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(54) Title: SYSTEM FOR DECOUPLING A CARRIER FOR A PIECE OF AMMUNITION OF A FIREARM

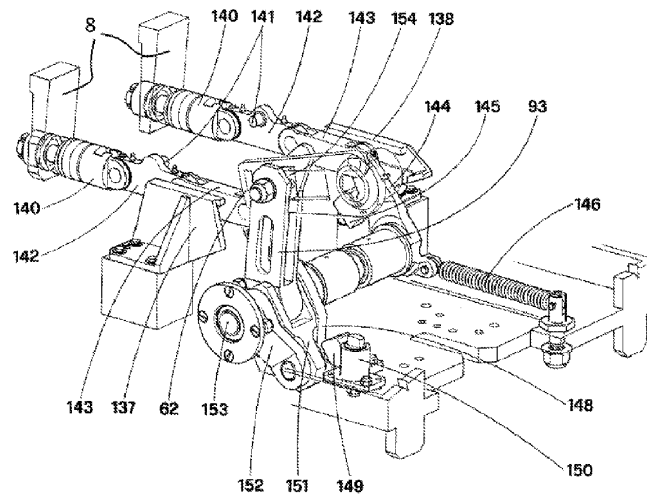


Fig. 4

(57) Abstract: System for decoupling a carrier for a piece of ammunition (42) of a firearm, comprising: a carrier recuperator (60), including: a first and a second cylinder (111, 112) respectively comprising a first and a second piston (63, 67); wherein each piston (63, 67) defines, in the respective cylinder (111, 112), a primary chamber (16, 66) full of liquid, and the two primary chambers (16, 66) are in fluidic communication with each other to allow a flow of liquid; the second piston (67) defines, in the second cylinder (112), a secondary chamber (68) containing a return medium for moving the second piston (67) and pumping the liquid into the primary chamber (16) of the first cylinder (111). The system includes a carrier rearming transmission, comprising: a first and a second articulated connecting rod (142, 143) hinged to a fulcrum (158), wherein the first connecting rod (142) is also hinged to a recoiling mass (8) of a firearm; a straight guide (137, 138) whereon the articulated connecting rods (142, 143) are intended to abut and slide; a rearming lever (93) freely

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rotatable about a first axis of rotation (153), and having a slider (154) at a first end thereof; a slotted link lever (62) rotatable about a second axis of rotation (21), and having a guide in which the slider (154) of the rearming lever (93) is slidably mounted, wherein the first piston (63) is connected to the slotted link lever (62) in such a way as to constrain the motion of the first piston (63) to the rotation of the slotted link lever (62); a crank lever (144, 148), rotatable about the first axis of rotation (153), having a first end connected to the recoiling mass through the two articulated connecting rods (142, 143), and configured to interfere with the rotation of the rearming lever (93); a release transmission configured to guide the movement of the carrier (114) and to selectively hold in position and release the rearming lever (93); wherein the first piston (63) is connected to the release transmission in such a way as to constrain the motion of the first piston (63) to a movement of the carrier (114).