



New connection on: : 18-08-2017 : 18:54:59 - Last disconnection on: : 15-08-2017 : 21:53:20

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[No database/cluster active] ..fi epodoc

 Database: EPODOC

[EPODOC: SS 1] drill and bit and cover

Results in EPODOC 1.749

[SS 2] 1 and mandrel

Results in EPODOC 10

[SS 3] ..v

[EPODOC: SS 3] ..li



1/10 © EPODOC / EPO

PN - [CN205936390U](#) U 20170208

PR - CN20162688688U 20160701

AP - CN20162688688U 20160701

DT - I

PA - CNPC BOHAI DRILLING ENG CO LTD

TI - Nearly **drill bit** rotary vibration drilling tool

AB - The utility model provides a nearly **drill bit** rotary vibration drilling tool, include: well urceolus, be equipped with the splined **mandrel** in the well urceolus, extend along the circumferential direction at the splined **mandrel** middle part has first boss, the **cover** has footstep bearing no. One on the splined **mandrel**, a footstep bearing rigid coupling is on the up end of first boss, the **cover** has first cam on the splined **mandrel**, and the lower surface of first cam and a footstep bearing's last surface contact, and the well urceolus inner wall that is close to first boss department extends along the circumferential direction has the second boss, there is the space between second boss and the first boss, first cam is connected with the spline fit of second boss. The drilling tool improved the mechanical drilling speed of hard ground layer well drilling,

alleviated nearly **drill bit** backing pressure and **drill bit** stick -slip phenomenon, solved the problem of well drillings speed -raisings such as dark directional well, big displacement well, horizontal well, creep into the effectual speed -raising means that provide for directional inclined shaft.

2/10 © EPODOC / EPO

PN - [CN105971538](#) A 20160928
PR - CN20161417316 20160614
AP - CN20161417316 20160614
DT - I
PA - CNOOC ENERGY TECH & SERV LTD
TI - Adjusting device for coring tool capable of achieving internal adjusting
AB - The invention discloses an adjusting device for a coring tool capable of achieving internal adjusting. The adjusting device is composed of a device body which comprises an adjusting tube, a lengthening tube is connected to the upper end of the adjusting tube, a lengthening bar is arranged in the lengthening tube, a **mandrel** located in the adjusting tube is connected to the lower end of the lengthening bar, and the lower end of the **mandrel** is arranged to be a cone structure; a spline is arranged on the outer side of the middle of the adjusting tube; a spring is arranged on the side face of the lower end of the adjusting tube, a top bead of which the lower end abuts against the conical surface of the **mandrel** is connected to the spring, the top bead can achieve telescopic motion under the action of the spring and the **mandrel**, and a top bead **cover** which tightly compresses the spring and is fixedly connected with the adjusting tube is arranged at the upper end of the spring. According to the adjusting device for the coring tool capable of achieving internal adjusting, the adjusting device is matched with the coring tool capable of achieving internal adjusting for use, a gap between a core catcher and a **drill bit** can be adjusted rapidly, accurately and safely, the operating time is shortened, the operating difficulty is reduced, and the operating efficiency is improved.

3/10 © EPODOC / EPO

PN - [CN205297336U](#) U 20160608
PR - CN20152630980U 20150819
AP - CN20152630980U 20150819
DT - I
PA - CNPC BOHAI DRILLING ENG CO LTD
TI - Sidetracked hole bores reamer with following
AB - The utility model discloses a sidetracked hole bores reamer with following, including top connection, interior hexagonal **cover**, outer tube, **mandrel**, a plurality of telescopic cutter wing and sealing member, wherein: the lower part of top connection is outer hexagonal, and interior hexagonal ways is in the lower part of top connection, the lower extreme of hexagonal **cover** including the last pot head of outer tube, and the lower extreme of top connection is stretched into to the upper end of **mandrel**, the lower extreme passes through threaded connection with the **drill bit** in stretching into the **drill bit**, being formed with the annular boss that reduces gradually of diameter from top to bottom on the outer wall of the lower part of **mandrel**, having a plurality of windows

along circumference evenly distributed on the pipe wall of outer tube, all correspond with every window and be provided with a telescopic cutter wing, it has a dovetail all to correspond to process with every telescopic cutter wing on the outer wall of annular boss, the lower extreme of the telescopic cutter wing be with dovetail complex fixture block, the sealing member is the loop configuration, packs in the space between **mandrel**, outer tube and **drill bit**. Through the utility model discloses can prevent that the card that the wing stretches out when withdrawing from hindering problem, the full discharge capacity of adaptation along with boring ream **drill** method.

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PN - [CN104975815](#) A 20151014

PNFP - CN104975815B B 20170308

PR - CN20151349101 20150624

AP - CN20151349101 20150624

DT - I

CT - || STSE (A)

[GB1504918](#) A 19780322 [A] (MASON TOOLS LTD LEE [CA])

[A] 1-5

* 全文 *;

[CN201301672Y](#) Y 20090902 [A] (CHONGQING WANGJIANG INDUSTRY C [CN])

[A] 1-5

* 全文 *;

[CN201771441U](#) U 20110323 [A] (TIANRONG KEJIAN BEIJING TRADING CO LTD)

[A] 1-5

* 全文 *;

[CN102031938](#) A 20110427 [A] (CHINA PETROLEUM & CHEMICAL)

[A] 1-5

* 全文 *;

[CN203129979U](#) U 20130814 [A] (LIAONING KUAKE PETROLEUM EQUIPMENT CO LTD)

[A] 1-5

* 全文 *;

[CN204703784U](#) U 20151014 [R] (UNIV YANGTZE)

[R] 1-5

* 权利要求1-5 *;

[CN105545223](#) A 20160504 [A] (GUIZHOU GAOFENG PETROLEUM MACHINERY CO LTD)

[A] 1-5

* 全文 *

PA - (A)

UNIVYANGTZE

TI - (A)

While drilling vibration reducer

AB - (A)

The invention relates to a while drilling vibration reducer, and belongs to the technical field of a downhole pipe string vibration reduction tool of petroleum drilling construction operation. The while drilling vibration reducer comprises a **mandrel**, a spline shaft, an oil cylinder, a spline outer tube, an upper mud scraping ring and a lower mud scraping ring, wherein one end of the **mandrel** is provided with the spline

shaft through screw threads; the spline outer tube is arranged on the spline shaft in a sleeving way; the oil cylinder and an oil cylinder **cover** are sequentially arranged on the **mandrel** arranged at one side of the spline outer tube; the upper mud scraping ring is arranged on the oil cylinder **cover**; the inner surface of the oil cylinder is provided with a lug boss; and a balance valve is arranged on the **mandrel** arranged at one side of the lug boss. The while drilling vibration reducer has the advantages that silicone oil can be injected into two cavities through oil injecting holes formed in the **mandrel** for regulating the pressure balance in the two cavities, so that the goal of vibration reduction is achieved; and the problems of service life reduction and safety accident generation due to fatigue damage of components in a **drill** string since the existing **drill bit** can generate longitudinal and circumferential vibration while a rock breaking effect is generated are solved. The while drilling vibration reducer has the advantages that the fatigue damage of a drilling tool can be effectively prevented, and the mechanical drilling speed can be accelerated.

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PN - [CN104295231](#) A 20150121

PNFP - CN104295231B B 20160824

PR - CN20141471408 20140916

AP - CN20141471408 20140916

DT - I

CNOI - (A)
[E21B17/07](#) ; [E21B19/086](#) ; [E21B21/10](#)

PA - (A)
UNIV SOUTHWEST PETROLEUM

TI - (A)
Low-friction-drag variable-diameter hydraulic thruster

AB - (A)
The invention relates to a low-friction-drag variable-diameter hydraulic thruster used for petroleum and natural gas drilling. According to the technical scheme, an upper connector is connected with an auxiliary cylinder through threads, the auxiliary cylinder is connected with a main cylinder through threads, the main cylinder is connected with a spline cylinder through threads, a piston is arranged in the auxiliary cylinder, a second piston cushion **cover**, a first piston ring and a first piston cushion **cover** are sequentially arranged on the piston, a first press cap and a first anti-loose cap are both connected with the piston through threads, a **mandrel** is arranged in the main cylinder and the spline cylinder, a semi-ring is arranged in the middle of the **mandrel**, a fourth piston cushion **cover**, a second piston ring and a third piston cushion **cover** are sequentially arranged on the head of the **mandrel**, a second pressing cap and a second anti-loose cap are connected with the **mandrel** through threads, a nozzle base is located between the piston and the **mandrel**, a nozzle is arranged in the nozzle base, four steel ball bases are evenly distributed between the **mandrel** and the spline cylinder, and steel balls are arranged in the steel ball bases. According to low-friction-drag variable-diameter hydraulic thruster, drilling pressure which is high enough, stable and uniform can be obtained by a **drill bit** in the true sense, the bridge over phenomenon can be prevented, and the low-friction-drag variable-diameter hydraulic thruster is used for drilling.

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- PN - [CN202735119U](#) U 20130213
- PR - CN20122400760U 20120814
- AP - CN20122400760U 20120814
- DT - I
- PA - WUHAN IRON & STEEL GROUP CORP
- TI - Screw type sampling head
- AB - The utility model discloses a screw type sampling head which comprises a hollow outer cylinder, wherein a **mandrel** and a piston rod are arranged in the outer cylinder, one end of the piston rod is installed on a bearing seat through a bearing, and the other end of the piston rod extends out of a **cover** plate of the outer cylinder to be matched with an air cylinder. The upper end of the **mandrel** is connected with the bearing seat, and the lower end of the **mandrel** is connected with a **drill bit**. The **mandrel** is further provided with a round scraper, wherein the periphery of the scraper is attached to the inner wall of the outer cylinder. The lower end face of the scraper, the upper end face of the **drill bit** and the inner wall of the outer cylinder form a sealed sampling room. The sampling room is completely sealed in a material transportation process, so a situation of material leakage is effectively avoided. As the scraper is arranged above the sampling room, completeness of unloading is greatly improved, and a sample mixing phenomenon is avoided. The screw type sampling head is simple, compact and reasonable in structure, easy to machine and manufacture, simple in installation and replacement of parts, and suitable for collection of samples such as coals and ores.

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- PN - [CN202701454U](#) U 20130130
- PR - CN20122435281U 20120822
- AP - CN20122435281U 20120822
- DT - I
- PA - ZHANG LANFEN
- TI - Transmission device of handheld electric **drill**
- AB - The utility model relates to a transmission device of a handheld electric **drill**; and the transmission device comprises a motor, wherein a rotating shaft is arranged at the front end of the motor; a gear is arranged on the external side of one end of the rotating shaft; a **mandrel** is fixedly arranged in the gear; the front end of the **mandrel** is connected with a **drill bit**; an end **cover** is arranged on the external side of the other end of the rotating shaft; the end **cover** and the rotating shaft are directly located by a bearing; a gearbox is arranged on the external side of the gear; and the gearbox and the **mandrel** are located by a bushing. The transmission device of the handheld electric **drill**, provided by the utility model, has the advantages of simple structure, high precision, low noise and long service life.

8/10 © EPODOC / EPO

- PN - [CN202219401U](#) U 20120516
- PR - CN20112248502U 20110714

AP - CN20112248502U 20110714

DT - I

PA - TIANJIN HOISTING EQUIPMENT CO

TI - Processing tooling for radial wire outlet holes on rear end covers of motors

AB - The utility model relates to a processing tooling for radial wire outlet holes on rear end covers of motors, which is characterized by comprising a bottom plate, a supporting plate, a **mandrel**, a press plate, a holddown nut, a drilling jig plate and a **drill** bushing. The supporting plate is perpendicularly fixedly mounted on the bottom plate, one end of the **mandrel** is supported on the supporting plate, the **mandrel** is used for mounting a rear end **cover**, the press plate and the holddown nut are disposed at the other end of the **mandrel**, the drilling jig plate is fixedly mounted at the upper end of the supporting plate and is parallel to the bottom plate, the **drill** bushing is fixedly mounted on the drilling jig plate and exactly arranged on the upper side of the **mandrel**, the distance from the center of the **drill** bushing to the inner side surface of the supporting plate is consistent to that from the bottom end of the rear end **cover** to the center of a radial wire outlet hole, a through hole corresponding to an axial positioning hole on the rear end **cover** is further disposed on the supporting plate, and the positioning hole is connected with the through hole by a hinge pin. By the aid of the tooling, the rear end **cover** can be conveniently and firmly fixed to the upper side of a workbench of a drilling machine, a drilling **bit** is aligned to the radial wire outlet hole of a workpiece, the **drill** bushing realizes effects of guiding and preventing deviation of the drilling **bit**, dimensional precision and position precision of processing of the wire outlet hole are guaranteed, production efficiency is improved, and the requirement of batch production is met.

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PN - [CN102182396](#) A 20110914

PNFP - CN102182396B B 20130424

PR - CN20111103661 20110425

AP - CN20111103661 20110425

DT - I

CT - || STSE (A)
[CN201756911U](#) U 20110309 [A] (XUZHOU XUGONG FOUNDATION CONSTRUCTION MACHINERY CO LTD)
 [A]
[CN2329760Y](#) Y 19990721 [A] (YANG FUSHUN [CN])
 [A]
[CN2723663Y](#) Y 20050907 [A] (SANYI HEAVY MACHINE SCIENCE AN [VG])
 [A]
[CN2743524Y](#) Y 20051130 [A] (LIANG YI [CN])
 [A]
[CN201187249Y](#) Y 20090128 [A] (UNIV CENTRAL SOUTH [CN])
 [A]
[CN201598973U](#) U 20101006 [A]
 [A]
[EP1171683](#) B1 20070912 [A] (VARCO INT [US])
 [A]

PA - (A B)
UNIV CHINA GEOSCIENCES WUHAN

TI - (A B)
Core drilling machine power head capable of keeping off opening orifice

AB - (A)
The invention relates to a core drilling machine power head capable of keeping off an opening orifice, which comprises a box body, an upper box **cover**, a driving gear shaft, a tap joint, a hydraulic motor, a driven gear, a sampler tube and a **mandrel**, wherein the **mandrel** is connected with the driven gear by a spline; the driving gear shaft and the **mandrel** are connected with the box body and the upper box **cover** by rolling bearings; the driving gear shaft is connected with the hydraulic motor through an axial hole and a key slot which are preserved on the driving gear shaft; the box body and the upper box **cover** are positioned by positioning pins and are connected by using screws; a sampler is arranged in an inner cavity of the sampler tube; a flushing fluid is transported to a **drill bit** through an inner cavity of the **mandrel**; and during sampling, the power head transversely moves to keep off an orifice of a **drill** rod, the sampler tube reaches the position of the orifice of the **drill** rod, a sampler in the sampler tube is put down for sampling and the sampler tube guides the sampler to enter the orifice of the **drill** rod. The power head has a compact structure and favorable sealing property; and the wire-line coring can be realized by keeping off the orifice of the **drill** rod. Various parts are sealed by adopting a moving seal or static seal mode; and the core drilling machine power head can be used for an underwater environment or suitable for core drilling on land.

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PN - [CN2907986Y](#) Y 20070606

PR - CN2006291958U 20060706

AP - CN2006291958U 20060706

DT - I

PA - LIU AIBO [CN]

TI - Explosion-proof trepanning **bit**

AB - The utility model relates to an explosion-proof hole **drill**, which is characterized in that a pipe hoop is welded on the surface of the pipe drilled, which is larger than the outside diameter of a **drill** hole. A support **cover** is installed in the pipe hoop. A NO.two sealing circle is provided between the top surface of the pipe hoop and the support **cover**, with a **mandrel** that carries out the relative movement with the **cover** installed on the bottom of the support **cover**. A combination **drill** is connected by an outside whorl with the bottom center of the **mandrel**. the **mandrel** and the contact surface of the support **cover** is arranged with a NO. one sealing circle upper and lower. A feed **cover** is installed inside the support **cover**. A **drill** stem is slide into the axial hole of the feed **cover**, and the lower part of the **drill** stem is connected inside the top surface of the **mandrel**, while the upper part of the **drill** stem is beyond the feed **cover**. The top of the feed **cover** contacts with the bottom of one upper part. Upper and lower NO.one sealing circles are installed on the contact surface of the **drill** stem and the feed **cover**. The utility model has a proper structure allowing connecting pipes without stopping the gas. The construction is quickly done with a low cost and no influence to the normal life of people. The operation is secure and the usage is easy.

[SS 3]