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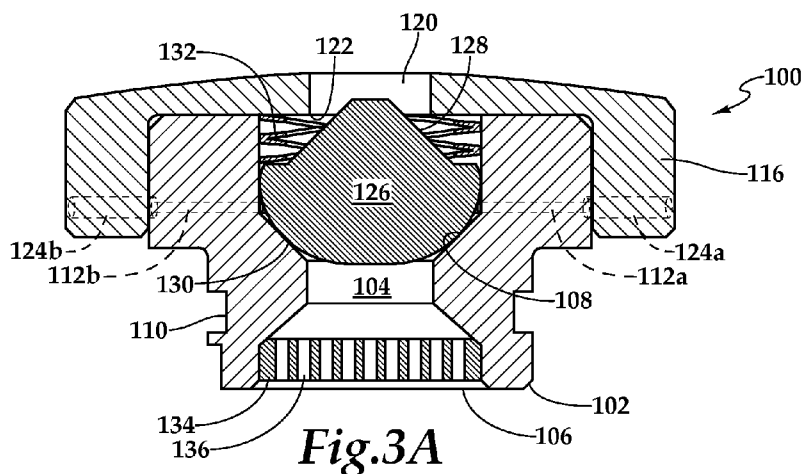
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(54) Title: CHECK VALVE ASSEMBLY FOR WELL STIMULATION OPERATIONS



(57) Abstract: A check valve assembly for well stimulation operations. The check valve assembly includes a valve body having an axially extending passageway including an inlet and a valve body seat. The valve body has a discharge port extending laterally from the passageway. A valve cap slidably engages with the valve body and has an opening with a valve cap seat. A piston is disposed within the passageway. In a closed position, a first sealing surface of the piston engages the valve body seat to prevent fluid communication between the inlet and the discharge port. In an open position, a second sealing surface of the piston engages the valve cap seat allowing fluid communication between the inlet and the discharge port. A spring disposed within the passageway between the piston and the valve cap biases the piston toward the closed position.