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(54) Title: METHOD FOR AUTOMATIC CONTROL AND POSITIONING OF AUTONOMOUS DOWNHOLE TOOLS

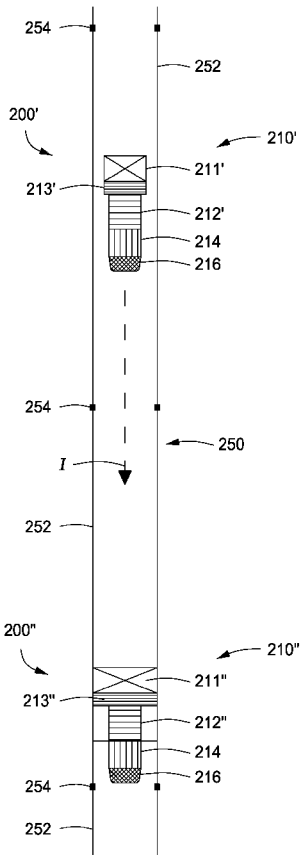


FIG. 2

(57) Abstract: Methods and apparatus for actuating a downhole tool in wellbore includes acquiring a CCL data set or log from the wellbore that correlates recorded magnetic signals with measured depth, and selects a location within the wellbore for actuation of a wellbore device. The CCL log is then downloaded into an autonomous tool. The tool is programmed to sense collars as a function of time, thereby providing a second CCL log. The autonomous tool aslo matches sensed collars with physical signature from the first CCL log and then self-actuates the wellbore device at the selected location based upon a correlation of the first and second CCL logs.

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