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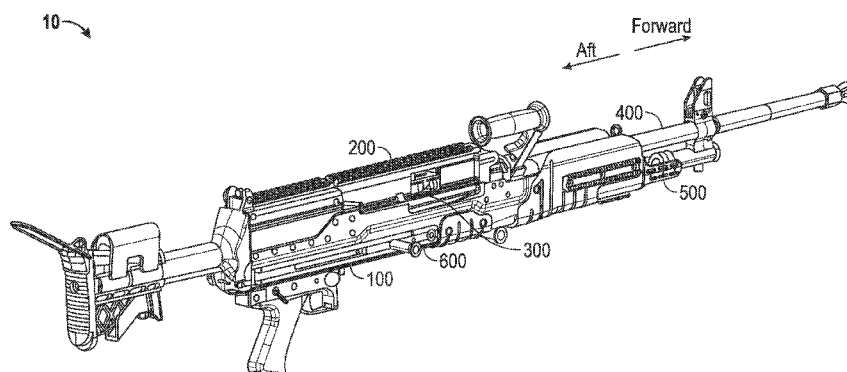
(54) **Title:** SHORT RECOIL IMPULSE AVERAGING WEAPON SYSTEM

FIG. 1

(57) **Abstract:** A weapon system is provided. The weapon system includes a receiver and an operating group. The operating group includes a barrel extension at least partially housed within the receiver and arranged to axially translate relative to the receiver; an operating rod (op-rod) assembly arranged to axially translate within the barrel extension; and a bolt assembly arranged to axially translate within the barrel extension. The system further includes a gas accelerator coupled to the barrel and the op-rod assembly; a buffer assembly including a self-centering spring and a hydraulic piston assembly having a first end coupled to the receiver and a second end coupled to the barrel extension; and a feeder coupled to the receiver and configured to provide the round to the operating group.

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