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(54) **Title:** A SUBSURFACE SAFETY VALVE INCLUDING AN ELECTROMAGNET AND AXIAL BRAKE

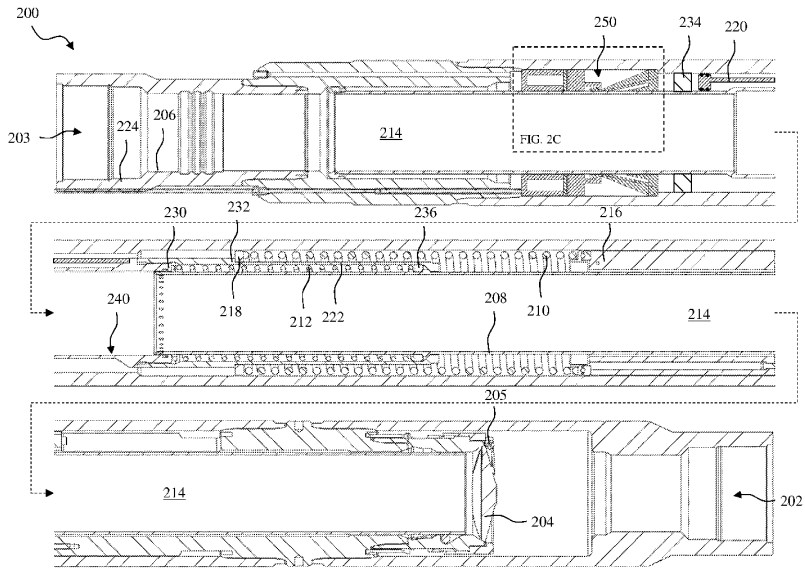

FIG. 2B

(57) **Abstract:** Provided is an SSSV, a well system, and a method. The SSSV, in one aspect, includes an electromagnet fixedly coupled to a housing, a target positioned proximate the electromagnet, and a radially compressible member located radially between a flow tube and the housing. In one aspect, the radially compressible member is engageable with the target and is configured to move between: 1) a radially extended state when the electromagnet is not energized and the target is in an axially distal position to allow the flow tube to move between a closed state and an open state, and 2) a radially compressed state when the electromagnet is energized and the target is in an axially proximal position to hold the flow tube in a flow state.

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