

Title (en)
RAFT INFLATION VALVE.

Title (de)
SCHLAUCHBOOTAUFBLASVENTIL.

Title (fr)
SOUPAPE DE GONFLAGE DE RADEAU.

Publication
EP 0141837 A4 19880121 (EN)

Application
EP 84901839 A 19840413

Priority
• US 48445483 A 19830413
• US 52523483 A 19830822

Abstract (en)
[origin: WO8404078A1] A raft inflation valve (14) includes a valve body (18) having an inlet (22), an outlet (46), an internal cylinder (24) open at one end to the valve outlet (46), and an inlet passage (28) leading from the valve inlet (22) to and intersecting with the midsection of the internal cylinder (24). A double-ended balanced piston (54) with O-ring seals (60, 64) on both ends is positioned on the internal cylinder (24) so that one end blocks the passage to the outlet (46). In this position (valve closed) the O-ring seals (60, 64) are on opposite sides of the intersection of the inlet passage (28) which results in a balancing of the gas pressure forces acting on the piston (54). When the valve (14) is actuated, a firing mechanism (72, 74) causes the piston to move away from the outlet end of the internal cylinder (24) so that the piston head (56) partially uncovers the outlet passage. Once the passage (28) is partially uncovered, the gas pressure forces on the piston (54) become unbalanced and the pressure rapidly accelerates the movement of the piston (54) the remaining distance out of the passage (28), which then allows the inflation gas to flow freely through the valve (14) to the raft.

IPC 1-7
B63C 9/24; **F16K 3/28**

IPC 8 full level
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CPC (source: EP)
B63C 9/24 (2013.01)

Citation (search report)
• [X] GB 798366 A 19580716 - GASACCUMULATOR SVENSKA AB
• [X] FR 1218111 A 19600509
• [Y] US 3485267 A 19691223 - MERCER GEORGE KENNETH
• [X] CH 378625 A 19640615 - GLOCKER PAUL L [CH]
• [Y] FR 1173226 A 19590223 - L ANGEVINIERE SOC IND, et al
• [A] GB 1350464 A 19740418 - SARGENT INDUSTRIES

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DE FR GB

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