS2017031898	5/10/2017		
Canada	USE OF POLYELECTROLYTES FOR THE REMEDIATION OF SOLIDS FROM OIL FIELD SEPARATION	3016438	3/1/2017		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
United States	USE OF POLYELECTROLYTES FOR THE REMEDIATION OF SOLIDS FROM OIL FIELD SEPARATION	15446614	3/1/2017		
World Intellectual Patent Organization	USE OF POLYELECTROLYTES FOR THE REMEDIATION OF SOLIDS FROM OIL FIELD SEPARATION	2017US20231	3/1/2017		
Canada	METHODS FOR ENHANCING HYDROCARBON RECOVERY FROM OIL SANDS	3010618	1/27/2017		
United States	METHODS FOR ENHANCING HYDROCARBON RECOVERY FROM OIL SANDS	15418170	1/27/2017		
World Intellectual Patent Organization	METHODS FOR ENHANCING HYDROCARBON RECOVERY FROM OIL SANDS	PCTUS2017015360	1/27/2017		
Argentina	TEMPERATURE-STABLE PARAFFIN INHIBITOR COMPOSITIONS	P170100029	1/5/2017		
Australia	TEMPERATURE-STABLE PARAFFIN INHIBITOR COMPOSITIONS	2017205435	1/5/2017		
Brazil	TEMPERATURE-STABLE PARAFFIN INHIBITOR COMPOSITIONS	BR1120180137928	1/5/2017		
Canada	TEMPERATURE-STABLE PARAFFIN INHIBITOR COMPOSITIONS	3009985	1/5/2017		
European Patent Office	TEMPERATURE-STABLE PARAFFIN INHIBITOR COMPOSITIONS	177362951	1/5/2017		
Russia	TEMPERATURE-STABLE PARAFFIN INHIBITOR COMPOSITIONS	2018128382	1/5/2017		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
United States	TEMPERATURE-STABLE PARAFFIN INHIBITOR COMPOSITIONS	15399080	1/5/2017		
World Intellectual Patent Organization	TEMPERATURE-STABLE PARAFFIN INHIBITOR COMPOSITIONS	PCTUS2017012265	1/5/2017		
Argentina	TEMPERATURE-STABLE PARAFFIN INHIBITOR COMPOSITIONS	P170100894	4/7/2017		
Canada	TEMPERATURE-STABLE PARAFFIN INHIBITOR COMPOSITIONS	3019857	4/6/2017		
European Patent Office	TEMPERATURE-STABLE PARAFFIN INHIBITOR COMPOSITIONS	177203072	4/6/2017		
United States	TEMPERATURE-STABLE PARAFFIN INHIBITOR COMPOSITIONS	15480959	4/6/2017		
World Intellectual Patent Organization	TEMPERATURE-STABLE PARAFFIN INHIBITOR COMPOSITIONS	PCTUS2017026367	4/6/2017		
United Arab Emirates	CORROSION INHIBITOR COMPOSITIONS AND METHODS OF USING SAME	P600146318	4/24/2017		
Canada	CORROSION INHIBITOR COMPOSITIONS AND METHODS OF USING SAME	3021519	4/24/2017		
European Patent Office	CORROSION INHIBITOR COMPOSITIONS AND METHODS OF USING SAME	177210119	4/24/2017		
Qatar	CORROSION INHIBITOR COMPOSITIONS AND METHODS OF USING SAME	QA20181000463	4/24/2017		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
United States	CORROSION INHIBITOR COMPOSITIONS AND METHODS OF USING SAME	15494995	4/24/2017		
World Intellectual Patent Organization	CORROSION INHIBITOR COMPOSITIONS AND METHODS OF USING SAME	PCTUS2017029 098	4/24/2017		
Argentina	PARAFFIN SUPPRESSANT COMPOSITIONS AND METHODS	P170102735	9/29/2017		
Argentina	PARAFFIN INHIBITORS, AND PARAFFIN SUPPRESSANT COMPOSITIONS AND METHODS	P170102736	9/29/2017		
	PARAFFIN SUPPRESSANT COMPOSITIONS AND METHODS		9/28/2017		
	PARAFFIN INHIBITORS, AND PARAFFIN SUPPRESSANT COMPOSITIONS AND METHODS		9/28/2017		
	PARAFFIN SUPPRESSANT COMPOSITIONS AND METHODS	3038783	9/28/2017		
	PARAFFIN INHIBITORS, AND PARAFFIN SUPPRESSANT COMPOSITIONS AND METHODS	3038772	9/28/2017		
	PARAFFIN SUPPRESSANT COMPOSITIONS AND METHODS	2019112093	9/28/2017		
	PARAFFIN INHIBITORS, AND PARAFFIN SUPPRESSANT COMPOSITIONS AND METHODS	2019112843	9/28/2017		
United States	PARAFFIN SUPPRESSANT COMPOSITIONS AND METHODS	15718502	9/28/2017		



Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
United States	PARAFFIN INHIBITORS, AND PARAFFIN SUPPRESSANT COMPOSITIONS AND METHODS	15718566	9/28/2017		
World Intellectual Patent Organization	PARAFFIN SUPPRESSANT COMPOSITIONS AND METHODS	PCTUS2017053 903	9/28/2017		
World Intellectual Patent Organization	PARAFFIN INHIBITORS, AND PARAFFIN SUPPRESSANT COMPOSITIONS AND METHODS	PCTUS2017053 901	9/28/2017		
Argentina	EMULSIONES DE POLÍMERO ENTRECruzADO DE HIDRAZIDA PARA USAR EN RECUPERACIÓN DE PETRÓLEO CRUDO	P170100458	2/23/2017		
Brazil	HYDRAZIDE CROSSLINKED POLYMER EMULSIONS FOR USE IN CRUDE OIL RECOVERY	BR1120180171 077	2/23/2017		
European Patent Office	HYDRAZIDE CROSSLINKED POLYMER EMULSIONS FOR USE IN CRUDE OIL RECOVERY	177571973	2/23/2017		
United States	HYDRAZIDE CROSSLINKED POLYMER EMULSIONS FOR USE IN CRUDE OIL RECOVERY	15440966	2/23/2017	10035946	7/31/2018
World Intellectual Patent Organization	HYDRAZIDE CROSSLINKED POLYMER EMULSIONS FOR USE IN CRUDE OIL RECOVERY	PCTUS2017019 096	2/23/2017		
Canada	SYSTEM AND METHOD FOR HYDROGEN SULFIDE DECONTAMINATION	2641278	10/17/2008	2641278	3/15/2016

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
United States	SYSTEM AND METHOD FOR HYDROGEN SULFIDE DECONTAMINATION	12253824	10/17/2008	7935323	5/3/2011
European Patent Office	REMOVAL OF ORGANIC DEPOSITS	177166444	4/4/2017		
Great Britain	REMOVAL OF ORGANIC DEPOSITS	16057713	4/4/2016		
Russia	REMOVAL OF ORGANIC DEPOSITS	2018137691	4/4/2017		
United States	REMOVAL OF ORGANIC DEPOSITS	16090682	4/4/2017		
World Intellectual Patent Organization	REMOVAL OF ORGANIC DEPOSITS	PCTIB20170519 15	4/4/2017		
Australia	PROGRESSIVE TANK SYSTEM AND METHOD FOR USING THE SAME	2017234255	3/13/2017		
Canada	PROGRESSIVE TANK SYSTEM AND METHOD FOR USING THE SAME	3017483	3/13/2017		
Colombia	Sistema de tanque progresivo y método para utilizarlo	20180009868	9/19/2018		
European Patent Office	PROGRESSIVE TANK SYSTEM AND METHOD FOR USING THE SAME	177131281	3/13/2017		
Mexico	PROGRESSIVE TANK SYSTEM AND METHOD FOR USING THE SAME	MXa20180111 38	3/13/2017		
United States	PROGRESSIVE TANK SYSTEM AND METHOD FOR USING THE SAME	15457940	3/13/2017		
World Intellectual Patent Organization	PROGRESSIVE TANK SYSTEM AND METHOD FOR USING THE SAME	PCTUS2017022 157	3/13/2017		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Brazil	RAPID POLYMER HYDRATION	BR1120180684 767	3/13/2017		
European Patent Office	RAPID POLYMER HYDRATION	177135480	3/13/2017		
United States	RAPID POLYMER HYDRATION	15457936	3/13/2017		
World Intellectual Patent Organization		PCTUS2017022 161	3/13/2017		
Canada	SLOW-RELEASE SCALE INHIBITING COMPOSITIONS	3024478	5/12/2017		
European Patent Office	SLOW-RELEASE SCALE INHIBITING COMPOSITIONS	177250990	5/12/2017		
United States	SLOW-RELEASE SCALE INHIBITING COMPOSITIONS	15593776	5/12/2017		
World Intellectual Patent Organization		PCTUS2017032 372	5/12/2017		
Australia	SLOW-RELEASE SCALE INHIBITING COMPOSITIONS				
	Methods for treating a well bore within an underground formation	2014366429	12/11/2014	2014366429	7/19/2018
Brazil	METHODS FOR TREATING A WELL BORE WITHIN AN UNDERGROUND FORMATION ( JDA - BAYER / COVESTRO )	BR1120160141 024	12/11/2014		
Canada	METHODS FOR TREATING A WELL BORE WITHIN AN UNDERGROUND FORMATION	2933833	12/11/2014		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
China	METHODS FOR TREATING A WELL BORE WITHIN AN UNDERGROUND FORMATION ( JDA - BAYER / COVESTRO )	201480075730 6	12/11/2014		
Colombia	METHODS FOR TREATING A WELL BORE WITHIN AN UNDERGROUND FORMATION ( JDA - BAYER / COVESTRO )	16173282	12/11/2014		
European Patent Office	METHODS FOR TREATING A WELL BORE WITHIN AN UNDERGROUND FORMATION ( JDA - BAYER / COVESTRO )	148242589	12/11/2014		
Mexico	METHODS FOR TREATING A WELL BORE WITHIN AN UNDERGROUND FORMATION ( JDA - BAYER / COVESTRO )	MXa20160080 92	12/11/2014		
United States	Methods for treating a well bore within an underground formation	14132236	12/18/2013	10000686	6/19/2018
United States	SOLVENCY FOR ASPHALTENE DEPOSIT REMEDIATION OR INHIBITION	62607102	12/18/2017		
United States	SOLVENCY FOR ASPHALTENE DEPOSIT REMEDIATION OR INHIBITION	16224290	12/18/2018		
World Intellectual Patent Organization	SOLVENCY FOR ASPHALTENE DEPOSIT REMEDIATION OR INHIBITION	PCTUS2018066 249	12/18/2018		
United States	COMPOSITIONS AND METHODS FOR DELAYED CROSSLINKING IN HYDRAULIC FRACTURING FLUIDS	15649129	7/13/2017		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
World Intellectual Patent Organization	COMPOSITIONS AND METHODS FOR DELAYED CROSSLINKING IN HYDRAULIC FRACTURING FLUIDS	PCTUS2017041 943	7/13/2017		
Argentina	COMPOSITIONS FOR ENHANCED OIL RECOVERY	P170101786	6/28/2017		
Colombia	COMPOSITION, METHOD AND USE FOR ENHANCED OIL RECOVERY	NC2018001433 8	6/26/2017		
United States	COMPOSITIONS FOR ENHANCED OIL RECOVERY	15633031	6/26/2017		
World Intellectual Patent Organization	COMPOSITION, METHOD AND USE FOR ENHANCED OIL RECOVERY	2017US39235 BR1120190112	6/26/2017		
	THIOL-FORMYL HEMIACETAL CORROSION INHIBITORS	731	12/1/2017		
	THIOL-FORMYL HEMIACETAL CORROSION INHIBITORS	3045658	12/1/2017		
	THIOL-FORMYL HEMIACETAL CORROSION INHIBITORS	178293601	12/1/2017		
	THIOL-FORMYL HEMIACETAL CORROSION INHIBITORS	MXa20190064 42	12/1/2017		
United States	THIOL-FORMYL HEMIACETAL CORROSION INHIBITORS	15829576	12/1/2017		
World Intellectual Patent Organization	THIOL-FORMYL HEMIACETAL CORROSION INHIBITORS	PCTUS2017064 282	12/1/2017		
Argentina	CONTROLLED RELEASE SOLID SCALE INHIBITORS	P170103559	12/18/2017		
United States	CONTROLLED RELEASE SOLID SCALE INHIBITORS	15845164	12/18/2017		
World Intellectual	CONTROLLED RELEASE SOLID SCALE INHIBITORS	PCTUS2017066 982	12/18/2017		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Patent Organization					
Argentina	COMPOSITIONS FOR ENHANCED OIL RECOVERY	P170102964	10/25/2017		
	COMPOSITIONS FOR ENHANCED OIL RECOVERY	3041060	10/24/2017		
	COMPOSITIONS FOR ENHANCED OIL RECOVERY	NC2019000408 4	10/24/2017		
United States	COMPOSITIONS FOR ENHANCED OIL RECOVERY	15792108	10/24/2017		
World Intellectual Patent Organization	COMPOSITIONS FOR ENHANCED OIL RECOVERY	PCTUS2017058 001	10/24/2017		
Argentina	USE OF SULFONIUM SALTS AS HYDROGEN SULFIDE INHIBITORS	P180100463	2/28/2018		
	USE OF SULFONIUM SALTS AS HYDROGEN SULFIDE INHIBITORS		2/28/2018		
	USE OF SULFONIUM SALTS AS HYDROGEN SULFIDE INHIBITORS		2/28/2018		
	USE OF SULFONIUM SALTS AS HYDROGEN SULFIDE INHIBITORS		2/28/2018		
	USE OF SULFONIUM SALTS AS HYDROGEN SULFIDE INHIBITORS		2/28/2018		
GCC (Gulf Co- op Council)	USE OF SULFONIUM SALTS AS HYDROGEN SULFIDE INHIBITORS	201834858	2/28/2018		
	USE OF SULFONIUM SALTS AS HYDROGEN SULFIDE INHIBITORS		2/28/2018		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
	USE OF SULFONIUM SALTS AS HYDROGEN SULFIDE INHIBITORS	15445707	2/28/2017	10301553	5/28/2019
World Intellectual Patent Organization	USE OF SULFONIUM SALTS AS HYDROGEN SULFIDE INHIBITORS	PCTUS2018020076	2/28/2018		
United States	KINETIC HYDRATE INHIBITORS FOR CONTROLLING GAS HYDRATE FORMATION IN WET GAS SYSTEMS	16104794	8/17/2018		
World Intellectual Patent Organization	KINETIC HYDRATE INHIBITORS FOR CONTROLLING GAS HYDRATE FORMATION IN WET GAS SYSTEMS	PCTUS2018046975	8/17/2018		
United States	METHOD FOR DISPERSING KINETIC HYDRATE INHIBITORS	15995501	6/1/2018		
World Intellectual Patent Organization	METHOD FOR DISPERSING KINETIC HYDRATE INHIBITORS	PCTUS2018035557	6/1/2018		
United States	THIOL ADDUCTS FOR CORROSION INHIBITION	16054732	8/3/2018		
World Intellectual Patent Organization	THIOL ADDUCTS FOR CORROSION INHIBITION	PCTUS2018045237	8/3/2018		
Argentina	DILUTION SKID AND INJECTION SYSTEM FOR SOLID/HIGH VISCOSITY LIQUID CHEMICALS	P180101366	5/23/2018		
United States	DILUTION SKID AND INJECTION SYSTEM FOR SOLID/HIGH VISCOSITY LIQUID CHEMICALS	15987623	5/23/2018		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
World Intellectual Patent Organization	DILUTION SKID AND INJECTION SYSTEM FOR SOLID/HIGH VISCOSITY LIQUID CHEMICALS	PCTUS2018034 113	5/23/2018		
Argentina	INJECTION SYSTEM FOR CONTROLLED DELIVERY OF SOLID OIL FIELD CHEMICALS	P180101366	5/23/2018		
United States	INJECTION SYSTEM FOR CONTROLLED DELIVERY OF SOLID OIL FIELD CHEMICALS	15987686	5/23/2018		
World Intellectual Patent Organization	INJECTION SYSTEM FOR CONTROLLED DELIVERY OF SOLID OIL FIELD CHEMICALS	PCTUS2018034 126	5/23/2018		
United States	DYNAMIC WAX DEPOSITION TESTING SYSTEMS AND METHODS	15942165	3/30/2018		
United States	ALKENYL SUCCINIMIDES AND USE AS NATURAL GAS HYDRATE INHIBITORS	62751938	10/29/2018		
United States	CORROSION INHIBITOR COMPOSITIONS AND METHODS OF USING SAME	16174913	10/30/2018		
World Intellectual Patent Organization	CORROSION INHIBITOR COMPOSITIONS AND METHODS OF USING SAME	PCTUS2018058 176	10/30/2018		
United States	CORROSION INHIBITOR COMPOSITIONS AND METHODS OF USING SAME	16174995	10/30/2018		
World Intellectual	THIOL-MALEIC ADHYDRIDE ADDUCTS FOR CORROSION INHIBITION	PCTUS2018058 181	10/30/2018		



Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Patent Organization					
United States	CORROSION INHIBITOR COMPOSITIONS AND METHODS OF USING SAME	16175051	10/30/2018		
Canada	TEMPERATURE-STABLE CORROSION INHIBITOR COMPOSITIONS & METHODS OF USE	3006935	6/1/2018		
United States	TEMPERATURE-STABLE CORROSION INHIBITOR COMPOSITIONS & METHODS OF USE	15992383	5/30/2018		
United States	FLOWABILITY TESTING SYSTEMS AND METHODS	62628336	2/9/2018		
	FLOWABILITY TESTING SYSTEMS AND METHODS	16270890	2/8/2019		
Argentina	FLUID DIVERSON COMPOSITION IN WELL STIMULATION	P180103495	11/28/2018		
United States	FLUID DIVERSON COMPOSITION IN WELL STIMULATION	16193542	11/16/2018		
World Intellectual Patent Organization	FLUID DIVERSON COMPOSITION IN WELL STIMULATION	PCTUS1861538	11/16/2018		
United States	IN-LINE CHEMICAL HEATING FOR IN-SITU GENERATION OF ACTIVE CHEMICALS	62650770	3/30/2018		
United States	IN-LINE CHEMICAL HEATING FOR IN-SITU GENERATION OF ACTIVE CHEMICALS	16193066	11/16/2018		
United States	ALKYL LACTONE-DERIVED HYDROXYAMIDES AND ALKYL LACTONE-DERIVED HYDROXYESTERS FOR THE CONTROL OF NATURAL GAS HYDRATES	62697153	7/12/2018		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
	ALKYL LACTONE-DERIVED HYDROXYAMIDES AND ALKYL LACTONE-DERIVED HYDROXYESTERS FOR THE CONTROL OF NATURAL GAS HYDRATES	16507873	7/10/2019		
	ALKYL LACTONE-DERIVED HYDROXYAMIDES AND ALKYL LACTONE-DERIVED HYDROXYESTERS FOR THE CONTROL OF NATURAL GAS HYDRATES	PCTUS2019041 155	7/10/2019		
United States	COMPOSITIONS FOR ENHANCED OIL RECOVERY	62690442	6/27/2018		
United States	COMPOSITIONS FOR ENHANCED OIL RECOVERY	16026345	7/3/2018		
World Intellectual Patent Organization	COMPOSITIONS FOR ENHANCED OIL RECOVERY	PCTUS2018040 712	7/3/2018		
United States	USE OF SILOXANE POLYMERS FOR VAPOR PRESSURE REDUCTION OF PROCESSED CRUDE OIL	16183007	11/7/2018		
World Intellectual Patent Organization	USE OF SILOXANE POLYMERS FOR VAPOR PRESSURE REDUCTION OF PROCESSED CRUDE OIL	PCTUS2018059 605	11/7/2018		
United States	COMPOSITIONS AND METHODS FOR BIOFILM REMOVAL	62619215	1/19/2018		
	COMPOSITIONS AND METHODS FOR BIOFILM REMOVAL	16251548	1/18/2019		
United States	GAS HYDRATE INHIBITION USING METHANOL FOAM COMPOSITION	62760691	11/13/2018		
United States	PREPARATION OF DISULFIDE CORROSION INHIBITORS BY ELECTROCHEMICAL METHODS	62772998	11/29/2018		
United States	SALT-TOLERANT, FAST-DISSOLVING, WATER-SOLUBLE RHEOLOGY MODIFIERS	62711983	7/30/2018		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
	SALT-TOLERANT, FAST-DISSOLVING, WATER-SOLUBLE RHEOLOGY MODIFIERS	16523642	7/26/2019		
	SALT-TOLERANT, FAST-DISSOLVING, WATER-SOLUBLE RHEOLOGY MODIFIERS	PCTUS2019043 584	7/26/2019		
United States	CARBOXY ALKYL-ESTER ANTI-AGGLOMERANTS FOR THE CONTROL OF NATURAL GAS HYDRATES	62684929	6/14/2018		
	CARBOXY ALKYL-ESTER ANTI-AGGLOMERANTS FOR THE CONTROL OF NATURAL GAS HYDRATES	16440663	6/13/2019		
	CARBOXY ALKYL-ESTER ANTI-AGGLOMERANTS FOR THE CONTROL OF NATURAL GAS HYDRATES	PCTUS2019036 920	6/13/2019		
Canada	EQUIPMENT AND METHOD OF OPERATING A PORTABLE HIGH TEMPERATURE HIGH PRESSURE PHASE SEPARATION SIMULATOR	3014779	8/21/2018		
	EQUIPMENT AND METHOD OF OPERATING A PORTABLE HIGH TEMPERATURE HIGH PRESSURE PHASE SEPARATION SIMULATOR				
United States	ALKYL LACTONE- DERIVED CORROSION INHIBITORS	62697165	7/12/2018		
	ALKYL LACTONE- DERIVED CORROSION INHIBITORS	16507649	7/10/2019		
	ALKYL LACTONE- DERIVED CORROSION INHIBITORS	PCTUS2019041 152	7/10/2019		
United States	REMOVAL AND PREVENTION OF BIOFILM BY NANOPARTICLE CHEMISTRIES	6685610	6/15/2018		
	REMOVAL AND PREVENTION OF BIOFILM BY NANOPARTICLE CHEMISTRIES	16441820	6/14/2019		
United States	USE OF SULFONIUM SALTS AS CORROSION INHIBITORS	16116669	8/29/2018		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
	USE OF SULFONIUM SALTS AS CORROSION INHIBITORS				
United States	CROSSLINKED POLYMERS FOR USE IN CRUDE OIL RECOVERY	62746961	10/17/2018		
United States	USE OF MULTIPLE CHARGED CATIONIC COMPOUNDS DERIVED FROM POLYAMINES FOR CLAY STABILIZATION IN OIL AND GAS OPERATIONS	62724365	8/29/2018		
United States	ADDITIVES FOR STEAM-INJECTION OIL RECOVERY	62751013	10/26/2018		
	COMPLETE REMOVAL OF SOLIDS DURING HYDROGEN SULFIDE SCAVENGING OPERATIONS USING A SCAVENGER AND A MICHAEL ACCEPTOR	62795678	1/23/2019		
	SELF-INVERTING POLYMER EMULSIONS	62825113	3/28/2019		
	LOADED, SEALED NANOTUBES FOR OIL RECOVERY	62861510	6/14/2019		
	POLYETHER POLYESTERS HAVING ANIONIC FUNCTIONALITY	047044912	1/22/2004	1587598	7/24/2019
	POLYETHER POLYESTERS HAVING ANIONIC FUNCTIONALITY	047044912	1/22/2004	1587598	7/24/2019
	POLYETHER POLYESTERS HAVING ANIONIC FUNCTIONALITY	047044912	1/22/2004	1587598	7/24/2019
Norway	Polyeter-polystere med anionisk funksjonalitet.	20053927	8/23/2005		
	POLYETHER POLYESTERS HAVING ANIONIC FUNCTIONALITY	047044912	1/22/2004	1587598	7/24/2019
	POLYETHER POLYESTERS HAVING ANIONIC FUNCTIONALITY	047044912	1/22/2004	1587598	7/24/2019
United Kingdom	METHOD OF REDUCING THE VISCOSITY OF HYDROCARBONS	108255043	10/19/2010	2491091	12/4/2019

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Netherlands	METHOD OF REDUCING THE VISCOSITY OF HYDROCARBONS	108255043	10/19/2010	2491091	12/4/2019
Norway	METHOD OF REDUCING THE VISCOSITY OF HYDROCARBONS	108255043	10/19/2010	2491091	12/4/2019
	ACID GAS SCRUBBING COMPOSITION	107946352	6/29/2010	2448667	6/26/2019
	ACID GAS SCRUBBING COMPOSITION	107946352	6/29/2010	2448667	6/26/2019
	ACID GAS SCRUBBING COMPOSITION	107946352	6/29/2010	2448667	6/26/2019
	AN ENVIRONMENTALLY FRIENDLY DISPERSION SYSTEM USED IN THE PREPARATION OF INVERSE EMULSION POLYMERS	127963999	6/5/2012	2718362	9/11/2019
	AN ENVIRONMENTALLY FRIENDLY DISPERSION SYSTEM USED IN THE PREPARATION OF INVERSE EMULSION POLYMERS	127963999	6/5/2012	2718362	9/11/2019
	AN ENVIRONMENTALLY FRIENDLY DISPERSION SYSTEM USED IN THE PREPARATION OF INVERSE EMULSION POLYMERS	127963999	6/5/2012	2718362	9/11/2019
	AN ENVIRONMENTALLY FRIENDLY DISPERSION SYSTEM USED IN THE PREPARATION OF INVERSE EMULSION POLYMERS	127963999	6/5/2012	2718362	9/11/2019
	ADDITIVES FOR IMPROVING HYDROCARBON RECOVERY	2016111032185	6/12/2012		
Canada	MONITORING HYDRAULIC FRACTURING	2904579	3/9/2014	2904579	12/24/2019
	MOBILITY CONTROL POLYMERS FOR ENHANCED OIL RECOVERY	16595193	10/7/2019		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
United Kingdom	ORGANIC DISULFIDE BASED CORROSION INHIBITORS	148328834	7/29/2014	3027787	1/15/2020
Netherlands	ORGANIC DISULFIDE BASED CORROSION INHIBITORS	148328834	7/29/2014	3027787	1/15/2020
Norway	ORGANIC DISULFIDE BASED CORROSION INHIBITORS	148328834	7/29/2014	3027787	1/15/2020
France	LOW DOSAGE NAPHTHENATE INHIBITORS	058148420	6/16/2005	1751395	2/11/2009
Italy	LOW DOSAGE NAPHTHENATE INHIBITORS	058148420	6/16/2005	5020099017 27068	2/11/2009
	THE USE OF OLIGO-QUATERNARY COMPOSITIONS TO INCREASE SCALE INHIBITOR LIFETIME IN A SUBTERRANEAN FORMATION	MXa20190110 88	5/22/2013		
	POLYMER EMULSIONS FOR USE IN CRUDE OIL RECOVERY	2019240605	7/29/2015		
	ПОЛИМЕРНЫЕ ЭМУЛЬСИИ ДЛЯ ПРИМЕНЕНИЯ ПРИ ИЗВЛЕЧЕНИИ СЫРОЙ НЕФТИ	201992069	7/29/2015		
	POLYMER EMULSIONS FOR USE IN CRUDE OIL RECOVERY	16601047	10/14/2019		
	CORROSION INHIBITORS AND KINETIC HYDRATE INHIBITORS	16674550	11/5/2019		
Brazil	PREPARATION OF NEW STABLE HYDROGEN SULFIDE SCAVENGERS USEFUL IN BOTH WATER AS WELL AS OIL MEDIUM APPLICATIONS	112019000989 2	9/27/2017		
Canada	PREPARATION OF NEW STABLE HYDROGEN SULFIDE SCAVENGERS USEFUL IN BOTH WATER AS WELL AS OIL MEDIUM APPLICATIONS		9/27/2017		
European Patent Office	PREPARATION OF NEW STABLE HYDROGEN SULFIDE SCAVENGERS USEFUL IN BOTH WATER AS WELL AS OIL MEDIUM APPLICATIONS	177911997	9/27/2017		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
	PREPARATION OF NEW STABLE HYDROGEN SULFIDE SCAVENGERS USEFUL IN BOTH WATER AS WELL AS OIL MEDIUM APPLICATIONS	16559926	9/4/2019		
Germany	NON-CORROSIVE COMBINATION FOAMER	161736038	6/8/2016	3103852	12/25/2019
United Kingdom	NON-CORROSIVE COMBINATION FOAMER	161736038	6/8/2016	3103852	12/25/2019
Netherlands	NON-CORROSIVE COMBINATION FOAMER	161736038	6/8/2016	3103852	12/25/2019
Romania	NON-CORROSIVE COMBINATION FOAMER	161736038	6/8/2016	3103852	12/25/2019
	COMPOSITIONS AND METHODS FOR DELAYED CROSSLINKING IN HYDRAULIC FRACTURING FLUIDS	16555087	8/29/2019		
	IMPROVED NAPHTHENATE INHIBITOR FORMULATIONS	BR1120190261 257	5/25/2018		
	IMPROVED NAPHTHENATE INHIBITOR FORMULATIONS	187339437	5/25/2018		
United States of America	NAPHTHENATE INHIBITION	16623493	5/25/2018		
European Patent Office	PARAFFIN SUPPRESSANT COMPOSITIONS, AND METHODS OF MAKING AND USING THEREOF	177310513	6/8/2017		
Russian Federation	PARAFFIN SUPPRESSANT COMPOSITIONS, AND METHODS OF MAKING AND USING THEREOF	2019100039	6/8/2017	2708744	12/11/2019
Russian Federation	TEMPERATURE-STABLE PARAFFIN INHIBITOR COMPOSITIONS	2018134062	4/6/2017		
	TEMPERATURE-STABLE PARAFFIN INHIBITOR COMPOSITIONS	16673474	11/4/2019		
Australia	CORROSION INHIBITOR COMPOSITIONS AND METHODS OF USING SAME	2017257491	4/24/2017		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
United Kingdom	METHODS FOR TREATING A WELL BORE WITHIN AN UNDERGROUND FORMATION ( JDA - BAYER / COVESTRO )	148242589	12/11/2014		
Canada	COMPOSITIONS AND METHODS FOR DELAYED CROSSLINKING IN HYDRAULIC FRACTURING FLUIDS	3030763	7/13/2017		
United States of America	COMPOSITIONS AND METHODS FOR DELAYED CROSSLINKING IN HYDRAULIC FRACTURING FLUIDS	16739434	1/10/2020		
Canada	COMPOSITION, METHOD AND USE FOR ENHANCED OIL RECOVERY	3029400	6/26/2017		
European Patent Office	COMPOSITION, METHOD AND USE FOR ENHANCED OIL RECOVERY	177368511	6/26/2017		
Australia	KINETIC HYDRATE INHIBITORS FOR CONTROLLING GAS HYDRATE FORMATION IN WET GAS SYSTEMS	2018319025	8/17/2018		
Brazil	KINETIC HYDRATE INHIBITORS FOR CONTROLLING GAS HYDRATE FORMATION IN WET GAS SYSTEMS	BR1120200031984	8/17/2018		
Canada	KINETIC HYDRATE INHIBITORS FOR CONTROLLING GAS HYDRATE FORMATION IN WET GAS SYSTEMS		8/17/2018		
European Patent Office	KINETIC HYDRATE INHIBITORS FOR CONTROLLING GAS HYDRATE FORMATION IN WET GAS SYSTEMS	187798343	8/17/2018		
Saudi Arabia	KINETIC HYDRATE INHIBITORS FOR CONTROLLING GAS HYDRATE FORMATION IN WET GAS SYSTEMS	520411310	8/17/2018		
	METHOD FOR DISPERSING KINETIC HYDRATE INHIBITORS	2018275786	6/1/2018		
	METHOD FOR DISPERSING KINETIC HYDRATE INHIBITORS	112019025137			
	METHOD FOR DISPERSING KINETIC HYDRATE INHIBITORS	5	6/1/2018		
	METHOD FOR DISPERSING KINETIC HYDRATE INHIBITORS		6/1/2018		



Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
	METHOD FOR DISPERSING KINETIC HYDRATE INHIBITORS	187334495	6/1/2018		
	METHOD FOR DISPERSING KINETIC HYDRATE INHIBITORS	519410712	6/1/2018		
Canada	THIOL ADDUCTS FOR CORROSION INHIBITION	3071545	8/3/2018		
European Patent Office	THIOL ADDUCTS FOR CORROSION INHIBITION	187556840	8/3/2018		
Mexico	THIOL ADDUCTS FOR CORROSION INHIBITION	MXa2020001345	8/3/2018		
	DILUTION SKID AND INJECTION SYSTEM FOR SOLID/HIGH VISCOSITY LIQUID CHEMICALS		5/23/2018		
	DILUTION SKID AND INJECTION SYSTEM FOR SOLID/HIGH VISCOSITY LIQUID CHEMICALS	187312673	5/23/2018		
	INJECTION SYSTEM FOR CONTROLLED DELIVERY OF SOLID OIL FIELD CHEMICALS		5/23/2018		
	INJECTION SYSTEM FOR CONTROLLED DELIVERY OF SOLID OIL FIELD CHEMICALS	187701362	5/23/2018		
	ALKENYL SUCCINIMIDES AND USE AS NATURAL GAS HYDRATE INHIBITORS	16665874	10/28/2019		
	ALKENYL SUCCINIMIDES AND USE AS NATURAL GAS HYDRATE INHIBITORS	PCTUS2019058299	10/28/2019		
United States of America	NOVEL IMIDAZOLINE-BASED ANTI-AGGLOMERANTS FOR THE CONTROL OF NATURAL GAS HYDRATES				
Canada	FLOWABILITY TESTING SYSTEMS AND METHODS	3033195	2/8/2019		
	COMPOSITIONS FOR ENHANCED OIL RECOVERY		7/3/2018		
	COMPOSITIONS FOR ENHANCED OIL RECOVERY		7/3/2018		
	COMPOSITIONS FOR ENHANCED OIL RECOVERY		7/3/2018		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
	COMPOSITIONS FOR ENHANCED OIL RECOVERY		7/3/2018		
	COMPOSITIONS FOR ENHANCED OIL RECOVERY		7/3/2018		
	GAS HYDRATE INHIBITION USING METHANOL FOAM COMPOSITION	P190103330	11/13/2019		
	GAS HYDRATE INHIBITION USING METHANOL FOAM COMPOSITION	16682953	11/13/2019		
	GAS HYDRATE INHIBITION USING METHANOL FOAM COMPOSITION				
	PREPARATION OF DISULFIDE CORROSION INHIBITORS BY ELECTROCHEMICAL METHODS	16692990	11/22/2019		
	PREPARATION OF DISULFIDE CORROSION INHIBITORS BY ELECTROCHEMICAL METHODS	PCTUS2019062853	11/22/2019		
	COMPOSITIONS FOR ENHANCED OIL RECOVERY	62890235	8/22/2019		
	CROSSLINKED POLYMERS FOR USE IN CRUDE OIL RECOVERY	P190102957	10/17/2019		
	CROSSLINKED POLYMERS FOR USE IN CRUDE OIL RECOVERY	16656025	10/17/2019		
	CROSSLINKED POLYMERS FOR USE IN CRUDE OIL RECOVERY	PCTUS2019056629	10/17/2019		
	USE OF MULTIPLE CHARGED CATIONIC COMPOUNDS DERIVED FROM POLYAMINES FOR CLAY STABILIZATION IN OIL AND GAS OPERATIONS	16554805	8/29/2019		
	ADDITIVES FOR STEAM-INJECTION OIL RECOVERY	16655683	10/17/2019		
	ADDITIVES FOR STEAM-INJECTION OIL RECOVERY	PCTUS2019056696	10/17/2019		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
	COMPLETE REMOVAL OF SOLIDS DURING HYDROGEN SULFIDE SCAVENGING OPERATIONS USING A SCAVENGER AND A MICHAEL ACCEPTOR				
United States of America	COMPLETE REMOVAL OF SOLIDS DURING HYDROGEN SULFIDE SCAVENGING OPERATIONS USING A SCAVENGER AND A MICHAEL ACCEPTOR	16747665	1/21/2020		
	COMPLETE REMOVAL OF SOLIDS DURING HYDROGEN SULFIDE SCAVENGING OPERATIONS USING A SCAVENGER AND A MICHAEL ACCEPTOR				
	SELF-INVERTING POLYMER EMULSIONS				
United States of America	SELF-INVERTING POLYMER EMULSIONS				
	SELF-INVERTING POLYMER EMULSIONS				
	ADDITIVES FOR LATEX EMULSION STABILIZATION	62908258	9/30/2019		
	SURFACE-MODIFIED NANOPARTICLE COMPOSITIONS AND RELATED APPLICATIONS IN SUBTERRANEAN HYDROCARBON RECOVERY	62948619	12/16/2019		
	DEPOSIT-INHIBITING COMPOSITIONS FOR USE IN CRUDE OIL PRODUCTION AND PROCESSING	62894004	8/30/2019		
United Arab Emirates	DEVELOPMENT OF A NOVEL HIGH TEMPERATURE STABLE SCAVENGER FOR REMOVAL OF HYDROGEN SULFIDE	P600119117	4/21/2016		
Angola	DEVELOPMENT OF A NOVEL HIGH TEMPERATURE STABLE SCAVENGER FOR REMOVAL OF HYDROGEN SULFIDE	3558	4/21/2016		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Argentina	DESARROLLO DE UN DEPURADOR ESTABLE A ALTA TEMPERATURA PARA LA ELIMINACIÓN DE SULFURO DE HIDRÓGENO	P160101131	4/22/2016		
Australia	DEVELOPMENT OF A NOVEL HIGH TEMPERATURE STABLE SCAVENGER FOR REMOVAL OF HYDROGEN SULFIDE	2016250539	4/21/2016		
Brazil	?método para tratar sulfeto de hidrogênio em uma corrente?	BR1120170214865	4/21/2016		
Canada	DEVELOPMENT OF A NOVEL HIGH TEMPERATURE STABLE SCAVENGER FOR REMOVAL OF HYDROGEN SULFIDE	2982407	4/21/2016		
China	DEVELOPMENT OF A NOVEL HIGH TEMPERATURE STABLE SCAVENGER FOR REMOVAL OF HYDROGEN SULFIDE	2016818141	4/21/2016		
Colombia	DEVELOPMENT OF A NOVEL HIGH TEMPERATURE STABLE SCAVENGER FOR REMOVAL OF HYDROGEN SULFIDE	NC20170009542	4/21/2016		
European Patent Office	DEVELOPMENT OF A NOVEL HIGH TEMPERATURE STABLE SCAVENGER FOR REMOVAL OF HYDROGEN SULFIDE	167838143	4/21/2016		
India	DEVELOPMENT OF A NOVEL HIGH TEMPERATURE STABLE SCAVENGER FOR REMOVAL OF HYDROGEN SULFIDE	201727032855	4/21/2016		
Nigeria	DEVELOPMENT OF A NOVEL HIGH TEMPERATURE STABLE SCAVENGER FOR REMOVAL OF HYDROGEN SULFIDE	NGPTC20172403	4/21/2016		
African Intellectual Property Organization	DEVELOPMENT OF A NOVEL HIGH TEMPERATURE STABLE SCAVENGER FOR REMOVAL OF HYDROGEN SULFIDE	201700377	4/21/2016		
Saudi Arabia	DEVELOPMENT OF A NOVEL HIGH TEMPERATURE STABLE SCAVENGER FOR REMOVAL OF HYDROGEN SULFIDE	517390146	4/21/2016		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
	DEVELOPMENT OF A NOVEL HIGH TEMPERATURE STABLE SCAVENGER FOR REMOVAL OF HYDROGEN SULFIDE	16358445	3/19/2019		
	DEVELOPMENT OF A NOVEL HIGH TEMPERATURE STABLE SCAVENGER FOR REMOVAL OF HYDROGEN SULFIDE	15135088	4/21/2016	10308886	6/4/2019
Yemen	DEVELOPMENT OF A NOVEL HIGH TEMPERATURE STABLE SCAVENGER FOR REMOVAL OF HYDROGEN SULFIDE	8922016	4/20/2016		
	METHOD AND COMPOSITION FOR PREVENTING CORROSION OF METAL SURFACES	117826644	11/8/2011	2638186	3/4/2020
	METHOD AND COMPOSITION FOR PREVENTING CORROSION OF METAL SURFACES	117826644	11/8/2011	2638186	3/4/2020
	METHOD AND COMPOSITION FOR PREVENTING CORROSION OF METAL SURFACES	117826644	11/8/2011	2638186	3/4/2020
	METHOD AND COMPOSITION FOR PREVENTING CORROSION OF METAL SURFACES	117826644	11/8/2011	2638186	3/4/2020
	POLYMER EMULSIONS FOR USE IN CRUDE OIL RECOVERY	202010213964 X	7/29/2015		
	SOLVENCY FOR ASPHALTENE DEPOSIT REMEDIATION OR INHIBITION		12/18/2018		
	SOLVENCY FOR ASPHALTENE DEPOSIT REMEDIATION OR INHIBITION		12/18/2018		
	CORROSION INHIBITOR COMPOSITIONS AND METHODS OF USING SAME		10/30/2018		
	CORROSION INHIBITOR COMPOSITIONS AND METHODS OF USING SAME		10/30/2018		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
	CORROSION INHIBITOR COMPOSITIONS AND METHODS OF USING SAME		10/30/2018		
	CORROSION INHIBITOR COMPOSITIONS AND METHODS OF USING SAME		10/30/2018		
	FLUID DIVERSION COMPOSITION IN WELL STIMULATION		11/16/2018		
	USE OF SILOXANE POLYMERS FOR VAPOR PRESSURE REDUCTION OF PROCESSED CRUDE OIL		11/7/2018		
	CONTINUOUS INVERSE EMULSION POLYMERIZATION PROCESS FOR UNIFORM POLYMER SIZE DISTRIBUTION	62990558	3/17/2020		
	COMPOSITIONS OF HETEROCYCLIC COMPOUNDS AND USES AS SULFIDOGENESIS INHIBITORS	62964968	1/23/2020		
GB	SQUEEZE TREATMENT FOR IN SITU SCAVENGING OF HYDROGEN SULFIDE	138647573	12/17/2013	2935770	4/8/2020
NO	SQUEEZE TREATMENT FOR IN SITU SCAVENGING OF HYDROGEN SULFIDE	138647573	12/17/2013	2935770	4/8/2020
United States	ENVIRONMENTALLY FRIENDLY BIS-QUATERNARY COMPOUNDS FOR INHIBITING CORROSION AND REMOVING HYDROCARBONACEOUS DEPOSITS IN OIL AND GAS APPLICATIONS	11952211	12/7/2007	7951754	5/31/2011
World Intellectual Patent Organization	COMPOSITION FOR REMEDIATING IRON SULFIDE IN OILFIELD PRODUCTION SYSTEMS	PCTUS2017063860	11/30/2017		
United States	COMPOSITION FOR REMEDIATING IRON SULFIDE IN OILFIELD PRODUCTION SYSTEMS	15827466	11/30/2017		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Brazil	COMPOSITION FOR REMEDIATING IRON SULFIDE IN OILFIELD PRODUCTION SYSTEMS	BR1120190110 402	11/30/2017		
Canada	COMPOSITION FOR REMEDIATING IRON SULFIDE IN OILFIELD PRODUCTION SYSTEMS	3045314	11/30/2017		
European Patent Office	COMPOSITION FOR REMEDIATING IRON SULFIDE IN OILFIELD PRODUCTION SYSTEMS	178175519	11/30/2017		
Mexico	COMPOSITION FOR REMEDIATING IRON SULFIDE IN OILFIELD PRODUCTION SYSTEMS	MXa20190062 79	11/30/2017		
United Arab Emirates	BIOCIDE COMPOSITIONS	1202016	7/31/2014		
Angola	BIOCIDE COMPOSITIONS	3193	7/31/2014		
Australia	BIOCIDE COMPOSITIONS	2014296102	7/31/2014	2014296102	3/15/2018
Brazil	composição de biocida, e, método de controlar a proliferação de micróbios em um sistema usado na produção, transporte, armazenamento e separação de óleo bruto e gás natural	BR1120160021 665	7/31/2014		
Canada	BIOCIDE COMPOSITIONS	2917469	7/31/2014		
China	BIOCIDE COMPOSITIONS	201480043145 8	7/31/2014		
Colombia	BIOCIDE COMPOSITIONS	16006830	7/31/2014		11/7/2018
Ecuador	BIOCIDE COMPOSITIONS	SP20168252	7/31/2014		
	BIOCIDE COMPOSITIONS	148320096	7/31/2014	3027027	7/24/2019
Indonesia	BIOCIDE COMPOSITIONS	P00201600514	7/31/2014		
India	BIOCIDE COMPOSITIONS	201617002359	7/31/2014		

Country Name	TITLE	APPLICATION NUMBER	DATE FILED	PATENT NUMBER	GRANT DATE
Mexico	BIOCIDE COMPOSITIONS	MXa20160013 98	7/31/2014		
	BIOCIDE COMPOSITIONS	NGPTC2016169 3	7/31/2014	NGPTC20161 693	1/23/2019
New Zealand	BIOCIDE COMPOSITIONS	715848	7/31/2014		
African Intellectual Property Organization	BIOCIDE COMPOSITIONS	1201600005	7/31/2014	17665	9/30/2016
Oman	BIOCIDE COMPOSITIONS	OM201600023	7/31/2014		
Russia	BIOCIDE COMPOSITIONS	2016107385	7/31/2014	2654110	5/16/2018
Saudi Arabia	BIOCIDE COMPOSITIONS	516370502	7/31/2014	5233	2/9/2017
Thailand	BIOCIDE COMPOSITIONS	1601000582	7/31/2014		
United States	BIOCIDE COMPOSITIONS	15193983	6/27/2016	9833002	12/5/2017
United States	BIOCIDE COMPOSITIONS	14448196	7/31/2014	9374999	6/28/2016
Viet Nam	BIOCIDE COMPOSITIONS	1201600389	7/31/2014		
	BIOCIDE COMPOSITIONS	201910889493 1	9/17/2019		