use of rams for the closing of the flow passageway.

[0025] It is another object of the present invention to provide a capping stack that provides the ability to capture fluids from the subsea well.

[0026] It is a further object of the present invention to provide a capping stack which allows the weight of the capping stack to be actively used to create pressure against the flow of fluid from the well.

[0027] It is still another object of the present invention to provide a capping stack that can be easily maneuvered between the risers of tension leg platforms or spar platforms.

[0028] It is still a further object of the present invention to provide a capping stack that is relative easy to handle on boats and offshore platforms and easily within the limits of existing equipment.

[0029] It is still a further object of the present invention to provide an assembled capping stack that can be shipped as air freight, on demand, to a desired location.

[0030] It is still a further object of the present invention to provide a capping stack that minimizes the risk of damage to a wellhead.

[0031] These and other objects and advantages of the present invention will become apparent from a reading of the attached specification and appended claims.

BRIEF SUMMARY OF THE INVENTION

[0032] According to one aspect of the present invention, there is provided a capping stack for use with a subsea well. The capping stack includes a body with a flow passageway extending therethrough. The flow passageway has an inlet suitable for connection to a fluid passageway of a blowout preventer or to a wellhead of subsea well. The body has a first bore having one end opening to an outlet end of the flow passageway. The first bore extends upwardly from the flow passageway. The body of the second bore has one end opening to the outlet end of the flow passageway. The second bore also extends upwardly from the flow passageway. A first flowline is affixed to the first bore and extends upwardly therefrom. A second flowline is affixed to the second bore and extends upwardly therefrom. A first valve is cooperative with the first flowline so as to be movable between an open position and a closed position. The open position is suitable allowing fluids from the subsea well to flow through the first flowline. The closed position is suitable for blocking fluids from passing outwardly of the first flowline. A second valve is cooperative the second flowline so as to be movable between an open position and a closed position. The open position of the second valve allows fluid from the subsea well to flow through the second flowline. The closed position

of the second valve blocks fluid from passing outwardly of the second flowline.

[0033] In the present invention, a connector is affixed to a lower end of the body. The connector is suitable for connecting the body to either the blowout preventer or the wellhead. A frame is connected to the body and extends upwardly therefrom.

[0034] The first bore diverges away from the second bore in a direction away from the outlet end of the flow passageway. The first bore extends an angle of 60° or less to vertical. The second bore extends at an angle of 60° or less to vertical. One end of the first bore is in spaced relation to the end of the second bore at the outlet end of the flow passageway. Each of the first and second bores has a cross-sectional area less than a cross-sectional area of the flow passageway.

[0035] In the present invention, there can be a third bore having one end opening to the outlet end of the flow passageway. The third bore extends upwardly from the flow passageway. A third flowline is affixed to the third bore and extends upwardly therefrom. A third valve is cooperative with the third flowline so as to be movable between an open position and a closed position. The open position of the third valve allows fluids from the subsea well to flow through the third flowline. The closed position of the third valve blocks fluids from passing outwardly of the third flowline. The third bore diverges away from the first and second bores in a direction away from the outlet end of the flow passageway.

[0036] In the present invention, the first valve can include a pair of valves that are cooperative with the first flowline. The pair of valves are in spaced relationship to each other. The second valve can also be a pair of valves that are cooperative with the second flowline. The pair of valves of the second valve are in spaced relationship to each other.

[0037] Each of the first and second flowlines includes a first portion having a first end and a second end. The first end connected to the respective bore. The first portion extends at an acute angle to vertical away from the respective bore. Each of the first and second flowlines also includes a second portion extending from the second end of the first portion and extending vertically upwardly therefrom. Each of the first and second flowlines has connecting portion at an upper end thereof. This connecting portion is suitable for connection to a conduit so as to allow fluids from the subsea well to flow therefrom.

[0038] A lifting mechanism can be affixed to an upper portion of the frame in a location generally centrally of the frame. This lifting mechanism is suitable for allowing a hoist or a crane to lift the capping stack and to lower the capping stack, as desired.

[0038a] According to another aspect of the present invention, there is provided a flow diverting system for use with a subsea well. The flow diverting system comprises: a blowout preventer; a body connected to an upper end of said blowout preventer, said body having a flow passageway extending therethrough, said flow passageway of said body having an inlet end and an outlet end, said inlet end suitable for connection to a fluid passageway of said blowout preventer, said body having a first bore having one end opening to said outlet end of said flow passageway, said first bore extending upwardly from said flow passageway, said body having a second bore having one end opening to said outlet end of said flow passageway, said second bore extending upwardly from said flow passageway; a first flowline affixed to said first bore and extending upwardly therefrom; a second flowline affixed to said second bore and extending upwardly therefrom; a first valve cooperative with said first flowline so as to be movable between an open position and a closed position, said open position allowing fluids from the subsea well to flow through said first flowline, said closed position blocking fluids from passing outwardly of said first flowline; and a second valve cooperative said second flowline so as to be movable between an open position and a closed position, said open position of said second valve allowing fluids from the subsea well to flow through said second flowline, said closed position of said second valve blocking fluids from passing outwardly of said second flowline.