

Title (en)

Automatic feeding device for primer cartridges of a gun.

Title (de)

Automatische Zufuhrvorrichtung für Zündkartuschen einer Artilleriekanone.

Title (fr)

Dispositif d'alimentation automatique en étoupilles d'un canon d'artillerie.

Publication

EP 0024997 A1 19810311 (FR)

Application

EP 80401233 A 19800828

Priority

FR 7922042 A 19790904

Abstract (en)

1. An automatic firing-tube feed device, for artillery gun, incorporating a tube, a breech wedge (1), a breech ring, mounted on the breech, for the purpose of igniting a propelling charge contained in a caseless, flammable case or cartridge bag type ammunition, said feed device incorporating : - one firing-tube holder assembly (7), moveable in a step-by-step rotation around an axis (Z-Z'), on which n firing-tubes (8) are held in an arrangement parallel to said axis and spaced at regular intervals around a circle centered on said axis, - one control means of the firing-tube holder (7) in step-by-step rotation (10, 11, 12) (2 pi/n pitch) and in translation, respectively, around and along the axis, permitting the firing-tube replacement after each round of ammunition has been fired, - one breech-hammer holder assembly (33), retractable in relation to the firing-tube holder (7) at the time of the firing-tube replacement operation, and traveling in a plane perpendicular to the firing-tube holder axis in order to clear the latter at the time of the firing-tube replacement operation, characterized by the fact that the firing-tube holder control means incorporates : - one grooved shaft-grooved bore assembly (14, 16), the grooved shaft (14) with its axis common with the firing-tube holder (7) axis (Z-Z'), interlocking with the latter and sliding in the grooved bore, the shaft and bore groove ends (13, 15) being provided with chamfers (17), said shaft's chamfers and grooves working together with the bore ones, in order to permit the firing-tube holder step-by-step rotation, - one circular gear-rack pair (10, 11) to permit the translation motion along the firing-tube holder axis, the rack (11) interlocking with the firing-tube holder, and having the same axis as the latter, the gear (10) being actuated when the gun breech (1) is operated.

Abstract (fr)

Le secteur technique de l'invention est celui des dispositifs d'alimentation automatique en étoupilles d'un canon d'artillerie. Le dispositif selon l'invention comprend: -un porte-étoupilles 7 de forme circulaire sur lequel sont disposées n étoupilles 8, - un ensemble de commande de changement d'étoupille comportant : un pignon 10, une crémaillère circulaire 11, un arbre cannelé 14 et une bague cannelée 16, - une culasse port percuteur 33 s'escamotant vis à vis du porte-étoupilles lors de la manoeuvre de changement d'étoupille. Application au domaine de l'armement

IPC 1-7

F41F 13/12

IPC 8 full level

F41A 19/57 (2006.01)

CPC (source: EP)

F41A 19/57 (2013.01)

Citation (search report)

- [X] FR 1268250 A 19610728 - RHEINMETALL GMBH
- [A] GB 191029929 A 19111227 - DAWSON ARTHUR TREVOR [GB], et al
- [A] GB 268053 A 19270329 - ARMSTRONG WHITWORTH CO ENG, et al

Cited by

CN109686192A; GB2240385A; US5115716A; GB2240385B

Designated contracting state (EPC)

AT BE CH DE GB IT LU NL SE

DOCDB simple family (publication)

EP 0024997 A1 19810311; EP 0024997 B1 19830209; AT E2459 T1 19830315; DE 3061910 D1 19830317; ES 494749 A0 19810601; ES 8105471 A1 19810601; FR 2464451 A1 19810306; FR 2464451 B1 19830930; NO 149401 B 19840102; NO 149401 C 19840411; NO 802590 L 19810305

DOCDB simple family (application)

EP 80401233 A 19800828; AT 80401233 T 19800828; DE 3061910 T 19800828; ES 494749 A 19800904; FR 7922042 A 19790904; NO 802590 A 19800903