

Search history

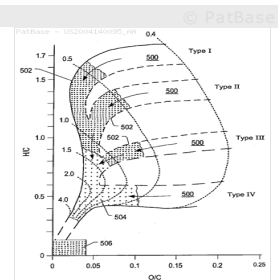
Search 1: FT=(subsea and pig* and pressure* and launch) (Results 210)

1) Family number: 30544271 (US2004140095A)

STAGED AND/OR PATTERNED HEATING DURING IN SITU THERMAL PROCESSING OF A HYDROCARBON CONTAINING FORMATION

Abstract: Source: US2004140095A A method for treating a hydrocarbon containing formation is described. The method for treating a hydrocarbon containing formation may include heating a first volume of the formation using a first set of heaters. A second volume of the formation may be heated using a second set of heaters. The first volume may be spaced apart from the second volume by a third volume of the formation. The first volume, second volume, and/or third volume may be sized, shaped, and/or located to inhibit deformation of subsurface equipment caused by geomechanical motion of the formation during heating.

Probable Assignee: SHELL OIL CO

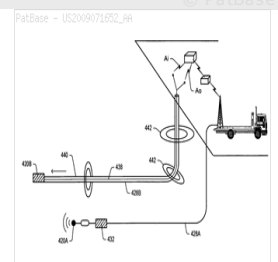
Earliest Publication Date: 20040506

2) Family number: 43031138 (US2009071652A)

IN SITU HEAT TREATMENT FROM MULTIPLE LAYERS OF A TAR SANDS FORMATION

Abstract: Source: US2009071652A A method for treating a tar sands formation is disclosed. The method includes providing a drive fluid to a first hydrocarbon containing layer of the formation to mobilize at least some hydrocarbons in the first layer. At least some of the mobilized hydrocarbons are allowed to flow into a second hydrocarbon containing layer of the formation. Heat is provided to the second layer from one or more heaters located in the second layer. At least some hydrocarbons are produced from the second layer of the formation.

Probable Assignee: SHELL OIL CO

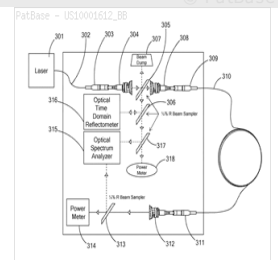
Earliest Publication Date: 20090319

3) Family number: 44432240 (US10001612B)

OPTICAL FIBER CABLE FOR TRANSMISSION OF HIGH POWER LASER ENERGY OVER GREAT DISTANCES

Abstract: Source: US10001612B There is provided a system and apparatus for the transmission of high power laser energy over great distances without substantial power loss and without the presence of stimulated Raman scattering. There is further provided systems and optical fiber cable configurations and optical fiber structures for the delivering high power laser energy over great distances to a tool or surface to perform an operation or work with the tool or upon the surface.

Probable Assignee: FORO ENERGY INC

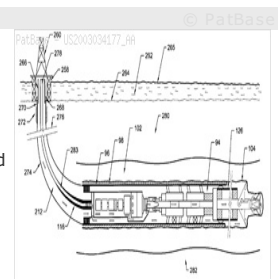
Earliest Publication Date: 20100225

4) Family number: 30665366 (US2003034177A)

HIGH POWER UMBILICALS FOR SUBTERRANEAN ELECTRIC DRILLING MACHINES AND REMOTELY OPERATED VEHICLES

Abstract: Source: US2003034177A The method of providing in excess of 60 kilowatts of electrical power to the electrical motor of a subterranean electric drilling machine through a substantially neutrally buoyant composite umbilical containing electrical conductors to reduce the frictional drag on the neutrally buoyant umbilical. Drilling and casing subterranean monobore wells are contemplated to distances of 20 miles from a wellsite. For drilling applications, the umbilical possesses a drilling fluid conduit. The umbilical also possesses high speed data communications such as a fiber optic cable or a coaxial cable that is used in the feedback control of the downhole electric drilling motor. Such umbilicals are also useful to provide power to remotely operated vehicles for subsea well servicing applications.

Probable Assignee: SMART DRILLING AND COMPLETION INC

Earliest Publication Date: 19960903

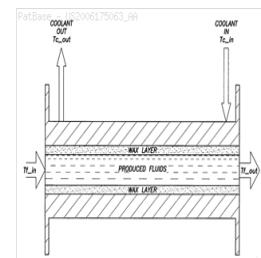
5) Family number: 33089815 (US2006175063A)

METHOD AND APPARATUS FOR A COLD FLOW SUBSEA HYDROCARBON PRODUCTION SYSTEM

Abstract: Source: US2006175063A A system for assuring **subsea** hydrocarbon production flow in pipelines by chilling the hydrocarbon production flow in a heat exchanger and causing solids to form, periodically removing deposits and placing them in a slurry utilizing a closed loop **pig launching** and receiving systems.

Probable Assignee: SHELL OIL CO

Earliest Publication Date: 20060629



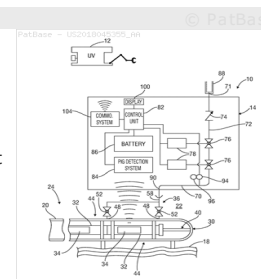
6) Family number: 67140010 (US2018045355A)

FLOW VARIATION SYSTEM

Abstract: Source: US2018045355A Methods of remotely, selectively controlling the flow rate of fluid moving through a **subsea** pipeline during dewatering of the pipeline involve a control unit of a **subsea** valve actuation system selectively, autonomously varying the flow of fluid through a fluid flow conduit of the system fluidly coupled to the pipeline at the **pig** receiving end thereof based at least partially upon one or more signals emitted by at least one **pressure** transducer or flow meter fluidly coupled to the fluid flow conduit.

Probable Assignee: BAKER HUGHES INC

Earliest Publication Date: 20180212



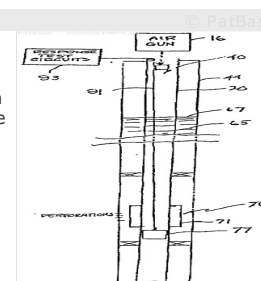
7) Family number: 29584641 (US2002140573A)

PRESSURE IMPULSE TELEMETRY APPARATUS AND METHOD

Abstract: Source: US2002140573A An apparatus and method of communicating in a tubular system (20) through a media (65) disposed therein and actuating a controllable device (58) are disclosed. The apparatus and method utilize a transmission apparatus (16) at a transmission node that is in communication with the media (65). The transmission apparatus (16) generates **pressure** impulses that are propagated through the media (65). The **pressure** impulses may be either positive or negative **pressure** impulses depending upon the selected transmission apparatus. The **pressure** impulses are detected by a reception apparatus (77) at a reception node. The detection apparatus may detect the **pressure** impulses as variation in the media (65) or as variation in the tubular system (20) caused by the **pressure** impulses. Once the detection apparatus (77) has detected the appropriate **pressure** impulse or pattern of **pressure** impulses, a signal may be generated to actuate the controllable device (58).

Probable Assignee: HALLIBURTON CO

Earliest Publication Date: 19981015



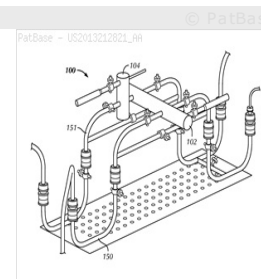
8) Family number: 51043360 (US2013212821A)

SUBSEA PIG HANDLER

Abstract: Source: US2013212821A A **pig launching** system comprising a pipe loop comprising a first end and a second end; a **pig** shuttle connected to the first end and the second end; a first opening in the **pig** shuttle aligned with the first end of the pipe loop; a second opening in the **pig** shuttle aligned with the second end of the pipe loop; and a slot within the **pig** shuttle movable between the first opening and the second opening.

Probable Assignee: SHELL OIL CO

Earliest Publication Date: 20120503



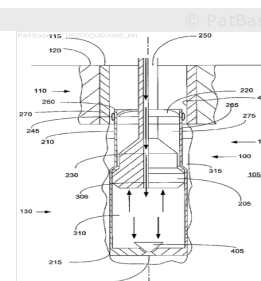
9) Family number: 31809425 (US2002060068A)

FORMING A WELLBORE CASING WHILE SIMULTANEOUSLY DRILLING A WELLBORE

Abstract: Source: US2002060068A A wellbore casing is formed simultaneously with the drilling out of the wellbore.

Probable Assignee: ENVENTURE GLOBAL TECHNOLOGY LLC

Earliest Publication Date: 20001207



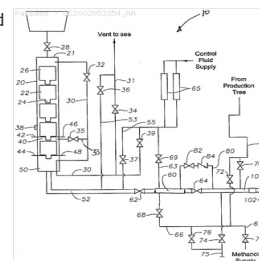
10) Family number: 30089690 (US2002053354A)

SUBSEA PIG RELOADER

Abstract: Source: US2002053354A A system for supplying **pigs** to a **subsea pig launcher** using a system carried and controlled by a remotely operated vehicle. The **pigs** are carried in racks that hold multiple **pigs**. The racks are extended and the **pigs** are allowed to drop into the barrel of the **subsea pig launcher**. The system is also equipped with a system that retracts the racks if hydraulic and electrical power is lost during the reloading process so that the remotely operated vehicle can be retrieved to the surface safely. The reloading process can be carried out by a remotely operated vehicle support vessel without the need for heavy lifting equipment or a large deck area.

Probable Assignee: SPX INT LTD

Earliest Publication Date: 20020509



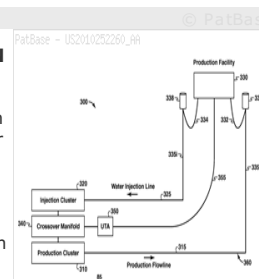
11) Family number: 43087568 (US2010252260A)

METHOD AND APPARATUS FOR FLOW ASSURANCE MANAGEMENT IN **SUBSEA** SINGLE PRODUCTION FLOWLINE

Abstract: Source: US2010252260A Managing hydrates in a **subsea** includes a host production facility, a production cluster comprising one or more producers, a water injection cluster comprising one or more water injectors, a water injection line, and a single production line for directing production fluid from the one or more producers to the host production facility. The methods comprise placing a **pig** in the **subsea** production system, shutting in production from the producers, and injecting a displacement fluid into the **subsea** production system in order to displace the hydrate inhibitor and any remaining production fluids in the production flowline and to further move the **pig** through the production flowline. The method may also include further injecting displacement fluid into the **subsea** production system in order to displace the hydrate inhibitor and **pig** through the single production line and to the host production facility.

Probable Assignee: EXXON MOBIL CORP

Earliest Publication Date: 20090402



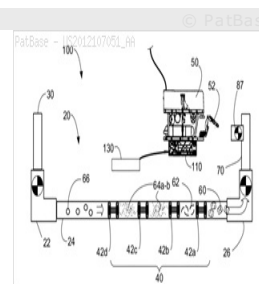
12) Family number: 51037707 (US2012107051A)

SUBSEA RECOVERY OF SWABBING CHEMICALS

Abstract: Source: US2012107051A Apparatus and methods are described for **subsea** pipeline servicing, including dewatering and chemical containment. A **subsea** pipeline service skid has a containment bladder affixed to the skid and in fluid communication with a skid mounted pump dimensioned to pump fluid from the **subsea** pipeline. A sensor system at the suction side of the pump detects the presence of seawater, water, chemical agent, or gas so the pump can be operated accordingly. The chemical agent used during dewatering operations of the pipeline is selectively pumped to the containment bladder **subsea** so the **subsea** vehicle can independently take the chemical agent to the surface.

Probable Assignee: BAKER HUGHES INC

Earliest Publication Date: 20120502



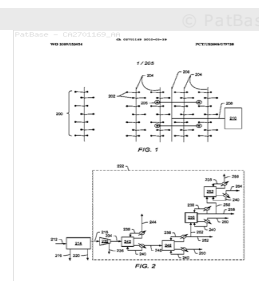
13) Family number: 44921378 (GB2465911A)

SYSTEMS, METHODS, AND PROCESSES UTILIZED FOR TREATING SUBSURFACE FORMATIONS

Abstract: Source: GB2465911A Systems, methods, and/or heaters for treating a subsurface formation are described herein. Some embodiments also generally relate to heaters that have novel components therein. Such heaters may be obtained by using the systems and methods described.

Probable Assignee: SHELL INT RESEARCH

Earliest Publication Date: 20090423



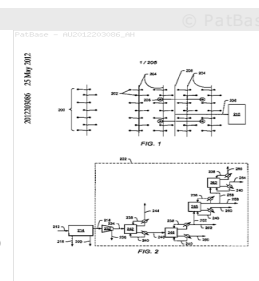
14) Family number: 51337255 (AU2012203086A)

VARIABLE VOLTAGE TRANSFORMER

Abstract: Source: AU2012203086A Variable Voltage Transformer Abstract In a first aspect there is disclosed a variable voltage transformer (772), the variable voltage transformer comprises a primary winding (754) configured to be coupled to a voltage power source that provides a first voltage across the primary winding and a secondary winding (756) electrically isolated from the primary winding, wherein the secondary winding is configured to step down the first voltage to a second voltage that is a preset percentage of the first voltage. A multistep load tap changer (7) coupled to the secondary winding is provided, wherein the load tap changer divides the second voltage into a selected number of voltage steps, the voltage steps incremented from a selected minimum percentage of the second voltage to a selected maximum percentage of the second voltage, wherein an electrical load is configured to be coupled to the multistep load tap changer to provide electrical power to the load with a selected voltage, the multistep load tap changer being configured to tap a selected voltage step in order to provide the selected voltage to the electrical load.

Probable Assignee: SHELL INT RESEARCH

Earliest Publication Date: 20120614



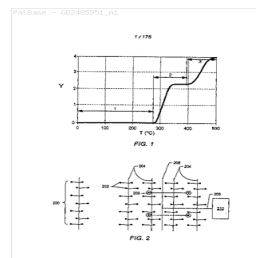
15) Family number: 44040073 (GB2485951A)

HEATING SYSTEM FOR A SUBSURFACE FORMATION

Abstract: Source: GB2485951A A heating system for a subsurface formation comprising: a first heater configuration, comprising: a conduit located in a first opening in the subsurface formation; three electrical conductors located in the conduit; a return conductor located inside the conduit, the return conductor being electrically coupled to the ends of the electrical conductors distal from the surface of the formation; and insulation located inside the conduit, the insulation being configured to electrically insulate the three electrical conductors, the return conductor, and the conduit from each other.

Probable Assignee: SHELL INT RESEARCH

Earliest Publication Date: 20081030



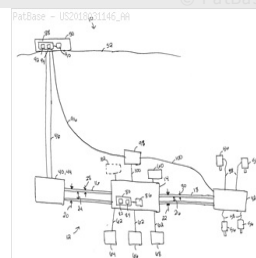
16) Family number: 68414104 (US2018031146A)

SUBSEA PIPELINE STATION

Abstract: Source: US2018031146A A **subsea** pipeline system may include a **subsea** pipeline station configured to establish fluid communication between a first pipeline and a second pipeline. The first pipeline may have a first diameter, and the second pipeline may have a second diameter different from the first diameter. Additionally, the **subsea** pipeline station may be configured to removably couple to one or more **pig launching** assemblies having different configurations.

Probable Assignee: ONESUBSEA IP UK LTD

Earliest Publication Date: 20180131



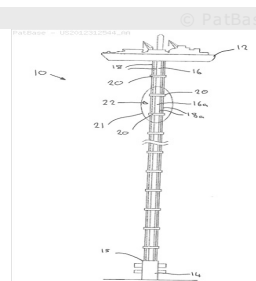
17) Family number: 49148715 (US2012312544A)

RISER SYSTEM

Abstract: Source: US2012312544A A riser system configured to be secured between a surface vessel and a **subsea** location comprises a primary conduit and an auxiliary conduit extending adjacent the primary conduit, wherein the primary and auxiliary conduits are connected together at an axial location along the riser system via a connecting portion. The auxiliary conduit comprises a composite material formed of at least a matrix and one or more reinforcing elements embedded within the matrix,

Probable Assignee: MAGMA GLOBAL LTD

Earliest Publication Date: 20121024



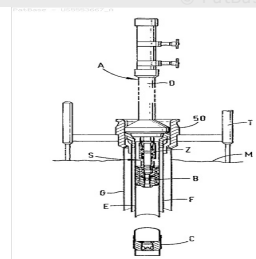
18) Family number: 30392889 (US5553667A)

CEMENTING SYSTEM

Abstract: Source: US5553667A A new cementing system has been developed which includes, in certain embodiments, a plug container with a flow diverter for diverting a portion of flowing fluid away from plugs in the plug container; a plug set system with internal sleeves or dart receivers with shearable parts for shearing to selectively release plugs-all in certain embodiments made of non-metal material and/or plastic; and a swivel equalizer with internal valving to isolate a plug set (or any other item) from torque and to relieve **pressure** below the swivel equalizer.

Probable Assignee: WEATHERFORD TECHNOLOGY HOLDINGS LLC

Earliest Publication Date: 19960910



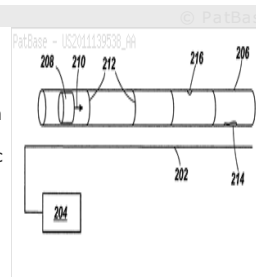
19) Family number: 42389684 (US2011139538A)

TRACKING OBJECTS IN CONDUITS

Abstract: Source: US2011139538A Methods and apparatus for tracking objects in conduits, especially for tracking the movement of a **pig** in a pipeline, are disclosed. Distributed acoustic sensing is used to obtain signal returns from a plurality of discrete longitudinal sensing portions of a fibre optic cable which is laid along the length of the conduit. The method involves detecting an acoustic signature corresponding to the object moving in the conduit. The acoustic signature may comprise a series of **pressure** pulses caused by the object traversing joints etc. in the conduit. Preferably the method involves detecting **pressure** waves caused by the object as it moves through the conduit. Detecting the characteristic **pressure** wave signal provides discrimination of the object from other acoustic disturbances. In pipeline applications a **pig** can be tracked in real time, if the **pig** stops moving an alert can be generated and the location of the **pig** will be known.

Probable Assignee: OPTASENSE HOLDINGS LTD

Earliest Publication Date: 20100225

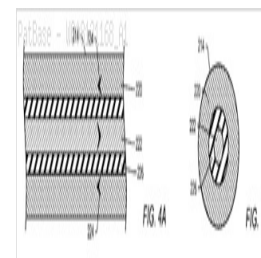


20) Family number: 42439137 (WO08131168A1)

ELECTRICALLY ISOLATING INSULATED CONDUCTOR HEATER

Abstract: A heating system for a subsurface formation includes an electrical conductor and an insulation layer at least partially surrounding the electrical conductor. A jacket that includes ferromagnetic material at least partially surrounds the insulation layer. The outside surface of the jacket is configured to be at little or no electric potential while the electrical conductor is conducting electricity and while the jacket is at temperatures below the Curie temperature of the ferromagnetic material.

Probable Assignee: SHELL INT RESEARCH



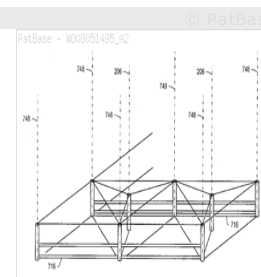
21) Family number: 42110971 (WO08051495A2)

SYSTEMS AND PROCESSES FOR USE IN TREATING SUBSURFACE FORMATIONS

Abstract: Methods for treating a tar sands formation are described herein. Methods for treating a tar sands may include heating a portion of a hydrocarbon layer in the formation from one or more heaters located in the portion. The heat may be controlled to increase the permeability of at least part of the portion to create an injection zone in the portion with an average permeability sufficient to allow injection of a fluid through the injection zone. A drive fluid and/or an oxidizing fluid may be provided into the injection zone. At least some hydrocarbons are produced from the portion.

Probable Assignee: SHELL OIL CO

Earliest Publication Date: 20080502



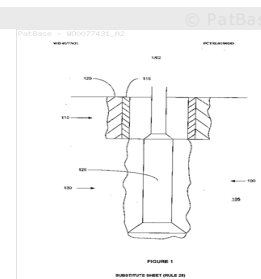
22) Family number: 31809365 (WO077431A3)

EXPANDABLE CONNECTOR

Abstract: An expandable threaded connection (4300) includes a first tubular member (4305), a second tubular member (4310) and a threaded connection (4315) for coupling the tubular members that includes one or more sealing members (4325).

Probable Assignee: SHELL INT RESEARCH

Earliest Publication Date: 20001026



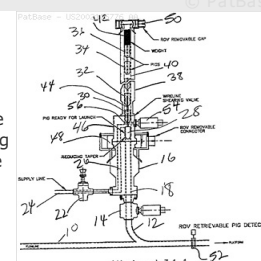
23) Family number: 28222140 (US2002116776A)

SUBSEA PIG LAUNCHER

Abstract: Source: US2002116776A A multiple pig subsea pig launcher is disclosed. The pig launcher can be assembled on a production pipeline subsea with the aid of an ROV. In the preferred embodiment, the pigs are connected to each other and spaced apart by a spine. The pig launcher is configured to capture the next pig to be launched in such a manner that the spine behind it is in alignment with a shearing valve; for example, coiled tubing or wireline. Sequential valve operation shears the spine and applies pressure behind the pig to launch it from the launcher past the pig detector and onto a platform for recapture.

Probable Assignee: OCEANEERING INT INC

Earliest Publication Date: 20010809



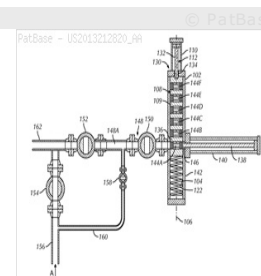
24) Family number: 51043352 (US2013212820A)

REMOTE PIG LAUNCHER

Abstract: Source: US2013212820A A pig launching system comprising a first pipe portion connected to a second pipe portion at a pipe intersection; a pig carrier located at the pie intersection; and the pig carrier comprising a plurality of pigs in a cylinder, an opening in the carrier aligned with the first pipe portion, and an indexing system adapted to move one of the pigs to the opening.

Probable Assignee: SHELL OIL CO

Earliest Publication Date: 20120503



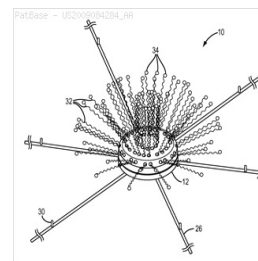
25) Family number: 43088335 (US2009084284A)

NON-LETHAL RESTRAINT DEVICE WITH DIVERSE DEPLOYABILITY APPLICATIONS

Abstract: Source: US2009084284A An immobilization device and method of restraining vehicles, persons and animals uses tendrils attached to various devices to engage the target. The immobilization device, system and method includes a housing containing launchable tendrils that are launched from the housing by a propellant. The tendrils may be attached to straps or other elements carried by the immobilization device. The tendrils will engage the target and restrain it if it is a vehicle such as a car, truck, boat, submarine, or like vehicle. In stopping a person or animal the tendrils will deliver a marking package, a shocking package or a snare package to mark, shock or snare the target. Straps may be pulled off the housing leaving the housing near the point of deployment.

Probable Assignee: ENGINEERING SCIENCE ANALYSIS CORP

Earliest Publication Date: 20090402



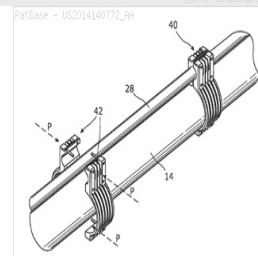
26) Family number: 49641324 (US2014140772A)

PIPELAYING

Abstract: Source: US2014140772A An apparatus for clamping elongate elements in a parallel **piggybacked** arrangement during **subsea** laying of the elements is disclosed. The apparatus has opposed reciprocating jaws for forcing together clamp segments around the elongate elements to assemble a **piggybacking** clamp that applies clamping forces to the elongate elements.

Probable Assignee: SUBSEA 7 LTD

Earliest Publication Date: 20130116



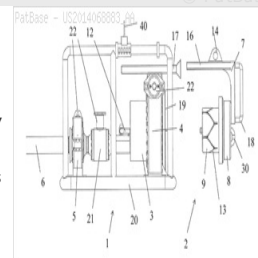
27) Family number: 51910310 (US2014068883A)

PIG LAUNCHER

Abstract: Source: US2014068883A As shown a carrier module (2) includes a magazine (9) having five chambers (10) each adapted to receive a pipeline **pig**, rotatably mounted on a blind hub (8) attached to a frame (7). A hanging eye 14 allows the module to be lowered to an undersea location where, guided by a ROV via a grab handle, its frame member (16) is received by guides (17) of a **launcher** module (1). The magazine passes through a large connector (4) which engages the blind hub. The ROV operates a bucket drive (22) causing the connector to engage the blind hub in sealing fashion thus enclosing the magazine in a **launch** chamber (3). A hydraulic ram (11) indexes the magazine to select a chamber from which a **pig** is to be **launched** or an empty chamber to receive a **pig**. Indexing is achieved by a roller on the free end of the ram shaft engaging in a cusped track (26) on the magazine. A **pressure** connection (12) for **launching** fluid goes through the center of the magazine, through the blind hub and back into a selected chamber.

Probable Assignee: VECTOR INT LTD

Earliest Publication Date: 20140108



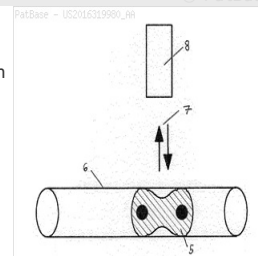
28) Family number: 59693617 (US2016319980A)

ASEPTIC PIPELINE PIG WITH IDENTIFICATION MEANS

Abstract: Source: US2016319980A A pipeline **pig** (5) for cleaning pipelines (6) and/or for recovering products from a pipeline is disclosed. The pipeline **pig** (5) comprises at least one radiofrequency identification tag (4a, 4b) as a means for identification and for the sending, receiving and storing of data. The pipeline **pig** (5) may be used in pipeline systems used for the production of sterile food or phaimaceutical products.

Probable Assignee: URESH AG

Earliest Publication Date: 20150709



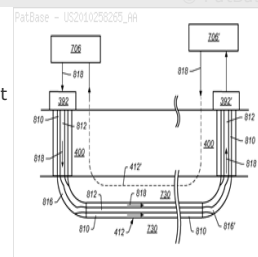
29) Family number: 47097473 (US2010258265A)

RECOVERING ENERGY FROM A SUBSURFACE FORMATION

Abstract: Source: US2010258265A A method of recovering energy from a subsurface hydrocarbon containing formation includes introducing an oxidizing fluid in a wellbore positioned in at least a first portion of the formation. At least a portion of the first portion of the formation has been subjected to an in situ heat treatment process. The portion includes a treatment area having elevated levels of coke substantially adjacent the wellbore. The **pressure** in the wellbore is increased by introducing the oxidizing fluid under **pressure** such that the oxidizing fluid substantially permeates a majority of the treatment area and initiates a combustion process. Heat from the combustion process is allowed to transfer to fluids in the treatment area. **Pressure** decreases in the wellbore such that heated fluids from the portion of the formation are conveyed into the wellbore. The heated fluids are transferred to a heat exchanger configured to collect thermal energy.

Probable Assignee: SHELL OIL CO

Earliest Publication Date: 20101014



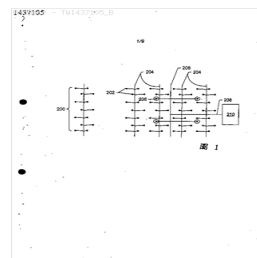
30) Family number: 42611974 (TW200817526A)

HIGH STRENGTH ALLOYS

Abstract: Source: TW200817526A High strength metal alloys are described. At least one composition of a metal alloy includes chromium, nickel, copper, manganese, silicon, niobium, tungsten and iron. A heater system may include a canister at least partially made from material containing at least one of the metal alloys. A system for heating a subterranean formation may include a tubular that is at least partially made from a material containing at least one of the metal alloys.

Probable Assignee: SHELL INT RESEARCH

Earliest Publication Date: 20071227



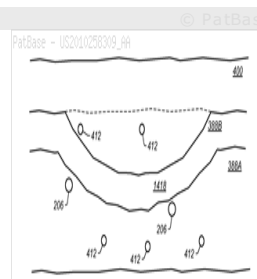
31) Family number: 47097510 (US2010258309A)

HEATER ASSISTED FLUID TREATMENT OF A SUBSURFACE FORMATION

Abstract: Source: US2010258309A A method for treating a tar sands formation includes providing heat from a first heater located between a steam injection well and a production well in a hydrocarbon containing layer. The first heater, the steam injection well, and the production well are located substantially horizontally in the layer. Heat is provided from a second heater horizontally offset from the first heater. The second heater is located vertically above an injection/production well and substantially horizontally in the layer. Steam is injected into the layer through the steam injection well after a selected amount of heat is provided from the first heater. Hydrocarbons are produced from the layer through the production well. Steam is injected and hydrocarbons are produced alternately through the injection/production well after a selected amount of heat is provided from the second heater.

Probable Assignee: SHELL OIL CO

Earliest Publication Date: 20101014



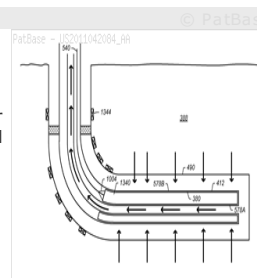
32) Family number: 48342297 (US2011042084A)

IRREGULAR PATTERN TREATMENT OF A SUBSURFACE FORMATION

Abstract: Source: US2011042084A A method of heating a subsurface hydrocarbon containing formation includes providing heat flux per volume to a first portion of a subsurface hydrocarbon containing formation. The heat flux per volume is provided by two or more first heat sources positioned in the first portion. Heat flux per volume is provided to a second portion of the subsurface hydrocarbon containing formation with the heat flux per volume being provided by two or more second heat sources positioned in the second portion. The heat flux per volume provided by the two or more second heat sources is greater than the heat flux per volume provided by the two or more first heat sources. The second portion is positioned below the first portion.

Probable Assignee: SHELL OIL CO

Earliest Publication Date: 20110224



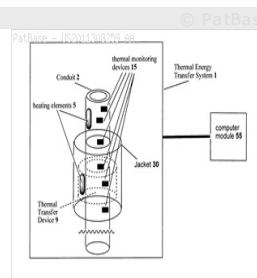
33) Family number: 50124707 (US2011308259A)

METHODS, DEVICES AND SYSTEMS FOR EXTRACTION OF THERMAL ENERGY FROM A HEAT CONDUCTING METAL CONDUIT

Abstract: Source: US2011308259A Provided are methods, devices and systems for controlled removal of thermal energy from a fluid within a thermally conducting metal conduit. The system allows for the in situ formation of a reversible plug that can stop the flow of fluid through the conduit, particularly without inducing thermally induced stress fractures or breaches in the conduit. The devices and systems include a thermal transfer device that can be adapted to be in thermal communication with a thermal conducting metal conduit containing a fluid, particularly a flowing fluid. The devices and systems allows for controlled re-heating of the conduit without inducing thermally induced stress fractures or breaches in the conduit to restore fluid flow through the conduit.

Probable Assignee: BIOFILM IP LLC

Earliest Publication Date: 20111222



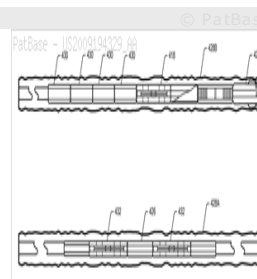
34) Family number: 43588990 (US2009194329A)

METHODS FOR FORMING WELLBORES IN HEATED FORMATIONS

Abstract: Source: US2009194329A A method for forming a wellbore in a heated formation includes flowing liquid cooling fluid to a bottom hole assembly in a wellbore in a heated formation. At least a portion of the liquid cooling fluid is vaporized at or near a region to be cooled. Vaporizing the liquid cooling fluid absorbs heat from the region to be cooled.

Probable Assignee: SHELL OIL CO

Earliest Publication Date: 20090806



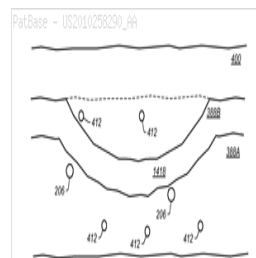
35) Family number: 47097513 (US2010258290A)

NON-CONDUCTING HEATER CASINGS

Abstract: Source: US2010258290A A system for heating a subsurface formation includes a heater wellbore located in a subsurface formation. A single conducting heater element includes a heated portion located in a part of the subsurface formation configured to be heated and a lead-in portion located in an overburden of the subsurface formation. The heated part is located below the overburden. A heater casing is located substantially in an overburden portion of the heater wellbore. The heater casing includes an electrically non-conducting portion and an electrically conducting portion. The non-conducting portion begins at the surface of the formation. The conducting portion is located between the non-conducting portion and the heated portion of the heater. The non-conducting portion extends to a depth that is at least about 30 m above the heated portion of the heater.

Probable Assignee: SHELL OIL CO

Earliest Publication Date: 20101014



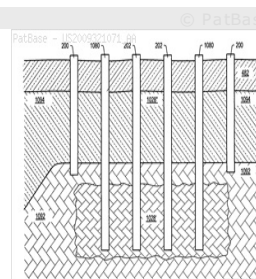
36) Family number: 44151046 (US2009321071A)

CONTROLLING AND ASSESSING **PRESSURE** CONDITIONS DURING TREATMENT OF TAR SANDS FORMATIONS

Abstract: Source: US2009321071A A method for treating a tar sands formation includes providing heat to at least part of a hydrocarbon layer in the tar sands formation from a plurality of heaters located in the formation. Heat is allowed to transfer from the heaters to at least a portion of the formation. A **pressure** in the portion of the formation is controlled such that the **pressure** remains below a fracture **pressure** of the formation overburden while allowing the portion of the formation to heat to a selected average temperature of at least about 280 degrees centigrade and at most about 300 degrees centigrade. The **pressure** in the portion of the formation is reduced to a selected **pressure** after the portion of the formation reaches the selected average temperature.

Probable Assignee: SHELL OIL CO

Earliest Publication Date: 20091231



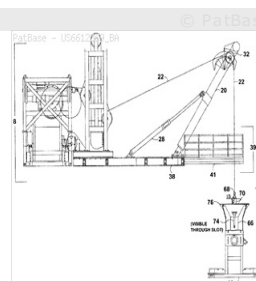
37) Family number: 27909886 (US6612369B)

UMBILICAL TERMINATION ASSEMBLY AND **LAUNCHING** SYSTEM

Abstract: Source: US6612369B The invention is a **subsea** umbilical termination assembly (UTA) for use with a **launch** system mounted on a vessel, wherein the UTA involves a lift point, a guide surrounding a connector attached to the lift point, a housing with a mandrel for engaging the connector and at least one interface, numerous flying leads connected to the housing, a base for the housing, and an emergency quick disconnect connected to the mandrel, wherein the disconnect has a hydraulic connector that engages hydraulic pistons that can then disengage numerous locking dogs enabling the hydraulic connector to disengage from the UTA, and wherein the interface in the housing connects to an electrical umbilical, a fiber optic cable, or hydraulic umbilical.

Probable Assignee: AKER ASA

Earliest Publication Date: 20030109



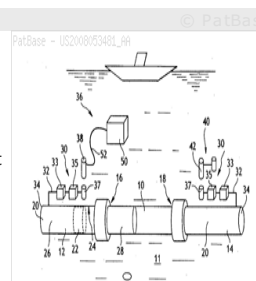
38) Family number: 32790599 (US2008053481A)

INSTALLATION AND METHOD FOR DRIVING A SUBMARINE PIPELINE SCRAPER

Abstract: Source: US2008053481A An installation for and a method for driving a submarine pipeline scraper, wherein one of the ends of the pipeline has a **launch** device and the other end has a receiving device. The scraper defines an upstream chamber and a downstream chamber. It can be **launched** inside the pipeline from the **launch** device in the direction of the receiving device, allowing water to enter through the **launch** device in order to subject the upstream chamber to hydrostatic **pressure**. The receiving device is identical to the **launch** device, such that water can enter through the receiving device in order to balance the **pressure** of the two chambers, and also enables a fluid to be injected into the downstream chamber to drive the scraper toward the **launch** device.

Probable Assignee: TECHNIP FRANCE

Earliest Publication Date: 20060331



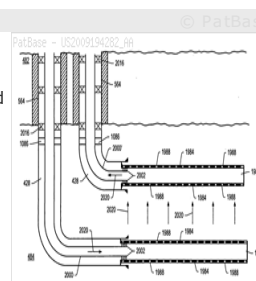
39) Family number: 43589034 (US2009194282A)

IN SITU OXIDATION OF SUBSURFACE FORMATIONS

Abstract: Source: US2009194282A Methods and systems for treating a hydrocarbon containing formation described herein include providing heat to a first portion of the formation from a plurality of heaters in the first portion, producing produced through one or more production wells in a second portion of the formation, reducing or turning off heat provided to the first portion after a selected time, providing an oxidizing fluid through one or more of the heater wells in the first portion, providing heat to the first portion and the second portion through oxidation of at least some hydrocarbons in the first portion, and producing fluids through at least one of the production wells in the second portion. The produced fluids may include at least some oxidized hydrocarbons produced in the first portion.

Probable Assignee: SHELL OIL CO

Earliest Publication Date: 20090806



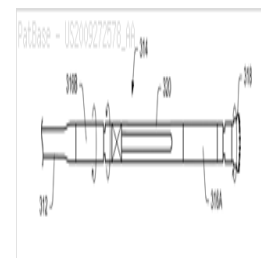
40) Family number: 43954026 (US2009272578A)

DUAL MOTOR SYSTEMS AND NON-ROTATING SENSORS FOR USE IN DEVELOPING WELLBORES IN SUBSURFACE FORMATIONS

Abstract: Source: US2009272578A A method for forming a subsurface wellbore is disclosed. The method includes operating a drilling string in a first direction of rotation. A first motor located near the end of the drilling string is operated in a direction of rotation opposite that of the drilling string. A drill bit is rotated using a second motor that is coupled to the first motor.

Probable Assignee: SHELL OIL CO





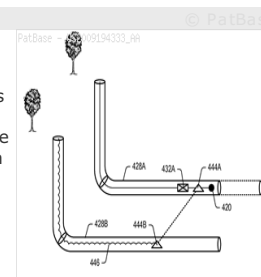
41) Family number: 43588937 (US2009194333A)

RANGING METHODS FOR DEVELOPING WELLBORES IN SUBSURFACE FORMATIONS

Abstract: Source: US2009194333A A method for forming two or more wellbores in a subsurface formation includes forming a first wellbore in the formation. A second wellbore is directionally drilled in a selected relationship relative to the first wellbore. At least one magnetic field is provided in the second wellbore using one or more magnets in the second wellbore located on a drilling string used to drill the second wellbore. At least one magnetic field is sensed in the first wellbore using at least two sensors in the first wellbore as the magnetic field passes by the at least two sensors while the second wellbore is being drilled. A position of the second wellbore is continuously assessed relative to the first wellbore using the sensed magnetic field. The direction of drilling of the second wellbore is adjusted so that the second wellbore remains in the selected relationship relative to the first wellbore.

Probable Assignee: SHELL OIL CO

Earliest Publication Date: 20090806



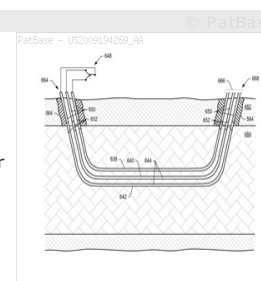
42) Family number: 43588954 (US2009194269A)

THREE-PHASE HEATERS WITH COMMON OVERBURDEN SECTIONS FOR HEATING SUBSURFACE FORMATIONS

Abstract: Source: US2009194269A A heating system for a subsurface formation is described. The heating system includes three substantially u-shaped heaters with first end portions of the heaters being electrically coupled to a single, three-phase wye transformer and second end portions of the heaters being electrically coupled to each other and/or to ground. The three heaters may enter the formation through a first common wellbore and exit the formation through a second common wellbore so that the magnetic fields of the three heaters at least partially cancel out in the common wellbores.

Probable Assignee: SHELL OIL CO

Earliest Publication Date: 20090806



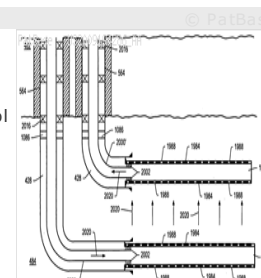
43) Family number: 43589035 (US2009194286A)

MULTI-STEP HEATER DEPLOYMENT IN A SUBSURFACE FORMATION

Abstract: Source: US2009194286A A method for installing a horizontal or inclined subsurface heater includes placing a heating section of a heater in a horizontal or inclined section of a wellbore with an installation tool. The tool is uncoupled from the heating section. A lead-in section is mechanically and electrically coupled to the heating section of the heater. The lead-in section is located in an angled or vertical section of the wellbore.

Probable Assignee: SHELL OIL CO

Earliest Publication Date: 20090806



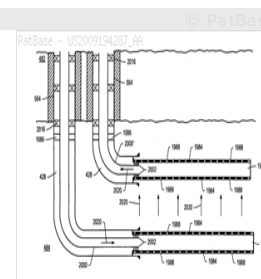
44) Family number: 43589040 (US2009194287A)

INDUCTION HEATERS USED TO HEAT SUBSURFACE FORMATIONS

Abstract: Source: US2009194287A A heating system for a subsurface formation includes an elongated electrical conductor located in the subsurface formation. The electrical conductor extends between at least a first electrical contact and a second electrical contact. A ferromagnetic conductor at least partially surrounds and at least partially extends lengthwise around the electrical conductor. The electrical conductor, when energized with time-varying electrical current, induces sufficient electrical current flow in the ferromagnetic conductor such that the ferromagnetic conductor resistively heats to a temperature of at least about 300 degrees centigrade

Probable Assignee: SHELL OIL CO

Earliest Publication Date: 20090806



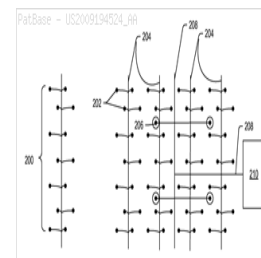
45) Family number: 43589234 (US2009194524A)

METHODS FOR FORMING LONG SUBSURFACE HEATERS

Abstract: Source: US2009194524A A method for forming a longitudinal subsurface heater includes longitudinally welding an electrically conductive sheath of an insulated conductor heater along at least one longitudinal strip of metal. The longitudinal strip is formed into a tubular around the insulated conductor heater with the insulated conductor heater welded along the inside surface of the tubular.

Probable Assignee: SHELL OIL CO

Earliest Publication Date: 20090806



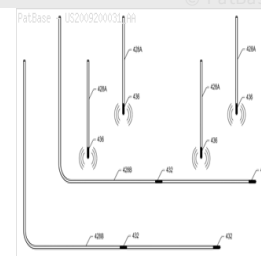
46) Family number: 43623983 (US2009200031A)

IRREGULAR SPACING OF HEAT SOURCES FOR TREATING HYDROCARBON CONTAINING FORMATIONS

Abstract: Source: US2009200031A A method for treating a hydrocarbon containing formation includes providing heat input to a first section of the formation from one or more heat sources located in the first section. Fluids are produced from the first section through a production well located at or near the center of the first section. The heat sources are configured such that the average heat input per volume of formation in the first section increases with distance from the production well.

Probable Assignee: SHELL OIL CO

Earliest Publication Date: 20090813



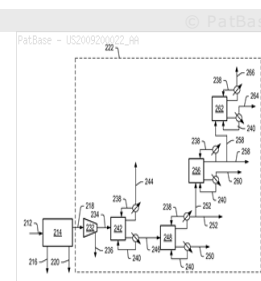
47) Family number: 43623984 (US2009200022A)

CRYOGENIC TREATMENT OF GAS

Abstract: Source: US2009200022A Systems and methods of treating a gas stream are described. A method of treating a gas stream includes cryogenically separating a first gas stream to form a second gas stream and a third stream. The third stream is cryogenically contacted with a carbon dioxide stream to form a fourth and fifth stream. A majority of the second gas stream includes methane and/or molecular hydrogen. A majority of the third stream includes one or more carbon oxides, hydrocarbons having a carbon number of at least 2, one or more sulfur compounds, or mixtures thereof. A majority of the fourth stream includes one or more of the carbon oxides and hydrocarbons having a carbon number of at least 2. A majority of the fifth stream includes hydrocarbons having a carbon number of at least 3 and one or more of the sulfur compounds.

Probable Assignee: SHELL OIL CO

Earliest Publication Date: 20090813



48) Family number: 43623989 (US2009200023A)

HEATING SUBSURFACE FORMATIONS BY OXIDIZING FUEL ON A FUEL CARRIER

Abstract: Source: US2009200023A A method of heating a portion of a subsurface formation includes drawing fuel on a fuel carrier through an opening formed in the formation. Oxidant is supplied to the fuel at one or more locations in the opening. The fuel is combusted with the oxidant to provide heat to the formation.

Probable Assignee: SHELL OIL CO

Earliest Publication Date: 20090813



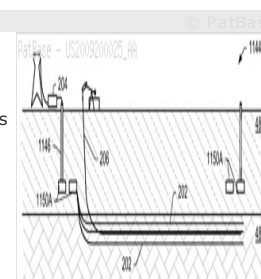
49) Family number: 43623998 (US2009200025A)

HIGH TEMPERATURE METHODS FOR FORMING OXIDIZER FUEL

Abstract: Source: US2009200025A A method of treating a formation fluid includes providing formation fluid from a subsurface in situ heat treatment process. The formation fluid is separated to produce a liquid stream and a first gas stream. The first gas stream includes carbon dioxide, hydrogen sulfide, hydrocarbons, hydrogen or mixtures thereof. Molecular oxygen is separated from air to form a molecular oxygen stream comprising molecular oxygen. The first gas stream is combined with the molecular oxygen stream to form a combined stream comprising molecular oxygen and the first gas stream. The combined stream is provided to one or more downhole burners.

Probable Assignee: SHELL OIL CO

Earliest Publication Date: 20090813



50) Family number: 43624362 (US2009200854A)

SOLUTION MINING AND IN SITU TREATMENT OF NAHCOLITE BEDS

Abstract: Source: US2009200854A A method for treating a nahcolite containing subsurface formation includes solution mining a first nahcolite bed above a hydrocarbon containing layer using a plurality of first solution mining wells. A second nahcolite bed is solution mined below the hydrocarbon containing layer using a plurality of second solution mining wells. At least one of the first solution mining wells is converted into a production well. The hydrocarbon containing layer is heated using a plurality of heaters. Formation fluid is produced from at least one converted first solution mining well.

Probable Assignee: SHELL OIL CO

