

Title (en)

ELECTROMAGNETIC FIRING SYSTEM FOR FIREARM WITH INTERRUPTABLE TRIGGER CONTROL

Title (de)

ELEKTROMAGNETISCHES SCHUSSSYSTEM FÜR FEUERWAFFEN MIT ABSCHALTBARER ABZUGSSTEUERUNG

Title (fr)

SYSTÈME DE MISE DE FEU ÉLECTROMAGNÉTIQUE POUR ARMES À FEU AVEC COMMANDE DE DÉCLENCHEMENT INTERRUPTEUR

Publication

EP 4168728 A4 20240717 (EN)

Application

EP 21829239 A 20210126

Priority

- US 202016909577 A 20200623
- US 2021015059 W 20210126

Abstract (en)

[origin: WO2021262253A1] An interruptible electronic trigger system for firearms includes a trigger unit comprising an electromagnetic actuator operably coupled to the firing mechanism and a programmable trigger microcontroller. The actuator is changeable between a non-powered unactuated position and powered actuated firing position. Upon detecting user initiated trigger activity, the trigger microcontroller transmits a shot initiated signal to an adaptive optics unit of a fire control targeting system mounted to the firearm when the trigger activity exceeds a preprogrammed trigger setpoint. A targeting microcontroller returns a shot authorization signal to the trigger microcontroller after performing ballistics computations based on sensor input and displaying a corrected reticle on the optics unit sight for user visual alignment with the target. Multiple trigger setpoints may be programmed to confirm continued intent to fire. The trigger microcontroller may deactivate the actuator and permit manual firing when preprogrammed maximum trigger force/displacement limits are exceeded.

IPC 8 full level

F41A 19/59 (2006.01); **F41A 19/17** (2006.01)

CPC (source: EP)

F41A 19/12 (2013.01); **F41A 19/16** (2013.01); **F41A 19/17** (2013.01); **F41A 19/59** (2013.01); **F41A 19/69** (2013.01)

Citation (search report)

- [A] US 10670361 B2 20200602 - GALIE LOUIS M [US], et al
- [A] US 2016061549 A1 20160303 - PATTERSON ROY [US], et al
- [A] US 6321478 B1 20011127 - KLEBES JOHN F [US]
- See also references of WO 2021262253A1

Designated contracting state (EPC)

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