

Nicolas Vargas

Title: SYSTEMS AND METHODS FOR OPERATING A PLURALITY OF WELLS THROUGH A SINGLE BORE

Abstract: Systems and methods usable to operate on a plurality of wells through a single main bore are disclosed herein. One or more chamber junctions are provided in fluid communication with one or more conduits within the single main bore. Each chamber junction includes a first orifice communicating with the surface through the main bore, and one or more additional orifices in fluid communication with individual wells of the plurality of wells. Through the chamber junctions, each of the wells can be individually or simultaneously accessed. A bore selection tool having an upper opening and at least one lower opening can be inserted into the chamber junction such that the one or more lower openings align with orifices in the chamber junction, enabling selected individual or multiple wells to be accessed through the bore selection tool while other wells are isolated from the chamber junction.

Classifications:

International (IPC 8-9): B02C13/24 B65G5/00 E21B17/00 E21B17/01 E21B17/10 E21B17/18 E21B19/00 E21B21/00 E21B21/12 E21B23/12 E21B23/14 E21B29/00 E21B29/06 E21B29/10 E21B33/00 E21B33/068 E21B33/10 E21B33/12 E21B33/13 E21B33/138 E21B34/06 E21B34/14 E21B37/00 E21B41/00 E21B43/00 E21B43/10 E21B43/12 E21B43/14 E21B43/16 E21B43/28 E21B43/29 E21B7/00 E21B7/06 E21B7/18 E21B7/20 E21C41/16 E21C41/20 E21C45/00 E21F17/16 F16L1/00 (Advanced/Invention); E21B43/00 (Core/Invention)

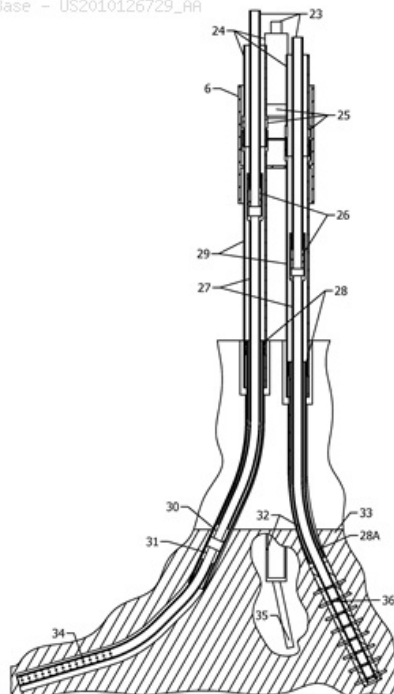
International (IPC 1-7): E21B33/13 E21B43/14

CPC: E21B33/138 B02C13/24 E21B21/00 E21B34/14 E21B43/121 E21B43/25 E21B29/00 E21B21/10 E21B34/02 E21B43/12 E21B43/14 E21B43/38 E21B43/00 E21B29/10 E21B17/10 E21B7/00 E21B33/068 E21B41/0092 E21B43/16 E21B17/00 E21B7/061 E21B33/13 E21B41/0035 E21B34/06 E21B21/12 E21B43/006 E21B43/29 E21B43/10 E21B23/14 E21B29/005 E21B29/06 E21B41/00 E21B33/047 E21B2033/005 E21B41/0007 E21B43/28 E21F17/16 E21B17/18 E21B23/002

European: E21B17/18 E21B21/10 E21B21/12 E21B23/00D E21B23/14 E21B29/00 E21B29/00R2 E21B29/06 E21B33/13 E21B33/138 E21B34/02 E21B41/00 E21B41/00L E21B43/00M E21B43/12 E21B43/12B E21B43/14 E21B43/25 E21B43/28 E21B43/29 E21B43/38 E21F17/16

US: 1/1 166/207 166/242.2 166/250.01 166/285 166/292 166/298 166/298S 166/305.1 166/311 166/313 166/316 166/373 166/379 166/384 166/387 166/387S 166/50 166/52 166/53 166/54.1 166/54.100S 166/55.8 166/55.800S 166/67 166/90.1 166/90.100S 175/315 175/320 175/67 175/67S 30/103 405/53 405/53P 405/55 405/59

PatBase - US2010126729_AA



Family:

Publication number	Publication date	Application number	Application date
AR078530 AA	20111116	AR2010P103623	20101006
AR079640 AA	20120208	AR2010P104705	20101217
AR084108 AA	20130424	AR2010P104704	20101217
AU2009318085 AA	20100527	AU20090318085	20091120
AU2009318085 BB	20160908	AU20090318085	20091120
AU2009336194 AA	20100715	AU20090336194	20091218
AU2009336194 BB	20160915	AU20090336194	20091218
AU2009336194 CA	20170216	AU20090336194	20091218
AU2010270051 AA	20110113	AU20100270051	20100705
AU2010270051 BB	20151210	AU20100270051	20100705
AU2011229956 AA	20110929	AU20110229956	20110301
AU2011229956 BB	20141023	AU20110229956	20110301
AU2011229957 AA	20110929	AU20110229957	20110301
AU2011229957 BB	20150827	AU20110229957	20110301
BR112012025143 A2	20170627	BR20121125143	20110301
BR112012025143 A8	20180626	BR20121125143	20110301
CA2744200 AA	20100527	CA20092744200	20091120
CA2744200 C	20161220	CA20092744200	20091120
CA2747623 AA	20100715	CA20092747623	20091218
CA2752322 AA	20110617	CA20092752322	20091218
CA2752322 C	20161213	CA20092752322	20091218
CA2752690 AA	20100715	CA20092752690	20091218
CA2752690 C	20161220	CA20092752690	20091218
CA2767293 AA	20110113	CA20102767293	20100705
CA2794346 AA	20120925	CA20112794346	20110301
CA2794346 C	20180109	CA20112794346	20110301
CA2794347 AA	20120925	CA20112794347	20110301
CN102292516 A	20111221	CN200980155044	20091120
CN102292516 B	20141029	CN200980155044	20091120
CN102317566 A	20120111	CN200980156880	20091218
CN102317566 B	20140820	CN200980156880	20091218

CN102434126 A	20120502	CN201110295836	20091218
CN102434126 B	20150225	CN201110295836	20091218
CN102482927 A	20120530	CN201080039647	20100705
CN102482927 B	20141126	CN201080039647	20100705
CN102906365 A	20130130	CN201180026024	20110301
CN102906365 B	20151125	CN201180026024	20110301
CN103180544 A	20130626	CN201180026054	20110301
CN103180544 B	20160113	CN201180026054	20110301
CN104271999 A	20150107	CN201380023115	20130301
CN104271999 B	20180202	CN201380023115	20130301
DE602009026354 D1	20141009	DE200960026354T	20091218
DE602009050713 D1	20180315	DE200960050713T	20091218
DE602011013791 D1	20150402	DE201160013791T	20110301
DE602011049969 D1	20180809	DE201160049969T	20110301
DK2379839 T3	20141027	DK20090837723T	20091218
DK2550422 T3	20150427	DK20110759817T	20110301
EP2358974 A1	20110824	EP20090827881	20091120
EP2358974 A4	20120613	EP20090827881	20091120
EP2358974 B1	20161012	EP20090827881	20091120
EP2358974 B8	20170125	EP20090827881	20091120
EP2379839 A1	20111026	EP20090837723	20091218
EP2379839 A4	20120829	EP20090837723	20091218
EP2379839 B1	20140827	EP20090837723	20091218
EP2428640 A2	20120314	EP20110188274	20091218
EP2428640 A3	20140409	EP20110188274	20091218
EP2428640 B1	20180207	EP20110188274	20091218
EP2446106 A2	20120502	EP20100791688	20100622
EP2452039 A2	20120516	EP20100737614	20100705
EP2550422 A1	20130130	EP20110759817	20110301
EP2550422 A4	20131225	EP20110759817	20110301
EP2550422 B1	20150218	EP20110759817	20110301
EP2550426 A1	20130130	EP20110759818	20110301
EP2550426 A4	20140122	EP20110759818	20110301
EP2550426 B1	20180711	EP20110759818	20110301
EP2820338 A1	20150107	EP20130793591	20130301
EP2820338 A4	20160803	EP20130793591	20130301
GB200821352 A0	20081231	GB20080021352	20081121
GB200902198 A0	20090325	GB20090002198	20090211
GB200910777 A0	20090805	GB20090010777	20090623
GB200910779 A0	20090805	GB20090010779	20090623
GB200911672 A0	20090812	GB20090011672	20090706
GB200920210 A0	20100106	GB20090020210	20091119
GB200920214 A0	20100106	GB20090020214	20091119
GB201004961 A0	20100512	GB20100004961	20100325
GB201010480 A0	20100804	GB20100010480	20100622
GB201011290 A0	20100818	GB20100011290	20100705
GB201021305 A0	20110126	GB20100021305	20101216
GB201104278 A0	20110427	GB20110004278	20110315
GB201104280 A0	20110427	GB20110004280	20110315
GB201111482 A0	20110817	GB20110011482	20110705
GB201203649 A0	20120418	GB20120003649	20120301
GB2465478 A1	20100526	GB20090020214	20091119
GB2465478 B2	20110309	GB20090020214	20091119
GB2471354 A1	20101229	GB20100004961	20100325
GB2471354 B2	20140212	GB20100004961	20100325
GB2471385 A1	20101229	GB20100010480	20100622
GB2471385 B2	20111019	GB20100010480	20100622
GB2471760 A1	20110112	GB20100011290	20100705
GB2471760 B2	20120201	GB20100011290	20100705
GB2476381 A1	20110622	GB20100021305	20101216
GB2476381 B2	20120808	GB20100021305	20101216
GB2479043 A1	20110928	GB20110004280	20110315
GB2479043 B2	20121003	GB20110004280	20110315
GB2479432 A1	20111012	GB20110004278	20110315
GB2479432 B2	20120613	GB20110004278	20110315
GB2484166 A1	20120404	GB20110011482	20110705
GB2484166 B2	20121107	GB20110011482	20110705
GB2514075 A1	20141119	GB20120003649	20120301
GB2514075 B2	20150923	GB20120003649	20120301
MX2011005417 A1	20111216	MX20110005417	20091120
MX2011006525 A1	20111206	MX20110006525	20091218
MX2011006526 A1	20111206	MX20110006526	20091218
MX2012000370 A1	20120213	MX20120000370	20100705
MX2012011095 A1	20130618	MX20120011095	20110301
MX2012011096 A1	20130207	MX20120011096	20110301
MX340528 B	20160711	MX20120000370	20100705

MX346017 B	20170301	MX20120011095	20110301
MY152760 A	20141128	MY20110002850	20091218
MY154104 A	20150430	MY20110002271	20091120
MY155874 A	20151215	MY20120004235	20110301
MY157428 A	20160615	MY20120004236	20110301
MY162272 A	20170531	MY20120000045	20100705
RU2011125342 A	20121227	RU20110125342	20091120
RU2011129767 A	20130127	RU20110129767	20091218
RU2011142274 A	20130427	RU20110142274	20111019
RU2011142274 A	20130427	RU20110142274	20091218
RU2012102286 A	20130727	RU20120102286	20100622
RU2012103898 A	20130820	RU20120103898	20100705
RU2012145288 A	20140427	RU20120145288	20110301
RU2012145291 A	20140427	RU20120145291	20110301
RU2518701 C2	20140610	RU20110125342	20091120
RU2520219 C2	20140620	RU20110129767	20091218
RU2531955 C2	20141027	RU20120102286	20100622
RU2556560 C2	20150710	RU20120145288	20110301
RU2559255 C2	20150810	RU20120103898	20100705
RU2563865 C2	20150920	RU20120145291	20110301
RU2594032 C2	20160810	RU20110142274	20091218
US2010126729 AA	20100527	US20090587360	20091006
US2011000668 AA	20110106	US20100803775	20100706
US2011146998 AA	20110623	US20100928674	20101216
US2011206459 AA	20110825	US20100803283	20100622
US2013043031 AA	20130221	US20110261448	20110301
US2013068473 AA	20130321	US20110261445	20110301
US2013306324 AA	20131121	US20130815699	20130314
US2014241803 AA	20140828	US20140270100	20140505
US2015021018 AA	20150122	US20130382215	20130301
US8397819 BB	20130319	US20090587360	20091006
US8528630 BB	20130910	US20100803775	20100706
US8714874 BB	20140506	US20100803283	20100622
US8807217 BB	20140819	US20100928674	20101216
US9181776 BB	20151110	US20110261445	20110301
US9366126 BB	20160614	US20140270100	20140505
US9574404 BB	20170221	US20130382215	20130301
US9719311 BB	20170801	US20110261448	20110301
US9777554 BB	20171003	US20130815699	20130314
WO10059228 A1	20100527	WO2009US06215	20091120
WO10150010 A2	20101229	WO2010GB51036	20100622
WO10150010 A3	20110505	WO2010GB51036	20100622
WO10150010 A4	20110728	WO2010GB51036	20100622
WO11004183 A2	20110113	WO2010GB51108	20100705
WO11004183 A3	20110707	WO2010GB51108	20100705
WO11119197 A1	20110929	WO2011US00372	20110301
WO11119198 A1	20110929	WO2011US00377	20110301
WO13176705 A1	20131128	WO2013US00057	20130301

Priority:

GB20080021352	20081121	GB20080023194	20081219	GB20090002198	20090211
GB20090010777	20090623	GB20090010779	20090623	GB20090011672	20090706
US20090587360	20091006	GB20090020214	20091119	WO2009US06215	20091120
GB20090021954	20091216	CA20092752322	20091218	CA20092752690	20091218
EP20090837723	20091218	CN200980156880	20091218	EP20110188274	20091218
US20090653784	20091218	WO2009US06641	20091218	GB20100004961	20100325
GB20100010480	20100622	US20100803283	20100622	WO2010GB51036	20100622
GB20100011290	20100705	WO2010GB51108	20100705	US20100803775	20100706
US20100928674	20101216	GB20100021787	20101223	EP20110759817	20110301
EP20110759818	20110301	US20110000372	20110301	WO2011US00372	20110301
WO2011US00377	20110301	US20110261448	20110301	US20110261445	20110301
GB20110004280	20110315	GB20110004278	20110315	RU20110129767	20110718
CA20112752322	20111004	GB20120003649	20120301	WO2013US00057	20130301
US20130382215	20130301	US20130815699	20130314	US20140270100	20140505

Probable Assignee: BRUCE TUNGET

Assignee(s): (std): BRUCE TUNGET ; TUNGET BRUCE A ; TUNGET BRUCE ARNOLD ; TUNGET BRUCE ; ARNOLD TUNGET BRUCE ; BRUCE A TUNGET ; TANDZHET BRJUS EH ; TANDZHET BRJUS EHRNOL D ; TANDZHET BRYUS E

Assignee(s): BRUCE ARNOLD TUNGET

Inventor(s): (std): TUNGET BRUCE ; TANDZHET BRYUS E ; TANDZHET BRJUS EHRNOL D ; TANDZHET BRJUS EH ; BRUCE A TUNGET ; ARNOLD TUNGET BRUCE ; TUNGET BRUCE A ; TUNGET BRUCE ARNOLD

Inventor(s): TUNGET BRUCE A WESTHILL ; BRUCE ARNOLD TUNGET

Agent(s): PIZZEYS PATENT AND TRADE MARK ATTORNEYS; PIZZEYS PATENT AND TRADE MARK ATTORNEYS PTY LTD; NORTON ROSE OR SENCRL SRL LLP; NORTON ROSE FULBRIGHT CANADA LLP SENCRL SRL; NORTON ROSE CANADA SENCRL SRL LLP; R WILLIAM WRAY AND ASSOCIATES; CANZLER AND BERGMEIER PATENTANWALTE; WIGHTMAN DAVID ALEXANDER; JOHNSON YVONNE CATHERINE; Wightman David Alexander; BARKER BRETTTEL LLP; THE MATTHEWS FIRM; MATTHEWS FIRM; MATTIS JACOB S; MATTIS JACOB; MCCUTCHEON TERRY L

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 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 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

Title: FORMATION FLUID SAMPLING APPARATUS AND METHOD

Abstract: A sample module is provided for use in a downhole tool to obtain fluid from a subsurface formation penetrated by a **wellbore**. The sample module includes a sample chamber carried by the module for collecting a sample of formation fluid obtained from the formation via the downhole tool, and a validation chamber carried by the module for collecting a substantially smaller sample of formation fluid than the sample chamber. The validation chamber is removable from the sample module at the surface without disturbing the sample chamber. In another aspect, the present invention provides an improved sample chamber for use in a downhole tool to obtain fluid from a subsurface formation penetrated by a **wellbore**. An improved sample chamber is also provided that includes a substantially cylindrical body capable of safely withstanding heating at the surface, following collection of a formation fluid sample via the downhole tool and withdrawal of the sample chamber from the **wellbore**, to temperatures necessary to promote recombination of the sample components within the chambers. Additionally, the body is sufficiently equipped so as to be certified for transportation. At least one floating piston is slidably positioned within the body so as to define a fluid collection cavity and a pressurization cavity, whereby the pressurization cavity may be charged to control the pressure of the sample collected in the collection cavity. A second such piston may be provided to create a third cavity wherein a buffer fluid may be utilized during sample collection. Metal-to-metal seals act as the final shut-off seals for the sample collected in the collection cavity of the body. A method related to the use of the sample module and sample chamber described above is also provided.

Classifications:

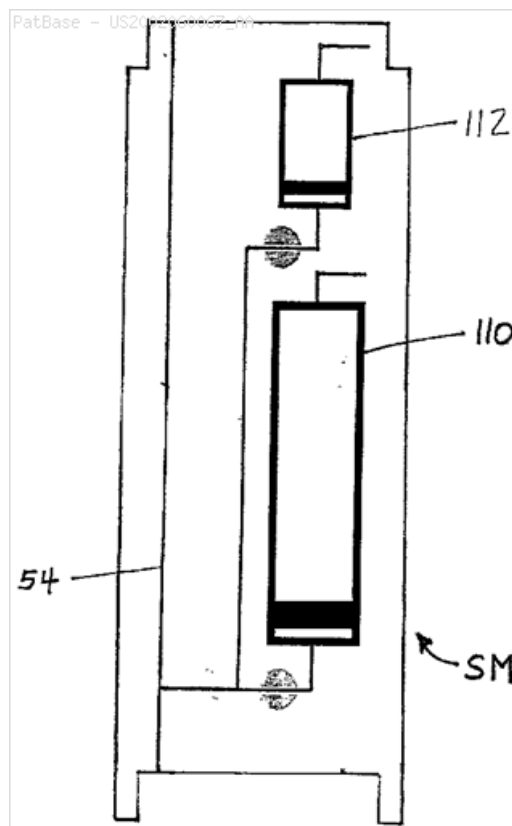
International (IPC 8-9): E21B49/08 E21B49/10 (Advanced/Invention);
E21B49/00 (Core/Invention)

International (IPC 1-7): E21B E21B49/00 E21B49/08 E21B49/10
G01V3/18

CPC: E21B49/081

European: E21B49/08B

US: 166/106 166/113 166/165 166/167 166/169 166/264 175/59
73/152.02 73/152.24

**Family:**

Publication number	Publication date	Application number	Application date
AU200019543 A1	20000928	AU20000019543	20000229
AU200019543 A5	20000928	AU20000019543D	20000229
AU735532 B2	20010712	AU20000019543	20000229
CA2299835 AA	20000925	CA20002299835	20000301
CA2299835 C	20040713	CA20002299835	20000301
CN1191422 C	20050302	CN20001004807	20000327
CN1269455 A	20001011	CN20001004807	20000327
GB200005154 A0	20000426	GB20000005154	20000306
GB2348222 A1	20000927	GB20000005154	20000306
GB2348222 B2	20011024	GB20000005154	20000306
NO20001544 A	20000926	NO20000001544	20000324
NO20001544 A0	20000324	NO20000001544	20000324
NO320827 B1	20060130	NO20000001544	20000324
US2002060067 AA	20020523	US20000511183	20000222
US2004129070 AA	20040708	US20030738241	20031217
US6688390 BB	20040210	US20000511183	20000222
US7243536 BB	20070717	US20030738241	20031217

Priority:

US19990126088P 19990325
US20030738241 20031217

US20000511183 20000222

CA20002299835 20000301

Probable Assignee: SCHLUMBERGER TECHNOLOGY CORP

Assignee(s): (std): BOLZE VICTOR M ; BROWN JONATHAN W ; KURKJIAN ANDREW L ; LONG TIMOTHY L ; SCHLUMBERGER OVERSEA S A ; SCHLUMBERGER LTD ; MELBOURNE ANGUS J ; MOORE LINWARD A ; SCHLUMBERGER TECHNOLOGY CORP ; SCHLUMBERGER CA LTD ; SCHLUMBERGER CANADA LTD ; SCHLUMBERGER TECHNOLOGY BV ; ZIMMERMAN ROBERT P ; SCHLUMBERGER TECHONOLGY CORP

Inventor(s): (std): LINWARD A MOORE ; ROBERT P ZIMMERMAN ; SPEIER ANDREW L ; TIMOTHY L LONG ; V M PIRZER ; VICTOR M BOLZE ; ZIMMERMAN ROBERT P ; ZIMMERMANN ROBERT P ; KURKJIAN ANDREW LORIS ; PIRZER V M ; MOORE LINWARD A ; MELBOURNE ANGUS J ; LONG TIMOTHY L ; KURKJIAN ANDREW L ; KURKEGIAN A L ; BURONG J W ; BROWN JONATHAN W ; BOLZE VICTOR M ; BROWN JONATHAN WEBSTER ; ANGUS J MELBOURNE ; J W BURONG ; JONATHAN W BROWN ; A L KURKEGIAN ; ANDREW L KURKJIAN

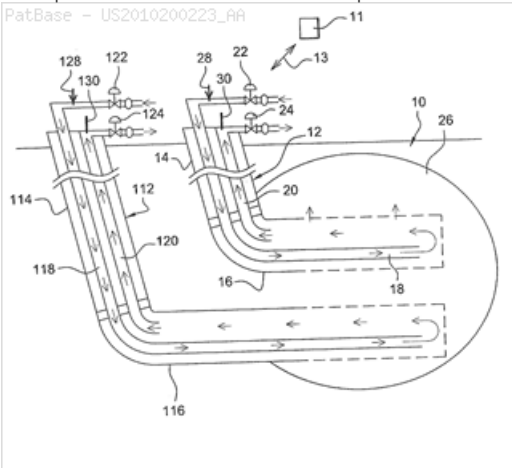
Inventor(s): ANDREW LORIS KURKJIAN ; JONATHAN WEBSTER BROWN

Agent(s): GRIFFITH HACK; SMART AND BIGGAR; J L JENNIE; BRIGITTC L

Title: METHOD FOR HEATING A HYDROCARBONS RESERVOIR

Abstract: A method is proposed for heating a hydrocarbons reservoir, comprising the provision of an installation comprising: a first **wellbore** equipped with an injection string fitted with an adjustable choke and an extraction string fitted with an adjustable choke, a set of sensors, intended to measure physical variables, an automatic device making it possible to control and monitor the operation of the installation; the circulation of steam from one string to the other; the control of the steam injection flow rate in function of a target value; the keeping of a set of physical variables within a predetermined range of values by continuous action of the automatic device on the choke of the injection string, and on the choke of the extraction string. The method makes it possible to more precisely control injection of the steam into the **wellbore**, throughout the circulation phase, optimizing the steam injection flow rate throughout the circulation phase while still ensuring the safe operation of the steam circulation phase.

Classifications:
International (IPC 8-9): E21B36/00 E21B43/14 E21B43/24 E21B47/00 E21B47/06 (Advanced/Invention); E21B36/00 E21B43/00 E21B43/16 E21B47/00 E21B47/06 (Core/Invention)
CPC: E21B43/24
European: E21B43/24
US: 166/250.01 166/250.010S 166/250.07 166/250.070P 166/252.1 166/272.3 166/303



Family:

Publication number	Publication date	Application number	Application date
CA2688742 AA	20100622	CA20092688742	20091216
CA2688742 C	20170627	CA20092688742	20091216
FR2940346 A1	20100625	FR20080007374	20081222
FR2940346 B1	20110121	FR20080007374	20081222
US2010200223 AA	20100812	US20090644843	20091222
US8534358 BB	20130917	US20090644843	20091222

Priority:

FR20080007374 20081222

Probable Assignee: TOTAL SA

Assignee(s): (std): LEMETAYER PIERRE ; MARTY BRUNO ; NGUETE EMMANUEL TOGUEM ; TOTAL SA

Assignee(s): TOTAL S A ; TOGUEM NGUETE EMMANUEL ; MAUDUIT DOMINIQUE

Inventor(s): (std): LEMETAYER PIERRE ; MARTY BRUNO ; MAUDUIT DOMINIQUE ; NGUETE EMMANUEL TOGUEM ; TOGUEM NGUETE EMMANUEL

Inventor(s): DOMINIQUE MAUDUIT ; EMMANUEL TOGUEM NGUETE ; PIERRE LEMETAYER

Agent(s): GOWLING WLG CANADA LLP; CABINET HIRSCH POCHART ET ASSOCIES; HENSLEY KIM AND HOLZER LLC; POLSINELLI PC

Title: METHOD AND APPARATUS TO COMPLETE A WELL HAVING TUBING INSERTED THROUGH A VALVE

Abstract: A method and apparatus for inserting a small diameter continuous hydraulic conduit or capillary tube down a well bore is presented. The methods and apparatus allow either the injection of chemicals to enhance production of oil and gas, or to provide a conduit for production up through the small diameter tubing in marginal wells, into a hanger below a well valve to permit its removal from below the valve if the valve should be required to be closed and its reinsertion without pulling the tubing from the well bore.

Classifications:

International (ipc 8-9): E21B19/08 E21B19/086 E21B19/16 E21B19/22 E21B23/01 E21B23/02 E21B23/04 E21B33/04 E21B33/06 E21B33/068

E21B34/10 E21B43/10 E21B43/12 (Advanced/Invention);

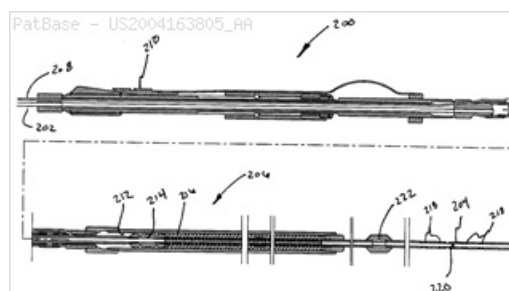
E21B43/12 E21B47/12 (Advanced/Non-invention)

International (ipc 1-7): E21B1/00 E21B43/12 E21B7/12

CPC: E21B33/068 E21B23/02 E21B33/04

European: E21B23/02 E21B33/04 E21B33/068

US: 166/208 166/250.01 166/305.1 166/332.5 166/372 166/38 166/380 166/382 166/67 166/77.1

**Family:**

Publication number	Publication date	Application number	Application date
AT415542 E	20081215	AT20040714605T	20040225
CA2539212 AA	20050825	CA20042539212	20040225
CA2539212 C	20110524	CA20042539212	20040225
CA2641567 AA	20040910	CA20042641567	20040225
CA2641601 AA	20040910	CA20042641601	20040225
CA2641601 C	20100202	CA20042641601	20040225
DE602004017975 D1	20090108	DE200460017975T	20040225
DK1608839 T3	20090309	DK20040714605T	20040225
EP1608839 A2	20051228	EP20040714605	20040225
EP1608839 A4	20060726	EP20040714605	20040225
EP1608839 B1	20081126	EP20040714605	20040225
EP2014868 A1	20090114	EP20080017786	20040225
EP2273062 A2	20110112	EP20100178525	20040225
EP2273062 A3	20171018	EP20100178525	20040225
ES2318273 T3	20090501	ES20040714605T	20040225
US2004163805 AA	20040826	US20040708338	20040225
US2006169459 AA	20060803	US20060277304	20060323
US2007187114 AA	20070816	US20070784655	20070409
US7082996 BB	20060801	US20040708338	20040225
US7219742 BB	20070522	US20060277304	20060323
US7617878 BB	20091117	US20070784655	20070409
WO04076797 A2	20040910	WO2004US05571	20040225
WO04076797 A3	20051110	WO2004US05571	20040225

Priority:

US20030319972P	20030225	CA20042539212	20040225	CA20042641567	20040225
CA20042641601	20040225	EP20040714605	20040225	US20040708338	20040225
EP20080017786	20040225	WO2004US05571	20040225	US20060277304	20060323
US20070784655	20070409	EP20080017786	20081010	CA20082539212	20081119

Probable Assignee: BAKER HUGHES A GE CO LLC

Assignee(s): (std): BJ SERVICES CO U S A ; HARKINS GARY O ; GEN OIL TOOLS LP ; GEN OIL TOOLS L P ; BJ SERVICES CO ; GENERAL OIL TOOLS LP ; BJ SERVICES COMPANY CANADA ; BJ SERVICES CO USA ; SMITH DAVID RANDOLPH ; SHANLEY BRENT ; RES FACTORY L C

Assignee(s): DYNA TEST LTD D B A DYNA COIL INJECTION SYSTEMS ; BAKER HUGHES A GE CO LLC ; BAKER HUGHES INC ; RESEARCH FACTORY LC ; THE RESEARCH FACTORY L C ; SMITH MR DAVID RANDOLPH ; HARKINS MR GARY O ; SHANLEY MR BRENT ; BJ SERVICES COMPANY U S A ; BJ SERVICES CO CANADA ; DYNA TEST INC ; DYNA TEST LTD ; BJ SERVICES COMPANY ; GENERAL OIL TOOLS L P

Inventor(s): (std): HARKINS GARY O ; SHANLEY BRENT ; SMITH DAVID R ; SMITH DAVID RANDOLPH ; SMITH DAVID ; HARKINS GARY

Agent(s): RICHES MCKENZIE AND HERBERT LLP; EDE ERIC ET AL; EDE ERIC; MURGITROYD AND CO; LUNDEEN AND DICKINSON LLP; HOWREY LLP; DAVID B; ZARIAN MIDGLEY AND JOHNSON PLLC

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

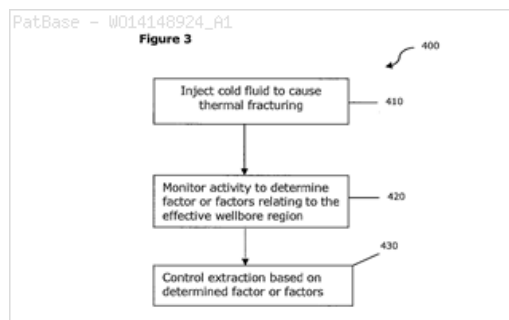
Title: IMPROVED EFFECTIVE WELL-BORE DIAMETER FOR HEAT EXTRACTION

Abstract: A method and system for determining or predicting a factor relating to an effective well-bore region, such as an effective **wellbore** diameter or other dimension, of an extraction well-bore of a geological or geothermal reservoir or other subsurface region, and controlling extraction of a natural resource, such as hot water from the subsurface region in accordance with the determined or predicted factor. Determination of such a factor includes analysis of the degree of permeability and/or fracture connectivity in a region surrounding the **wellbore**.

Classifications:

International (IPC 8-9): E21B43/12 (Advanced/Invention)

CPC: E21B43/26 Y02E10/14 F24T10/20 F24T2010/53 F24T2201/00



Family:

Publication number	Publication date	Application number	Application date
WO14148924 A1	20140925	WO2014NZ00049	20140324

Priority:

NZ20130608631 20130322

Probable Assignee: AUCKLAND UNISERVICES LTD

Assignee(s): (std): AUCKLAND UNISERVICES LTD

Inventor(s): (std): LEARY PETER

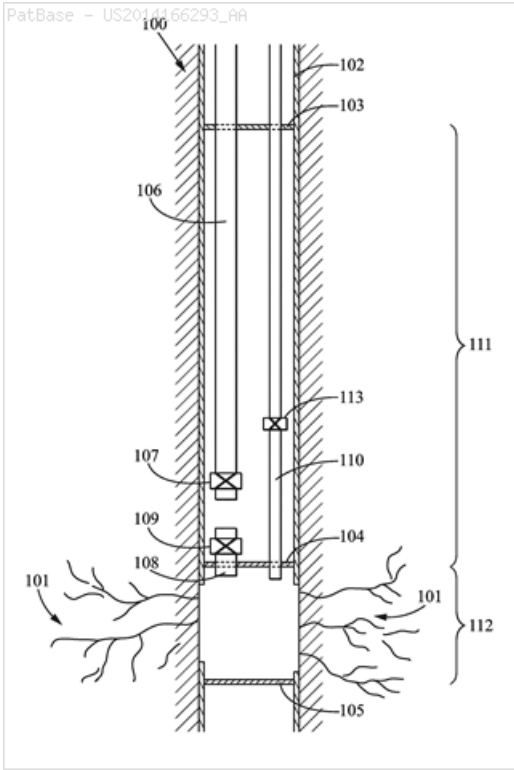
Agent(s): WEST WALKER GREG J ET AL

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 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

Title: METHOD FOR EXTENDING A NETWORK OF EXISTING FRACTURES

Abstract: The present invention relates to a method for extending a network of existing fractures in a subterranean formation. This method comprises pumping a first fluid into a pressurized volume to pressurize a compressible fluid in said pressurized volume to a predetermined pressure and releasing a second fluid out of the pressurized volume in a confined volume connected to the existing fractures, the second fluid being released due to a relaxation of the pressurized compressible fluid in the pressurized volume. Moreover, the release of second fluid exerts pressures in the existing fractures exceeding a fracturing threshold of the subterranean formation.

Classifications:
International (IPC 8-9): E21B43/26 (Advanced/Invention)
CPC: E21B43/26
US: 166/106 166/308.1



Family:

Publication number	Publication date	Application number	Application date
AU2012292170 AA	20130207	AU20120292170	20120726
CA2843786 AA	20140131	CA20122843786	20120726
CN103797213 A	20140514	CN201280044732	20120726
EP2739820 A2	20140611	EP20120740962	20120726
RU2014108143 A	20150910	RU20140108143	20120726
US2014166293 AA	20140619	US20120236013	20120726
WO13017529 A2	20130207	WO2012EP64720	20120726
WO13017529 A3	20130704	WO2012EP64720	20120726
WO13017529 A9	20130516	WO2012EP64720	20120726

Priority:

US20110515058P 20110804 US20120236013 20120726 WO2012EP64720 20120726

Probable Assignee: TOTAL SA

Assignee(s): (std): LEON JEAN FRANCOIS ; TOTAL SA

Assignee(s): TOTAL S A

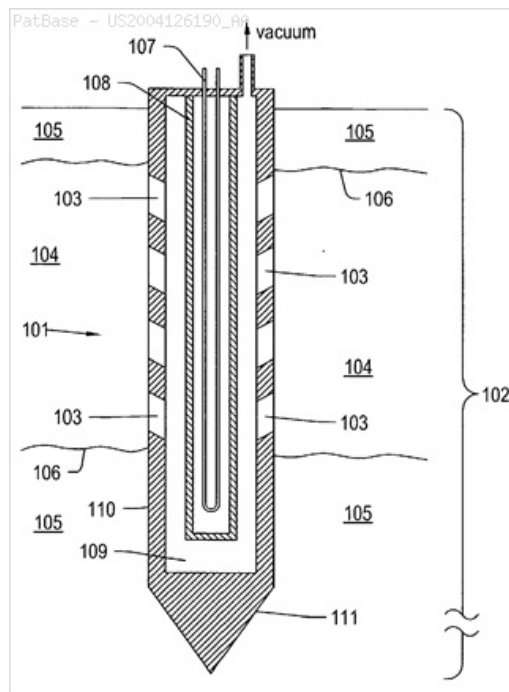
Inventor(s): (std): LEON JEAN FRANCOIS

Agent(s): GOLJA HAINES AND FRIEND; NORTON ROSE FULBRIGHT CANADA LLP SENCRL SRL; CABINET PLASSERAUD; LOISEL BERTRAND 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 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 QA RO RS RU RW 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

Abstract: A method is provided to remove contaminants from contaminated soil. The method may include withdrawing vapors from a vapor extraction well, estimating the amount of water vapor removed from the contaminated soil in the vapors being withdrawn from the vapor extraction well, and applying heat to the contaminated soil from a plurality of heater wells at a rate not greater than that which would vaporize the estimated amount of water vapor. The permeability of the soil may thereby increase by the application of heat. Six or more heat injection wells may be provided for each vapor extraction well, and the heat injection wells may be placed and energized in a regular pattern around the vapor extraction well, which may include multiple rings of heaters around each vapor extraction well.

US: 405/128.4 405/128.6 405/128.600P 405/128.85



Publication number	Publication date	Application number	Application date
AT299403 E	20050715	AT20020773912T	20021024
AU2002336664 AA	20030506	AU20020336664	20021024
AU2002336664 BB	20070913	AU20020336664	20021024
AU2002336664 CA	20081218	AU20020336664	20021024
BRPI0213511 A	20041019	BR2002PI13511	20021024
BRPI0213511 B1	20110726	BR2002PI13511	20021024
CA2462215 AA	20040407	CA20022462215	20021024
CA2462215 C	20110405	CA20022462215	20021024
DE60205038 D1	20050818	DE20026005038	20021024
DE60205038 T2	20060420	DE20026005038T	20021024
DK1467826 T3	20051114	DK20020773912T	20021024
EP1467826 A1	20041020	EP20020773912	20021024
EP1467826 B1	20050713	EP20020773912	20021024
EP1467826 B8	20050914	EP20020773912	20021024
JP2005506902 T2	20050310	JP20030537842T	20021024
JP4509558 B2	20100721	JP20030537842T	20021024
KR100925129 B1	20091105	KR20047006097	20021024
KR20040048428 A	20040609	KR20047006097	20021024
MXPA04003712 A1	20040730	MX2004PA03712	20040420
TW564192 B	20031201	TW20020124639	20021024
US2004126190 AA	20040701	US20020279771	20021024
US6951436 BB	20051004	US20020279771	20021024
WO03035290 A1	20030501	WO2002US34273	20021024

US20010346138P 20011024 US20020279771 20021024 WO2002US34273 20021024
WQ2002US34273 20040423

Assignee(s): SHELL INT RESEARCHMAATSCHAPPIJ BV ; SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B V ; SHELL OIL COMPANY ; SHELL CANADA LIMITED ; SHELL INTERNATIONALE RESEARCHMAATSCHAPPIJ B V ; SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B V DEN HAAG ; SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ BESLOTEN VENNOOTSCHAP ; SHELL INT RESEARCH MIJ BESLOTEN VENNOOTSCHAP ; SHELL

INT RESEARCH MIJ BV ; BOARD OF REGENTS THE UNIVERSITY OF TEXAS SYSTEM ; BOARD OF REGENTS
UNIV ; BOARD OF REGENTS UNIV OF TEXAS SYSTEM ; BOARD OF REGENTS UNIV OF TEXAS SYSTEMS ;
BOARD OF REGENTS UNIV TEXAS SYSTEM ; BOARD OF REGENTS UNIVERSITY

Inventor(s): (std): ERIC PIERRE DE ROUFFIGNAC ; STEGEMEIER ; VINEGAR J ; STEGEMEIER LEO ; STEGEMEIER GEORGE L ;
ROUFFIGNAC ERIC PIERRE DE ; DE ROUFFIGNAC PIERRE ; DE ROUFFIGNAC ERIC P ; VINEGAR HAROLD J ;
STEGEMEIER GEORGE LEO ; DE ROUFFIGNAC ERIC PIERRE

Inventor(s): HAROLD J VINEGAR ; GEORGE LEO STEGEMEIER

Agent(s): SPRUSON AND FERGUSON; SMART AND BIGGAR; MEYERTONS HOOD KIVLIN KOWERT AND GOETZEL PC;
MEYERTONS ERIC B; ERIC B

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

Title: Down hole tool for determination of formation properties

Abstract: The apparatus of the present invention relates to a down hole tool capable of extraction of valid samples and making pressure measurements useful in calculating formation permeability. The tool incorporates the features of a staddle packing to allow formation fluid specimens to be taken at large flow rates without depressing the pressure below the formation fluid bubble point. When used in combination with a pressure probe the tool is used to obtain meaningful permeability readings in a larger radius area than previously permitted with known designs. Additionally, the apparatus of the present invention allows flow **control** during the creation of the **pressure** pulse which enhances **extraction** of valid samples and the permeability determination. The apparatus may be modularly constructed so that in a single descent of the tool, a pressure profile of the zone of interest can be made, a fluid analysis can be made at each station, multiple uncontaminated fluid samples can be withdrawn at pressures above the bubble point, local vertical and horizontal permeability measurements can be made at each station, a packer module can be set at a location dictated by previous measurements and a large scale pressure build up test can be performed.

Classifications:

International (IPC 8-9): E21B49/00 E21B49/08

E21B49/10 (Advanced/Invention);

E21B49/00 (Advanced/Non-invention);

E21B49/00 (Core/Invention)

International (IPC 1-7): E02B47/00 E02B49/00 E21B33/127 E21B47/06

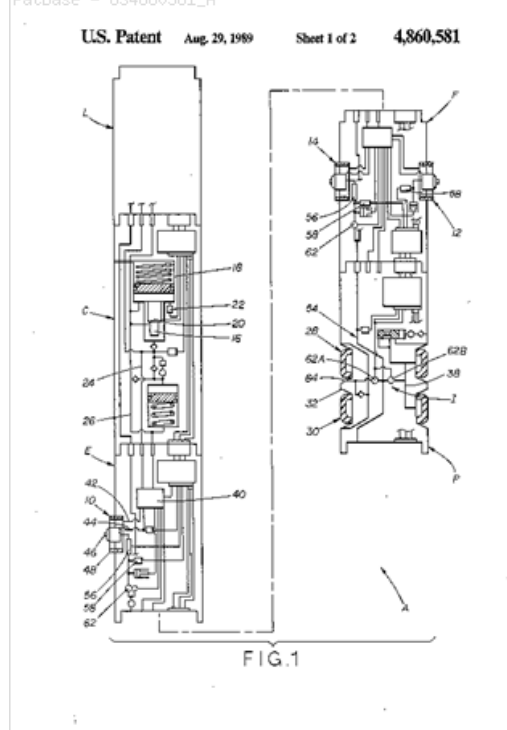
E21B49/00 E21B49/08 E21B49/10

CPC: E21B49/081 E21B49/088 E21B49/10 E21B49/08

European: E21B49/08 E21B49/08B E21B49/08T2 E21B49/10

US: 175/40 175/50 73/152.26 73/152.41 73/152.51

PatBase - US4860581_A



Family:

Publication number	Publication date	Application number	Application date
AT146560 E	19970115	AT19890402511T	19890914
AU198941668 A1	19900329	AU19890041668	19890922
AU626216 B2	19920723	AU19890041668	19890922
BRPI8903832 A	19900327	BR1989PI03832	19890731
CN1019836 B	19921230	CN19891007138	19890912
CN1041419 A	19900418	CN19891007138	19890912
DE68927569 D1	19970130	DE19896027569	19890914
DE68927569 T2	19970626	DE19896027569T	19890914
DE68929202 D1	20000608	DE19896029202	19890914
DE68929202 T2	20010104	DE19896029202T	19890914
DK173591 B1	20010409	DK19890004293	19890831
DK429389 A	19900324	DK19890004293	19890831
DK429389 A0	19890831	DK19890004293	19890831
DZ1360 A1	20040913	DZ19890000148	19890920
EG18656 A	19931030	EG19890000460	19890919
EP0362010 A2	19900404	EP19890402511	19890914
EP0362010 A3	19910814	EP19890402511	19890914
EP0362010 B1	19961218	EP19890402511	19890914
EP0697502 A1	19960221	EP19950115286	19890914
EP0697502 B1	20000503	EP19950115286	19890914
ES2148392 T3	20001016	ES19950115286T	19890914
MA21632 A1	19900401	MA19890021886	19890920
MX166366 B	19930105	MX19890017421	19890904
NO180057 B	19961028	NO19890003435	19890828
NO180057 C	19970205	NO19890003435	19890828
NO893435 A	19900326	NO19890003435	19890828
NO893435 A0	19890828	NO19890003435	19890828
NZ230726 A	19920728	NZ19890230726	19890921
OA9094 A	19911031	OA19890059650	19890922

PH26204 A	19920318	PH19890039251	19890919	
RU2074316 C 1	19970227	SU19894614961	19890922	
TR28979 A	19970721	TR19890000735	19890921	
US4860581 A	19890829	US19880248867	19880923	
US4936139 A	19900626	US19890377694	19890710	
ZA8907236 A	19900627	ZA19890007236	19890922	

Priority:

US19880248867 19880923 US19890377694 19890710 EP19890402511 19890914

Probable Assignee: SCHLUMBERGER TECHNOLOGY 5000 GULF FREEWAY PO BOX 2175 HOUSTON TX 77023 A CORP OF TX CORP

Assignee(s): (std): D PROSPECTION ELECTR SCHLU SOC ; PRAD RES AND DEV NV ; SCHLUMBERGER PROSPECTION ; SCHLUMBERGER OVERSEAS ; SCHLUMBERGER LTD ; SCHLUMBERGER SERVICES PETROL ; SCHLUMBERGER SURENCO SA ; SCHLUMBERGER RES LTD ; SHLYUMBERGER OVERSIZ S A ; SCHLUMBERGER TECHNOLOGY BV ; SCHLUMBERGER TECHNOLOGY CORP ; SCHLUMBERGER HOLDINGS ; SOC D PROSPECTION ELECTR SCHLU

Assignee(s): SCHLUMBERGER TECHNOLOGY 5000 GULF FREEWAY (PO BOX 2175) HOUSTON TX 77023 A CORP OF TX CORP ; SCHLUMBERGER TECHNOLOGY 5000 GULF FREEWAY PO BOX 2175 HOUSTON TX 77023 A CORP OF TX CORP ; SCHLUMBERGER HOLDINGS LIMITED ; SCHLUMBERGER HOLDINGS LTD ; SCHLUMBERGER TECHNOLOGY 5000 GULF FREEWAY ; SHLYUMBERGER OVERSIZ SA ; SCHLUMBERGER TECHNOLOGY B V ; SCHLUMBERGER TECHNOLOGY B V DEN HAAG S GRAVENHAGE ; SOCIETE DE PROSPECTION ELECTRIQUE SCHLUMBERGER ; SHLYUMBERGER OVERSIZ SA ; SERVICES PETROLIERS SCHLUMBERGER ; SCHLUMBERGER TECHNOLOGY DEN HAAG S GRAVENHAGE BV ; SERVICES PETROLIERS SCHLUMBERGER PARIS ; SCHLUMBERGER TECHNOLOGY A CORP OF TX CORP ; SCHLUMBERGER SURENCO S A ; SCHLUMBERGER LTD NEW YORK N Y US ; SCHLUMBERGER HOLDINGS LTD ROAD TOWN ; SCHLUMBERGER LTD NEW YORK ; SCHLUMBERGER LIMITED ; SCHLUMBERGER RESEARCH LIMITED ; SCHLUMBERGER OVERSEAS S A ; SCHLUMBERGER RESEARCH LTD ; PRAD RESEARCH AND DEVELOPMENT N V ; DE PROSPECTION ELECTRIQUE SCHLUMBERGER SOC

Inventor(s): (std): JULIAN POP ; PERKINS JOSEPH ; POP JULIAM ; POP JULIAN ; POP JULIEN ; THOMAS ZIMMERMAN ; ZIMMERMAN THOMAS ; JOSEPH PERKINS ; ZIMMERMAN THOMAS H ; TOMAS ZIMMERMAN ; POP JULIAN J ; PERKINS JOSEPH L ; DZHULIAN POP ; DZHOZEF PERKINS

Inventor(s): DZHOZEF PERKINS[US] ; DZHULIAN POP[AU] ; POP JULIAN HOUSTON TEXAS 77009 US ; PERKINS JOSEPH SUGAR LAND TEXAS 77479 US ; TOMAS ZIMMERMAN[US] ; JULIAM POP ; ZIMMERMAN THOMAS HOUSTON TEXAS 77059 US

Agent(s): GRIFFITH HACK

Designated states: AT DE ES FR GB GR IT NL

Title: SYSTEM AND METHOD FOR REMOVING AN ELECTROLYTE FROM AN ENERGY STORAGE AND/OR CONVERSION DEVICE USING A SUPERCRITICAL FLUID

Abstract: A system and method of removing an electrolyte from energy storage and conversion devices using a supercritical fluid are provided. The method includes placing a selected device in a container, adding a fluid to the container, adjusting at least one of a temperature and a pressure of the fluid in the container to form the supercritical fluid from the fluid in the container, exposing the supercritical fluid to the electrolyte, and removing the supercritical fluid from the container, wherein removal of the supercritical fluid causes removal of the electrolyte from the container.

Classifications:

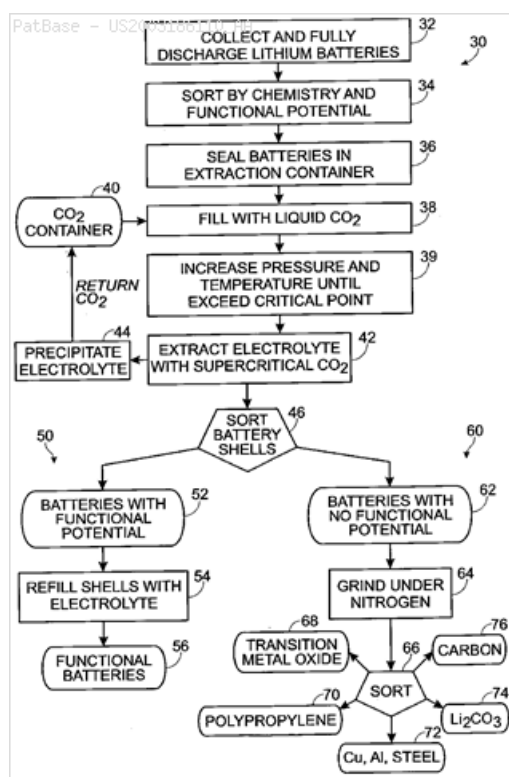
International (IPC 8-9): B01D11/00 B03D1/004 B03D1/02 B09B3/00 C21B11/10 C22B11/10 H01G13/00 H01G9/00 H01G9/02 H01G9/038 H01M10/05 H01M10/30 H01M10/42 H01M10/44 H01M10/54 H01M2/12 H01M2/36 H01M6/50 H01M6/52 (Advanced/Invention); H01M10/052 H01M10/0525 H01M10/40 H01M10/52 H01M10/54 H01M2/12 H01M2/36 (Advanced/Non-invention); C21B11/00 C22B11/00 H01M10/42 H01M2/00 H01M6/00 (Core/Invention); H01M10/36 (Core/Non-invention)

International (IPC 1-7): B01D11/00 B09B3/00 H01G13/00 H01G9/00 H01M10/40 H01M10/42 H01M10/54 H01M2/36 H01M6/52

CPC: Y02E60/13 H01G9/038 H01G11/58 H01M2/1229 H01M10/0525 H01M2/36 H01M6/52 H01M10/30 H01M10/4242 H01M2/364 H01M10/052 H01M10/4285 H01M10/52 Y10T29/49108 Y02W30/84 H01M10/54

European: H01G11/58 H01G9/02D H01G9/038 H01M10/30 H01M10/42R H01M10/42T H01M10/54 H01M2/36 H01M2/36D H01M6/52 T01M10/052 T01M10/0525 T01M10/52 T01M2/12C2 T01M2/36 Y02E60/12 Y02E60/12D Y02E60/13 Y02T10/70B2

US: 209/166 209/167 29/623.1 423/1 429/49 429/49P 429/50 429/50P 429/52 429/52S 429/53 429/95 429/95S



Family:

Publication number	Publication date	Application number	Application date
AT502414 E	20110415	AT20030703755T	20030109
AU2003205087 AA	20030730	AU20030205087	20030109
AU2003205087 BB	20080306	AU20030205087	20030109
AU2003205087 CA	20081106	AU20030205087	20030109
BRPI0306822 A	20041228	BR2003PI06822	20030109
BRPI0306822 B1	20120904	BR2003PI06822	20030109
CN100442595 C	20081210	CN20038002073	20030109
CN102160220 A	20110817	CN200980136414	20090728
CN102160220 B	20140813	CN200980136414	20090728
CN1618142 A	20050518	CN20038002073	20030109
DE60336381 D1	20110428	DE20036036381	20030109
EP1472756 A1	20041103	EP20030703755	20030109
EP1472756 A4	20061102	EP20030703755	20030109
EP1472756 B1	20110316	EP20030703755	20030109
EP2319114 A1	20110511	EP20090803502	20090728
EP2319114 A4	20140305	EP20090803502	20090728
JP2005515605 T2	20050526	JP20030561034T	20030109
JP4591909 B2	20101201	JP20030561034T	20030109
KR100997349 B1	20101130	KR20047010690	20030109
KR20040071776 A	20040812	KR20047010690	20030109
US2003186110 AA	20031002	US20030340358	20030109
US2005244704 AA	20051103	US20040004643	20041202
US2007292746 AA	20071220	US20070731093	20070329
US2009286137 AA	20091119	US20090510947	20090728
US2013302223 AA	20131114	US20130945313	20130718
US7198865 BB	20070403	US20030340358	20030109
US7858216 BB	20101228	US20070731093	20070329
US8067107 BB	20111129	US20040004643	20041202
US8497030 BB	20130730	US20090510947	20090728
WO03061056 A1	20030724	WO2003US00766	20030109
WO10014637 A1	20100204	WO2009US52000	20090728

Priority:

US20020347216P 20020109	US20030340358 20030109	WO2003US00766 20030109
US20030526701P 20031202	US20040004643 20041202	US20070731093 20070329
US20080084220P 20080728	US20090510947 20090728	WO2009US52000 20090728
US20130945313 20130718		

Probable Assignee: ECO BAT INDIANA LLC

Assignee(s): (std): PARKER ROBERT ; SLOOP STEVEN E ; STEVEN E SLOOP ; STEVEN SLOOP ; ECO BAT INDIANA LLC

Assignee(s): ONTO TECHNOLOGY LLC

Inventor(s): (std): PARKER ROBERT ; STEVEN ESLOOP ; SLOOP STEVEN E

Inventor(s): SLOOP STEVEN ; ECO BAT INDIANA LLC ; STEVEN E SLOOP

Agent(s): SPRUSON AND FERGUSON; STAINTHORPE VANESSA JULIET; HERRMANN UWE; ALLEMAN HALL MCCOY
RUSSELL AND TUTTLE LLP; K AND L GATES LLP; HALL M MATTHEWS

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
TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: STEAM GENERATION

Abstract: A steam generation device and a method for generating steam using the device are disclosed. The device includes a fluid circulation pipe containing electrically and thermally conductive material, and at least one inductive cable made from an electrically conductive material wound around the pipe. The device and method allow for improved steam generation.

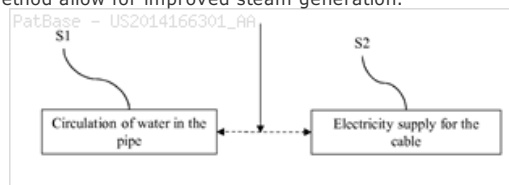
Classifications:**International (IPC 8-9):** E21B36/00 E21B43/24 F22B1/28 F22B37/10

H05B6/10 (Advanced/Invention);

E21B36/00 (Core/Invention)

CPC: E21B43/2401 F22B1/281 F22B1/282 E21B36/04 E21B43/2406

F22B37/103 H05B6/107 H05B6/108

US: 166/372 219/643 392/397**Family:**

Publication number	Publication date	Application number	Application date
AP201407446 A0	20140228	AP20140007446	20120717
AU2012289013 AA	20130131	AU20120289013	20120717
BR112014001532 A2	20170214	BR20141101532	20120717
CA2842340 AA	20140117	CA20122842340	20120717
CN103717968 A	20140409	CN201280037166	20120717
EP2737248 A1	20140604	EP20120735158	20120717
FR2978527 A1	20130201	FR20110056726	20110725
GC5503 A	20170504	GC2012P021822	20120723
RU2014106326 A	20150827	RU20140106326	20120717
RU2610084 C2	20170207	RU20140106326	20120717
US2014166301 AA	20140619	US20120234562	20120717
WO13014023 A1	20130131	WO2012EP63952	20120717

Priority:

FR20110056726 20110725 WO2012EP63952 20120717

Probable Assignee: TOTAL SA**Assignee(s):** (std): CORRE BERNARD ; TOTAL SA**Assignee(s):** TOTAL S A**Inventor(s):** (std): BERNARD CORRE ; CORRE BERNARD ; KORR BERNAR**Agent(s):** IP GATEWAY PATENT AND TRADEMARK ATTORNEYS PTY LTD; IP GATEWAY PATENT AND TRADE MARK ATTORNEYS PTY LTD; ROBIC; HIRSCH AND ASSOCIES; CABINET HIRSCH AND PARTNERS; SABA AND CO TMP

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 QA RO RS RU RW 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

Title: ARTIFICIAL SIMULTANEOUS PRODUCTION AND MAINTENANCE SYSTEM ASSISTED BY MECHANICAL PUMPING WITH FLEXIBLE TUBING FOR FLUID EXTRACTION

Abstract: An artificial simultaneous production and maintenance system assisted by mechanical pumping for fluid extraction, comprising: a surface assembly including a sub-base, a hydraulic drive head, a stuffing box, an O-ring preventer, a wedge preventer and a connection and splicing means; from the surface assembly a production tubing extends vertically downwards inside the well bore; a casing; a flexible tubing located inside the production tubing all along its length, being the casing, the production tubing and the flexible tubing concentrically one inside the other; and a pump assembly including a connector, a check valve, cleaning tool and a plunger pump. The system allows assisted production by mechanical pumping for fluid extraction and maintenance by simultaneous pumping of chemicals to the well to modify physical properties of the fluid to be extracted and clean organic and inorganic material buildup within the well.

Classifications:

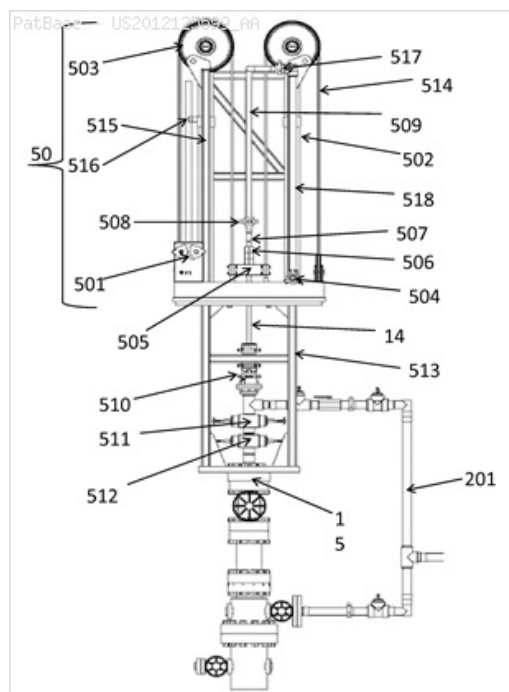
International (IPC 8-9): B23Q17/00 E21B12/06 E21B17/20 E21B37/06 E21B41/02 E21B43/00 E21B43/12 F04B53/00

F04B53/10 (Advanced/Invention)

CPC: E21B43/126 E21B43/127 E21B17/20 E21B37/06 Y10T29/49764 E21B41/02

European: E21B17/20 E21B37/06 E21B43/12B9C

US: 1/1 166/105 29/407.01 29/407.010S



Family:

Publication number	Publication date	Application number	Application date
AR083930 AA	20130410	AR2011P104321	20111118
AU2011330738 AA	20120524	AU20110330738	20111118
AU2011330738 AH	20160825	AU20110330738	20111118
AU2011330738 BB	20160811	AU20110330738	20111118
AU2011330738 BH	20160825	AU20110330738	20111118
BR112013012345 A2	20160823	BR20131112345	20111118
CA2818101 AA	20130515	CA20112818101	20111118
CN103221633 A	20130724	CN201180055773	20111118
CN103221633 B	20160824	CN201180055773	20111118
CO7230335 A2	20150331	CO20130143983	20130617
EA026845 B1	20170531	EA20130000597	20111118
EA201300597 A1	20131230	EA20130000597	20111118
EP2642068 A1	20130925	EP20110842369	20111118
EP2642068 A4	20180110	EP20110842369	20111118
GC5483 A	20170430	GC2011P019793	20111119
MX2010012619 A1	20120306	MX20100012619	20101119
RU2013127628 A	20141227	RU20130127628	20111118
US2012125599 AA	20120524	US20110297990	20111116
US9410404 BB	20160809	US20110297990	20111116
WO12066514 A1	20120524	WO2011IB55187	20111118
WO12066514 A4	20120816	WO2011IB55187	20111118

Priority:

MX20100012619 20101119 WO2011IB55187 20111118

Probable Assignee: TELEFONAKTIEBOLAGET L M ERICSSON

Assignee(s): (std): AVANTUB DE CV SA ; AVANTUB S A DE C V ; AVANTUB SA DE CV ; HAMMOND BRAVO WILLIAM ANTHONY

Assignee(s): TELEFONAKTIEBOLAGET L M ERICSSON ; AVANTUB SA

Inventor(s): (std): BRAVO WILLIAM ANTHONY HAMMOND ; HAMMOND BRAVO WILLIAM ANTHONY ; HAMMOND BRAVO WILLIAM ANTHONY

Inventor(s): WILLIAM ANTHONY HAMMOND BRAVO

Agent(s): HOULIHAN2; HOULIHAN2; HOULIHAN2 PTY LTD; BERESKIN AND PARR LLP SENCRL SRL; HAMSOE PATENTBYRA ANS; ABU GAZALEH INTELLECTUAL PROPERTY LLC; DAVID W; CARSTENS AND CAHOON LLP;

SHAUKAT A; BELTRAN RIVERA RAFAEL

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 QA RO RS RU RW 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

Title: APPARATUS FOR EXTRACTION OF OIL VIA UNDERGROUND DRILLING AND PRODUCTION LOCATION

Abstract: A well pressure control assembly includes an annular pressure containment structure useful for manipulating pipe during drilling and other well operations performed with annular pressure at the wellhead. The annular pressure containment structure includes a sealing structure involving a sealing wall and a fluid port extending through the sealing wall through with a hydrodynamic bearing fluid is injectable adjacent pipe received in the annular pressure containment structure.

Classifications:

International (IPC 8-9): E21B27/00 E21B33/08 E21B33/12

E21B33/128 (Advanced/Invention);

E21B27/00 E21B33/02 E21B33/12 (Core/Invention);

E21B (Subclass/Invention)

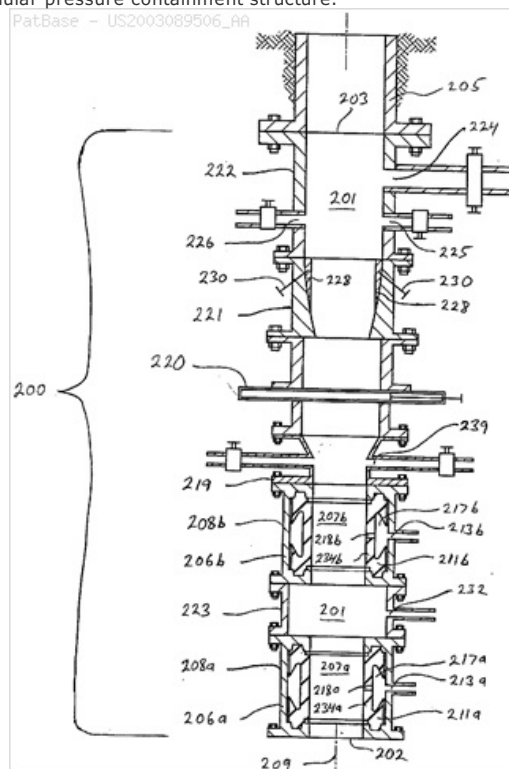
International (IPC 1-7): E21B0/0 E21B0/00 E21B27/0 E21B27/00

E21B33/12 E21B33/128

CPC: E21B33/085

European: E21B33/08B

US: 166/162 166/387 166/88.1



Family:

Publication number	Publication date	Application number	Application date
AU2002352601 AA	20030526	AU20020352601	20021108
MXPA04005723 A1	20050419	MX2004PA05723	20021108
US2003089506 AA	20030515	US20020179799	20020625
US6796381 BB	20040928	US20020179799	20020625
WO03042485 A2	20030522	WO2002US36023	20021108
WO03042485 A3	20040325	WO2002US36023	20021108

Priority:

US20010332869P 20011112 US20020179799 20020625 WO2002US36023 20021108

Probable Assignee: ORMEXLA USA INC

Assignee(s): (std): ANDREWS RICHARD E ; AYLER MAYNARD F ; ORMEXLA USA INC

Assignee(s): ORMEXLA U INC SA

Inventor(s): (std): RICHARD E ANDREWS ; AYLER MAYNARD F ; ANDREWS RICHARD E

Inventor(s): MAYNARD F AYLER

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

Title: PROCESS AND APPARATUS FOR CLEANING PARTICULATE SOLIDS

Abstract: A system for cleaning solids contaminated with solvent-soluble contaminants. The system, which includes both process and apparatus, comprises slurrying of the solids with a solvent, feeding the slurry to a cyclone separation zone integrally connected to a countercurrent extraction zone, separating the slurry into an overflow stream which includes solvent and fine particles of solids and an underflow stream which includes mostly coarse particles of solids in the cyclone separation zone, processing the overflow stream in a cleaning zone with additional solvent, processing the underflow stream in countercurrent relationship with additional solvent through the countercurrent extraction zone, combining the cleaned coarse particles of solids withdrawn from the extraction zone with the cleaned fine particles of solids withdrawn from the cleaning zone and centrifuging the combined cleaned particles to remove residual solvent and recovering the combined solids having reduced contamination for disposal.

Classifications:**International (IPC 8-9):** B01D11/00 B01D11/02 B09C1/02 E21B21/06

E21B41/00 (Advanced/Invention);

B01D11/00 (Advanced/Non-invention);

B01D11/02 B09C1/00 E21B21/00 E21B41/00 (Core/Invention);

B01D11/00 (Core/Non-invention)

International (IPC 1-7): B01D11/00 B01D11/02 B04C5/00 B04C9/00

B08B13/00 B08B3/08 B08B3/10 E21B21/00 E21B21/06 E21B41/00

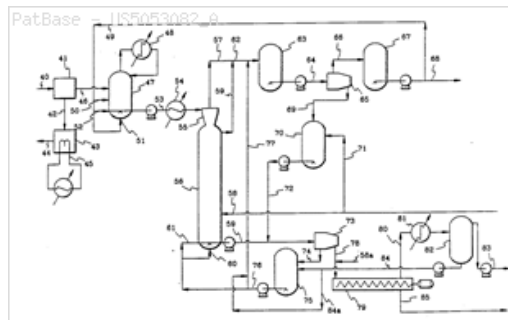
CPC: B01D21/34 B01D21/262 B01D21/267 B01D2221/04 B01D11/0223

B01D11/028 B01D2011/002 B09C1/02 E21B21/066 E21B21/068

E21B41/005

European: B01D11/02M4 B01D11/02S B01D21/26 B09C1/02

E21B21/06N2C E21B21/06P E21B41/00M L01D11/00B

US: 134/25.1 134/26 134/33 134/42 175/206 175/66 210/512.1 210/787**Family:**

Publication number	Publication date	Application number	Application date
AU199174460 A1	19911010	AU19910074460	19910228
CN1057411 A	19920101	CN19911001808	19910227
US5053082 A	19911001	US19900487351	19900228
WO9114075 A1	19910919	WO1991US01290	19910228

Priority:

US19900487351 19900228

US19910487351 19910228

WO1991US01290 19910228

Probable Assignee: CONOCO INC**Assignee(s):** (std): CONOCO INC**Inventor(s):** (std): FLANIGAN DAVID A ; HEILHECKER JOE K ; WILLIAMS ROBERT E**Inventor(s):** ROBERT E WILLIAMS ; JOE K HEILHECKER ; DAVID A FLANIGAN**Designated states:** AT AU BE CA CH DE DK ES FR GB GR IT JP LU NL NO SE SU

Title: METHOD OF WORKING BED DEPOSITS OF SOLID MINERALS

Abstract: Source: SU1011858A **Machine translation:** 1 invention relates to mining and can be used in besschahtnoy extraction of solid minerals such as coal, by dispersing it. Known extraction method using carbon downhole jetting I 3, however, the method is characterized by complexity and loss of the coal in its entirety. Discloses a method of mining, which includes feeding in fractured reservoir heavy liquid separation for mineral processing of rock particles. A disadvantage of this method is the need for preliminary preparation of the deposit. Closest to the proposed in its essence and results is a method comprising drilling, forcing them through the formation of substances, dispersing minerals extraction and the latter on the surface of C 3 disadvantages of this method is labor intensive work yuth, low rate of mining due to low rate of heterogeneous physical and chemical reactions reacting coal and chemical dispersing agent useful big losses) due to the low rate of fossil mining and intensive subsidence host rocks. The purpose of the invention - an increase of mineral **extraction** and shorten the mining deposits by **controlling** rock **pressure** and movement of fluids and dispersed in mineral formation. This goal is achieved in that the method comprising drilling, pumping them through agents, dispersing minerals extraction and the latter on the surface drilled injection and production wells, rock faces which are arranged in a plane layer, producing tons sboyka end portions faces of these wells, drilled, mensche at least one further hole, which is disposed in the bottomhole formation plane E between slaughter injection and production wells, and does not intersect the last sboyka therebetween filled with a discharge, and production wells sboyka therebetween inert fluid at a pressure not mensche mountain reservoir pressure enclosing rocks, producing t download in additional well dispersant in an amount providing treatment reservoir between the drilled hole and then into the injection well or additional ut Jelen pumped liquid udelnym weight large proportion of the mineral, but a smaller proportion of the enclosing rocks, then through production wells recovered mixture of liquid and particulate mineral. A wellhead down dip of the formation, beginning at the production wells, wherein the culling injection well extending along the strike of the formation and **borehole** mining slaughtering extend in the same direction, but at an angle to the line of incidence of the side seam. In addition, the injection and production wells drilled to intersect the previously goaf formation. Ust wells along the strike of a reservoir, and slaughtering pass by the drop formation. Ut Zhelen fluid is pumped into an injection well via a conduit extending to the end of said well Sabo. Furthermore, during the injection of dispersing additional materials in the production **borehole** t periodic download zhinu inert liquid and pumping it at this dispersing agents injected into the formation under pressure to pnevmorazryv or fracturing the formation. Fig. 1 is a schematic of the proposed method at the location of places unsealing line stretch (vertical section through production wells); Fig. 2 - section A-A in Fig. One; Fig. 3 - the same, but in the recesses of solid fossil; Fig. 4 Scheme of the proposed method in arrangement of the seats on the line drop necropsy (an oblique cross-section in the plane of the wells). Mining section consists of production wells 1 and 2 input skvazhshsh, Bskryvayuschih layer 3 solid fossil (place necropsy production wells designated as 4) and extending in the plane of the sheet (section mining wells extending in the plane of the reservoir is designated as 5), 6 sboyki end portions of the front and mining wells raspolozheshshh plane formation, 7-9 additional wells to inject substances dyspergeriuyuschih extending in the plane of the sheet between the input and production wells and cross-ing the entrance, dobychschgyu wells and Breakthrough, line 10. goaf formed at extraction of solid minerals indicated. 11. The arrows indicate the direction of movement of the liquid with a specific gravity, specific weight Large Live solid fossil mensche but the proportion of the host rocks., Process is carried out as follows. T a mining drill 1 and the discharge **borehole** 2, revealing the formation razrabatshaemy portion 3 and extending in the plane of the sheet. In one embodiment, the method places a autopsies on the line stretch fields, and land wells located in the plane of the sheet, drilled down dip field (Fig. 1-3). Then produce 6 tons sboyka front end portions and mining wells raspolozhennrs plane formation. Sboyka production t fired, electrothermal way rhenium connective deviated horizontal wells, etc. Bur t on mensche least one additional well 7-9, extending to 310 118 684 to the injection wells-plane formation mezhod input, dobychiz mining wells. tion wells and does not intersect the input, production wells and their Breakthrough, sealed the entrance and a mining skvazhily, zapolnSpot input, production wells and their Breakthrough fluid and maintain overpressure fluid pressure counteracts the development of the host rocks of the mountain, and compression of the input. mining wells and sboyki. Is injected into the formation of solid fossil through additional wells, dispersants solid minerals in amounts to provide treatment to develop direct-field section, located between the input, production wells and Breakthrough. Pressure in the formation of substances diepergeriuyuschih effected in dependence on the state of the phase in rezhij e gidroraschleneni pnevmoraschlened or reservoir in which a portion razraba.tyvaemom razvivayuts treischny fields. Dispersants, penetrates into cracks, macropores and micropores of solid fossil cause it razruschenie, and in the initial moments of time dispersion occurs along the boundaries of cracks and macropores, and then propagate deep into solid blocks poleznogche fossil. To degradation by the action of the dispersing agent has not been outside the field area region razrabatshaemogo portion of it pumping in additional well dispersants production t periodic injection of an inert liquid in the injection well and its vshusk dobganoy of wells than achieved vshos of dispersant injection, wells and mining sboyki them and eliminating the possibility of spreading dispersant beyond the developed area. When razrabatgoaemy plot field produced by the action of dispersing agents transferred to loose cocTOsmHe pumped into injection wells or injection wells and more liquid with a specific gravity, specific weight Large Live solid fossil, but mensche proportion of the host rocks, and this mixture is extracted liquid and particulate solids useful fossil through production wells. The liquid stream passing through the injection well. Breakthrough and production wells, produces erosion translated into rpsloe state of solid fossil to his move to the production wells. In **borehole** mining mineral resource and vshosits pops to the surface fluid flow. Since vsplyat solid minerals in the input and may well, in order to avoid the formation of counter noixiKOB fluid pumping and vsplyayuschego minerals in the injection well is pumped into it heavier liquid through the conduit, the outlet of which is by the end of the **borehole**. Stope surfaces, on which the erosion of solid fossil loosened, in this case will end portions sboyka injection and production wells, located in the plane of the sheet, and the participation of mining wells, located in the plane of the sheet (Figure,

Classifications:**International (IPC 8-9):** E21B43/28 E21C45/00 (Advanced/Invention);

E21B43/00 (Core/Invention)

International (IPC 1-7): E21B43/28 E21C41/04

Publication number	Publication date	Application number	Application date
SU1011858 A1	19830415	SU19813348963	19811028

SU19813348963 19811028

Assignee(s): (std): INST GEOTEKHNICHESKOI MEKHANIK ; INST GEOTEKHNICHESKOJ MEK AN U ; OF GEOTECHNICAL MECHANICS OF ACADEMY OF SCIENCES OF USSR INST

Inventor(s): (std): ABRAMOV FEDOR A ; POTURAEV VALENTIN N ; REPKA VALERIJ V

Inventor(s): REPKA VALERIJ V SU ; POTURAEV VALENTIN N SU ; ABRAMOV FEDOR A SU

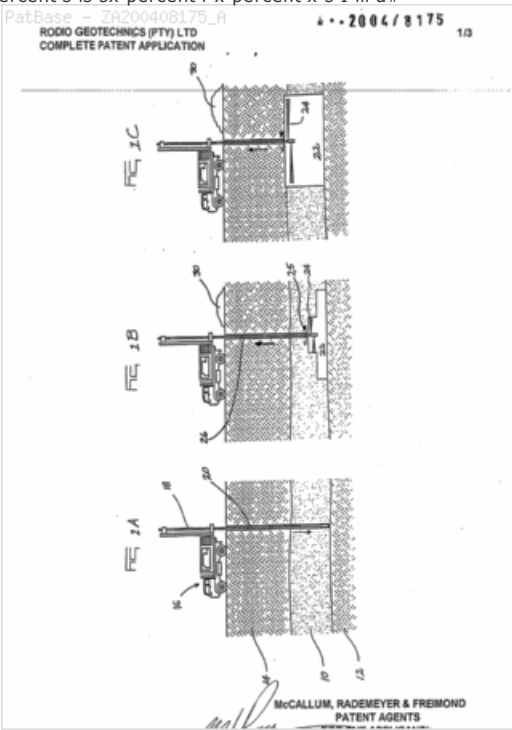
Title: MATERIAL EXTRACTION

Abstract: ADVERTISEMENT DRAWING pis W## k#m 11 ## 1 r percent percent s is sx percent f x percent x s I ill a#

Classifications:

International (IPC 8-9): E21D (Subclass/Invention)

International (IPC 1-7): E21D



Family:

Publication number	Publication date	Application number	Application date
ZA200408175 A	20050706	ZA20040008175	20041008
ZA200408175 A	20050831	ZA20040008175	20041008

Priority:

ZA20030002793 20031010

Probable Assignee: RODIO GEOTECHNICS PTY LTD

Assignee(s): (std): RODIO GEOTECHNICS LTD ; RODIO GEOTECHNICS PTY LTD

Inventor(s): (std): HEINZ WOLFGANG FRIEDRICH ; PAOLO ITALO SEGATTO ; SEGATTO PAOLO ITALO ; WOLFGANG FRIEDRICH HEINZ

Title: DEVICE FOR ELIMINATING OIL PARTICLES FROM THE CRANKCASE VENTILATION GAS IN AN INTERNAL COMBUSTION ENGINE

Abstract: A device for eliminating oil particles from the crankcase ventilation gas of an internal combustion engine. The device is located in the flow duct of the gas that runs from the crankcase to an induction tract of the engine. The device includes an oil separator in the form of an outlet for the gas with a deflection of the flow, causing the oil particles to be deposited on a baffle surface and thus to be eliminated from the crankcase ventilation gas flow. The device has an infeed cross-section, which lies upstream of the baffle surface when viewed from the flow direction of the crankcase ventilation gas, and which is sub-divided into several infeed sub-sections. The baffle surface is a solid surface that is devoid of perforations. The baffle surface is configured on a valve body, which lies downstream of the infeed sub-sections when viewed in the flow direction of the gas, and which is pre-tensioned by a force. The valve body can be displaced in the opening direction in opposition to the pre-tension, as a result of the differential pressure in the gas between the crankcase and the induction tract.

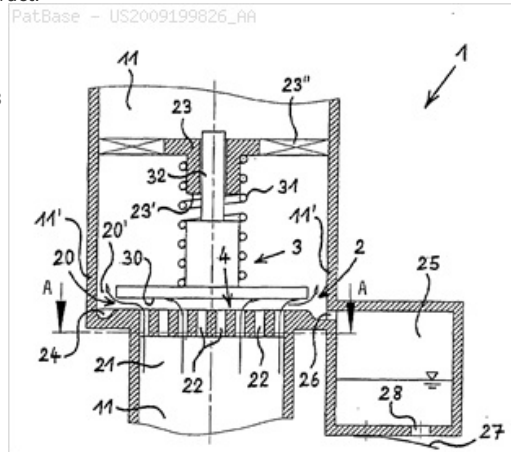
Classifications:

International (IPC 8-9): B01D45/04 B01D45/06 B01D45/08 B01D50/00 F01M13/02 F01M13/04 F02B25/06 (Advanced/Invention); B01D45/00 B01D50/00 F01M13/00 F02B25/00 (Core/Invention)

CPC: B01D45/08 F01M13/023 F01M13/04 F01M2013/0461 F01M2013/0488 F01M2013/0494

European: B01D45/08 F01M13/02N2B F01M13/04 R01M13/04L R01M13/04T R01M13/04T2

US: 123/572 123/573 55/315 55/315S 55/418 55/418S 96/400 96/400S



Family:

Publication number	Publication date	Application number	Application date
AT505626 E	20110415	AT20060762145T	20060624
DE202005009990 U1	20061102	DE200520009990U	20050625
DE502006009316 D1	20110526	DE200650009316T	20060624
EP2087213 A1	20090812	EP20060762145	20060624
EP2087213 B1	20110413	EP20060762145	20060624
EP2087213 B2	20140122	EP20060762145	20060624
US2009199826 AA	20090813	US20060993363	20060624
US8042529 BB	20111025	US20060993363	20060624
WO07000281 A1	20070104	WO2006EP06039	20060624

Priority:

DE200520009990U 20050625 WO2006EP06039 20060624

Probable Assignee: HENGST GMBH AND CO KG

Assignee(s): (std): HENGST GMBH AND CO KG ; MEINIG UWE ; PIETSCNER SIEGHARD

Assignee(s): SCHULZE HORN AND PARTNER GBR ; HENGST GMBH AND COKG ; HENGST GMBH

Inventor(s): (std): PIETSCNER SIEGHARD ; MEINIG UWE

Agent(s): LINNEMANN WINFRIED; GREER BURNS AND CRAIN; GREER BURNS AND CRAIN LTD

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR 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 MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: METHOD AND APPARATUS FOR STIMULATING HEAVY OIL PRODUCTION

Abstract: A method of enhanced oil recovery having a number of steps. One step is to establish a flow path between an injection well and a production well. Then a solvent is heated, under pressure, until the condensation temperature of the solvent vapour is above the naturally occurring formation temperature. Then, the solvent is injected, under pressure, into the formation where it is permitted to condense. Then, the latent heat of condensation, together with warm solvent reduce the viscosity of the insitu hydrocarbon, while precipitating out asphaltenes. The reduced viscosity solvent/heavy oil blend is then recovered.

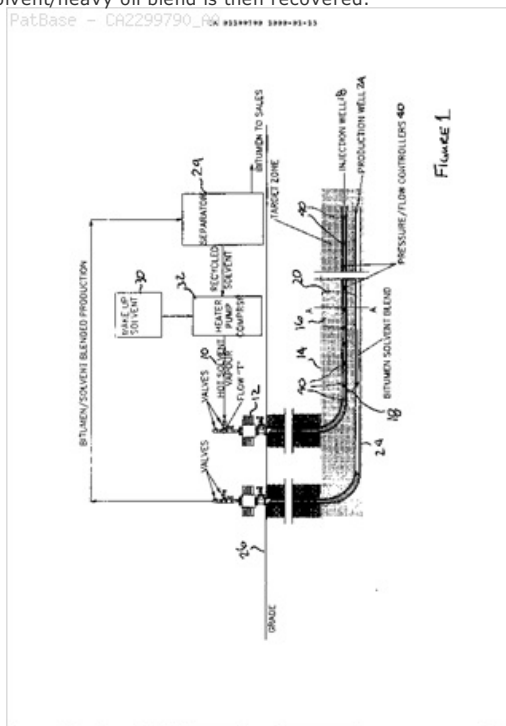
Classifications:

International (IPC 8-9): E21B43/24 E21B43/241 E21B43/25 E21B43/30 E21B43/40 (Advanced/Invention)

International (IPC 1-7): E21B43/24

CPC: E21B43/24 E21B43/255 E21B43/305 E21B43/40

European: E21B43/24 E21B43/25G E21B43/30B E21B43/40



Family:

Publication number	Publication date	Application number	Application date
CA2299790 AA	20010823	CA20002299790	20000223
CA2299790 C	20080708	CA20002299790	20000223
CA2633061 AA	20010823	CA20002633061	20000223
CA2633061 C	20120925	CA20002633061	20000223
CA2785871 AA	20010823	CA20002785871	20000223
CA2785871 C	20150512	CA20002785871	20000223

Priority:

CA20002299790 20000223 CA20002633061 20000223 CA20002785871 20000223
CA20122633061 20120828

Probable Assignee: N SOLV CORP

Assignee(s): (std): NENNIGER JOHN ; SOLV CORP N

Assignee(s): N SOLV CORP

Inventor(s): (std): NENNIGER JOHN

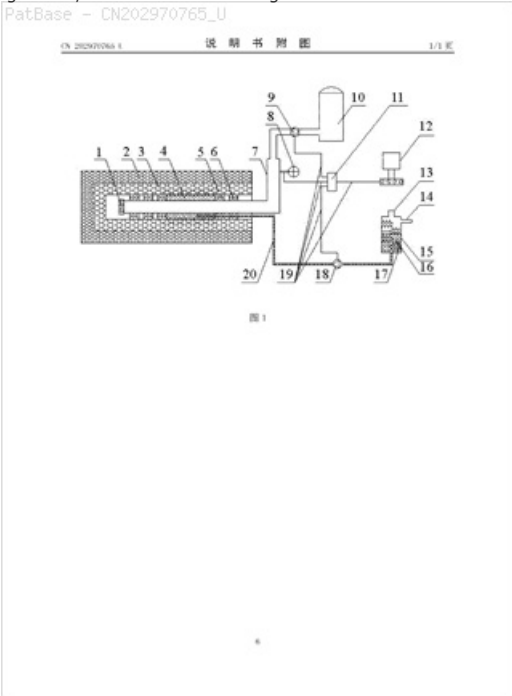
Agent(s): PIASETZKI AND NENNIGER LLP; PIASETZKI NENNIGER KVAS LLP

Title: INTELLIGENT AUTONOMOUS DYNAMIC HOLE SEALING GAS EXTRACTION SYSTEM FOR COAL MINE

Abstract: An intelligent autonomous dynamic hole sealing gas extraction system for a coal mine is applicable to underground hole sealing and intelligent gas extraction of the coal mine. The system comprises a gas storage connected with a gas extraction pipe, wherein the gas storage is connected with an automatic gas extraction pump capable of automatically adjusting negative extraction pressure; an automatic gas concentration detection instrument is connected with the gas extraction pipe located near a drill hole; the gas extraction pipe located in a coal bed is wrapped with five groups of polyurethane hole sealing bags; the polyurethane hole sealing bags are wrapped with five groups of hole plugging cloth capable of being tightly fit with a coal wall; a stocker is connected with an automatic feed pressure control pump by a feed pipe; the feed pipe located in the coal bed is bound among the polyurethane hole sealing bags and the hole plugging cloth; data signals of the automatic gas concentration detection instrument, the automatic gas **extraction** pump and the automatic feed **pressure control** pump are connected with a data line integrator by data acquisition lines; and the data line integrator is connected with an automatic monitoring controller by a data line. The system is simple to set, convenient in operation and better in using effect, and facilitates intelligent control.

Classifications:

International (IPC 8-9): E21B33/13 E21F7/00 (Advanced/Invention)



Family:

Publication number	Publication date	Application number	Application date
CN102913273 A	20130206	CN201210426336	20121031
CN102913273 B	20141119	CN201210426336	20121031
CN202970765 U	20130605	CN201220565604U	20121031

Priority:

CN201210426336 20121031 CN201220565604U 20121031

Probable Assignee: UNIV CHINA MINING

Assignee(s): (std): CHINA UNIV OF MINING AND TECHNOLOGY ; SHANXI LU AN ENVIRONMENTAL ENERGY DEV CO LTD ; UNIV CHINA MINING

Assignee(s): SHANXI LU AN ENVIRONMENTAL ENERGY DEVELOPMENT CO

Inventor(s): (std): ZOU QUANLE ; ZHANG WENPING ; ZHANG QING ; ZHANG CHAO ; XIAO YANING ; WANG YANKAI ; WANG DONGFEI ; LIN BAIQUAN ; LI QINGZHAO ; GAO YABIN ; DAI HUAMING

Title: SEPARATING OIL AND WATER STREAMS

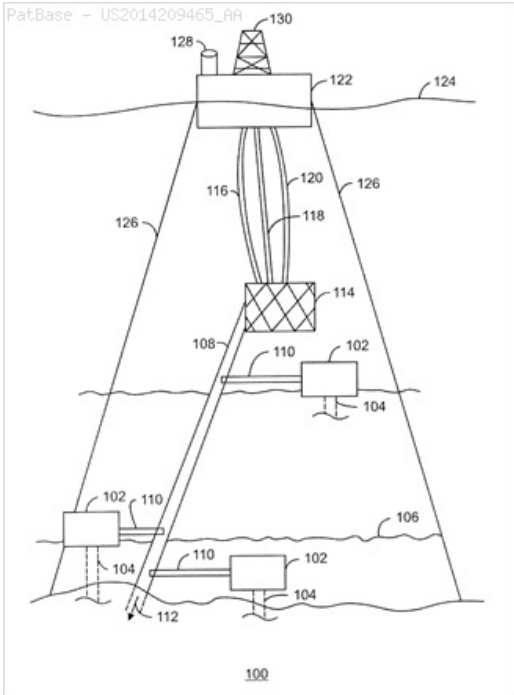
Abstract: Embodiments described herein provide a system and methods for separating oil and water streams. The method includes separating a fluid stream into an oil continuous stream and a water continuous stream using a cyclonic separator, flowing the oil continuous stream to a first gravity separation vessel, and flowing the water continuous stream to a second gravity separation vessel. The method also includes separating the oil continuous stream in the first gravity separation vessel into an oil stream and a water stream and separating the water continuous stream in the second gravity separation vessel into an oil stream and a water stream.

Classifications:

International (IPC 8-9): C10G1/04 E21B43/34 (Advanced/Invention)

CPC: E21B43/34 C10G33/06

US: 204/554 204/555 204/666 210/252 210/788



Family:

Publication number	Publication date	Application number	Application date
US2014209465 AA	20140731	US20120237814	20120831
WO13043354 A1	20130328	WO2012US53409	20120831

Priority:

US20110537317P 20110921 US20120237814 20120831 WO2012US53409 20120831

Probable Assignee: EXXON MOBIL CORP

Assignee(s): (std): EXXON MOBIL CORP ; EXXONMOBIL UPSTREAM RES CO ; LARNHOLM PER REIDAR ; WHITNEY SCOTT M

Assignee(s): EXXONMOBIL UPSTREAM RESEARCH CO ; EXXONMOBIL UPSTREAM RESEARCH COMPANY

Inventor(s): (std): WHITNEY SCOTT M ; LARNHOLM PER REIDAR

Agent(s): TIMMINS STEPHEN 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 IS IT JP KE KG KM KN KP KR 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 PE PG PH PL PT QA RO RS RU RW 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

Title: Method and apparatus for measuring and controlling the flow of natural gas from gas wells

Abstract: This system and Method serve as both a raw data logger for well operation analysis and a well event logger for well performance analysis. An improved methodology of remote event and process variable logging and data retention designed specifically to address the needs of intermittently flowing gas wells is useful for eliminating gas slippage associated with intermittent or erratic gas flow conditions, eliminating measurement errors, and lowering operating costs. The well data can be scanned in seconds for its current flow situation, and as a set of specific conditions are met, a built-in control program reacts to those conditions by shutting down the well until certain pressure criteria are met to allow the well to flow again. To maintain measurement integrity, precise event logging of the valve positions to indicate the actual flowing period are included in the flow integration. There are auto-calibration and reintegration features in the system methodology for eliminating slippage gas and eliminating settling disputes between the producer and the pipeline operator. Graphical presentation of event logs and process variable data allows the user to quickly and effectively diagnose and correct gas well problem. The same graphical presentation provides visual inspection and analysis to optimize gas well production.

Classifications:

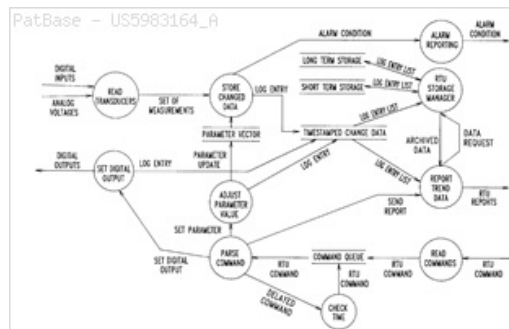
International (ipc 8-9): E21B43/00 E21B43/12 E21B47/00 G01F1/36 G01F1/50 G01F15/06 G01F15/075 (Advanced/Invention); E21B41/00 (Advanced/Non-invention); E21B43/00 E21B43/12 (Core/Invention); E21B41/00 (Core/Non-invention)

International (ipc 1-7): G01F1/36 G01F1/50 G01F15/06 G01F15/075 G06F19/00

CPC: E21B43/12 E21B47/00 E21B2041/0028 G01F1/363 E21B43/006

European: E21B43/00M E21B43/12 E21B47/00 G01F1/36A P21B41/00F

US: 702/12 702/45



Family:

Publication number	Publication date	Application number	Application date
CA2320875 AA	20000818	CA19992320875	19990225
CA2320875 C	20081125	CA19992320875	19990225
EP1060450 A1	20001220	EP19990908478	19990225
EP1060450 A4	20050126	EP19990908478	19990225
JP2002505435 T2	20020219	JP20000533849T	19990225
US5983164 A	19991109	US19980030275	19980225
US6446014 BA	20020903	US19990436066	19991108
WO9944168 A1	19990902	WO1999US04136	19990225

Priority:

US19970039125P 19970225 US19980030275 19980225 WO1999US04136 19990225
US19990436066 19991108

Probable Assignee: WIXXI TECHNOLOGIES LLC

Assignee(s): (std): OCONDI CHAM ; STELLA LLC

Assignee(s): VECO DRILLING INC ; VECO GAS TECHNOLOGY INC ; WIXXI TECHNOLOGIES LLC ; OCONDI PARTNERSHIP RLLLP LTD ; STELA LLC ; STELA LLC A COLORADO LIABILITY CO LTD ; STELA LLC A COLORADO LTD ; CH2M HILL INC

Inventor(s): (std): OCONDI CHAM

Agent(s): BORDEN LADNER GERVAIS LLP

Designated states: AT BE CA CH CY DE DK ES FI FR GB GR IE IT JP LU MC NL PT SE

Title: OIL WELL BLOWOUT CONTROL - BY LARGE CYLINDER SUNK IN SEA-BED AROUND WELL FOR OIL EXTRACTION

Abstract: Blow-outs of oil wells, specially of offshore wells, are sealed off by a large cylinder, open at both ends, and with cutting edges at the bottom. An annular ram is reciprocated to drive the cutting edge in the sea bed. Connections on several levels permit pumps to extract the ejected oil until the pressure is reduced enough to close the top of the cylinder. This is a less risky method than the explosive method. It saves time and money compared with the method of drilling a relief hole for a blow-out.

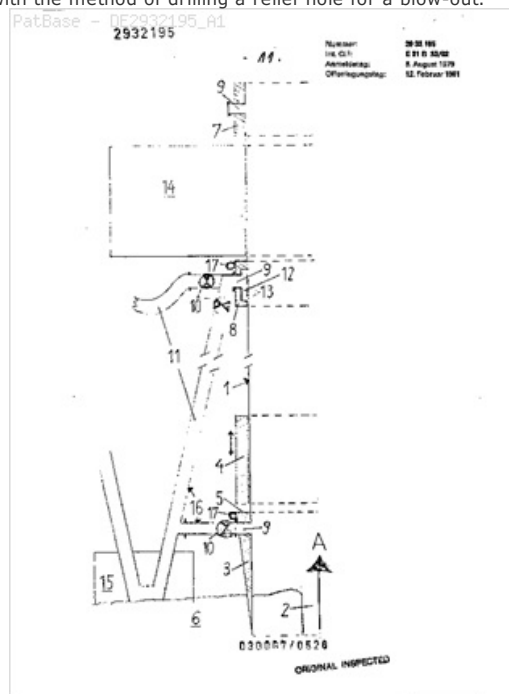
Classifications:

International (IPC 8-9): E21B33/02 E21B43/01 (Advanced/Invention);
E21B33/02 E21B43/00 (Core/Invention)

International (IPC 1-7): E21B33/02 E21B33/035 E21B35/00 E21B43/01

CPC: E21B33/02 E21B43/0122

European: E21B33/02 E21B43/01M



Family:

Publication number	Publication date	Application number	Application date
DE2932195 A1	19810212	DE19792932195	19790808
DE2932195 C2	19830105	DE19792932195	19790808

Priority:

DE19792932195 19790808

Probable Assignee: HOFMANN HANS

Assignee(s): (std): HOFMANN HANS

Assignee(s): HOFMANN HANS 8712 VOLKACH DE ; FISCHER WOLF D ; FISCHER WOLF D 8714 WIESENTHEID DE

Inventor(s): (std): HOFMANN HANS

Inventor(s): HOFMANN HANS 8712 VOLKACH DE ; FISCHER WOLF D ; FISCHER WOLF D 8714 WIESENTHEID DE

Title: Drinking water from sea water - water is pulled in through vacuum in floating column and passes through to evapn. chamber

Abstract: Drinking water is produced by flash distn. from sea-water using the vacuum produced above the water surface in a floating column and the temp. prevailing in the warmer surface layers. Surface water is taken into the evapn. chamber by wave action, with return flow countered by non-return valves. Similar valves prevent the return of cooling condensing water brought by riser pipes from deeper levels. Gas bubbles are removed before evapn. Linkage to shore transfers electrical power, data and the produced drinking water. Automatic allowances are made for tidal lift and wave height. USE/ADVANTAGE - For plant anchored close to coast. With no external heating, energy consumption is low.

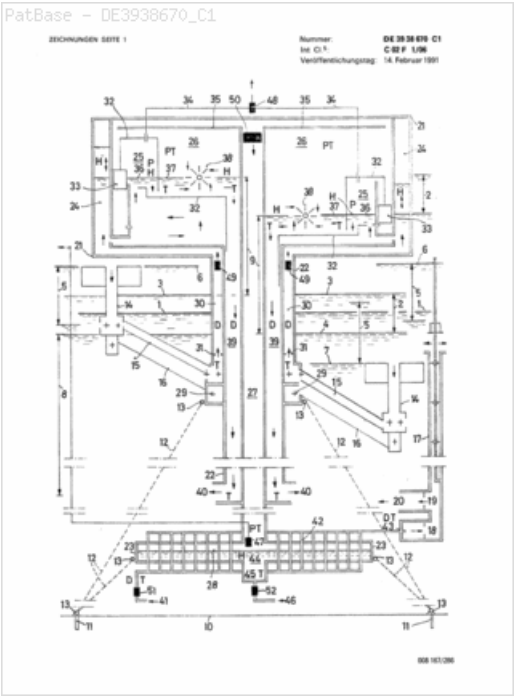
Classifications:

International (IPC 8-9): B01D3/06 C02F1/06 (Advanced/Invention);
B01D3/00 C02F1/06 (Core/Invention)

International (IPC 1-7): C02F1/06

CPC: B01D3/06 C02F1/06

European: B01D3/06 C02F1/06



Family:

Publication number	Publication date	Application number	Application date
DE3938670 C1	19910214	DE19893938670	19891121

Priority:

DE19893938670 19891121

Probable Assignee: PI PRAKTISCHE INFORMATIK GMBH 8000 MUENCHEN DE

Assignee(s): PI PRAKTISCHE INFORMATIK GMBH 8000 MUENCHEN DE

Inventor(s): SCHMIDT EDGAR DR ; SCHMIDT EDGAR DR 8000 MUENCHEN DE

Abstract: Source: DE8913762U1 [DE] (Claim 1) 1. Vorrichtung zur Gewinnung von Suesswasser aus dem Meer durch Entspannungsverdampfung mit Verdampfer, Bruecke und Kondensator, g e k e n n z e i c h n e t durch aussen angebrachte Wellenreiter zum Transport des Substrats, die ueber Verbindungsleitungen sowie Gelenke mit den zum Verdampfer fuehrenden Steigleitungen verbunden sind, oder durch aussen angebrachte Hydrostatische Rohre zum Transport des Kuehlwassers, die mit den Kuehlrohren des Kondensators an den Einlassoeffnungen oder an den Auslassoeffnungen fuer das Kuehlwasser verbunden sind, oder durch Wellenreiter und Hydrostatische Rohre zusammen.

Machine translation: (Claim 1) 1 Device for obtaining fresh water from the sea by flash evaporation with evaporator, bridge and capacitor, marked together by outside mounted surfers to transport the substrate, over connecting lines and joints with the evaporator leading risers, or by externally mounted hydrostatic pipes to transport the Coolant, which are for the Kuehlrohren the capacitor to the Einlassoeffnungen or at the outlet Coolant connected together or by surfers and Hydrostatic pipes.

Classifications:

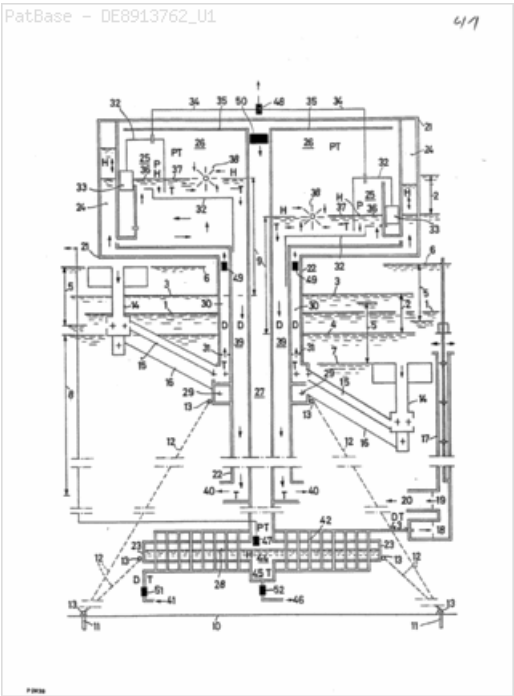
International (IPC 8-9): B01D3/06 C02F1/06 (Advanced/Invention);

B01D3/00 C02F1/06 (Core/Invention)

International (IPC 1-7): C02F1/06

CPC: B01D3/06 C02F1/06

European: B01D3/06 C02F1/06



Family:

Publication number	Publication date	Application number	Application date
DE8913762 U1	19901115	DE19890013762U	19891121

Priority:

DE19890013762U 19891121

Probable Assignee: PI PRAKTISCHE INFORMATIK GMBH 8000 MUENCHEN DE

Assignee(s): PI PRAKTISCHE INFORMATIK GMBH 8000 MUENCHEN DE