

Title (en)

CLOSING DEVICE FOR SKELETON BOXES FOR TRANSPORTING LIQUEFIED GAS BOTTLES

Publication

EP 0549991 A3 19931208 (DE)

Application

EP 92121708 A 19921221

Priority

ES 9103936 U 19911230

Abstract (en)

[origin: EP0549991A2] Skeleton boxes for liquefied gas containers conventionally have a loading opening formed in one side wall of the box and, as a closing device, a metal closure rod which divides the loading opening transversely and is held in metal bushes. However, the use of metal leads to a progressive deformation of these metal parts, due to the gas containers knocking against the closure rod, up to non-functionability of the closing device. According to the invention, such wear is ruled out by a rigid design of the closure rod (5) and of the holding elements (1, 1') made of plastic material. The closing device is composed of a closure rod (5) which is preferably T-shaped in cross-section and two holding elements (1, 1') which are fitted over it in mirror image and are placed with a U-shaped hooked part 2 against a longitudinal bar (6) of the skeleton box (8) in each case. The closing device (1, 5, 1') which holds itself together is operated by displacing it along the longitudinal bars (6), devices serving for bounding (7) the displacement path towards the bottom and for retention (9) in the uppermost position. The skeleton box (8) is preferably likewise made of plastic in a rigid design. <IMAGE>

IPC 1-7

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IPC 8 full level

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Citation (search report)

- [X] FR 1585919 A 19700206
- [A] EP 0301482 A2 19890201 - BITTMANN BITO LAGERTECH [DE]
- [A] GB 2036688 A 19800702 - LEE M, et al
- [A] DE 8634415 U1 19870312
- [A] FR 2577202 A1 19860814 - TOTALGAZ CIE FSE [FR]
- [A] FR 2035997 A1 19701224 - MUNDUS ESTRUCTURAS
- [A] FR 2643043 A1 19900817 - SALAUN ROGER [FR], et al

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