

SEALED, HEAT-INSULATED VESSEL HOUSED IN A BUOYANT STRUCTURE**ABSTRACT**

A floating structure comprises a sealed and thermally insulated tank (1). An upper bearing wall (7) bears a turret-like cargo tank dome (15, 21) intended for the passage of cargo handling equipment (16, 22). The turret-like cargo tank dome comprises an internal fluidtight wall forming a sheath (22) engaged through the opening in the upper bearing wall (7) and connected in fluidtight manner to the primary sealing membrane (13) of the upper tank wall all around the sheath. Respective primary and secondary venting devices allow gas to be vented respectively from the primary and secondary spaces of the turret-like cargo tank dome. A gas reservoir containing a tracer gas that is non-condensable or that has a condensation temperature below the low temperature of the liquefied gas contained in the tank is connected via a control valve to one of the venting devices that are the primary venting device and the secondary venting device. A gas detector able to detect the tracer gas is in communication with the other of those devices.

Figure to be published: 1