

Title (en)

PERFORATION GUN SYSTEM PRODUCING SELF-CLOSING PERFORATION HOLES

Title (de)

PERFORATIONSKANONENSYSYSTEM MIT SELBSTVERSCHLIESSENDEN DURCHSCHUSSLÖCHERN

Title (fr)

SYSTEME DE CANON DE PERFORATION PRODUISANT DES TROUS DE PERFORATION A OBTURATION AUTOMATIQUE

Publication

EP 1685308 B1 20071010 (DE)

Application

EP 04765481 A 20040922

Priority

- EP 2004010609 W 20040922
- DE 10344958 A 20030927
- DE 102004004750 A 20040130
- DE 102004011616 A 20040310
- DE 102004043948 A 20040911

Abstract (en)

[origin: WO2005033472A1] The invention relates to a perforation gun comprising an external gun barrel (1) in the interior of which perforators (10) are located which can be ignited via a fuse (11) extending through the gun barrel (1) and which, after ignition, pierce the gun barrel (1) with perforation holes (13), whereby means are provided which automatically close the perforation holes (13). According to an embodiment of the invention, the means for automatically closing the perforation holes comprise cartridges including a swellable two-component foam. Said cartridges are located inside the gun barrel (1) and can be broken up by the ignited fuse (11), thereby allowing foam to escape from the cartridges, allowing it to swell and obliterate the perforation holes (13). If the means for automatically closing the perforation holes (13) comprise a sliding tube (4) that can be displaced after perforation by an adjusting device by at least the diameter of the perforation hole (13), the sliding tube (4) is located coaxially between the perforators (10) and the gun barrel (1).

IPC 8 full level

E21B 43/119 (2006.01); **F42D 99/00** (2009.01)

CPC (source: EP US)

E21B 43/119 (2013.01 - EP US)

Cited by

DE102010048044A1; WO2011045021A2; EP2354443A3; EP3269922A1; WO2011045021A3

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2005033472 A1 20050414; AT E375435 T1 20071015; CA 2539244 A1 20050414; CA 2539244 C 20120221; DE 502004005228 D1 20071122; EP 1685308 A1 20060802; EP 1685308 B1 20071010; NO 20061842 L 20060616; NO 336706 B1 20151026; US 2007107589 A1 20070517; US 7607379 B2 20091027

DOCDB simple family (application)

EP 2004010609 W 20040922; AT 04765481 T 20040922; CA 2539244 A 20040922; DE 502004005228 T 20040922; EP 04765481 A 20040922; NO 20061842 A 20060426; US 57358104 A 20040922