

MADE-UP FLANGE LOCKING CAP

Abstract of the Disclosure

A cap (11) is lowered onto and secured to a subsea member (13) with an external flange (17), effecting a seal between the external flange (17) and cap (11). The cap (11) includes a tubular outer body (29) defining a cavity (43), and a tubular inner body (27) defining a bore (39), wherein the lower end of the inner body (27) resides within the cavity (43). The cap (11) also includes a lower engaging member (53) coupled to the outer body (29) that is radially movable between an inward state and an outward state and configured to alternately engage and disengage at least one of a backside of the external flange (17). The cap (11) includes an upper engaging member (59) coupled to the outer body (29) and being radially movable independently of the lower engaging member (53) between an inward state and an outward state and configured to engage and disengage the inner body (27).

Figure 1