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(54) Title: VARIABLE BARREL CAMMING SYSTEM FOR FIREARM

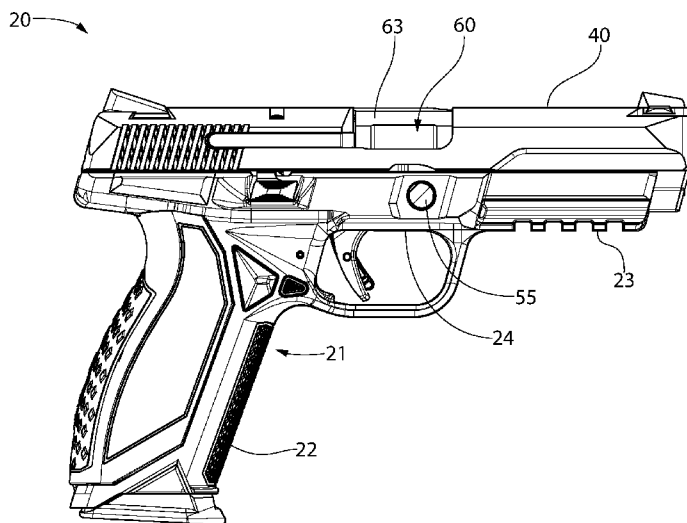


FIG. 1

(57) Abstract: A variable barrel camming system for a firearm includes a linearly reciprocating slide supported by a frame and a barrel removably coupled to the slide for movement therewith. A cam slot on the barrel slideably engages a cam pin mounted transversely in the frame. The slot includes a cam track surface having multiple angles and contours designed to control the motion and orientation of the barrel. When the firearm is discharged, the slide and barrel initially move rearward together under recoil forces generated. The pin slides forward in the slot over the cam track surface which is configured to rotate and uncouple the barrel from the slide which continues rearward alone. The cam track surface has a varying cam profile selected to gradually dissipate the kinetic energy of the barrel/slide unit in a controlled manner, thereby reducing the felt recoil imparted to a user compared to conventional cam systems.



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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

See Search History Document

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

See Search History Document

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

See Search History Document

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2,664,786 A (Guisasola) 05 January 1954 (05.01.1954), entire document, especially Fig. 1, 2, 3, 5; col 1, ln 54 to col 2, ln 3; col 2, ln 12-21; col 2, ln 31-34; col 3, ln 61-62; col 3, ln 69-72;	1-24
A	US 5,734,120 A (Besselink) 31 March 1998 (31.03.1998), entire document, especially Fig. 1, 2; col 8, ln 33-35; col 8, ln 1-6; col 8, ln 13-16;	1-24
A	US 2015/0292828 A1 (Nebeker et al.) 15 October 2015 (15.10.2015), entire document	1-24
A	US 1,618,510 A (Browning) 22 February 1927 (22.02.1927), entire document	1-24
A	US 2011/0289811 A1 (Gentilini et al.) 01 December 2011 (01.12.2011), entire document	1-24
A	US 2010/0005956 A1 (Wossner) 14 January 2010 (14.01.2010), entire document	1-24
T	US 2017/0184358 A1 (Zajk) 29 June 2017 (29.06.2017), entire document	1-24

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