

Title (en)

Pressure plate for a mine, in particular an anti-tank mine, and a mine provided with such a plate.

Title (de)

Druckplatte für eine Mine, insbesondere zur Panzerbekämpfung, und Mine mit einer solchen Platte.

Title (fr)

Plateau de pression pour mine, notamment antichar, et mine pourvue d'un tel plateau.

Publication

EP 0236176 A1 19870909 (FR)

Application

EP 87400181 A 19870127

Priority

FR 8601238 A 19860129

Abstract (en)

[origin: US4718347A] A pressure plate for a mine comprises a hydraulic circuit. The mine is triggered by complete depression of the pressure plate. The hydraulic circuit comprises a pressure chamber containing a fluid that is compressed by a force applied to the pressure plate. The fluid is evacuated from the pressure chamber in a controlled manner through a depressurization unit in response to a sustained force greater than a predetermined threshold being applied to the pressure plate. A bistable member moves between a first position in which it prevents communication between the pressure chamber and the depressurization unit and a second position in which it establishes communication between the pressure chamber and the depressurization unit. The bistable member is initially in the first position when no force is exerted on the pressure plate. It remains in the first position so long as the pressure plate is subjected to an increasing or stable force. It switches to the second position when the pressure of the fluid decreases after it has increased due to a force of this kind. Thus, after increasing to a maximum value and then decreasing to a minimum value, any increase in the force results in depressurization of the fluid and complete depression of the pressure plate. This explodes the mine.

Abstract (fr)

Le circuit hydraulique du plateau de pression (7) d'une mine comporte un élément bistable (300) susceptible de passer d'une première position, fermant le passage entre une chambre de pression (100) et un organe de décompression (200), à une seconde position, ouvrant ce passage, l'élément bistable se trouvant initialement à la première position en l'absence d'effort exercé sur le plateau, y demeurant tant que le plateau est soumis à un effort croissant ou stable, et basculant à la seconde position lorsque la pression du fluide vient à décroître après avoir augmenté sous l'effet d'un tel effort, de sorte que, après passage à une valeur maximale puis minimale, un effort croissant à nouveau provoque la décompression du fluide et l'enfoncement complet du plateau, permettant ainsi la libération d'un percuteur (3) et l'initiation d'une charge pyrotechnique utile (2).

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