

Title (en)

SINGLE LOOP USER-ADJUSTABLE ELECTROMAGNETIC TRIGGER MECHANISM FOR FIREARMS

Title (de)

EINSCHLEIFIGER, BENUTZERVERSTELLBARER ELEKTROMAGNETISCHER ABZUGSMECHANISMUS FÜR SCHUSSWAFFEN

Title (fr)

MÉCANISME DE DÉTENTE ÉLECTROMAGNÉTIQUE RÉGLABLE PAR L'UTILISATEUR À BOUCLE UNIQUE POUR ARMES À FEU

Publication

EP 3874221 A4 20211201 (EN)

Application

EP 19878616 A 20191030

Priority

- US 201916667009 A 20191029
- US 201862754062 P 20181101
- US 2019058882 W 20191030

Abstract (en)

[origin: WO2020092580A1] A hybrid magnetically variable firing system for a firearm includes a trigger mechanism configured to allow a user to selectively adjust the trigger pull force- displacement profile. In a closed magnetic flux loop configuration, the trigger mechanism includes a selectively energizable electromagnetic and mechanical biasing member providing a static holding torque which creates resistance opposing movement of the trigger. Energizing the electromagnetic at a user- preselected point during the trigger pull event creates a magnetic force opposing the static holding torque, which dynamically changes the trigger pull force required to discharge the firearm. The electromagnetic assists the user in completing the trigger pull thereby creating an adjustable lighter trigger pull. In one embodiment, the electromagnet is energized when the actual trigger pull force applied or trigger displacement reaches a corresponding trigger setpoint preprogrammed into a control circuit. A microcontroller may control operation of the trigger mechanism.

IPC 8 full level

F41A 19/16 (2006.01); **F41A 17/06** (2006.01); **F41A 19/17** (2006.01); **F41A 19/58** (2006.01)

CPC (source: EP)

F41A 17/06 (2013.01); **F41A 19/16** (2013.01); **F41A 19/17** (2013.01); **F41A 19/58** (2013.01)

Citation (search report)

[X] US 2018259285 A1 20180913 - GALIE LOUIS M [US], et al

Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

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