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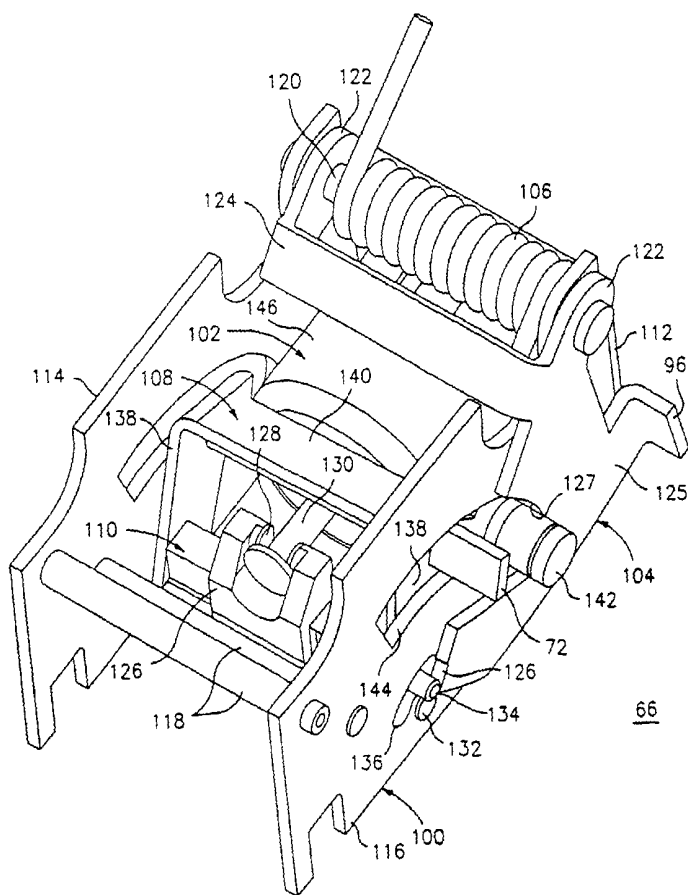
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[Continued on next page]

(54) Title: FAST ACTING HIGH FORCE TRIP ACTUATOR



(57) Abstract: A trip actuator (66) includes a trip spring (106) to bias the trip arm (104) in a clockwise direction about trip arm pivot (120). In the latched and ready to operate state, the clockwise moment about the axis of the latch pivot (132) created by force "F" opposes the counterclockwise moment created about the axis of the latch pivot (132) created by the horizontal component "f_x" of force "f", to hold the latch (110) in the upright position against the force of the trip arm (104). When a trip (triggering) signal is provided to the flux shifter (102), the flux shifter (102) releases the plunger (130). With the force "F" removed, the trip arm (104) will drive the latch pin (134), causing the latch (110) to rotate counterclockwise about the latch pivot (132). As the latch (110) and trip arm (104) rotate, the latch pin (134) slides off the latch surface (126), fully releasing the trip arm (104) and allowing the trip paddle (96) to move the secondary latch tab (50).



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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 H01H71/32 H01H71/50

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)

IPC 7 H01H

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

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

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 620 580 A (MERLIN GERIN) 19 October 1994 (1994-10-19) the whole document ---	1, 2, 4, 5, 11, 12, 14, 15
X	US 4 506 246 A (WONG TAK M) 19 March 1985 (1985-03-19) column 22, line 32 -column 23, line 66 ---	1-5, 8-15, 18-20
A	US 5 453 724 A (GUERRETTE MICHAEL C ET AL) 26 September 1995 (1995-09-26) cited in the application abstract -----	10, 20

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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INTERNATIONAL SEARCH REPORT

information on patent family members

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