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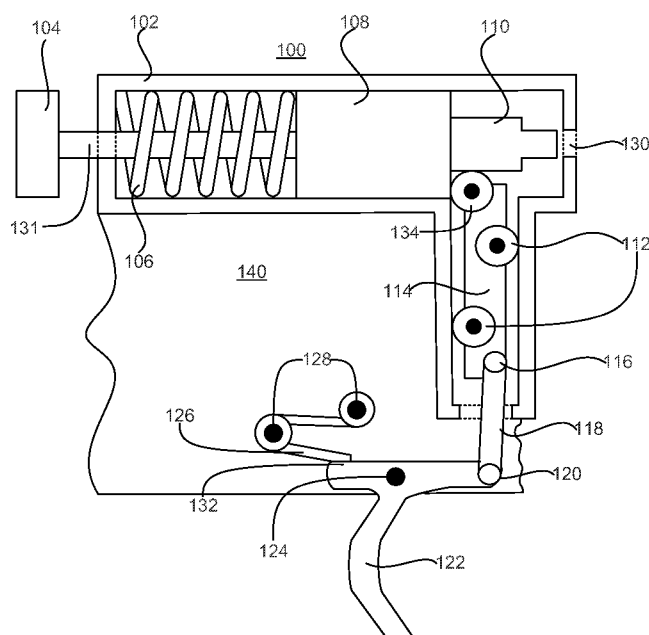
- with international search report (Art. 21(3))
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(54) Title: LOW-FORCE ROLLING TRIGGER

FIG. 1



(57) Abstract: In an embodiment, a low-force, low-friction, short-travel, low-energy control rolling trigger utilizes a rolling element as a trigger-release mechanism in equipment, machines and tools such as for clutches, brakes, actuators, and projectile launchers. The rolling elements within the trigger mechanism reduce the friction, which in-turn reduces the force necessary to discharge trigger. In an embodiment, the trigger is part of a firearm and uses a mechanical trigger. In another embodiment, the trigger is activated by an electronic signal that activates a solenoid, which pulls the rolling element, and thereby releases the striker or in a trigger-release assembly.

A. CLASSIFICATION OF SUBJECT MATTER***F41A 19/10(2006.01)i, F41A 19/11(2006.01)i***

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

F41A 19/10; F41C 19/02; F41C 19/00; F41A 19/09; F41A 19/12

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: trigger, bearing, stricker, spring, linkage, pin and chassis

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	US 04908970 A (BELL, DENNIS L.) 20 March 1990 See abstract, column 4 line 14 - column 8, line 63 and figures 1-25.	1-8, 10, 11, 14-16 9, 12-13
A	US 05852891 A (ONISHI et al.) 29 December 1998 See abstract and figures 1-6.	1-16
A	US 2010-0024273 A1 (DUPERRY et al.) 04 February 2010 See abstract and figures 1-4B.	1-16
A	US 04754567 A (LEHFELDT et al.) 05 July 1988 See abstract and figures 1-8.	1-16



Further documents are listed in the continuation of Box C.



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"P" document published prior to the international filing date but later than the priority date claimed

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"&" document member of the same patent family

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US 04908970 A

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None

US 05852891 A

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US 2010-0024273 A1

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US 04754567 A

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