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Electrically-driven compression fracture pump truck

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Abstract of CN202463670 (U)

The utility model discloses an electrically-driven compression fracture pump truck, which comprises a truck chassis with a driving cab, wherein a lubrication cooling system, a compression fracture pump, a suction manifold and a discharge manifold are installed on the truck chassis; the suction manifold and the discharge manifold are connected through the compression fracture pump; an electrically-driven system and a control system are also installed on the truck chassis; the electrically-driven system comprises an electric motor and an electric motor driving device; the electric motor is used for driving the compression fracture pump to operate; the control system comprises a main power control system and an auxiliary power control system; the main power control system is used for controlling electric motor driving device; the auxiliary power control system is used for controlling the lubrication cooling system; and electricity is supplied to the electric motor driving device, the main power control system and the auxiliary power control system through an external power supply. The electrically-driven compression fracture pump truck has the advantages of simple structure, reasonable design, low construction cost, high operating efficiency, high reliability and good energy conservation and emission reduction effects, is convenient to match, convenient to supply energy and easy to maintain, overcomes the defects and shortages in the prior art that the fuel oil consumption of the compression fracture pump truck is high, an engine and a torque converter are difficult to match, and is convenient to popularize and use.

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DESCRIPTION CN202463670U

Electric drive fracturing pump truck

[0001]

Technical Field

[0002]

The utility model belongs to the technical field of oil exploitation, and relates to a mechanical operation device for oil exploitation, in particular to an electric-driven fracturing pump truck.

[0003]

Background Art

[0004]

Fracturing is an important technical means to increase reserves and production in oil and gas fields. It requires the use of high-pressure fluid to first open the formation cracks, and then fill the cracks with fracturing sand to enhance the formation permeability and increase oil and gas production.

In fracturing construction, the performance of fracturing equipment determines the realization of improvement in fracturing technology.

Sophisticated fracturing equipment is an essential technical support for fracturing construction.

The total volume of fracturing operations in my country's oil and gas fields increases at a rate of 10% to 20% per year. With the development of deep wells and difficult wells, the scale of fracturing operations is gradually increasing. The domestically available fracturing equipment is far from meeting the growing demand for fracturing construction.

[0005]

High-power fracturing units are high-tech petroleum equipment. European and American countries, especially the United States, have 80 years of research, development, production and application history in this field.

For a long period of time, my country's only way to obtain advanced fracturing equipment was to import it. Fracturing equipment, especially high-power fracturing equipment, once became a "bottleneck" equipment in my country's oil and gas production field.

[0006]

A fracturing pump truck is a special equipment that installs pumping equipment on a self-propelled truck chassis and is used to perform high-pressure, large-displacement oil well fracturing and production-increasing operations.

The device consists of two parts: chassis and upper equipment. The chassis mainly provides the transportation function for the whole vehicle, and also provides power for the auxiliary system of the upper part (platform); the upper part is the working part of the fracturing pump truck, which is mainly composed of the power system, transmission system, fracturing pump and manifold system. The power generated by the power system is transmitted to the power end of the fracturing pump through the transmission system, driving the fracturing pump to work.

[0007]

In the prior art, whether it is an imported product or a domestically produced vehicle, its fracturing pump truck adopts a power transmission scheme of "diesel engine-torque converter-drive shaft-fracturing pump".

This arrangement is based on a power scheme with the engine as the prime mover. The main problems are: 1. When the single-machine power of a fracturing pump truck reaches more than 1500kW, the engine cost rises rapidly and the selection is difficult; 2. Due to the large size and weight of high-power diesel engines and gearboxes, it is not conducive to the design of vehicle-mounted solutions and the development of higher-power pump trucks, and the diesel engine drive solution has become a bottleneck restricting the development of new fracturing pump trucks; 3. The selection range of supporting components such as

torque converters is narrow and the price is high; important components (engines, torque converters, etc.) need to be imported, which not only causes high cost of the whole machine, but also hinders the development of equipment with independent intellectual property rights; 4. When high-power fracturing pump trucks are operating in the field, fuel consumption is large and the fuel supply cost is high, which pushes up the overall operating cost; 5. When the diesel engine output power is in the non-economic operating range, fuel consumption is large and the adaptability to different operating conditions is poor. 6. High-power diesel engines produce loud noise, high emissions, and poor working conditions for workers.

[0008]

Utility Model Content

[0009]

The technical problem to be solved by the utility model is to provide an electric-driven fracturing pump truck in view of the deficiencies in the above-mentioned prior art, which has a simple structure, a novel and reasonable design, convenient matching, a low cost, a high level of automatic control, high working efficiency, convenient energy supply, good energy-saving and emission reduction effects, easy maintenance, high working reliability, and is easy to promote and use.

[0010]

In order to solve the above technical problems, the technical solution adopted by the utility model is: an electric-driven fracturing pump truck, including a truck chassis with a cab, a lubrication and cooling system and a fracturing pump, as well as a suction manifold and a discharge manifold connected to the fracturing pump are installed on the truck chassis, characterized in that: an electric drive system and a control system are also installed on the truck chassis, the electric drive system includes a motor and a motor drive device for driving the fracturing pump to operate, the control system includes a main power control system for controlling the motor drive device and an auxiliary power control system for controlling the lubrication and cooling system, and the motor drive device, the main power control system and the auxiliary power control system are all powered by an external power supply.

[0011]

The above-mentioned electrically driven fracturing pump truck is characterized in that: the number of the electric motor is one, and the electric motor is connected to the fracturing pump via a first coupling.

[0012]

The above-mentioned electric-driven fracturing pump truck is characterized in that: there are two electric motors, namely the first electric motor and the second electric motor, there are two motor driving devices, namely the first motor driving device connected to the first motor and the second motor driving device connected to the second motor, the electric drive system also includes a gearbox, the first motor is connected to the gearbox through a second coupling, the second motor is connected to the gearbox through a third coupling, and the gearbox is connected to the fracturing pump through a fourth coupling.

[0013]

The above-mentioned electric-driven fracturing pump truck is characterized in that: the external power supply includes a well site power grid, a main transformer connected to the well site power grid and an auxiliary transformer connected to the main transformer, the auxiliary transformer is installed on the truck chassis, the electric motor drive device is connected to the main transformer, and the main power control system and the auxiliary power control system are both connected to the auxiliary transformer.

[0014]

The above-mentioned electric-driven fracturing pump truck is characterized in that: the external power supply includes a generator set and an auxiliary transformer connected to the generator set, the auxiliary transformer is installed on the truck chassis, the electric motor drive device is connected to the generator set, and the main power control system and the auxiliary power control system are both connected to the auxiliary transformer.

[0015]

The above-mentioned electrically driven fracturing pump truck is characterized in that: the number of the generator sets is one or more, and the multiple generator sets are connected in parallel.

[0016]

The above-mentioned electrically driven fracturing pump truck is characterized in that: the main power control system includes a controller and a human-machine interaction device connected to the controller, and the motor drive device is connected to the controller.

[0017]

The above-mentioned electric-driven fracturing pump truck is characterized in that: the main power control system is installed in the main control cabinet, the auxiliary power control system is installed in the auxiliary control cabinet, the motor drive device, the main control cabinet and the auxiliary control cabinet are all arranged in the electric control room, and the electric control room is installed on the truck chassis.

[0018]

The above-mentioned electrically driven fracturing pump truck is characterized in that: the electric motor is an AC motor or a DC motor, and the motor driving device is an AC motor driving device or a DC motor driving device matched with the electric motor.

[0019]

The above-mentioned electrically driven fracturing pump truck is characterized in that the AC motor driving device is a frequency converter, and the DC motor driving device is a thyristor.

[0020]

Compared with the prior art, the utility model has the following advantages:

[0021]

1. The utility model has a simple structure and a novel and reasonable design.

[0022]

2. Convenient matching: The motor and the corresponding frequency converter and thyristor in the utility model are mature products both at home and abroad, and the selection and matching are convenient.

[0023]

3. Low cost: The utility model uses an electric motor as a prime mover to drive the fracturing pump. The number of electric motors can be selected according to the power of the driven fracturing pump. Medium-power electric motors have low cost. When the electric motor is

driven by an electric motor drive device, the overall cost is lower than that of the engine solution.

[0024]

4. High level of automatic control, which improves work efficiency: Driven by the motor drive device, the motor can maintain the best energy utilization rate under different power outputs, so that the energy consumption of the operation is minimized, and the energy saving and emission reduction effect is good. At the same time, various matching output modes of torque and speed can be realized, which is easy to improve the automation level and efficiency of fracturing operations.

[0025]

5. Convenient energy supply: The utility model adopts electric drive mode, which can directly use the well site power grid for power supply, eliminating the need for oil transportation.

[0026]

6. Easy maintenance: The utility model adopts an electric motor to drive the fracturing pump. Compared with a high-power diesel engine, the maintenance of the electric drive solution is very simple, with fewer control indicators, which greatly reduces the workload and cost of daily maintenance.

[0027]

7. High working reliability: The reliability of the motor system is much higher than that of the diesel engine system. The AC motor can be maintenance-free for 20 years. Whether the motor drive device uses a frequency converter or a thyristor, it can maintain long-term uninterrupted operation. When multiple diesel generator sets are used for power supply, the reliability of multiple units in parallel is higher than that of a single high-power diesel engine. If one of the units has a problem, the system can reduce power and continue to operate without affecting the fracturing operation.

[0028]

8. The utility model has good use effect and is easy to promote and use.

[0029]

To sum up, the utility model has a simple structure, novel and reasonable design, convenient matching, low cost, high automatic control level, high working efficiency, convenient energy supply, good energy-saving and emission reduction effect, easy maintenance, and high working reliability. It solves the defects and shortcomings of the power transmission system of the fracturing pump truck in the prior art, such as high fuel consumption, difficulty in matching the engine and the torque converter, high fuel consumption when the unit is running at low power, and poor operating conditions, and is easy to promote and use.

[0030]

The technical solution of the utility model is further described in detail below through the drawings and examples.

[0031]

BRIEF DESCRIPTION OF THE DRAWINGS

[0032]

FIG1 is a schematic structural diagram of embodiment 1 of the present utility model.

[0033]

FIG. 2 is a schematic structural diagram of Embodiment 2 of the present utility model.

[0034]

FIG. 3 is a top view of FIG. 2 .

[0035]

FIG. 4 is a schematic diagram of the power supply connection relationship of Example 1 of the utility model.

[0036]

FIG5 is a schematic diagram of the power supply connection relationship of Example 2 of the utility model.

[0037]

Description of reference numerals:

[0038]

1-Truck chassis; 1-1-Driver's cab; 2-Electronic control room;

[0039]

3-motor driving device; 3-1-first motor driving device;

[0040]

3-2-second motor driving device; 4-motor;

[0041]

4-1-first motor; 4-2-second motor; 5-fracturing pump;

[0042]

6-1-Suction manifold; 6-2-Discharge manifold; 7-Auxiliary transformer;

[0043]

8-lubrication and cooling system; 9-1-first coupling; 9-2-second coupling;

[0044]

9-3-third coupling; 9-4-fourth coupling; 10-gearbox;

[0045]

11-main transformer; 12-generator set; 12-1-first generator set;

[0046]

12-1-Second generator set; 13-1-Main control cabinet; 13-2-Auxiliary control cabinet;

[0047]

14-Main power control system; 14-1-Controller; 14-2-Human-computer interaction equipment;

[0048]

15-Auxiliary power control system; 16-Wellsite power grid.

[0049]

DETAILED DESCRIPTION

[0050]

Example 1

[0051]

As shown in Figure 1, the utility model includes a truck chassis 1 with a cab 1-1, and a lubrication cooling system 8 and a fracturing pump 5, as well as a suction manifold 6-1 and a discharge manifold 6-2 connected to the fracturing pump 5 are installed on the truck chassis 1. An electric drive system and a control system are also installed on the truck chassis 1. The electric drive system includes a motor 4 and a motor drive device 3 for driving the fracturing pump 5. The control system includes a main power control system 14 for controlling the motor drive device 3 and an auxiliary power control system 15 for controlling the lubrication cooling system 8. The motor drive device 3, the main power control system 14 and the auxiliary power control system 15 are all powered by an external power supply.

[0052]

In this embodiment, there is one motor 4, and the motor 4 is connected to the fracturing pump 5 via a first coupling 9-1.

When the input power requirement of the fracturing pump 5 is relatively small (eg, less than 900 kW), a single high-power motor 4 can be used to directly drive the fracturing pump 5 .

[0053]

In this embodiment, the external power supply includes a well site power grid 16, a main transformer 11 connected to the well site power grid 16, and an auxiliary transformer 7 connected to the main transformer 11. The auxiliary transformer 7 is installed on the truck chassis 1, the motor drive device 3 is connected to the main transformer 11, and the main power control system 14 and the auxiliary power control system 15 are both connected to the auxiliary transformer 7. This power supply scheme has the lowest vehicle manufacturing cost and operating cost.

Specifically, as shown in Figure 4, the primary side coil of the main transformer 11 is connected to the well site power grid 16 through a cable and a vacuum circuit breaker Z1 and a vacuum circuit breaker Z2 connected in series on the cable. The cable between the vacuum circuit breaker Z1 and the well site power grid 16 is connected with a current

transformer TA1, a lightning arrester F1 and a power indicator light L1. The current transformer TA1 is connected with an ammeter A1. The cable between the vacuum circuit breaker Z1 and the vacuum circuit breaker Z2 is connected with a lightning arrester F2 and a fuse FU and a voltage transformer TV connected in series. The voltage transformer TV is connected with a voltmeter V. The cable between the vacuum circuit breaker Z2 and the primary side coil of the main transformer 11 is connected with a current transformer TA2, a lightning arrester F3, a grounding switch K and a power indicator light L2. The current transformer TA2 is connected with an ammeter A2. The primary side coil of the auxiliary transformer 7 is connected to the secondary side coil of the main transformer 11 through circuit breakers QF1 and QF2.

[0054]

In this embodiment, the active power control system 14 includes a controller 14 - 1 and a human-machine interaction device 14 - 2 connected to the controller 14 - 1 , and the motor drive device 3 is connected to the controller 14 - 1 .

Specifically, the main power control system 14 also includes an incoming line circuit breaker, a voltage detection circuit, a current detection circuit, etc., all of which adopt conventional circuit connections in the prior art; the power supply end of the motor drive device 3 is connected to the secondary side coil of the main transformer 11 through the incoming line circuit breaker QF3 and the circuit breaker QF1; the power supply ends of the controller 14-1 and the human-computer interaction device 14-2 are both connected to the secondary side coil of the auxiliary transformer 7; the power supply incoming line end of the auxiliary power control system 15 is connected to the secondary side coil of the auxiliary transformer 7.

The parameters set by the human-computer interaction device 14-2 include the start and stop of the motor drive device 3, the start and stop of the lubrication and cooling system 8, the start and stop of the motor 4, the speed of the motor 4 and the pressure of the fracturing pump 5. The parameters displayed by the human-computer interaction device 14-2 include: the operating status of the motor drive device 3 (including the start and stop status and the speed), the output pressure and output displacement of the fracturing pump 5, the lubricating oil pressure and temperature of the fracturing pump 5, and the current and voltage in the circuit. The above-displayed parameters are all detected by conventional detection means in the prior art and transmitted to the controller 14-1, and the controller 14-1 then controls the human-computer interaction device 14-2 for display.

The auxiliary power control system 15 is mainly a control circuit of the lubrication and cooling system 8, including components such as a circuit breaker, a contactor, a thermal relay, and a control relay, all of which are connected using conventional circuits in the prior art.

[0055]

In this embodiment, the main power control system 14 is installed in the main control cabinet 13-1, the auxiliary power control system 15 is installed in the auxiliary control cabinet 13-2, the motor drive device 3, the main control cabinet 13-1 and the auxiliary control cabinet 13-2 are all arranged in the electric control room 2, and the electric control room 2 is installed on the truck chassis 1.

Specifically, the wall of the electric control room 2 can be welded by steel plates. In order to make the electric control room 2 have a heat preservation function and ensure that the equipment in the electric control room 2 can operate at a suitable temperature, this can be achieved by setting the wall of the electric control room 2 to a double-layer structure and filling the wall of the electric control room 2 with refractory materials; in addition, a movable door can be installed on the wall of the electric control room 2, and a seat 2-1 can be set in the electric control room 2 to facilitate the operator to enter and exit and control the equipment installed in the electric control room.

[0056]

In this embodiment, the motor 4 is an AC motor or a DC motor, and the motor driving device 3 is an AC motor driving device or a DC motor driving device matched with the motor 4 . Specifically, the AC motor drive device is a frequency converter, and the DC motor drive device is a thyristor. That is, when the motor 4 is an AC motor, the motor drive device 3 is implemented by a frequency converter, and when the motor 4 is a DC motor, the motor drive device 3 is implemented by a thyristor. Both driving schemes have significant energy-saving and emission reduction effects.

[0057]

Example 2

[0058]

As shown in Figures 2 and 3, this embodiment is different from Embodiment 1 in that: the number of the motors 4 is two and they are the first motor 4-1 and the second motor 4-2 respectively; the number of the motor drive devices 3 is two and they are the first motor drive device 3-1 connected to the first motor 4-1 and the second motor drive device 3-2 connected to the second motor 4-2 respectively; the electric drive system also includes a gearbox 10; the first motor 4-1 is connected to the gearbox 10 via a second coupling 9-2; the second motor 4-2 is connected to the gearbox 10 via a third coupling 9-3; and the gearbox 10 is connected to the fracturing pump 5 via a fourth coupling 9-4.

The external power supply includes a generator set 12 and an auxiliary transformer 7 connected to the generator set 12, the auxiliary transformer 7 is installed on the truck chassis 1, the motor drive device 3 is connected to the generator set 12, and the main power control system 14 and the auxiliary power control system 15 are both connected to the auxiliary transformer 7.

Specifically, the number of the generator sets 12 is one or more, and the multiple generator sets 12 are connected in parallel.

The rest of the structure is the same as that of Example 1.

[0059]

Specifically, the generator set 12 is a diesel generator set or a gas generator set.

In this embodiment, there are two generator sets 12, namely a first generator set 12-1 and a second generator set 12-2.

As shown in FIG5, the first generator set 12-1 and the second generator set 12-2 are connected in parallel with each other, the primary side coil of the auxiliary transformer 7 is connected to the output end of the first generator set 12-1 through the circuit breaker QF4 and the circuit breaker QF8 and is connected to the output end of the second generator set 12-2 through the circuit breaker QF5 and the circuit breaker QF8, the power supply end of the first motor drive device 3-1 is connected to the output end of the first generator set 12-1 through the incoming circuit breaker QF6 and the circuit breaker QF4 and is connected to the output end of the second generator set 12-2 through the incoming circuit breaker QF6 and the circuit breaker QF5, the power supply end of the second motor drive device 3-2 is connected to the output end of the first generator set 12-1 through the incoming circuit breaker QF7 and the circuit breaker QF4, and is connected to the output end of the second generator set 12-2 through the incoming circuit breaker QF7 and the circuit breaker QF5; the power supply ends of the controller 14-1 and the human-machine interaction device 14-2 are both connected to the secondary side coil of the auxiliary transformer 7; the power supply incoming line end of the auxiliary power control system 15 is connected to the secondary side coil of the auxiliary transformer 7.

[0060]

When the input power requirement of the fracturing pump 5 is relatively large and a single motor 4 is insufficient to drive the fracturing pump 5, two motors 4 drive the fracturing pump 5 together through the gearbox 10.

When driving a fracturing pump 5 with a higher power, the fracturing pump 5 can also be driven by connecting multiple motors 4 in series or in parallel through a transfer case.

[0061]

Compared with a single high-power generator set 12 supplying power, the use of multiple relatively low-power generator sets 12 connected in parallel to supply power has advantages in terms of cost and operational reliability.

The use of generator sets for power supply allows the number of grid-connected generator sets 12 to be arbitrarily selected according to power requirements, which helps save fuel.

[0062]

In the utility model, the main power control system 14 is responsible for controlling the operation of the entire electric-driven fracturing pump truck. It can input control parameters through the human-computer interaction device 14-2, and can also display the real-time status of the electric-driven fracturing pump truck through the human-computer interaction device 14-2, thereby improving the control accuracy and information level of the entire fracturing pump truck.

By adjusting the output of the motor drive device 3 through the controller 14-1 in the main power control system 14, the stepless and continuous speed regulation of the motor 4 can be achieved to meet the working needs of the fracturing pump 5, and the fracturing pump 5 can be driven to output high-pressure liquids of different pressures and flow rates, making it easy to realize more and more complex control functions.

[0063]

In addition, in the present invention, the electric drive system, the lubrication and cooling system 8 and the control system can also be powered by batteries.

The main control cabinet 13 - 1 and the auxiliary control cabinet 13 - 3 are fixed to the floor or wall in the electric control room 2 by bolts to adapt to long-distance transportation.

The electric control room 2 has the functions of sound insulation, waterproofing and heat preservation, which is suitable for operators to control operations for a long time.

[0064]

In summary, the utility model aims at the shortcomings of the existing fracturing pump truck power transmission system, such as high fuel consumption, difficulty in matching the engine and the torque converter, high fuel consumption when the unit is running at low power, and poor operating conditions. A fracturing pump truck solution with the motor 4 as the prime mover is proposed. The solution has a simple structure, a novel and reasonable design, convenient matching, low cost, a high level of automatic control, high working efficiency,

convenient energy supply, easy maintenance, high working reliability, good use effect, and is easy to promote and use.

[0065]

The above is only a preferred embodiment of the present invention and does not constitute any limitation to the present invention. Any simple modification, change and equivalent structural change made to the above embodiments according to the technical essence of the present invention shall still fall within the protection scope of the technical solution of the present invention.

Notice

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CLAIMS CN202463670U

1.

An electric-driven fracturing pump truck comprises a truck chassis (1) with a cab (1-1), a lubrication cooling system (8) and a fracturing pump (5) being installed on the truck chassis (1), and a suction manifold (6-1) and a discharge manifold (6-2) connected to the fracturing pump (5), characterized in that an electric drive system and a control system are also installed on the truck chassis (1), the electric drive system comprises an electric motor (4) and a motor drive device (3) for driving the fracturing pump (5), the control system comprises a main power control system (14) for controlling the motor drive device (3) and an auxiliary power control system (15) for controlling the lubrication cooling system (8), and the motor drive device (3), the main power control system (14) and the auxiliary power control system (15) are all powered by an external power supply.

2.

The electrically driven fracturing pump truck according to claim 1 is characterized in that: the number of the electric motor (4) is one, and the electric motor (4) is connected to the fracturing pump (5) via a first coupling (9-1).

3.

According to the electric-driven fracturing pump truck of claim 1, it is characterized in that: the number of the electric motors (4) is two and they are respectively a first electric motor (4-1) and a second electric motor (4-2); the number of the electric motor driving devices (3) is two and they are respectively a first electric motor driving device (3-1) connected to the first

electric motor (4-1) and a second electric motor driving device (3-2) connected to the second electric motor (4-2); the electric drive system also includes a gearbox (10); the first electric motor (4-1) is connected to the gearbox (10) through a second coupling (9-2); the second electric motor (4-2) is connected to the gearbox (10) through a third coupling (9-3); and the gearbox (10) is connected to the fracturing pump (5) through a fourth coupling (9-4).

4.

The electric-driven fracturing pump truck according to claim 2 or 3 is characterized in that: the external power supply includes a well site power grid (16), a main transformer (11) connected to the well site power grid (16) and an auxiliary transformer (7) connected to the main transformer (11), the auxiliary transformer (7) is installed on the truck chassis (1), the motor drive device (3) is connected to the main transformer (11), and the main power control system (14) and the auxiliary power control system (15) are both connected to the auxiliary transformer (7).

5.

The electric-driven fracturing pump truck according to claim 2 or 3 is characterized in that: the external power supply includes a generator set (12) and an auxiliary transformer (7) connected to the generator set (12), the auxiliary transformer (7) is installed on the truck chassis (1), the electric motor drive device (3) is connected to the generator set (12), and the main power control system (14) and the auxiliary power control system (15) are both connected to the auxiliary transformer (7).

6.

According to the electrically driven fracturing pump truck of claim 5, it is characterized in that the number of the generator sets (12) is one or more, and the multiple generator sets (12) are connected in parallel.

7.

The electric-driven fracturing pump truck according to claim 2 or 3 is characterized in that: the active power control system (14) includes a controller (14-1) and a human-machine interaction device (14-2) connected to the controller (14-1), and the motor drive device (3) is connected to the controller (14-1).

8.

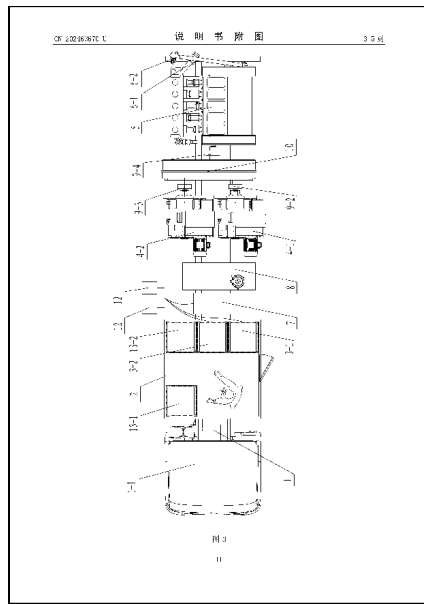
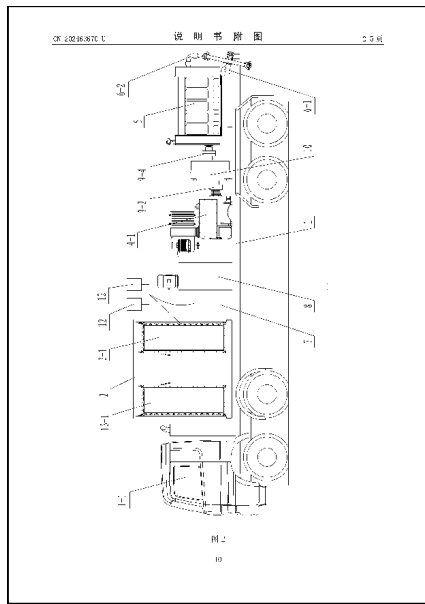
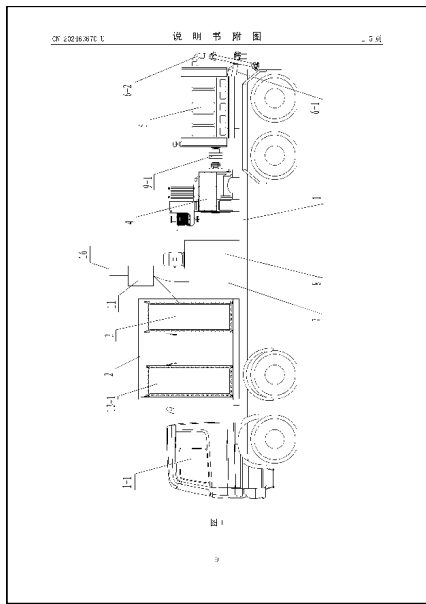
According to the electric-driven fracturing pump truck of claim 7, it is characterized in that: the main power control system (14) is installed in the main control cabinet (13-1), the auxiliary power control system (15) is installed in the auxiliary control cabinet (13-2), the motor drive device (3), the main control cabinet (13-1) and the auxiliary control cabinet (13-2) are all arranged in the electric control room (2), and the electric control room (2) is installed on the truck chassis (1).

9.

According to the electric-driven fracturing pump truck of claim 2 or 3, it is characterized in that the motor (4) is an AC motor or a DC motor, and the motor drive device (3) is an AC motor drive device or a DC motor drive device matched with the motor (4).

10.

The electrically driven fracturing pump truck according to claim 9 is characterized in that the AC motor drive device is a frequency converter, and the DC motor drive device is a thyristor.



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