

PatBase - Search results 25 October 2015

Search query (2): [SP]: 1. a method for improving flow conditions in a porous media while servicing a well penetrating to the porous media, comprising the steps of: stopping drilling or production activities on the well introducing a well control fluid into the well and the porous media, the well control fluid comprising a mixture of a surfactant, a co-surfactant and a carrier fluid holding the well control fluid in the well and the porous media in the presence of water while the well is being serviced, such that the fluid penetrates the porous media and forms a water film on surfaces of the porous media and when well servicing is finished, resuming drilling or production activities on the well. 2. the method of claim 1, wherein the surfaces of the porous media prior to treatment with the mixture have hydrocarbons adhered to them, and wherein the water film is formed over the surfaces and the hydrocarbon adhered to the surfaces. 3. the method of claim 1, wherein the porous media is a subterranean hydrocarbon bearing formation containing asphaltene and wherein the asphaltene is adhered to the surfaces of the porous media. 4. the method of claim 3, wherein the hydrocarbon has an api gravity of between 6 and 16. 5. the method of claim 3, wherein the hydrocarbon has an api gravity of between 6 and 12. 6. the method of claim 1, wherein the surfactant is selected from the group consisting of cationic surfactants, nonionic surfactants, amphoteric surfactants and combinations thereof. 7. the method of claim 1, wherein the co-surfactant is an alcohol co-surfactant. 8. the method of claim 7, wherein the alcohol co-surfactant is selected from the group consisting of methanol, ethanol, propanol, butanol, pentanol, isopropanol, and combinations thereof. 9. the method of claim 1, wherein the carrier fluid is selected from the group consisting of organic solvents, light hydrocarbons, diluents, light crude oil, and combinations thereof, water, production water and brine. 10. the method of claim 1, wherein the carrier fluid is a light crude oil with an api gravity between 20 to 25. 11. the method of claim 1, wherein the surfactant is an ethoxylated nonyl phenol having between 4 and 60 ethoxylated groups, and wherein the co-surfactant is ethanol. 12. the method of claim 11, wherein the mixture contains equal amounts by volume of surfactant and co-surfactant. 13. the method of claim 11, wherein the mixture contains each of the surfactant and the co-surfactant at a concentration of between 0.5 and 5 percent wt. 14. the method of claim 11, wherein the mixture contains each of the surfactant and the co-surfactant at a concentration of between 1 and 4 percent wt. 15. the method of claim 1, wherein the surfaces of the porous media define pore space for the hydrocarbon, and wherein the surfaces are defined by a material selected from the group consisting of quartz, feldspar, siliceous mineral, carbonaceous mineral, clays, and combinations thereof.

Results: 53

Yenny Campos

Search history

- Search 1: PN=(us20120152535) (Results 1)
- Search 2: [SP]: 1. a method for improving flow conditions in a porous media while servicing a well penetrating to the porous media, comprising the steps of: stopping drilling or production activities on the well introducing a well control fluid into the well and the porous media, the well control fluid comprising a mixture of a surfactant, a co-surfactant and a carrier fluid holding the well control fluid in the well and the porous media in the presence of water while the well is being serviced, such that the fluid penetrates the porous media and forms a water film on surfaces of the porous media and when well servicing is finished, resuming drilling or production activities on the well. 2. the method of claim 1, wherein the surfaces of the porous media prior to treatment with the mixture have hydrocarbons adhered to them, and wherein the water film is formed over the surfaces and the hydrocarbon adhered to the surfaces. 3. the method of claim 1, wherein the porous media is a subterranean hydrocarbon bearing formation containing asphaltene and wherein the asphaltene is adhered to the surfaces of the porous media. 4. the method of claim 3, wherein the hydrocarbon has an api gravity of between 6 and 16. 5. the method of claim 3, wherein the hydrocarbon has an api gravity of between 6 and 12. 6. the method of claim 1, wherein the surfactant is selected from the group consisting of cationic surfactants, nonionic surfactants, amphoteric surfactants and combinations thereof. 7. the method of claim 1, wherein the co-surfactant is an alcohol co-surfactant. 8. the method of claim 7, wherein the alcohol co-surfactant is selected from the group consisting of methanol, ethanol, propanol, butanol, pentanol, isopropanol, and combinations thereof. 9. the method of claim 1, wherein the carrier fluid is selected from the group consisting of organic solvents, light hydrocarbons, diluents, light crude oil, and combinations thereof, water, production water and brine. 10. the method of claim 1, wherein the carrier fluid is a light crude oil with an api gravity between 20 to 25. 11. the method of claim 1, wherein the surfactant is an ethoxylated nonyl phenol having between 4 and 60 ethoxylated groups, and wherein the co-surfactant is ethanol. 12. the method of claim 11, wherein the mixture contains equal amounts by volume of surfactant and co-surfactant. 13. the method of claim 11, wherein the mixture contains each of the surfactant and the co-surfactant at a concentration of between 0.5 and 5 percent wt. 14. the method of claim 11, wherein the mixture contains each of the surfactant and the co-surfactant at a concentration of between 1 and 4 percent wt. 15. the method of claim 1, wherein the surfaces of the porous media define pore space for the hydrocarbon, and wherein the surfaces are defined by a material selected from the group consisting of quartz, feldspar, siliceous mineral, carbonaceous mineral, clays, and combinations thereof. (Results 53)

Title: Secondary oil recovery method

Abstract: Source: US3135326A (Claim 1) 1. A method of oil recovery from subterranean formations penetrated by an injection well and a production well comprising the steps of sequentially injecting into said injection well; a first bank of fluid miscible with said oil to cause a gradual viscosity gradient between that of said oil and a second bank; said second bank comprising a water solution at a temperature between the range of 30-40 degrees F. and containing carbon dioxide gas in an amount within tire range of 12 to 20 cubic feet per cubic foot of said solution at standard conditions and further containing citric acid of at least .025 pound per barrel of said solution; a third bank of a water solution at a temperature between the range of 100 degrees F. and 212 degrees F. and containing a water soluble Surfactant capable of reducing the interfacial tension between said formation and said oil; driving said banks from said injection well to said production well at a pressure of substantially the hydrostatic pressure existing in said injection well; and withdrawing oil from said production well.

Classifications:

International (IPC 8-9): C09K8/58 E21B43/16 (Advanced/Invention);

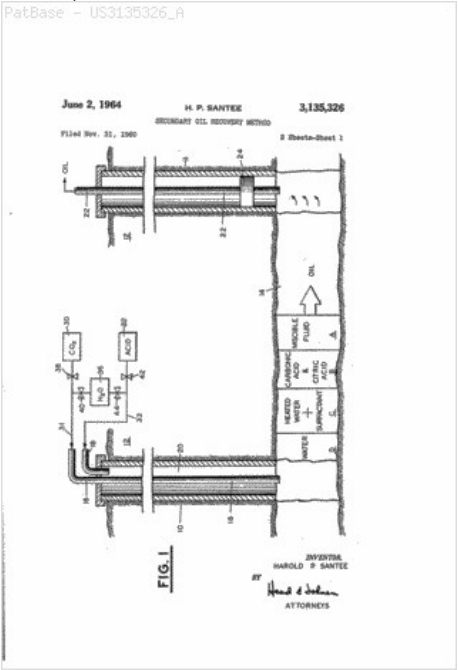
C09K8/58 E21B43/16 (Core/Invention)

International (IPC 1-7): E21B43/20

CPC: C09K8/58 C09K8/594 E21B43/164

European: C09K8/58 C09K8/594 E21B43/16E

US: 166/270.1 166/272.1



Family:

Publication number	Publication date	Application number	Application date
US3135326 A	19640602	US19600070485	19601121

Priority:

US19600070485 19601121

Probable Assignee: OIL SAND CONDITIONING CORP

Assignee(s): (std): OIL SAND CONDITIONING CORP

Inventor(s): (std): SANTEE HAROLD P

Title: FREEING STUCK PIPE

Abstract: Source: US3217802A (Claim 1) 1. In a well operation wherein a well fluid is circulated through a drill stem in a well, a cake of water-wet well fluid solids accumulates on the face of a permeable formation penetrated by the well bore, and the drill stem becomes stuck against the cake of water-wet solids by a differential in hydrostatic pressure between fluid in the well and in the permeable formation applied across the drill stem, that improvement which comprises substantially filling the well bore outside the drill stem in the permeable formation with a petroleum oil containing an ionic oil-soluble surfactant capable of reducing interfacial tension at an interface between the petroleum oil and water to not more than 2 dynes per centimeter in amount sufficient to accomplish such reduction and a coupling agent effective to couple between oil and water and thereby substantially increase solubility of water in said petroleum oil; dissolving water from the cake of water-wet solids in the petroleum oil in quantity to crack the cake by dehydration; passing petroleum oil from the well bore through the resulting cracked cake to the permeable formation, whereby the differential pressure across the drill stem is decreased; and releasing the drill stem.

Classifications:

International (IPC 8-9): E21B31/03 (Advanced/Invention);
E21B31/00 (Core/Invention)

CPC: Y10S507/94 E21B31/03

European: E21B31/03

US: 166/301 166/312 507/243 507/259 507/265 507/940

Family:

Publication number	Publication date	Application number	Application date
US3217802 A	19651116	US19610096109	19610316

Priority:

US19610096109 19610316

Probable Assignee: MAGNET COVE BARIUM CORP

Assignee(s): (std): MAGNET COVE BARIUM CORP

Inventor(s): (std): REDDIE WILLIAM A ; SIMON HUEY A ; WERLEIN EUGENE R

Title: INHIBITION OF DEPOSITION OF HYDROCARBONACEOUS SOLIDS FROM OIL

Abstract: Source: US3244188A (Claim 1) 1. The method of inhibiting the adhesion of solid hydrocarbonaceous material, deposited on surfaces from oil containing such substances in solution or suspension in contact therewith, which consists essentially of flushing said surfaces with an aqueous dispersion of an agent which 20 yields OH ions in an aqueous medium and subjecting the thus flushed surfaces to the action of an aqueous solution containing between 5 and 1000 parts, per million parts aqueous solution, of a polymer having a molecular weight of at least about 10,000 selected from the class consisting 25 of homopolymers of N-vinyl-alkyl-2-oxazolidinone; copolymers of N-vinyl-alkyl-2-oxazolidinones and a monomer selected from the class consisting of maleic anhydride, sodium styrene sulfonate, sodium vinyl toluene sulfonate, and alkyl acrylic acids; alkali salts of copolymers of N-vinyl-2-oxazolidinones and maleic anhydride; copolymers of vinylmorpholinone and maleic anhydride and alkali salts thereof; copolymers of vinylpyrrolidone and a monomer selected from the class consisting of maleic anhydride and vinyl acetate; copolymers of ethyl-35 ene and maleic anhydride; copolymers of ethylene and maleic acid; and alkali amide salts of copolymers of ethylene and maleic anhydride, each of said alkyl substituent being selected from methyl and ethyl and said alkali salts being selected from the class consisting of alkali metal 40 and ammonium salts.

Classifications:

International (IPC 8-9): C09K8/524 C23F15/00 (Advanced/Invention); C09K8/52 C23F15/00 (Core/Invention)

CPC: Y10S507/929 Y10S507/931 C23F15/005 C09K8/524 Y10T137/0424

European: C09K8/524 C23F15/00B

US: 134/22.17 134/22.19 134/40 137/15.05 166/304 507/221 507/224 507/228 507/229 507/90 507/929 507/931

Family:

Publication number	Publication date	Application number	Application date
US3244188 A	19660405	US19620228015	19621003

Priority:

US19620228015 19621003

Probable Assignee: DOW CHEMICAL CO

Assignee(s): (std): DOW CHEMICAL CO

Assignee(s): THE DOW CHEMICAL COMPANY

Inventor(s): (std): BURTCH FRED W ; PARKS CHRIST F

Abstract: Source: US3519006A ABSTRACT OF THE DISCLOSURE

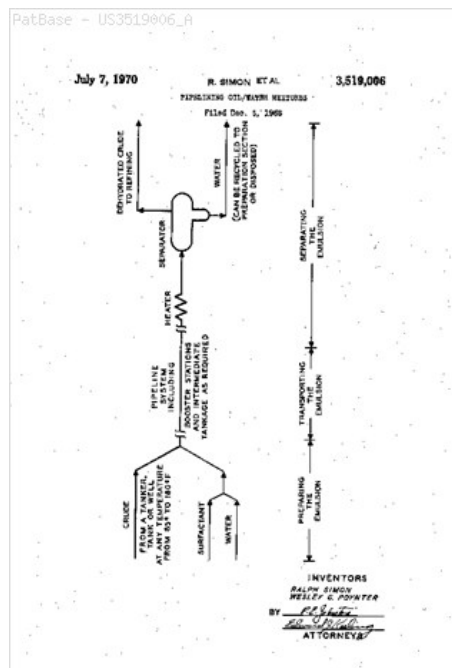
Classifications:

International (IPC 8-5): B01F 17/00 B07D 7/52 C10E 1/52
F17D 1/17 (Advanced/Invention);

International (IPC 1-7): B65G C10G29/22 C10M F16L55/00 F17D1/

European: B01F17/00E2 B67D7/32K6 C10L1/32D F17D1/17

US: 137/13



Family:

Publication number	Publication date	Application number	Application date
DE1644874 A1	19710722	DE1967C044046	19671204
DE1644874 B2	19790208	DE1967C044046	19671204
DE1644874 C3	19790927	DE1967C044046	19671204
FR1549648 A	19681213		19671205
GB1177718 A	19700114	GB19670054425	19671129
NL6716539 A	19680606	NL19670016539	19671205
US3519006 A	19700707	US19660599125	19661205

Priority:

US19660599125 19661205

Probable Assignee: CHEVRON RES

Assignee(s): (std): CHEVRON RES ; RALPH SIMON ; WESLEY G POYNTER

Assignee(s): CHEVRON RESEARCH CO ; CHEVRON RESEARCH CO SAN FRANCISCO CALIF V ST A ; CHEVRON RESEARCH COMPANY

Inventor(s): (std): GWINN POYNTER WESLEY ; POYNTER WESLEY G ; POYNTER WESLEY GWINN ; SIMON RALPH

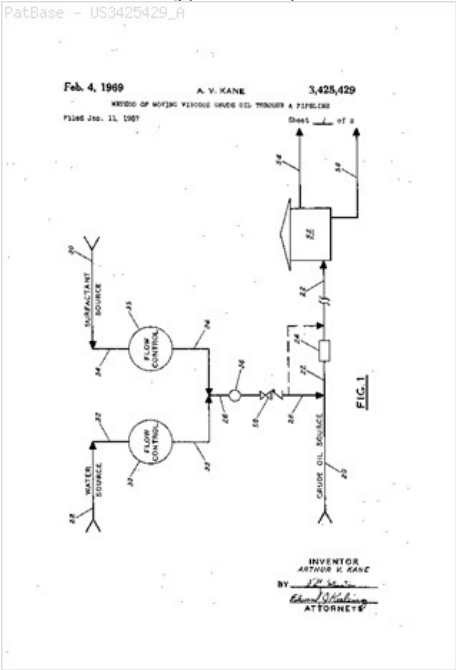
Inventor(s): WESLEY G POYNTER ; WESLEY GWINN POYNTER ; RALPH SIMON

Title: METHOD OF MOVING VISCOUS CRUDE OIL THROUGH A PIPELINE

Abstract: Source: US3425429A ABSTRACT OF THE DISCLOSURE
A method of transporting crude oil through, a pipeline by injecting an aqueous solution of nonionic surfactant into the pipeline to contact the crude oil and to effect a 15 flowing pressure drop decrease in the pipeline and thereafter reducing the amount of surfactant solution being injected into the pipeline to less than 5 percent of the crude oil concurrently injected into the pipeline to maintain the flowing pressure drop decrease.

Classifications:

International (IPC 8-9): B67D7/32 (Advanced/Invention);
B67D7/32 (Core/Invention)
International (IPC 1-7): B01F B65G53/30 B67D5/60 F16C17/00 F17D1/16 F17D1/17
CPC: Y10T137/0391 B67D7/3272
European: B67D7/32K6
US: 137/13



Family:

Publication number	Publication date	Application number	Application date
DE1644877 A1	19710722	DE19681644877	19680109
DE1644877 C2	19821118	DE19681644877	19680109
ES349091 A1	19690401	ES19680349091	19680110
FR1549987 A	19681213		19680104
GB1188781 A	19700422	GB19680001511	19680110
NL6800436 A	19680712	NL19680000436	19680111
US3425429 A	19690204	US19670608687	19670111

Priority:
US19670000608 19670111 US19670608687 19670111

Probable Assignee: CHEVRON RES
Assignee(s): (std): CHEVRON RES
Assignee(s): CHEVRON RESEARCH CO ; CHEVRON RESEARCH CO 94105 SAN FRANCISCO CALIF US ; CHEVRON RESEARCH COMPANY
Inventor(s): (std): KANE ARTHUR V ; VERMILLION KANE ARTHUR ; KANE ARTHUR VERMILLION
Inventor(s): KANE ARTHUR VERMILLION MARACAIBO ZULIA VE ; ARTHUR V KANE

Title: OIL RECOVERY

Abstract: Source: US3553130A ABSTRACT OF THE DISCLOSURE An additive for an aqueous fluid used in recovering oil from a formation comprising a mixture of ethylene oxide jg adducts of alkyl phenols. This application is a division of application Ser. No. 589,522, filed Oct. 26, 1966 now Pat. No. 3,401,748. This case relates to a new and improved method for recovering oil from geological formations. This invention also relates to a new and improved additive for use in fluids used to recover oil from geological formations. This invention also relates to a new and improved fluid 25 for recovering oil from geological formations. Heretofore it has been known to add detergent to waterflood brine in order to increase the amount of oil recovered by the subterranean geological formations being waterflooded. Among the detergents used have been 30 ethylene oxide adducts of octyl or nonyl phenols wherein the number of ethylene oxide units per molecule varies up to 100. Also heretofore, it was thought in order to get a good displacement of oil by use of waterflood techniques, the 35 ethylene oxide adducts of alkyl phenols employed had to have from 6 to 9, preferably 6 to 8, ethylene oxide units per molecule. Very surprisingly, it has now been found that ethylene oxide adducts of octyl and nonyl phenols that have 40 ethylene oxide units outside of the 6 to 9 range heretofore thought necessary can be used and are very effective in displacing oil from a formation if a mixture of at least 1 adduct having from IV2 to 5 ethylene oxide units per molecule is mixed with another adduct having from 45 9Vz to 100 ethylene oxide units per molecule.

Classifications:**International (IPC 8-9):** C09K8/584 F16L25/00 (Advanced/Invention);

C09K8/58 F16L25/00 (Core/Invention)

International (IPC 1-7): E21B43/20 E21B43/22**CPC:** Y10S507/936 Y10S516/01 C09K8/584**European:** C09K8/584**US:** 166/275 166/305.1 166/42 252/8.55 252/855 507/262 507/936 516/76 516/DIG.1**Family:**

Publication number	Publication date	Application number	Application date
US3401748 A	19680917	US19660589522	19661026
US3553130 A	19710105	US19680730613	19680520

Priority:

US19660589522 19661026 US19680730613 19680520

Probable Assignee: PHILLIPS PETROLEUM CO**Assignee(s):** (std): PHILLIPS PETROLEUM CO**Assignee(s):** PHILLIPS PETROLEUM COMPANY**Inventor(s):** (std): STRATTON CHARLES A**Inventor(s):** CHARLES A STRATTON

Title: SECONDARY RECOVERY OF PETROLEUM BY WATERFLOODING

Abstract: Source: US3452817A ABSTRACT OF THE DISCLOSURE A secondary recovery, water flooding process in which a surface active agent is employed in conjunction with an organic water thickening compound. By employing the surface active agent in a concentration within the range of from 0.1 to 3.0 weight percent in a waterflood containing sufficient water thickening compound to establish a water flood/crude oil viscosity ratio of at least about 0.3/1.0, greatly increased amounts of oil are recoverable over the amounts obtained by use of water thickening agents and surface active agents used alone or in combinations other than those provided for herein. Cross-reference to related application This application is a continuation-in-part of my copending application S.N. 334,008, filed Dec. 27, 1963, now abandoned. B

Classifications:

International (IPC 8-9): C09K8/58 E21B43/20 (Advanced/Invention)

International (IPC 1-7): E21B43/16 E21B43/20

CPC: C09K8/58 E21B43/20

European: C09K8/58 E21B43/20

US: 166/268 166/275 166/305 166/305.1

Family:

Publication number	Publication date	Application number	Application date
US3452817 A	19690701	US19670607403	19670105

Priority:

US19670607403 19670105

Probable Assignee: CITIES SERVICE OIL CO

Assignee(s): (std): CITIES SERVICE OIL CO

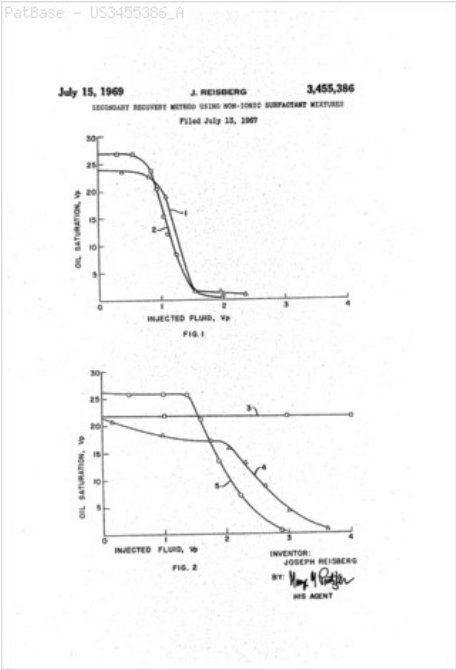
Inventor(s): (std): FALLGATTER WAYNE S

Inventor(s): WAYNE S FALLGATTER

Title: SECONDARY RECOVERY METHOD USING NON-IONIC SURFACTANT MIXTURES

Abstract: Source: US3455386A ABSTRACT OF THE DISCLOSURE
An improvement in recovery of oil using waterflooding comprising incorporating into the waterflooding aqueous liquid a mixture of a water-soluble non-ionic surfactant having a cyclic group of carbon atoms in a concentration exceeding the critical concentration for micelle formation and a relatively water-insoluble, oil-soluble non-ionic surfactant having a cyclic group of carbons in an amount sufficient to swell the non-ionic surfactant micelles and cause said surfactant-containing aqueous fluid to be capable of solubilizing a significant proportion of oil, with said surfactant-containing aqueous liquid being present in at least the frontal portion of the aqueous liquid with which the oil is displaced. CROSS-REFERENCE TO RELATED APPLICATION This application is a continuation-in-part of copending application Ser. No. 359,405, filed Apr. 13, 1964, and which issued on July 11, 1967 as U.S. Patent 3,330,344. B

Classifications:
International (IPC 8-9): C09K8/584 (Advanced/Invention);
C09K8/58 (Core/Invention)
International (IPC 1-7): E21B43/22
CPC: Y10S507/938 C09K8/584
European: C09K8/584
US: 166/275 507/255 507/262 507/938



Family:

Publication number	Publication date	Application number	Application date
US3455386 A	19690715	US19670653145	19670713

Priority:
US19670653145 19670713

Probable Assignee: SHELL OIL CO
Assignee(s): (std): SHELL OIL CO
Inventor(s): (std): REISBERG JOSEPH
Inventor(s): JOSEPH REISBERG

Title: OIL RECOVERY PROCESS UTILIZING MINIATURE SLUG OF OIL-EXTERNAL MICELLAR DISPERSION

Abstract: Source: US3467188A ABSTRACT OF THE DISCLOSURE Minislugs of oil-external micellar dispersions are injected into injection wells to increase the injectivity index of the well. It is postulated, inter alia, that the dispersion removes hydrocarbon from the sand pores immediately adjacent the well bore and also overcomes the adversities of "skin damage." B

Classifications:
International (IPC 8-9): C09K8/584 (Advanced/Invention);
C09K8/58 (Core/Invention)
International (IPC 1-7): E21B43/20 E21B43/22
CPC: C09K8/584
European: C09K8/584
US: 166/274 166/275 166/400

Family:

Publication number	Publication date	Application number	Application date
US3467188 A	19690916	US19680712345	19680312

Priority:
US19680712345 19680312

Probable Assignee: MARATHON OIL CO

Assignee(s): (std): MARATHON OIL CO

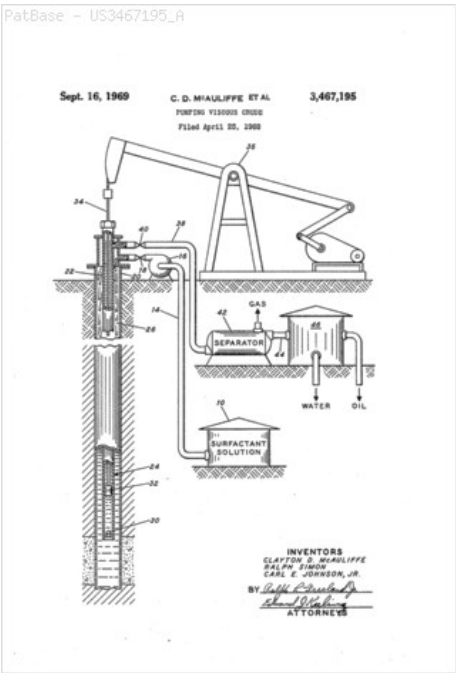
Inventor(s): (std): GOGARTY WILLIAM B

Inventor(s): WILLIAM B GOGARTY

Title: PUMPING VISCOUS CRUDE

Abstract: Source: US3467195A ABSTRACT OF THE DISCLOSURE
The invention is directed to improving the pumpability of crude oil from a well by injecting predeterminable amounts of nonionic surfactant into the well to contact oil and water to form a low viscosity oil-in-water emulsion near the pump in the well. This application is a continuation-in-part of Ser. No. 642,284, filed May 18, 1967, now U.S. Patent No. 3,380,531, issued Apr. 30, 1968, which in turn, is a continuation-in-part of Ser. No. 503,210, filed Oct. 23, 1965, and now abandoned.

Classifications:
International (IPC 8-9): C09K8/584 (Advanced/Invention); C09K8/58 (Core/Invention)
International (IPC 1-7): C09K3/00 E21B43/00 E21B43/12
CPC: Y10S507/935 C09K8/584 Y10T137/0391
European: C09K8/584
US: 137/13 166/314 166/371 507/262 507/935



Family:

Publication number	Publication date	Application number	Application date
US3467195 A	19690916	US19680724194	19680425

Priority:

US19680724194 19680425

Probable Assignee: CHEVRON RES
Assignee(s): (std): CHEVRON RES
Assignee(s): CHEVRON RESEARCH CO
Inventor(s): (std): JOHNSON CARL E JR ; MCAULIFFE CLAYTON D ; SIMON RALPH
Inventor(s): RALPH SIMON ; CARL E JOHNSON JR ; CLAYTON D MCAULIFFE