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- (71) **Applicant:** HALLIBURTON ENERGY SERVICES, INC. [US/US]; 10200 Bellaire Blvd., Houston, Texas 77072 (US).
- (72) **Inventors:** ACOSTA, Frank; 2600 S. 2nd Street, Duncan, Oklahoma 73536 (US). HELMS, Lonnie Carl; 2600 S. 2nd Street, Duncan, Oklahoma 73536 (US). KEY, John; 2600 S. 2nd Street, Duncan, Oklahoma 73536 (US). BUDLER, Nicholas; 2600 S. 2nd Street, Duncan, Oklahoma 73536 (US).
- (74) **Agents:** KAISER, Iona N. et al.; McDermott Will & Emery LLP, The McDermott Building, 500 North Capital Street, N.W., Washington, District of Columbia 20001 (US).

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(54) **Title:** PRESSURE ACTIVATED DOWN HOLE SYSTEMS AND METHODS

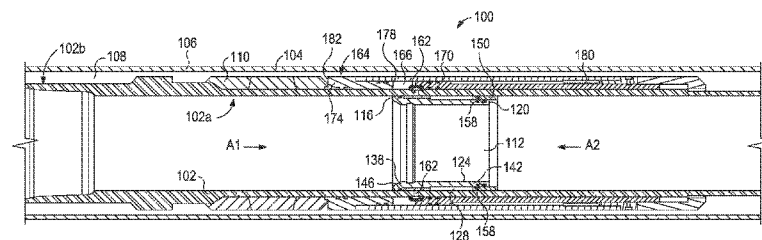


FIG. 1

(57) **Abstract:** Systems and methods for activating a down hole tool in a wellbore. A trigger is moveably positioned in the interior of a base pipe and includes a first end and a second, smaller end. The trigger is moveable between an unactivated position where a port in the base pipe is blocked and an activated position where the port is open. At least one latch member prevents movement of the trigger from the unactivated position to the activated position until a predetermined force is applied to the trigger. Increasing pressure in the interior increases a force differential between the first end and the second end. When the force differential is substantially equal to the predetermined force, the latch releases and allows the trigger to move from the unactivated position to the activated position, thereby opening the port to permit activation of the down hole tool.