

Title (en)

Device for the suppression of dust and/or gas explosions

Title (de)

Vorrichtung zur Unterdrückung von Staub- und/oder Gasexplosionen

Title (fr)

Dispositif pour la suppression des explosions des poussières et/ou de gaz

Publication

EP 0882472 A1 19981209 (DE)

Application

EP 97810347 A 19970604

Priority

EP 97810347 A 19970604

Abstract (en)

A space, subject to risk of gas or particle explosion, is protected by an extinguishing powder retained at pressure behind a flap. This may be released at a light pressure increase in the space by means of a sensor, linear electric motor and a system of linkages with a large degree of mechanical advantage. The pressurised extinguishing material is contained in a vessel (11) whose opening (101) is sealed with a stopper (1) hinged (2,3) on one side and retained by a ledge (5) and clasp (6). This pivots on a shaft (40) and has an extending lever (42) contacting a roller (61) in line with three further rollers (62-64). A lightweight plate (84), also in contact with the rollers, has a slot (85) into which a pin (82) is engaged. The pin is on the axially moveable shaft (81) of a linear motor (90) which is activated by a control system and pressure or temperature sensor (30). The plate (84) holds the inner two rollers (62,63) and on lifting causes the outer pair (61,64) to move together, releasing the catch holding the vessel (100) stopper in position.

Abstract (de)

Zur Unterdrückung von Staub- und/oder Gasexplosionen in industriellen Anlagen werden Löschmittel aus einem Behälter (100), durch rasches Öffnen einer Klappe (1), unter einem Druck (p) in den Explosionsraum (12) eingeblasen. Zur Elimination pyrotechnischer Elemente und zur Beschleunigung des Ansprechverhaltens ist ein Auslösemechanismus (80) vorgesehen, welcher über einen Schieber (84) Rollen (61-64) bewegt. Dadurch wird ein Hebel (42) entriegelt, der seinerseits, über eine Kraftumsetzung die auf einem kippbaren Sims (9) aufliegende Klappe (1,5) entriegelt und das unter dem Druck (p) stehende Lösmittel freigibt. <IMAGE>

IPC 1-7

A62C 37/42; **A62C 3/04**

IPC 8 full level

A62C 3/04 (2006.01); **A62C 37/42** (2006.01)

CPC (source: EP)

A62C 3/04 (2013.01); **A62C 37/42** (2013.01)

Citation (search report)

- [X] GB 2122891 A 19840125 - EDWARDS LIMITED CLIFFORD
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Designated contracting state (EPC)

AT BE CH DE DK ES FI FR GB IT LI NL SE

DOCDB simple family (publication)

EP 0882472 A1 19981209

DOCDB simple family (application)

EP 97810347 A 19970604