

## **Subsea Wellhead Protection Structure, Canopy and Installation**

### **Abstract**

A subsea wellhead protection structure (WPS) comprises a base frame (1) and a removable canopy (2), the base frame providing a protected space for a subsea wellhead when in use, the canopy being adapted to engage the base frame and provide cover over the protected space. The base frame and canopy incorporate a plurality of locking means each comprising a locking pin (19) and corresponding locking sleeve (21), which are adapted to engage and disengage under opposite loading, requiring a lower load for a locking sleeve (21) to lock onto a locking pin (19) than to disengage therefrom. The WPS may additionally incorporate leg housings (15) for telescopic legs (16) with a mechanical release mechanism (41, 42a, 42b, 43) actuated by the weight of the canopy to allow the telescopic legs (16) to extend under their own weight. The canopy (2) may incorporate a door latching mechanism (31) comprising a handle bar with two differently sized and weighted arms (31b, 31c), and handle (31a) and a first latching element (31d) adapted to engage a corresponding second latching element (37) on the canopy frame.

(Fig. 11)