

Title (en)

LAUNCHING DEVICE AND PROJECTILE ESPECIALLY ADAPTED FOR SUCH A LAUNCHING DEVICE

Title (de)

WERFER UND SPEZIELL FÜR EINEN SOLCHEN WERFER ANGEPASTES PROJEKTIL

Title (fr)

EQUIPEMENT D'ARMEMENT ET PROJECTILE SPECIALEMENT ADAPTE POUR UN TEL EQUIPEMENT D'ARMEMENT

Publication

EP 3187816 A1 20170705 (FR)

Application

EP 16206899 A 20161226

Priority

FR 1563479 A 20151230

Abstract (en)

[origin: US2017299328A1] Weapon equipment including a launcher and a projectile, the projectile having an operating head, a tail and a weight between 750 g and 1000 g. The tail includes a tube made of an aluminum alloy having an inner diameter between 21.5 and 22.5 mm, a stroke between first and second locations between 110 mm and 120 mm, and a thickness in the vicinity of the first location between 4.6 mm and 5 mm, a piston movable between the first and second locations and defining with the tube a hermetically-sealed propulsion chamber, a propulsion charge placed in the propulsion chamber, the propulsion charge including a powder having a heat of combustion between 3500 J/g and 4000 J/g, the propulsion charge having a mass greater than 2.4 g and less than 3.7 g.

Abstract (fr)

Equipement d'armement comprenant un lanceur et un projectile (25), le projectile (25) ayant un poids compris entre 750 g et 1000 g, le projectile (25) comprenant une tête opérante (26) et une queue (40), la queue (40) comportant : - un tube (41) en alliage d'aluminium présentant un diamètre intérieur (Di) compris entre 21,5 mm et 22,5 mm, une course (c) entre des premier (E1) et deuxième (E2) emplacements comprise entre 110 mm et 120 mm, et une épaisseur (e) au voisinage du premier emplacement (E1) comprise entre 4,6 mm et 5 mm, - un piston (60) déplaçable entre les premier (E1) et deuxième (E2) emplacements et délimitant avec le tube (41) une chambre de propulsion (65) hermétiquement fermée, - une charge de propulsion (70) placée dans la chambre de propulsion (65), la charge de propulsion (70) comprenant une poudre ayant une chaleur de combustion comprise entre 3500 J/g et 4000 J/g, la charge de propulsion (70) ayant une masse strictement supérieure à 2,4 g et inférieure à 3,7 g.

IPC 8 full level

F42B 29/00 (2006.01); **F41F 1/06** (2006.01); **F41F 7/00** (2006.01); **F42B 12/24** (2006.01); **F42B 30/10** (2006.01); **F42C 19/10** (2006.01)

CPC (source: CH EP US)

F41F 1/06 (2013.01 - CH EP US); **F41F 7/00** (2013.01 - EP US); **F42B 12/24** (2013.01 - CH EP US); **F42B 29/00** (2013.01 - CH EP US); **F42B 30/10** (2013.01 - CH EP US); **F42C 19/0819** (2013.01 - CH US); **F42C 19/10** (2013.01 - EP US)

Citation (applicant)

RENÉ MALFATTI: "Manuel de Rechargement", 2004, pages: 43 - 45

Citation (search report)

- [Y] FR 1326176 A 19630503 - ENERGA
- [A] FR 2488385 A1 19820212 - VALINOR SA [LI]
- [A] DE 102013010502 A1 20150108 - RHEINMETALL WAFFE MUNITION [DE]
- [A] FR 1589250 A 19700323
- [IY] ANONYMOUS: "Fly-K mortar systems - excellent stealth capabilities and tremendous tactical potential", 15 February 2010 (2010-02-15), XP002760779, Retrieved from the Internet <URL:http://www.rheinmetall-defence.com/de/rheinmetall_defence/public_relations/news/detail_1436.php> [retrieved on 20160815]

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3187816 A1 20170705; **EP 3187816 B1 20181226**; **EP 3187816 B9 20190626**; CH 711974 A2 20170630; CH 711974 B1 20200415; DK 3187816 T3 20190225; DK 3187816 T5 20190923; ES 2708660 T3 20190410; ES 2708660 T9 20190823; FR 3046457 A1 20170707; FR 3046457 B1 20180216; HU E041271 T2 20190528; HU E041271 T4 20191128; PL 3187816 T3 20190531; RS 58306 B1 20190329; RS 58306 B9 20190830; US 2017299328 A1 20171019; US 9921032 B2 20180320

DOCDB simple family (application)

EP 16206899 A 20161226; CH 5542016 A 20160427; DK 16206899 T 20161226; ES 16206899 T 20161226; FR 1563479 A 20151230; HU E16206899 A 20161226; PL 16206899 T 20161226; RS P20190145 A 20161226; US 201615390630 A 20161226