



New connection on: : 11-07-2018 : 20:54:31 - Last disconnection on: : 11-07-2018 : 20:38:05

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[EPODOC: SS 15] ..fi epodoc

 Database: EPODOC

[EPODOC: SS 15] hang+ and ring and seal+ and pipe and casing

Results in EPODOC 100

[SS 16] * and PD<20141230

Results in EPODOC 66

[SS 17] ..v

[EPODOC: SS 17] ..li 1-10



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PN - [CN204040962U](#) U 20141224

PR - CN20142295988U 20140605

AP - CN20142295988U 20140605

DT - I

PA - LIU QINGMEI

TI - Double-level and three-level **casing** head slips and **pipe** joint hoop type all-metal **seal hanger**

AB - The utility model discloses a double-level and three-level **casing** head slips and **pipe** joint hoop type all-metal **seal hanger** which comprises a regulator body **ring** arranged on a metal **seal** base. An inner **seal ring** regulation sleeve, a primary **seal ring** regulation **ring** and a secondary sleeve **seal** sleeve **ring** arranged in the regulator body **ring** from bottom to top, an outer **seal ring** regulation sleeve and a positioning sleeve are arranged on the outer side of the regulator body **ring** from bottom to top, the upper end of the secondary sleeve **seal** sleeve **ring** is in contact with the conical inner wall of the inner cavity of an upper flange body, a metal **seal** jacket is arranged between the outer surface of the metal **seal** base and the surface of the inner cavity of a sleeve

head body, and an inner **seal ring** is arranged between the inner surface of the metal **seal** base and the outer surface of a sleeve. Multiple metal **seals** are adopted in the double-level and three-level **casing** head slips and **pipe** joint hoop type all-metal **seal hanger**, so that the double-level and three-level **casing** head slips and **pipe** joint hoop type all-metal **seal hanger** is good in **seal** effect and capable of effectively preventing leakage, reducing pressure drop and increasing production efficiency and yield.

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PN - [CN204040906U](#) U 20141224
 PR - CN20142409033U 20140724
 AP - CN20142409033U 20140724
 DT - I
 PA - ANSHAN ZHENGFA MACHINERY CO LTD
 TI - Coupling clamping type **casing** running device for top drive drilling equipment
 AB - The utility model relates to a coupling clamping type **casing** running device for top drive drilling equipment. A center **pipe** is provided with a rotary **sealing** connecting plate, a **hanging** supporting base, a main hydraulic cylinder and a tong head body in sequence from top to bottom. A **casing** elevator is arranged below the tong head body, a **hanging** body is arranged at the lower end of the **hanging** supporting base, a **hanging ring** is fixedly connected to the lower end surface of the **hanging** body, the lower end of the **hanging ring** is connected with the **casing** elevator, and a **hanging ring** tilt hydraulic cylinder is arranged on the surface of the **hanging ring**. By means of the device, a **casing** can be prevented from falling off and meanwhile can also be properly spun and pressed in the **casing** running process, so that jamming of a drilling tool is prevented, safety and the reliability are guaranteed, the work efficiency is improved, and the workload of workers is reduced.

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PN - [CN203925385U](#) U 20141105
 PR - CN20142232357U 20140508
 AP - CN20142232357U 20140508
 DT - I
 PA - ZHEJIANG VOCATIONAL COLLEGE COMMERCE
 TI - Device capable of installing two intermediate casings inside guide **pipe**
 AB - The utility model relates to the technical field of one shaft with double well mouths, in particular to a device capable of installing two intermediate casings inside a guide **pipe**. The device comprises a double-well-mouth **casing** head, a **casing hanger**, the intermediate casings, the guide **pipe** and an inverted slips, wherein the lower portion of the double-well-mouth **casing** head is provided with the inverted slips; the inverted slips clamps the guide **pipe**; a **sealing ring** seals the guide **pipe**; the intermediate casings are hung inside the double-well-mouth **casing** head through the **casing hanger**; a **sealing** device seals the **casing hanger**; the lower portion of the **casing hanger** is provided with a long guide-in groove; the guide **pipe**, the **sealing ring** and the inverted slips are 26 inches; the intermediate casings and the **casing hanger** are 95/8 inches; the bottom of the **casing hanger** is directly connected with the upper ends of the intermediate casings; the upper portion of the **casing hanger** is in threaded connection with a lifting tool; the

connected intermediate casings are hung below the **casing hanger**. The well mouth space is saved greatly, the double well mouths are installed inside the shaft where only one well can be drilled in the prior art, the investment cost of the device is low, and oil and gas yield is improved significantly.

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PN - [CN203856443U](#) U 20141001
 PR - CN20142181691U 20140415
 AP - CN20142181691U 20140415
 DT - I
 PA - LIU KEJUN
 TI - Telescopic thermal recovery **casing** head device
 AB - The utility model relates to a telescopic thermal recovery **casing** head device which adopts the technical scheme that the telescopic thermal recovery **casing** head device comprises an upper flange, a **sealing ring**, a shell, a high-temperature pressure gauge, a stop valve, an end cover, a plug, a thermal recovery brake valve, a backing **ring**, a **hanger** and a **casing pipe**, wherein the upper part of the shell is connected with the upper flange by a bolt; the **sealing ring** is arranged between the shell and the upper flange; the lower part of the upper flange is provided with a lower lug plate; the lower lug plate of the upper flange is connected with the **hanger**; two test interfaces are respectively formed at the two sides of the shell; the test interface at one end of the shell is connected with the end cover; the end cover is provided with the stop valve which is connected with the high-temperature pressure gauge; the test interface at the other end of the shell is connected with the thermal recovery brake valve by the backing **ring**; the end part of the thermal recovery brake valve is provided with the plug; the **hanger** is connected with the **casing pipe**. The telescopic thermal recovery **casing** head device has the beneficial effects that the device is reasonable in structure and design and convenient to install and use, and safety guarantee is provided for the reliable mining of a thickened oil thermal recovery well.

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PN - [CN203822242U](#) U 20140910
 PR - CN20142259945U 20140518
 AP - CN20142259945U 20140518
 DT - I
 PA - JIANGSU HONGTAI PETROCHEMICAL MACHINERY CO LTD
 TI - Metallic **seal** single-stage **casing** head with rubber rings
 AB - The utility model provides a metallic **seal** single-stage **casing** head with rubber rings. The metallic **seal** single-stage **casing** head adopts a lengthened neck **casing pipe hanger** which is thin at two ends and thick in the middle, wherein a group of conical surface expansion metallic **seal** component formed by a disc spring, a compacting **casing pipe**, an inner **seal ring** and an outer **seal ring** is mounted between the middle upper part in the **casing pipe hanger** and the centre hole of a crossover flange; a vertically wedged metallic **seal** component formed by a lower cushion **ring**, an X-shaped **seal ring**, an upper backing **ring**, a jointed nut and a set screw is mounted between the middle lower part in the **casing pipe hanger** and the centre hole of a **casing** spool; moreover, **sealing**

grooves are formed in the inner circumference and the outer circumference of the compacting **casing pipe** and the outer circumference of the **casing pipe hanger** and O-shaped **seal** rings are mounted in the **sealing** grooves; the O-shaped **seal** rings are made of hydrogenated butadiene-acrylonitrile rubber with high saturation; moreover, **sealing** grease is further injected in the **ring**-shaped space and gaps in the **casing** head through a grease injection valve and small step holes on the crossover flange, so that a multifunctional **sealing** insurance effect is achieved and the metallic **seal** single-stage **casing** head is particularly suitable for using in a sulfurated high-temperature and high-pressure oil and gas well.

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- PN - [CN203626689U](#) U 20140604
- PR - CN20132746430U 20131122
- AP - CN20132746430U 20131122
- DT - I
- PA - PETROCHINA CO LTD
- TI - Shaft mouth protection, **seal** and connection device
- AB - The utility model discloses a shaft mouth protection, **seal** and connection device and belongs to the technical field of shaft mouth devices. The shaft mouth protection, **seal** and connection device comprises a **casing** nipple with a screw thread, an upper flange, a lower flange, a **casing** nipple, a cable passing port, a V-shaped **seal**, a connection union, a **casing** nipple top plugging cover board, a top cover board inner hook, a top cover board outer **hanging ring**, a top cover board pressing cap, a top cover board pressing cap handle, a **casing** nipple side taper **pipe** buckle hole, a flange **sealing** steel **ring** and a flange connection bolt. The lower flange and one **casing** nipple are connected and tightly welded through the screw thread, and the screw thread is reserved at the other end of the **casing** nipple. The upper flange is directly welded to and connected with one end of the other **casing** nipple in a **sealing** mode, and a screw thread is reserved at the other end of the **casing** nipple and is plugged through the top cover board. The top cover board is fixedly **sealed** through the pressing cap with an inner screw thread. The shaft mouth protection, **seal** and connection device can **seal** a shaft effectively and protect monitoring instruments in the shaft, and cables can pass through the cable passing port, be supported and protected and extend freely.

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- PN - [CN203515437U](#) U 20140402
- PR - CN20132602509U 20130927
- AP - CN20132602509U 20130927
- DT - I
- PA - PETROCHINA CO LTD
- TI - Self-**sealed** type well opening **casing pipe hanging** device
- AB - The utility model relates to a self-**sealed** type well opening **casing pipe hanging** device and belongs to the technical field of oil gas water well completion well opening devices. An inner cavity of a **hanging** body is a conical face which is provided with a movable slip seat. An annular elastic slip is installed on the movable slip seat, and an inner **sealing** assembly is arranged below the movable slip seat. A **sealing** groove is

formed in the outer portion of the **hanging** device body and provided with an outer **sealing** assembly, and a pressure bearing **ring** of the lower end of the **hanging** device body is fixed through a screw with a standby cap. The self-**sealed** type well opening **casing pipe hanging** device solves the problems that after a **casing pipe** is back connected, the depth cannot be corrected, and therefore a **hanger** cannot be arranged in a **casing pipe** head in a seated mode, the well opening cannot be installed, and only a welding working means can be adopted; working strength is relieved, construction efficiency is improved, a **casing pipe** head device is effectively protected, construction preparation is provided for next work, and reasonable and effective conditions are provided; the self- **sealed** type well opening **casing pipe hanging** device is simple in structure, convenient to use and capable of saving working cost.

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- PN - [CN203452759U](#) U 20140226
- PR - CN20132430380U 20130719
- AP - CN20132430380U 20130719
- DT - I
- PA - PETROCHINA CO LTD
- TI - Parallel double- **pipe** steam injection well mouth device
- AB - The utility model discloses a parallel double-**pipe** steam injection well mouth device, and belongs to the technical field of mechanical oil extraction equipment. A parallel double-**pipe** structure is adopted in the parallel double-**pipe** steam injection well mouth device, a main **pipe** is a mushroom head suspended in a mandrel mode, and an auxiliary **pipe** is an oil **pipe** suspending in a thread mode. A well mouth is composed of a tubing head five joint, a main **pipe** suspension part assembly, a top thread **sealing** mechanism, a **pipe hanging** flange, a three joint, a main brake valve, an oil **casing pipe** brake valve, screw thread flanges, a steel **ring** and a bolt. Inner coupling oil pipes are suspended inside the main **pipe** and the auxiliary **pipe**. A **casing pipe** flange is connected with the tubing head five joint which is connected with a thermal collecting brake valve, the top thread **sealing** mechanism, the main **pipe** suspension part assembly and the **pipe hanging** flange, the other end of the **pipe hanging** flange is connected with the main brake valve, the other end of the main brake valve is connected with the three joint, the other end of the three joint is connected with the first screw thread flange and the second screw thread flange, and the main **pipe** suspension part assembly is connected between the **pipe hanging** flange and the tubing head five joint. The parallel double-**pipe** steam injection well mouth device is reasonable in structural design and reliable in work, the demands of super heavy oil hot drive double-**pipe** steam injection technique, and later non-well control under pressure is achieved.

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- PN - [CN203257367U](#) U 20131030
- PR - CN2013226849U 20130118
- AP - CN2013226849U 20130118
- DT - I
- PA - UNIV CHINA PETROLEUM
- TI - **Ring seal** assembly of multilevel metal **seal** structure

AB - The utility model relates to a **ring seal** assembly of a multilevel metal **seal** structure, and the **ring seal** assembly is used for **sealing** an underwater well head system in ocean oil and gas exploitation. The **ring seal** assembly is mainly composed of a locking sleeve, a driving sleeve, an upper portion **seal ring** and a lower **seal ring**, the multilevel **seal** structure of two sets of **seal** rings and a plurality of **seal** faces is adopted, spline match is adopted between the upper portion **seal ring** and the driving sleeve and between the driving sleeve and the locking sleeve, and unsynchronized **seal** of the upper **seal ring** and the lower **seal ring** is achieved. The upper **seal ring** and the lower **seal ring** are both U type **seal ring** faces, after **seal** is driven, the U type **seal ring** faces expand outward, therefore, round flanges on the **seal** faces, a well head and a **casing pipe hanger** are squeezed to form a metal **seal** structure, in a recovering process, a **ring** groove is connected with recovering rings among all the parts in a fastening mode, and the recovering work is completed. Not only is compressive strength of the **seal** assembly improved, **seal** reliability increased and service life prolonged, but also the two sets of **seal** devices can be driven and installed separately, scraping of the **seal** faces is prevented, the **seal** effect is ensured, and finally the **ring seal** assembly of the multilevel metal **seal** structure is simple in assembling and disassembling process and saves operation time and cost.

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PN - [CN203223203U](#) U 20131002

PR - CN20132199426U 20130419

AP - CN20132199426U 20130419

DT - I

PA - SJS LTD

TI - **Hanging** packer for open hole completion **pipe** string

AB - The utility model relates to the technical field of oil and gas field open hole horizontal well multi-section fracture, in particular to a **hanging** packer for an open hole completion **pipe** string. The **hanging** packer for the open hole completion **pipe** string is composed of a center **pipe**, an upper guiding **ring**, a glued dowel, an upper clamping tile, an upper cone, a cutting dowel, an outer back band, an inner back band, an upper rubber sleeved check **ring**, a rubber barrel bearing **ring**, a rubber barrel, an upper rubber sleeve check **ring**, a lower cone, a lower clamping tile, a locking **ring**, a locking **ring** sleeve, an upper piston, an O-shaped **ring**, a splitting **ring** sleeve, a splitting **ring**, a lower piston, an upper setting sleeve, a lower setting sleeve, a lower guiding **ring** and a lower connector. The **hanging** packer for the open hole completion **pipe** string is mainly applied to open hole horizontal well multi-section fracture, the anchoring performance is reliable, the packer can resist high temperature and high pressure and reliably **seal** a large-scale **casing pipe**, and the maximum inner drift diameter can ensure that 20 fracture balls can pass through the packer to achieve maximization of the number of fractured layers.