invention and a tubular component which is located in a central passage of the blow out preventer housing, the locking part when in its locking position, engaging with the tubular component to prevent or restrict translational movement of the tubular component along the central passage of the blow out preventer housing.

According to another aspect of the present disclosure, we provide a blow out preventer including a housing, and a first and second fluid pressure actuated locking parts, each of which is provided in an aperture extending from the exterior of the housing to the interior of the housing, and movable from a retracted position in which the locking part does not extend into the interior of the housing to a locking position in which the locking part extends into the interior of the housing, the first and second fluid pressure operated locking parts being separated longitudinally relative to the housing, the first locking part when in its locking position, engaging with the tubular component in a manner that a lowermost end of the tubular component is resting on top of the first locking part, to prevent or restrict translational movement of the tubular component in a first direction along the central passage of the blow out preventer housing, and the second locking part, when in its locking position, engaging with the tubular component in a manner that an uppermost end of the tubular component is below the second locking part, to prevent or restrict translational movement of the tubular component in a second direction along the central passage of the blow out preventer housing.

According to a further aspect of the present disclosure, we provide a blow out preventer assembly including the blow out preventer according to the above aspect and the tubular component which is located in a central passage of the blow out preventer housing, the locking part when in its locking position, engaging with the tubular component to prevent or restrict translational movement of the tubular component along the central passage of the blow out preventer housing. A method of supporting a tubular component in a blowout preventer is also provided. The method includes the steps of: providing a

blowout preventer according to the above aspect; moving the second locking part to the retracted position; moving the first locking part to the locked position; dropping the tubular component into the housing so that the lowermost end of the tubular component rests on top of the first locking part; and after the step of dropping, moving the second locking part to the locking position so that the uppermost end of the tubular component is below the second locking part and bears against an lower surface of the second locking part, whereby a translational movement of the tubular component in the housing is restricted.

According to another aspect of the present disclosure, we provide a blow out preventer including: a housing having a longitudinal axis and being divided into a first housing part and a second housing part; a plurality of fasteners, movement of the first housing part relative to the second housing part being prevented by the plurality of fasteners, each fastener including a shaft which extends through a fastener receiving passage provided in the first housing part into a fastener receiving passage provided in the second housing part; and fluid flow passages extending within the housing in a longitudinal direction from the first housing part of the housing to the second housing part of the housing, the fluid flow passages being interspersed between fastener receiving passages in a circumferential direction. The fastener receiving passages extend from a shoulder in the exterior surface of the housing which joins a smaller outer diameter portion of housing with a larger outer diameter portion of housing, into the housing, and the fasteners are each provided with a head at one end of the shaft, when in use, the head engaging with the shoulder.

An embodiment of the invention will now be described, by way of example only, with reference to the accompanying drawings, of which

FIGURE 1 is a longitudinal cross-section through a BOP stack including three BOPs in accordance with the invention,

FIGURE 2 is a longitudinal cross-section through the BOP stack shown in Figure 1 with a seal assembly positioned in the BOP stack,

FIGURE 3 is a perspective side view of the BOP stack illustrated in Figure 1,

FIGURE 4 is a detailed view of the portion of the cross-section through the BOP stack marked X in Figure 1,

FIGURE 5 is a detailed view of a cross-section through one of the lower locking dogs in the BOP stack illustrated in Figure 1,

CLAIMS

1. A blow out preventer comprising a housing, and a first and second fluid pressure actuated locking parts, each of which is provided in an aperture extending from the exterior of the housing to the interior of the housing, and movable from a retracted position in which the locking part does not extend into the interior of the housing to a locking position in which the locking part extends into the interior of the housing,

wherein the first and second fluid pressure operated locking parts are separated longitudinally relative to the housing, the first locking part when in its locking position, engaging with a tubular component in a manner that a lowermost end of the tubular component is resting on top of the first locking part, to prevent or restrict translational movement of the tubular component in a first direction along the central passage of the blow out preventer housing, and the second locking part, when in its locking position, engaging with the tubular component in a manner that an uppermost end of the tubular component is below the second locking part, to prevent or restrict translational movement of the tubular component in a second direction along the central passage of the blow out preventer housing.

2. The blow out preventer according to claim 1 wherein two fluid pressure operated locking parts are provided, the two fluid pressure operated locking parts being separated longitudinally relative to the housing.

3. A blow out preventer assembly including the blow out preventer of claim 1 and the tubular component which is located in a central passage of the blow out preventer housing, the locking part when in its locking position, engaging with the tubular component to prevent or restrict translational movement of the tubular component along the central passage of the blow out preventer housing.

4. A method of supporting a tubular component in a blowout preventer, the method comprising the steps of:

providing a blowout preventer according to claim 1;

moving the second locking part to the retracted position;

moving the first locking part to the locked position;

dropping the tubular component into the housing so that the lowermost end of the tubular component rests on top of the first locking part; and

after the step of dropping, moving the second locking part to the locking position so that the uppermost end of the tubular component is below the second locking part and bears against an lower surface of the second locking part, whereby a translational movement of the tubular component in the housing is restricted.

5. A blow out preventer comprising:

a housing having a longitudinal axis and being divided into a first housing part and a second housing part;

a plurality of fasteners, movement of the first housing part relative to the second housing part being prevented by the plurality of fasteners, each fastener including a shaft which extends through a fastener receiving passage provided in the first housing part into a fastener receiving passage provided in the second housing part; and

fluid flow passages extending within the housing in a longitudinal direction from the first housing part of the housing to the second housing part of the housing, the fluid flow passages being interspersed between fastener receiving passages in a circumferential direction,

wherein,

the fastener receiving passages extend from a shoulder in the exterior surface of the housing which joins a smaller outer diameter portion of housing with a larger outer diameter portion of housing, into the housing, and

the fasteners are each provided with a head at one end of the shaft, when in use, the head engaging with the shoulder.

6. The blow out preventer of claim 5 wherein the fasteners comprise a shaft which, in use, extends into one of the fastener receiving passages, at least a portion of which is threaded, and at least a portion of the fastener receiving passage in one or both of the first of second part of the housing is provided with a correspondingly threaded portion so that, in use, the threaded portion of the shaft of each fastener is engaged with the threaded portion of fastener receiving passage.