

Search query (3): [SP]: 1. reivindicaciones un sistema de aditivos para mejorar la capacidad de flujo y potenciar la capacidad de dilucion de diluyentes en procesos de produccion y transporte de crudos pesados y extrapesados, caracterizado porque dicho sistema comprende: un aditivo e que comprende: alcoholes alifaticos y/o aromaticos con numero de carbonos entre 2 y 30 atomos de carbono (c2-c30) y/o sus correspondientes compuestos etoxilados, y especificamente alcoholes aromaticos con cadenas alquidicas con numero de carbonos de 4 a 12 atomos de carbono (c4 a c12) y derivados en rangos de concentracion entre 5 y 75 percent en peso alcoholes primarios, secundarios y terciarios, dioles, polioles, eteres de glicoles, o mezclas de los mismos, en rangos de concentracion entre 2 y 20 percent en peso acidos sulfonicos, esteres sulfonicos, alquil-sulfonatos de sodio, de potasio, de calcio o mezcla de estos en una concentracion entre 0.5 y 10 percent en peso hidroxidos de sodio, de potasio, de calcio y de magnesio o mezclas de los mismos en una concentracion entre 0.4 y 20 percent en peso eteres de 2 a 6 carbonos, en concentraciones entre 2 al 18 percent en peso aceites vegetales sulfonados en concentraciones entre 2 y 8 percent en peso dispersantes para fluidos base aceite comprenden acidos grasos saturados, nsaturados, hidroxiacidos grasos, y/o sales o esteres provenientes de aceites vegetales en cualquiera de sus combinaciones o derivados en concentraciones entre 0,2 percent y 8 percent en peso agua en concentracion en peso entre 3,5 y 8 percent y solventes organicos en donde dichos solventes organicos son de tipo alifatico o aromatico en un rango desde 42 percent hasta 78 percent en peso. 2.el sistema de aditivos para mejorar la capacidad de flujo y potenciar la capacidad de dilucion de diluyentes en procesos de produccion y transporte de crudos pesados y extrapesados de acuerdo con la reivindicacion 1, caracterizado porque dicho sistema vincula ademas del aditivo e, un aditivo g que comprende: dispersantes para fluidos base aceite en solventes alifaticos y/o aromaticos con numero de carbonos entre 2 y 22 atomos de carbono (c2-c30) y/o sus compuestos etoxilados, combinaciones de los mismos o derivados en rangos de concentracion entre 5 y 30 percent en peso solventes organicos mono, di y trialquilados con compuestos alifaticos, o mezclas de los mismos provenientes de la destilacion del petroleo en rangos de concentracion entre 35 percent y 75 percent fosfolipidos, esteres de glicerol, acido butilico, acidos: laurico, palmitico, estearico, aceites vegetales o mezclas de los mismos, y/o derivados o materias primas que contengan estos compuestos, y que estan en un rango de concentracion entre 8 - 22 percent en peso los alcoholes y/o glicoles con numero de carbonos entre 2 y 22 atomos de carbono (c2-c22) y/o sus correspondientes compuestos etoxilados o combinaciones de los mismos o que se encuentre en el aditivo e, se encuentran en rangos de concentracion entre 5 y 25 percent en peso esteres de polialcohol, esteres de glicol, esteres de glicerina, esteres de sorbitano, esteres de polietilenglicol (peg), esteres de trimetilpropano (t p), poliol-esteres, y/o sus derivados y/o combinaciones de los mismos, se encuentran en rangos de concentracion de 0,1 - 15 percent en peso. 3. el sistema de aditivos para mejorar la capacidad de flujo y potenciar la capacidad de dilucion de diluyentes en procesos de produccion y transporte de crudos pesados y extrapesados de acuerdo con la reivindicacion 1 o 2, caracterizado porque en dicho sistema los alcoholes primarios, secundarios y terciarios son metanol, etanol, propanol, isopropanol, butanol, isobutanol, terbutanol o una mezcla de los mismos. 4. el sistema de aditivos para mejorar la capacidad de flujo y potenciar la capacidad de dilucion de diluyentes en procesos de produccion y transporte de crudos pesados y extrapesados de acuerdo con cualquiera de las reivindicaciones anteriores, caracterizado porque los eteres de 2 a 6 carbonos son metoxietano, metoximetano, 3,3- oxipropano, etano-oxietano eter etilico o mezclas de los mismos. 5. el sistema de aditivos para mejorar la capacidad de flujo y potenciar la capacidad de dilucion de diluyentes en procesos de produccion y transporte de crudos pesados y extrapesados de acuerdo con cualquiera de las reivindicaciones anteriores, caracterizado porque los aceites vegetales sulfonados son aceite de oliva, aceite de girasol, aceite de soya, aceite de palma, aceite de sesamo, aceite de mani, aceite de cartamo, aceite de ricino, aceite de colza o combinaciones de los mismos. 6. el sistema de aditivos para mejorar la capacidad de flujo y potenciar la capacidad de dilucion de diluyentes en procesos de produccion y transporte de crudos pesados y extrapesados de acuerdo con cualquiera de las reivindicaciones anteriores, caracterizado porque los solventes organicos del sistema de aditivos son de tipo alifatico o aromatico, en donde los solventes alifaticos contienen desde 1 hasta 18 atomos de carbono y los solventes aromaticos son benceno, xileno, tolueno o con una o mas cadenas de sustituyentes alifaticas de cadena lineal o ramificada que comprenden entre 1 y 12 atomos de carbono, o mezclas de los mismos. 7. el sistema de aditivos para mejorar la capacidad de flujo y potenciar la capacidad de dilucion de diluyentes en procesos de produccion y transporte de crudos pesados y extrapesados de acuerdo con cualquiera de las reivindicaciones anteriores, caracterizado porque el solvente organico es etilenglicol y/o sus derivados y/o esta presente este compuesto en la materia prima. 8. un proceso de produccion, deshidratacion y transporte de crudos pesados y extrapesados provenientes de recobros convencionales, caracterizado porque comprende los pasos de a) agregar en linea a los fluidos provenientes de yacimiento crudo pesado o crudo extra pesado y agua uno de los aditivos de la invencion (aditivo e) y b) agregar al diluyente el aditivo g para la dilucion de los crudos pesados y extrapesados en el paso de deshidratacion y de transporte de los mismos. 9. el proceso de produccion, deshidratacion y transporte de crudos pesados y extrapesados provenientes de recobros convencionales de acuerdo con la reivindicacion 8, caracterizado porque los diluyentes a los que se agregan los aditivos son tipo gasolina, nafta, diesel, biodiesel o mezclas de los mismos. 1. claims a system of additives to improve the flow capacity and enhance the ability of dilution of diluents in production processes and transport of heavy crudes and heavy crudes, characterized in that said system further comprises: an additive e comprising aliphatic and/or aromatic alcohols with carbon number between 2 and 30 carbon atoms (c2-c30) and/or their corresponding ethoxylated compounds, and specifically with aromatic alcohols with carbon number of 4 to 12 alkyl chains of carbon atoms (c4 to c12) and derivatives in concentration ranges between 5 and 75 percent by weight primary, secondary and tertiary alcohols, diols, polyols, ethers, glycols, or mixtures thereof, at between 2 and 20 wt percent concentration ranges weight sulfonic acids, sulfonic esters, alkyl sulfonates, sodium, potassium, calcium or mixture of these in a concentration between 0.5 and 10 percent by weight hydroxides of sodium, potassium, calcium and magnesium salts or mixtures thereof in a concentration between 0.4 and 20 percent by weight ethers of 2 to 6 carbons, in concentrations between 2 to 18 weight percent sulfonated vegetable oils at concentrations between 2 and 8 percent by weight dispersants for oil based fluids comprise saturated fatty acids, unsaturated monomers, hydroxy fatty acids, and/or salts or esters from vegetable oils in any combinations or derivatives in concentrations between 0.2 percent and 8 percent by weight water in concentration in weight between 3.5 and 8 percent and organic solvents wherein said organic solvents are aliphatic or aromatic type in a range from 42 percent to 78 percent by weight. 2.the system of additives to improve the flow capacity and enhance the ability of dilution of diluents in production processes and transport of heavy crudes and heavy crudes according to claim 1, characterized in that said links in addition to the additive e, an additive g comprising: dispersants for oil based fluids in aliphatic and/or aromatic solvents with carbon number between 2 and 22 carbon atoms (c2-c30) and/or their ethoxylated compounds, combinations thereof, or derivatives in concentration ranges between 5 and 30 percent by weight mono-, di- and trialquilados organic solvents with aliphatic compounds, or mixtures thereof from the distillation of oil in concentration ranges between 35 percent and 75 percent phospholipids, esters of glycerol, butyl, acids: lauric, palmitic, stearic acid, vegetable oils, or mixtures thereof, and/or derivatives or raw materials containing these compounds, and which are in a concentration range between 8 - 22 percent by weight the alcohols and/or glycols with carbon number between 2 and 22 carbon atoms (c2-c22) and/or their corresponding ethoxylated compounds or combinations of the same or that is in the additive e, are between 5 and 25 percent by weight concentration ranges esters of polyhydric alcohol, glycol esters, glycerol esters, sorbitan esters, polyethylene glycol (peg) esters, esters of trimethylpropane (t p), polyol-esters, and/or their derivatives and/or combinations thereof, in concentration ranges of 0.1 - 15 percent by weight. 3. the system of additives to improve the fl

Results: 7

Search history

Search IC=(F17D1/16) (Results 1374)

1:

Search FT=(ethoxylated alkyl phenol) and IC=(F17D1/16) (Results 5)

2:

Search [SP]: 1. reivindicaciones un sistema de aditivos para mejorar la capacidad de flujo y potenciar la capacidad de dilucion de diluyentes en procesos de produccion y transporte de crudos pesados y extrapesados, caracterizado porque dicho sistema comprende: un aditivo e que comprende: alcoholes alifaticos y/o aromaticos con numero de carbonos entre 2 y 30 atomos de carbono (c2-c30) y/o sus correspondientes compuestos etoxilados, y especificamente alcoholes aromaticos con cadenas alquidicas con numero de carbonos de 4 a 12 atomos de carbono (c4 a c12) y derivados en rangos de concentracion entre 5 y 75 percent en peso alcoholes primarios, secundarios y terciarios, dioles, polioles, eteres de glicoles, o mezclas de los mismos, en rangos de concentracion entre 2 y 20 percent en peso acidos sulfonicos, esteres sulfonicos, alquil-sulfonatos de sodio, de potasio, de calcio o mezcla de estos en una concentracion entre 0.5 y 10 percent en peso hidroxidos de sodio, de potasio, de calcio y de magnesio o mezclas de los mismos en una concentracion entre 0.4 y 20 percent en peso eteres de 2 a 6 carbonos, en concentraciones entre 2 al 18 percent en peso aceites vegetales sulfonados en concentraciones entre 2 y 8 percent en peso dispersantes para fluidos base aceite comprenden acidos grasos saturados, nsaturados, hidroxiacidos grasos, y/o sales o esteres provenientes de aceites vegetales en cualquiera de sus combinaciones o derivados en concentraciones entre 0,2 percent y 8 percent en peso agua en concentracion en peso entre 3,5 y 8 percent y solventes organicos en donde dichos solventes organicos son de tipo alifatico o aromatico en un rango desde 42 percent hasta 78 percent en peso. 2.el sistema de aditivos para mejorar la capacidad de flujo y potenciar la capacidad de dilucion de diluyentes en procesos de produccion y transporte de crudos pesados y extrapesados de acuerdo con la reivindicacion 1, caracterizado porque dicho sistema vincula ademas del aditivo e, un aditivo g que comprende: dispersantes para fluidos base aceite en solventes alifaticos y/o aromaticos con numero de carbonos entre 2 y 22 atomos de carbono (c2-c30) y/o sus compuestos etoxilados, combinaciones de los mismos o derivados en rangos de concentracion entre 5 y 30 percent en peso solventes organicos mono, di y trialquilados con compuestos alifaticos, o mezclas de los mismos provenientes de la destilacion del petroleo en rangos de concentracion entre 35 percent y 75 percent fosfolipidos, esteres de glicerol,

ácido butílico, ácidos: laurico, palmítico, estearico, aceites vegetales o mezclas de los mismos, y/o derivados o materias primas que contengan estos compuestos, y que están en un rango de concentración entre 8 - 22 percent en peso los alcoholes y/o glicoles con número de carbonos entre 2 y 22 átomos de carbono (C2-C22) y/o sus correspondientes compuestos etoxilados o combinaciones de los mismos o que se encuentren en el aditivo e, se encuentran en rangos de concentración entre 5 y 25 percent en peso ésteres de polialcohol, ésteres de glicol, ésteres de glicerina, ésteres de sorbitano, ésteres de polietilenglicol (peg), ésteres de trimetilpropano (t p), poliol-ésteres, y/o sus derivados y/o combinaciones de los mismos, se encuentran en rangos de concentración de 0,1 - 15 percent en peso. 3. el sistema de aditivos para mejorar la capacidad de flujo y potenciar la capacidad de dilución de diluyentes en procesos de producción y transporte de crudos pesados y extrapesados de acuerdo con la reivindicación 1 o 2, caracterizado porque en dicho sistema los alcoholes primarios, secundarios y terciarios son metanol, etanol, propanol, isopropanol, butanol, isobutanol, terbutanol o una mezcla de los mismos. 4. el sistema de aditivos para mejorar la capacidad de flujo y potenciar la capacidad de dilución de diluyentes en procesos de producción y transporte de crudos pesados y extrapesados de acuerdo con cualquiera de las reivindicaciones anteriores, caracterizado porque los éteres de 2 a 6 carbonos son metoxietano, metoximetano, 3,3-oxipropano, etano-oxietano éter etílico o mezclas de los mismos. 5. el sistema de aditivos para mejorar la capacidad de flujo y potenciar la capacidad de dilución de diluyentes en procesos de producción y transporte de crudos pesados y extrapesados de acuerdo con cualquiera de las reivindicaciones anteriores, caracterizado porque los aceites vegetales sulfonados son aceite de oliva, aceite de girasol, aceite de soya, aceite de palma, aceite de sesamo, 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porque el solvente orgánico es etilenglicol y/o sus derivados y/o esta presente este compuesto en la materia prima. 8. un proceso de producción, deshidratación y transporte de crudos pesados y extrapesados provenientes de recobros convencionales, caracterizado porque comprende los pasos de a) agregar en línea a los fluidos provenientes de yacimiento crudo pesado o crudo extra pesado y agua uno de los aditivos de la invención (aditivo e) y b) agregar al diluyente el aditivo g para la dilución de los crudos pesados y extrapesados en el paso de deshidratación y de transporte de los mismos. 9. el proceso de producción, deshidratación y transporte de crudos pesados y extrapesados provenientes de recobros convencionales de acuerdo con la reivindicación 8, caracterizado porque los diluyentes a los que se agregan los aditivos son tipo gasolina, nafta, diesel, biodiesel o mezclas de los mismos. 1. claims a system of additives to improve the flow capacity and enhance the ability of dilution of diluents in production processes and transport of heavy crudes and heavy crudes, characterized in that said system further comprises: an additive e comprising aliphatic and/or aromatic alcohols with carbon number between 2 and 30 carbon atoms (C2-C30) and/or their corresponding ethoxylated compounds, and specifically with aromatic alcohols with carbon number of 4 to 12 alkyl chains of carbon atoms (C4 to C12) and derivatives in concentration ranges between 5 and 75 percent by weight primary, secondary and tertiary alcohols, diols, polyols, ethers, glycols, or mixtures thereof, at between 2 and 20 wt percent concentration ranges weight sulfonic acids, sulfonic esters, alkyl sulfonates, sodium, potassium, calcium or mixture of these in a concentration between 0.5 and 10 percent by weight hydroxides of sodium, potassium, calcium and magnesium salts or mixtures thereof in a concentration between 0.4 and 20 percent by weight ethers of 2 to 6 carbons, in concentrations between 2 to 18 weight percent sulfonated vegetable oils at concentrations between 2 and 8 percent by weight dispersants for oil based fluids comprise saturated fatty acids, unsaturated monomers, hydroxy fatty acids, and/or salts or esters from vegetable oils in any combinations or derivatives in concentrations between 0.2 percent and 8 percent by weight water in concentration in weight between 3.5 and 8 percent and organic solvents wherein said organic solvents are aliphatic or aromatic type in a range from 42 percent to 78 percent by weight. 2. the system of additives to improve the flow capacity and enhance the ability of dilution of diluents in production processes and transport of heavy crudes and heavy crudes according to claim 1, characterized in that said links in addition to the additive e, an additive g comprising: dispersants for oil based fluids in aliphatic and/or aromatic solvents with carbon number between 2 and 22 carbon atoms (C2-C20) and/or their ethoxylated compounds, combinations thereof, or derivatives in concentration ranges between 5 and 30 percent by weight mono-, di- and trialkylated organic solvents with aliphatic compounds, or mixtures thereof from the distillation of oil in concentration ranges between 35 percent and 75 percent phospholipids, esters of glycerol, butyl, acids: lauric, palmitic, stearic acid, vegetable oils, or mixtures thereof, and/or derivatives or raw materials containing these compounds, and which are in a concentration range between 8 - 22 percent by weight the alcohols and/or glycols with carbon number between 2 and 22 carbon atoms (C2-C22) and/or their corresponding ethoxylated compounds or combinations of the same or that is in the additive e, are between 5 and 25 percent by weight concentration ranges esters of polyhydric alcohol, glycol esters, glycerol esters, sorbitan esters, polyethylene glycol (peg) esters, esters of trimethylpropane (t p), polyol-esters, and/or their derivatives and/or combinations thereof, in concentration ranges of 0.1 - 15 percent by weight. 3. the system of additives to improve the fl (Results 7)

1) Family number: 53118046 (US2013172218A)

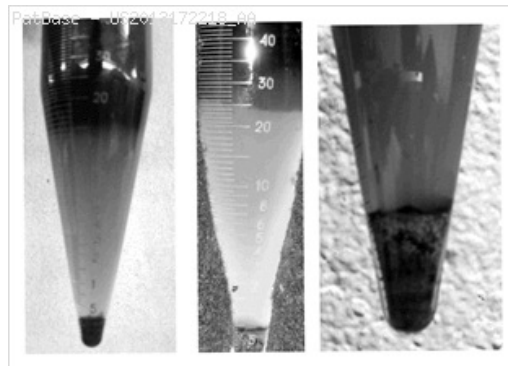
PatBase

Title: COMPOUND OF BIODEGRADABLE SURFACTANTS FOR SEPARATING IMPURITIES IN A HYDROCARBON

Abstract: Compounds of biodegradable surfactants useful for optimizing the separation of impurities typical of hydrocarbons, and designed to intervene and stabilize the molecular structure of crude oil, with no significant alterations of the crude's intrinsic composition are disclosed. The biodegradable surfactants compounds coexist with a non-ionic surfactant and an organic mix in emulsion form with the purpose of isolating crude from the pipeline, reduce friction to improve crude flow and to enter the crude macromolecule to modify the hydrocarbon chain to reduce its density and thus its viscosity; including compounds of biodegradable surfactants that comprise sodium hydroxide 1N, potassium chloride, sulphonic acid, dodecanoic acid, nonylphenol, terpene-1 and water, preferably hard water.

Classifications:

International (IPC 8-9): C09K3/00 C09K3/32 C09K8/035 C09K8/52 C09K8/524 C09K8/58 C09K8/60 C10G1/04 C10G29/06 C10G29/12 C10G29/20 C10G29/22 C10G29/28 C10G33/04 C11D3/60 C11D7/06 C11D7/08 C11D7/10 C11D7/24 C11D7/26 E21B21/06 E21B37/06 E21B43/16 E21B43/22 (Advanced/Invention)
CPC: C09K3/32 C09K8/52 C09K8/602 C10G1/045 C10G29/06 C10G29/12 C10G29/20 C10G29/22 C10G29/28 C10G33/04 E21B21/068 C09K8/035 C09K8/524 C11D7/06 C11D7/08 C11D7/10 C11D7/248 C11D7/261 C11D7/262 C11D7/265 E21B37/06 E21B43/16
US: 1/1 166/304 208/311 208/390 252/183.13 252/364 507/137 507/244 507/264 507/266 510/110 510/188 510/365 510/491 516/142



Family:

Publication number	Publication date	Application number	Application date
MX2012000253 A1	20121012	MX20120000253	20120102
MX360865 B	20181109	MX20120000253	20120102
US2013172218 AA	20130704	US20120475438	20120518
US2015065400 AA	20150305	US20140533565	20141105
US2015065402 AA	20150305	US20140533585	20141105
US2017210970 AA	20170727	US20170484834	20170411

US9617481 BB	20170411	US20140533565	20141105
US10385256 BB	20190820	US20170484834	20170411

Priority:

MX20120000253 20120102 US20120475438 20120518 US20120475438 20120518
US20140533565 20141105 US20140533585 20141105 US20170484834 20170411

Probable Assignee: ENVIRONMENTAL DEVELOPMENT PRODUCTS ENDEVPRO LTD

Assignee(s): (std): ENVIRONMENTAL DEV PRODUCTS ENDEVPRO LTD ; ENVIRONMENTAL DEVELOPMENT PRODUCTS ENDEVPRO LTD ; ENVIRONMENTAL DEV PRODUCTS ENDEVPRO LTD ; ENV DEV PRODUCTS ENDEVPRO LTD ; ENVIRONMENTAL DEV PRODUCTS ENDEVPRO LTD ; REYES LOPEZ RIXIO EGARDO ; LABARCA FINOL OSMERIO ENRIQUE ; ENVIRONMENTAL DEVELOPMENT PRODUCTS ENDEVPRO LTD STAR

Assignee(s): ENVIRONMENTAL DEVELOPMENT PRODUCTS ENDEVPRO LTD ; ENVIRONMENTAL DEVELOPMENT PRODUCTS ENDEVPRO LTD ; ENVIRONMENTAL DEVELOPMENT PRODUCTS ENDEVPRO LIMITED

Inventor(s): (std): LABARCA FINOL OSMERIO ENRIQUE ; REYES LOPEZ RIXIO EGARDO ; RIXIO EGARDO REYES LOPEZ ; OSMEIRO ENRIQUE LABARCA FINOL ; LOPEZ RIXIO EGARDO REYES ; FINOL OSMEIRO ENRIQUE LABARCA

Agent(s): MERCHANT AND GOULD PC

2) Family number: 41802075 (US2008135053A)

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Title: METHODS, SYSTEMS AND DEVICES FOR PERFORMING GYNECOLOGICAL PROCEDURES

Abstract: Methods, systems and devices for performing gynecological procedures. According to one embodiment, there is provided a device for occluding a fallopian tube, the device including an outer member and an inner member. The outer member may be a hollow, frusto-conical structure shaped to include an open proximal end, an open distal end, and a side wall. The outer member may be self-expandable such that the distal end is biased radially outwardly. In addition, the side wall may have a porous structure to permit the ingrowth of tissue therethrough. Tines may be provided on the outer surface of the side wall to promote the anchoring of the outer member in a fallopian tube. The inner member, which may be structured to induce scarring, may comprise an elongated fibrous body fixed at its proximal end to the proximal end of the outer member. A bore may extend distally from the proximal end of the inner member to receive a delivery rod. The inner member, which may have pores or interstices to permit the ingrowth of tissue thereinto, is coated or impregnated with a sclerosing agent.

Classifications:

International (IPC 8-9): A61B1/00 A61B1/012 A61B1/018 A61B1/06 A61B1/303 A61B1/002 A61B17/00 A61B17/02 A61B17/12 A61B17/22 A61B17/29 A61B17/30 A61B17/32 A61B17/3201 A61B17/3205 A61B17/3207 A61B17/34 A61B17/42 A61B18/14 A61B19/00 A61B5/00 A61B8/12 A61B90/30 A61F6/00 A61F6/06 A61F6/20 A61F6/22 A61M1/00 A61M25/00 A61M25/09 A61M25/10 A61M29/00 A61M29/02 A61M31/00 A61M37/00 A61N5/06 A61N7/02 (Advanced/Invention); A61B1/12 A61B10/02 A61B17/00 A61B17/12 A61B17/22 A61B17/29 A61B17/3201 A61B17/3205 A61B17/3207 A61B17/34 A61B17/42 A61B18/14 A61B19/00 A61B8/12 A61B90/30 A61M25/00 (Advanced/Non-invention);

A61B1/012 A61B17/32 A61B17/34 A61B17/42 A61B19/00 A61B5/00 A61F6/00 A61M1/00 A61M29/00 A61M29/02 (Core/Invention)

CPC: A61B2017/12054 A61F6/225 A61B17/12022 A61B17/12131 A61B17/12159 A61B17/12172 A61B2017/00986 A61F6/208 A61B17/320758 A61B17/3421 A61B17/3498 A61B2017/3447 A61B17/22 A61N7/022 A61M31/002 A61B5/6875 A61M25/09 A61N5/0603 A61N5/062 A61M29/02 A61B17/12099 A61B17/12136 A61B2017/00973 A63M1/0082 A61B8/12 A61B17/3496 A61B2010/0208 A61B2017/00738 A61B2017/00526 A61B17/00234 A61B2017/0073 A61B1/0615 A61B1/0661 A61B17/12013 A61B17/12045 A61B2017/00084 A61B2017/00278 A61B2017/00557 A61B2017/00862 A61B2017/00876 A61B2017/00893 A61B2017/12018 A61B2017/12127 A61B2017/22038 A61B2017/306 A61F6/20 A61M25/0026 A61M25/1002 A61M25/1011 A61M37/0092 A61M2025/1047 A61M2025/105 A61B2090/3614 A61B2090/306 A61B1/00135 A61B17/0218 A61B2017/00867 A61B2017/22069 A61M25/0023 A61M25/0097 A61B17/3205 A61B2017/22079 A61B17/02 A61B2017/22078 A61B17/4241 A61B17/30 A61B17/320016 A61B17/29 A61B2017/3445 A61B17/3201 A61B17/32053 A61B17/32056 A61B17/320725 A61B17/320783 A61B17/3462 A61B2017/00685 A61B2017/2905 A61B2017/320004 A61B2017/320064 A61B2017/320775 A61B2017/3466 A61B2017/4216 A61B2018/1407 A61B2217/007 A61M1/0082 A61B1/303 A61B2090/064 A61B2017/320028 A61B2217/005 A61B17/3415 A61B2017/00424 A61B2017/00398 A61B2017/320024 A61B17/32002 A61B90/30 A61B2017/00331 A61B2017/0046 A61B2017/347 A61B2017/32007 A61B2017/320071 A61B17/42

European: A61B1/06 A61B1/303 A61B17/02E A61B17/12P A61B17/12P1T2 A61B17/12P5 A61B17/12P7 A61B17/12P7B A61B17/12P7P A61B17/12P7W1 A61B17/3205G A61B17/32E2 A61B17/34G4 A61B17/42 A61F6/20 A61F6/20L A61F6/22B A61M25/00R1 A61M25/00V A61M25/10A A61M25/10D A61M37/00U K61B1/00H4 K61B1/303 K61B17/00C1T K61B17/00E1T K61B17/00M K61B17/00N8 K61B17/00Q14 K61B17/00Q2 K61B17/00S10 K61B17/00S12 K61B17/00S14 K61B17/00S21 K61B17/00X1 K61B17/12L2 K61B17/12L4 K61B17/12P2 K61B17/12P6 K61B17/22G K61B17/22H7F K61B17/29 K61B17/29F6 K61B17/30S K61B17/3201 K61B17/3205S K61B17/3207E K61B17/3207R K61B17/3207R4 K61B17/3207S K61B17/32A K61B17/32E2R K61B17/32T K61B17/32U K61B17/34G4M K61B17/34G4M2 K61B17/34H K61B17/34H4 K61B17/34V K61B17/42C K61B18/14C2 K61B19/46H K61B19/52B K61B19/52B4 K61B19/52D4 K61B217/00Q16 K61B217/00Q18 K61B8/12 K61M1/00T1 K61M25/00R1M K61M25/10Z2 K61M25/10Z3

US: 1/1 128/831 128/832 128/898 128/898S 600/104 600/104P 600/114 600/154 600/154P 600/156 600/156S 600/158 600/158S 600/37 604/106 604/164.01 604/164.010P 604/22 604/27 604/28 604/28S 604/514 604/515 604/517 606/110 606/115 606/119 606/119P 606/119S 606/170 606/170P 606/171 606/171P 606/180 606/193 606/193S 606/198 606/198S

Family:

Publication number	Publication date	Application number	Application date
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AU2010242907 BB	20150521	AU20100242907	20100429
CA2760328 AA	20111027	CA20102760328	20100429
CA2760328 C	20170117	CA20102760328	20100429
CN102438534 A	20120502	CN201080018769	20100429
CN102438534 B	20160302	CN201080018769	20100429
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EP2083771 A2	20090805	EP20070864060	20071107
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EP2134283 A1	20091223	EP20080745182	20080404
EP2134283 A4	20110323	EP20080745182	20080404
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EP2424449 A1	20120307	EP20100770377	20100429
EP2424449 A4	20150527	EP20100770377	20100429
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EP3132760 A1	20170222	EP20160182254	20100429
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US2008135053 AA	20080612	US20070936003	20071106
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US2008146873 AA	20080619	US20070923482	20071024
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US9392935 BB	20160719	US20070923482	20071024
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US10130389 BB	20181120	US20160365502	20161130
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WO10127171 A1	20101104	WO2010US33047	20100429
WO10127174 A1	20101104	WO2010US33050	20100429

Priority:

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US20160365502	20161130	US20180190770	20181114		

Probable Assignee: HOLOGIC INC

Assignee(s): (std): FLAHERTY J CHRISTOPHER ; INTERLACE MEDICAL INC ; GRUBER WILLIAM HARWICK ; FOSHEE DAVID L ; FLAHERTY J CHRISTOPHER ; GRUBER WILLIAM H ; ERSON MARK THOMAS ; LITSCHER ERIC KARL ; JACOBS DAVID ; MACARI DANNY ; LORENZ MICHAEL A ; KOLADA PAUL P ; KNODEL BRYAN DALE ; LORENZ MICHAEL ANTHONY ; MORA LUDWIN M ; LITSCHER ERIK KARL ; HOLOGIC INC ; BURCHFIELD BRENT L ; BURCHFIELD BRENT LEE ; DREW DOUGLAS R ; CHIN ALBERT CHUN CHI ; DICESARE PAUL ; CLCENAS

CHRIS W ; CRISP RYAN S ; CICHENAS CHRIS WILLIAM ; CRISP RYAN SCOTT ; DANIELS CHRIS SCOTT ; CHURCHILL WILLIAM LUCAS ; ADAMS RONALD D ; ADAMS RONALD DAVID ; MOSLER THEODORE J ; TELLERS CHRISTOPHER PATRICK ; PATTERSON FRANK V ; RADZIUNAS JEFFREY ; VIGLIOTTI DANIEL ; VITITOE KEVIN J ; SULLIVAN ROY HEWETT ; SULLIVAN ROY HEWITT

Assignee(s): SUROS SURGICAL SYSTEMS INC ; THIRD WAVE TECHNOLOGIES INC ; GEN PROBE INC ; HOLOGIC INC BEDFORD ; HOLOGIC INC MARLBOROUGH ; BANK OF AMERICA NA COLLATERAL AGENT AS ; BIOLUCENT LLC ; CYTYC CORP ; CYTYC SURGICAL PRODUCTS PARTNERSHIP LTD ; DIRECT RADIOGRAPHY CORP ; FLAHERTY J ; GOLDMAN SACHS BANK USA

Inventor(s): (std): FLAHERTY J CHRISTOPHER ; GRUBER WILLIAM HARWICK ; ADAMS RONALD DAVID ; FOSHEE DAVID L ; MOSLER THEODORE J ; DREW DOUGLAS R ; FLAHERTY J CHRISTOPHER ; GRUBER WILLIAM H ; ADAMS RONALD D ; ERSOON MARK THOMAS ; LITSCHER ERIC KARL ; CHIN ALBERT CHUN CHI ; JACOBS DAVID ; TELLERS CHRISTOPHER PATRICK ; PATTERSON FRANK V ; MACARI DANNY ; BURCHFIELD BRENT L ; RADZIUNAS JEFFREY ; DICESARE PAUL ; LORENZ MICHAEL A ; CICHENAS CHRIS W ; VIGLIOTTI DANIEL ; CRISP RYAN S ; CICHENAS CHRIS WILLIAM ; VITITOE KEVIN J ; SULLIVAN ROY HEWETT ; CRISP RYAN SCOTT ; KOLADA PAUL P ; BURCHFIELD BRENT LEE ; KNODEL BRYAN DALE ; DANIELS CHRIS SCOTT ; LORENZ MICHAEL ANTHONY ; MORA LUDWIN M ; SULLIVAN ROY HEWITT ; LITSCHER ERIC KARL ; CHURCHILL WILLIAM LUCAS ; CHUN CHI CHIN ALBERT ; DAVID ADAMS RONALD ; HEWITT SULLIVAN ROY ; LUCAS CHURCHILL WILLIAM ; DAVID JACOBS ; KARL LITSCHER ERIC ; HARWICK GRUBER WILLIAM ; CICHENAS CHRIS W ; GRUBER WILLIAM

Inventor(s): FLAHERTY J ; LITSCHER ERIC KARL HOPKINTON ; DICESARE PAUL EASTON ; KNODEL BRYAN DALE FLAGSTAFF ; CRISP RYAN SCOTT LEWIS CENTER ; ADAMS RONALD DAVID HOLLISTON ; KOLADA PAUL P BEXLEY ; LORENZ MICHAEL ANTHONY GAHANNA ; RADZIUNAS JEFFREY WALLINGFORD ; VIGLIOTTI DANIEL HAMDEN ; BURCHFIELD BRENT LEE POWELL ; SULLIVAN ROY HEWETT UXBRIDGE ; GRUBER WILLIAM HARWICK SOUTHBOROUGH ; MORA LUDWIN M WORTHINGTON ; DANIELS CHRIS SCOTT COLUMBUS ; CHIN ALBERT CHUN CHI NEWTON ; CICHENAS CHRIS WILLIAM PATASKALA ; VITITOE KEVIN J COLUMBUS ; SULLIVAN ROY HEWITT UXBRIDGE ; CHURCHILL WILLIAM LUCAS BOLTON ; JACOBS DAVID ACTON

Agent(s): WALLINGTON DUMMER ; SIM AND MCBURNEY ; RICHES MCKENZIE AND HERBERT LLP ; GRAPE AND SCHWARZENSTEINER ; MARTIN DAVID JOHN ; AHMAD SHEIKH SHAKEEL ; RICKARD DAVID JOHN ; LECOMTE AND PARTNERS ; ALVAREZ SONIA ; KNOBBE MARTENS OLSON AND BEAR LLP ; VISTA IP LAW GROUP LLP ; DELANEY KAROLINE A ; ALTMAN DANIEL E

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

3) Family number: 65075542 (US2017058188A) PatBase

Title: METHOD OF IMPROVING MOBILITY OF HEAVY CRUDE OILS IN SUBTERRANEAN RESERVOIRS

Abstract: A method for improving mobility of heavy crude oil in a subterranean reservoir is provided. A fluid formulation can be introduced into the reservoir, the fluid formulation comprising water and a surfactant, and optional co-solvents. The fluid formulation can produce one or more of a dispersion and an emulsion in the reservoir, whereby the surfactant acts as an dispersant or emulsifying agent, emulsifier and/or drag reducing agent. The emulsion or the dispersion can have a water external phase and a crude oil internal phase.

Classifications:

International (IPC 8-9): C09K8/035 C09K8/58 C09K8/584 C09K8/60 C09K8/86 E21B43/16 E21B43/22 (Advanced/Invention)

CPC: C09K8/035 C09K8/584 E21B43/16

US: 1/1 166/270.1

Family:

Publication number	Publication date	Application number	Application date
AU2016315665 AA	20180412	AU20160315665	20160829
AU2016315665 BB	20190718	AU20160315665	20160829
BR112018003367 A2	20181002	BR20181103367	20160829
CA2996554 AA	20180223	CA20162996554	20160829
CO20180002539 A2	20180531	CO20180002539	20180309
EP3344723 A1	20180711	EP20160763648	20160829
ID201808174 A	20180803	ID2018P0001833	20160829
MX2018002218 A1	20180323	MX20180002218	20160829
RU2018109296 A	20190916	RU20180109296	20160829
RU2018109296 A3	20190916	RU20180109296	20160829
RU2707231 C2	20191125	RU20180109296	20160829
US2017058188 AA	20170302	US20160250442	20160829
US10494563 BB	20191203	US20160250442	20160829
WO17040412 A1	20170309	WO2016US49289	20160829

Priority:

US20150212779P 20150901 RU20180109296 20160829 US20160250442 20160829
WO2016US49289 20160829

Probable Assignee: BAKER HUGHES A GE CO LLC

Assignee(s): (std): BAKER HUGHES A GE CO ; BAKER HUGHES A GE CO LLC ; BAKER HUGHES INC

Assignee(s): BEJKE KHYUZ E DZHII KOMPANI LLK ; QUINTERO LIRIO ; MARCOS JOSE ; GOMEZ SERNA GERMAN RODRIGO ; MESA SEBASTIAN ; TORO CARLOS F

Inventor(s): (std): GOMEZ SERNA GERMAN RODRIGO ; MESA SEBASTIAN ; MARCOS JOSE ; QUINTERO LIRIO ; TORO CARLOS F ; LIRIO QUINTERO ; JOSE MARCOS ; GERMAN RODRIGO GOMEZ SERNA ; SEBASTIAN MESA ; CARLOS F TORO ; TORO F CARLOS

Inventor(s): TORO F ; KINTERO LIRIO ; MARKOS KHOSE ; GOMES SERNA GERMAN RODRIGO ; MESA SEBASTIAN ; TORO KARLOS ; CARLOS TORO F

Agent(s): PATENT ATTORNEY SERVICES; FPA PATENT ATTORNEYS PTY LTD; SIM AND MCBURNEY; MARKS AND

CLERK; CAROLINA MERCEDES DAZA MONTALVO; DEHNS; DR TOETI HERATY N ROOSSENO; GREENBERG TRAURIG LLP; CHRETIEN MARK G ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

4) Family number: 59063570 (US2015111799A)

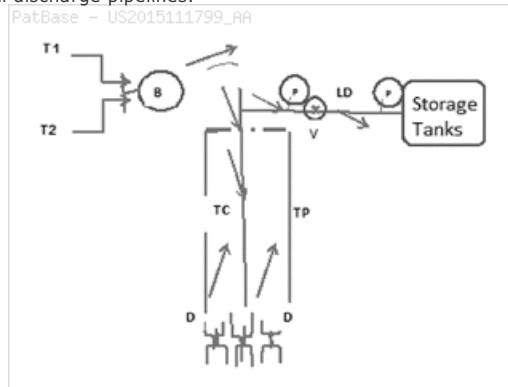
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Title: APPLICATION OF A CHEMICAL COMPOSITION FOR VISCOSITY MODIFICATION OF HEAVY AND EXTRA-HEAVY CRUDE OILS

Abstract: The present invention relates to the use of a chemical composition to modify the physical properties (viscosity and interfacial tension) of heavy and extra-heavy crude oils, to increase their mobility. The chemical composition comprises or consists of a combination of systems based on ionic and non-ionic liquids, which may be pure or modified, mixed in an aqueous or organic medium as a dispersing agent, depending on the nature of the crude to be treated, together with a surfactant. The composition is mixed with the crude oil at a temperature between 5 and 100 degrees centigrade, at pressures from 1 atm (14.7 psi) up to about 680.2 atm (10,000 psi). The composition can be mixed with heavy crude oils, at the point of extraction from the well in the field, during the transport of crude oil in pipelines, or in the well discharge pipelines.

Classifications:

International (IPC 8-9): C07C7/10 C09K3/00 C09K8/035 C09K8/58 C09K8/584 C10G71/02 C10M101/02 C10M133/46 F17D1/17 (Advanced/Invention); C09K8/524 (Advanced/Non-invention)
CPC: C10M101/02 C09K8/584 C10M133/46 C10M2215/224 C09K8/035 C09K8/524 C10M2203/1006 C10M2211/00 C10N2220/04 C10N2230/02 C10N2230/04
US: 507/243 508/283 585/4



Family:

Publication number	Publication date	Application number	Application date
CA2866851 AA	20150422	CA20142866851	20141010
CA2866851 C	20180904	CA20142866851	20141010
MX2013012324 A1	20150421	MX20130012324	20131022
MX359374 B	20180913	MX20130012324	20131022
US2015111799 AA	20150423	US20140520734	20141022
US9790446 BB	20171017	US20140520734	20141022

Priority:

MX20130012324 20131022

Probable Assignee: INSTITUTO MEXICANO DEL PETROLEO

Assignee(s): (std): INST MEXICANO DEL PETROLEO ; INST MEXICANO DEL PETROLEO ; MEXICANO INST PETROL ; UNIV DE GUANAJUATO ; UNIV GUANAJUATO

Assignee(s): INSTITUTO MEXICANO DEL PETROLEO ; UNIVERSIDAD DE GUANAJUATO ; INSTITUTO MEXICANO DEL PETROLEO ; MIRANDA OLVERA ALMA DELIA ; VAZQUEZ GUEVARA MIGUEL ANGEL ; DOMINGUEZ ESQUIVEL JOSE MANUEL ; GARCIA CHAVEZ RICARDO

Inventor(s): (std): MIRANDA OLVERA ALMA DELIA ; GARCIA CHAVEZ RICARDO ; DOMINGUEZ ESQUIVEL JOSE MANUEL ; VAZQUEZ GUEVARA MIGUEL ANGEL ; OLVERA ALMA DELIA MIRANDA ; ESQUIVEL JOSE MANUEL DOMINGUEZ ; GUEVARA MIGUEL ANGEL VAZQUEZ ; CHAVEZ RICARDO GARCIA ; RICARDO GARCIA CHAVEZ ; JOSE MANUEL DOMINGUEZ ESQUIVEL ; MIGUEL ANGEL VAZQUEZ GUEVARA ; ALMA DELIA MIRANDA OLVERA

Agent(s): NORTON ROSE FULBRIGHT CANADA LLP SENCRL SRL; DICKINSON WRIGHT PLLC

5) Family number: 57266690 (US2014238901A)

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Title: DEHYDRATING AND DESALTING COMPOSITIONS OF CRUDE OILS, USING TRIBLOCK COPOLYMERS ALPHA,OMEGA-BIFUNCTIONALIZED WITH AMINES

Abstract: Compositions consisting of block copolymers a, γ -di-aryl or alkyl sulfonates of poly(ethylene oxide) ω -poly(propylene oxide)-poly(ethylene oxide) ω of bis-ammonium and block copolymers a, γ -di-amine of poly(ethylene oxide) ω -poly(propylene oxide)-poly(ethylene oxide) ω , are provided that are effective in the dewatering and desalting crude oils whose specific gravities are within the range of 14 to 20 degrees API. A method of dewatering and desalting heavy crude oil adds a mixture of the copolymer bifunctionalized with an aliphatic or aromatic secondary amine and a copolymer bifunctionalized with an aliphatic or aromatic tertiary amine.

Classifications:

International (IPC 8-9): C08G65/333 C08G65/334 C08L71/02 C10G31/08 C10G33/04 (Advanced/Invention)
CPC: C08L71/02 C10G33/04 C08G65/33303 C08G65/3344 C08G2261/126 C10G31/08
US: 1/1 208/188 524/609 524/612

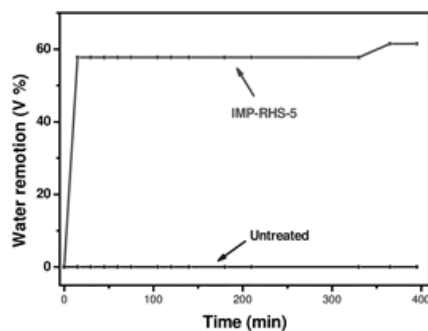


Figure 1

Family:

Publication number	Publication date	Application number	Application date
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MX2013002359 A1	20140903	MX20130002359	20130228
US2014238901 AA	20140828	US20140192005	20140227
US2017313949 AA	20171102	US20170650319	20170714
US9745521 BB	20170829	US20140192005	20140227
US10047302 BB	20180814	US20170650319	20170714

Priority:

MX20130002359 20130228 US20140192005 20140227 US20170650319 20170714

Probable Assignee: INSTITUTO MEXICANO DEL PETROLEO

Assignee(s): (std): INST MEXICANO DEL PETROLEO ; MEXICANO INST PETROL

Assignee(s): INSTITUTO MEXICANO DEL PETROLEO

Inventor(s): (std): ALVAREZ RAMIREZ FERNANDO ; LOPEZ ORTEGA ALFONSO ; FLORES SANDOVAL CESAR ANDRES ; FLORES OROPEZA EUGENIO ALEJANDRO ; HERNANDEZ CORTEZ JOSE GONZALO ; VAZQUEZ MORENO FLAVIO SALVADOR ; ESTRADA MARTINEZ ARQUIMEDES ; CASTRO SOTELO LAURA VERONICA ; REYES MARTINEZ REYNA ; MARTINEZ REYNA REYES ; SANDOVAL CESAR ANDRES FLORES ; CORTEZ JOSE GONZALO HERNANDEZ ; SOTELO LAURA VERONICA CASTRO ; RAMIREZ FERNANDO ALVAREZ ; OROPEZA EUGENIO ALEJANDRO FLORES ; MORENO FLAVIO SALVADOR VAZQUEZ ; ORTEGA ALFONSO LOPEZ ; MARTINEZ ARQUIMEDES ESTRADA ; FERNANDO ALVAREZ RAMIREZ ; ARQUIMEDES ESTRADA MARTINEZ ; EUGENIO ALEJANDRO FLORES OROPEZA ; ALFONSO LOPEZ ORTEGA ; JOSE GONZALO HERNANDEZ CORTEZ ; CESAR ANDRES FLORES SANDOVAL ; FLAVIO SALVADOR VAZQUEZ MORENO ; REYNA REYES MARTINEZ ; LAURA VERONICA CASTRO SOTELO

Agent(s): DICKINSON WRIGHT PLLC

6) Family number: 52134752 (US2012261312A)

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Title: SYNERGISTIC FORMULATIONS OF FUNCTIONALIZED COPOLYMERS AND IONIC LIQUIDS FOR DEHYDRATED AND DESALTED OF MEDIUM, HEAVY AND EXTRA HEAVY CRUDE OILS

Abstract: The present invention is related to formulations including one or more block copolymers with low polydispersity and bifunctionalized with amines, and an ionic liquid. A method of demulsifying, dehydrating, and desalting crude oils having API gravity ranging between 8 to 30 admixes the formulation with the crude oil in an amount effective to demulsify, dehydrate and/or desalt the crude oils.

Classifications:

International (IPC 8-9): B01D17/04 C07C7/20 C08G65/26 C08G65/28
C08K5/00 C08L71/02 C09K3/00 C10G29/20 C10G31/08
C10G33/04 (Advanced/Invention)

CPC: C10G29/20 C10G31/08 C10G2300/1033 C08G65/2606
C08G65/2621 C08G65/2624 C08G65/263 C10G33/04 B01D17/047

US: 208/188 252/184 252/194 516/135 516/161 516/174

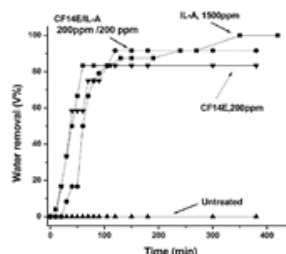


Figure 1

Family:

Publication number	Publication date	Application number	Application date
CA2773959 AA	20121018	CA20122773959	20120412
CA2773959 C	20170627	CA20122773959	20120412
MX2011004120 A1	20121029	MX20110004120	20110418
MX340805 B	20160624	MX20110004120	20110418
US2012261312 AA	20121018	US20120449007	20120417
US2015087729 AA	20150326	US20140563262	20141208
US9587182 BB	20170307	US20120449007	20120417
US9650577 BB	20170516	US20140563262	20141208

Priority:

MX20110004120 20110418 CA20122773959 20120412 US20120449007 20120417
 US20140563262 20141208

Probable Assignee: INSTITUTO MEXICANO DEL PETROLEO

Assignee(s): (std): ALVAREZ RAMIREZ FERNANDO ; CASTRO SOTELO LAURA VERONICA ; ESTRADA MARTINEZ ARQUIMEDES ; FLORES OROPEZA EUGENIO ALEJANDRO ; HERNANDEZ CORTEZ JOSE GONZALO ; MEXICANO INST PETROL ; VAZQUEZ MORENO FLAVIO SALVADOR ; LOPEZ ORTEGA ALFONSO ; INST MEXICANO DEL PETROLEO

Assignee(s): INSTITUTO MEXICANO DEL PETROLEO

Inventor(s): (std): HERNANDEZ CORTEZ JOSE GONZALO ; CASTRO SOTELO LAURA VERONICA ; VAZQUEZ MORENO FLAVIO SALVADOR ; ESTRADA MARTINEZ ARQUIMEDES ; ALVAREZ RAMIREZ FERNANDO ; LOPEZ ORTEGA ALFONSO ; FLORES OROPEZA EUGENIO ALEJANDRO ; RAMIREZ FERNANDO ALVAREZ ; SOTELO LAURA VERONICA CASTRO ; CORTEZ JOSE GONZALO HERNANDEZ ; OROPEZA EUGENIO ALEJANDRO FLORES ; MORENO FLAVIO SALVADOR VAZQUEZ ; ORTEGA ALFONSO LOPEZ ; MARTINEZ ARQUIMEDES ESTRADA ; FERNANDO ALVAREZ RAMIREZ ; FLAVIO SALVADOR VAZQUEZ MORENO ; EUGENIO ALEJANDRO FLORES OROPEZA ; ALFONSO LOPEZ ORTEGA ; JOSE GONZALO HERNANDEZ CORTEZ ; LAURA VERONICA CASTRO SOTELO ; ARQUIMEDES ESTRADA MARTINEZ

Agent(s): GOWLING LAFLEUR HENDERSON LLP; GOWLING WLG CANADA LLP; DICKINSON WRIGHT PLLC

7) Family number: 72770781 (WO19007445A1)

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Title: METHOD FOR IMPROVING THE FLOW CAPACITY AND INCREASING THE DILUTION CAPACITY OF DILUENTS IN METHODS FOR THE PRODUCTION AND TRANSPORT OF HEAVY AND EXTRA-HEAVY CRUDE OILS COMING FROM THE DIFFERENT PHASES OF RECOVERY OF DEPOSITS (PRIMARY, SECONDARY AND ENHANCED)

Abstract: The invention relates to a method including a system of additives which increase fluidity and/or flow capacity and minimise pressure drops from the steps of lifting in production wells, collection lines, dehydration systems and ducts for transporting heavy and extra-heavy hydrocarbons. In addition, the injected system of chemical additives increases the dilution capacity of the solvents that need to be applied to improve the quality of the crude oil (reduce viscosity and density, and increase API gravity), thereby facilitating the dehydration and transport.

Classifications:

International (IPC 8-9): C08F212/08 C08F212/36 C08F220/32
 C08G64/34 C09K8/035 C09K8/58 C09K8/584 C10L1/04 C10L1/10
 C10L1/188 C10L10/00 C10L10/14 C10M101/02 E21B43/20
 F17D1/16 (Advanced/Invention)

CPC: C09K8/035 C09K8/584 C10M101/02 E21B43/20

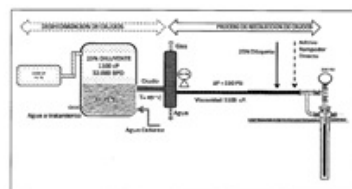


Figura 1

Family:

Publication number	Publication date	Application number	Application date
CO20170006772 A1	20190118	CO20170006772	20170705
WO19007445 A1	20190110	WO2018CO00015	20180705

Priority:

CO20170006772 20170705

Probable Assignee: ECOPETROL SA**Assignee(s):** (std): ECOPETROL SA ; POLYNEX S A S**Assignee(s):** POLYNEX SAS**Inventor(s):** (std): BORRERO GOMEZ JAIME ; CUADRO ARDILA CLAUDIA ESNEIDEN ; BARRERO ACOSTA RIGOBERTO ; RODRIGUEZ RODRIGUEZ LILIA ; NOVOA MANTILLA LUZ ANGELA ; ZAMORA SANCHEZ RAFAEL ; BELTRAN LOPEZ DIEGO MAURICIO ; BUENO VELANDIA ALEXIS**Agent(s):** HERRERA HERRERA LUZ MARA**Designated states:** AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW