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(54) **Title:** LINEAR ESCAPEMENT FOR A SUBTERRANEAN VALVE

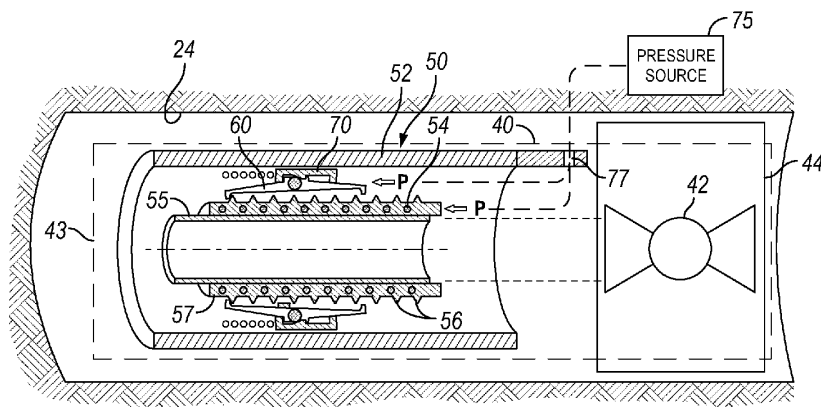


FIG. 2

(57) **Abstract:** A linear escapement mechanism is provided for actuating a downhole tool in a controlled and predictable manner, such as in response to a certain number of pressure cycles. In an example, the actuator includes an escapement sleeve axially moveable with respect to an actuator housing. The escapement sleeve has a plurality of axially-arranged escapement teeth. A rocker secured within the actuator housing has opposing first and second pallets. An operating sleeve is reciprocable to rock the rocker back and forth to alternately move the opposing first and second pallets into engagement with the escapement sleeve as the escapement sleeve advances axially in an actuating direction.



WO 2024/237928 A1