

Title (en)
STORAGE RESERVOIR FOR CRYOGENIC LIQUIDS

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EP 0401154 B1 19930609 (DE)

Application
EP 90730007 A 19900410

Priority
DE 3913253 A 19890422

Abstract (en)
[origin: US5018639A] The invention relates to a container for the storage of low-temperature liquids, especially liquefied gases, consisting of an outer container made of reinforced or prestressed concrete, equipped perhaps with a steel dome, and an open inner steel tank, intended to hold the liquid, the steel tank resting on an insulator; an annular space is provided between the two tanks, this space containing a granular insulating material and, in its lower part, a spacer element. In order to protect the steel tank from sliding during an earthquake and in order to absorb the horizontal forces unleashed during such an event, an annular hollow container made of steel is installed between the spacer and the wall of the concrete container, to which it is firmly attached. This hollow container, filled partially with a material that is liquefiable by heating, has some heating elements. The spacer is attached firmly to the hollow container and it is also firmly or tensionally connected to the steel tank. The material in the hollow container, which is preferably a bitumen, is heated during filling and emptying of the steel tank, and consequently does not prevent the deformations of the steel tank caused by the temperature changes during filling and emptying.

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Cited by
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