CLAIMS

1. A monohull offshore drilling vessel comprising:
- a hull with a bow and a stern and a moonpool extending through the hull,
- an accommodation topside having crew quarters and a bridge, said accommodation topside being arranged on the hull at the bow,
- the hull having an upper deck between the accommodation topside and the stern of the vessel,
- a firing line hoist system that is mounted on the hull at said moonpool, which firing line hoist system comprises a mast, which is connected to the hull at the moon pool of the drilling vessel,
- a hoisting device supported by the mast, having a load attachment device displaceable along a firing line, which extends on the outside of and adjacent to a firing line side of the mast, and which firing line extends through the moonpool, wherein the hoisting device is adapted to be used for drilling or drilling related operations, which hoisting device includes one or more cables and one or more associated winches, the winches preferably disposed in the hollow construction of the mast, to manipulate the position of a load attachment device relative to the mast,
- a drill floor provided at the firing line side of the mast, which covers a portion of the moon pool while the firing line extends through an opening in said drill floor,
- a riser-tensioner for exerting a tensile force from the drilling vessel upon a riser, wherein the riser-tensioner is provided below the drilling floor,
- marine equipment,
- drilling equipment for performing auxiliary operations for the drilling or drilling related operations, wherein the drilling equipment provided in the hull of the vessel below the upper deck comprises one or more of:
    - a pipe storage for storing drill pipes in a substantially horizontal position,
    - a riser storage for storing risers in a substantially horizontal position,
    - a BOP storage area for storing a BOP (Blow Out Preventer),
    - a silo room for accommodating silos,
    - a mud tank for storing drilling mud,
    - a storage tank for storing fluids such as base oil or brine,
    - a pump room for accommodating pumps such as mud pumps,
    - burner booms

characterized in that
the drill floor is flush with the upper deck, and in that drilling equipment and marine equipment is provided in the hull of the vessel below the upper deck, and

the drill floor is mobile between an active position in which it is flush with the upper deck and covers a portion of the moon pool at said firing line side of the mast while the firing line extends through an opening in said drill floor, and a non-active position of the drill floor, allowing equipment to be brought in the firing line above the moon pool and manipulated by the hoisting device.

2. Monohull offshore drilling vessel according to claim 1, wherein the lateral side of the hull of the vessel, below the upper deck, is provided with one or more recessed storage areas for the storage of equipment, such that the stored equipment does not project beyond the plane of the lateral side of the hull of the vessel.

3. Monohull offshore drilling vessel according to claim 1, wherein a BOP (Blow Out Preventer) storage area is provided in the hull of the vessel below the upper deck, adjacent the moonpool, and wherein the non-active position of the drill floor allows the BOP to be positioned below the drill floor, and wherein the hoisting device is adapted for raising and lowering the BOP to the seabed.

4. Monohull offshore drilling vessel according to claim 3, wherein equipment to perform dual gradient drilling is provided, in particular a mudlift pump, and wherein the hoisting device is adapted for raising and lowering the BOP and the mudlift pump connected to the top of the BOP to the seabed, and wherein the drill floor is mobile between the active position and an elevated non-active position, wherein the elevated non-active position of the drill floor allows both the mudlift pump and the BOP to which it is to be connected to be brought into the firing line above the moon pool and manipulated by the hoisting device.

5. Monohull offshore drilling vessel according to claim 1, wherein a ventilation system is provided in the hull of the vessel, comprising ventilation intake shafts and ventilation exhaust shafts, which shafts open out at a level below the upper deck.

6. Monohull offshore drilling vessel according to claim 1, wherein the upper deck is provided with a grid of recesses, the vessel further comprising one or more vertical elements, and wherein each recess is adapted to receive a cooperating vertical element, e.g. a number of oppositely spaced vertical elements forming a rack, e.g. to store pipes or risers.

7. Monohull offshore drilling vessel according to claim 6, wherein flanges are provided defining the recesses, which flanges are provided countersunk, such that the flange is flush with the upper deck.

8. Monohull offshore drilling vessel according to claim 1, further comprising pipelay equipment, wherein the upper deck comprises a storage area for storage reels for pipes, and wherein pipelay equipment is adapted to be installed in the firing line, such that the offshore drilling vessel is adapted to be used for pipelay operations.

9. Monohull offshore drilling vessel according to claim 1, wherein the firing line hoist system is a multiple firing line hoist system comprising:

- a first hoisting device supported by the mast and having a first load attachment device displaceable along a first firing line, which extends on the outside of and adjacent to a first firing line side of the mast; and

- a second hoisting device supported by the mast and having a second load attachment device displaceable along a second firing line, which extends on the outside of and adjacent to a second firing line side of the mast;
  wherein the first firing line side of the mast is opposite the second firing line side of the mast.

10. Monohull offshore drilling vessel according to claim 1, wherein the vessel further comprises one or more cranes, which are mounted to the upper deck.