

Publication

EP 0137095 A2 19850417 (DE)

Application

EP 84103412 A 19840328

Priority

DE 3322020 A 19830618

Abstract (en)

[origin: US4527502A] An expelling mechanism adapted for use with discharge tubes and drain tubes of submarines for ejecting a weapon by compressed air includes a chamber formed with an outlet opening, and adapted to substantially communicate selectively with a storage container holding compressed gas, a discharge valve which may be moved towards the opening in a closing direction, and away therefrom in an opening direction at a selectable opening velocity, and a hydraulic control device for controlling the movement of the discharge valve. The hydraulic control device includes a cylinder adapted to be filled with hydraulic fluid, a piston reciprocally movable along a stroke within the cylinder, and partitioning the cylinder into two cylinder chambers, an overflow channel establishing communication between the cylinder chambers, and a connecting device connecting the discharge valve with the hydraulic control device. The outlet opening and the overflow channel have cross-sections which are variable in dependence of the stroke, respectively, so that the outlet opening increases as the discharge valve moves in the opening direction. The opening velocity of the discharge valve may be controlled, and different respective cross-sections of the overflow channel may be set in dependence of the stroke.

Abstract (de)

Zur Steuerung eines Ausblasventils einer Ausblaseeinrichtung ist zur höhenunabhängigen konstanten Ausstoßgeschwindigkeit ein hydraulisches Steuerventil angeordnet. Hierbei ist ein Kolben in einem Zylinder geführt und die abgeteilten Zylinderräume sind durch Überströmverbindungen miteinander verbunden. Durch Ausgestaltungen der Überströmverbindungen sind in Abhängigkeit des Kolbenhubes unterschiedliche Überströmquerschnitte einstellbar.

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