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(54) **Title:** SYSTEM AND METHOD FOR ACTIVATING A DOWN HOLE TOOL

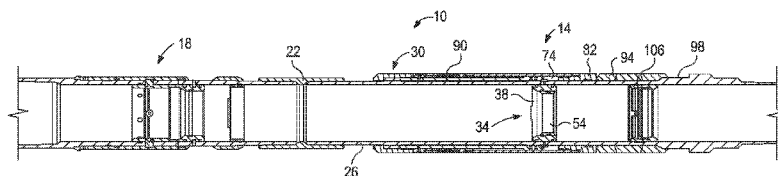


FIG. 1

(57) **Abstract:** Systems and methods for setting a down hole tool include a base pipe having an interior and defining a port that communicates with a pressure chamber positioned outside of the base pipe. A sleeve is positioned in the interior to substantially block the port and to prevent substantial fluid communication between the interior and the pressure chamber. The sleeve includes a first portion having a first shear resistance for resisting movement of the first portion with respect to the base pipe. The sleeve also includes a second portion having a second shear resistance for resisting movement of the second portion with respect to the first portion. Movement of the first portion with respect to the base pipe in response to overcoming the first shear resistance exposes the port to permit fluid communication between the interior and the pressure chamber for setting the down hole tool.

