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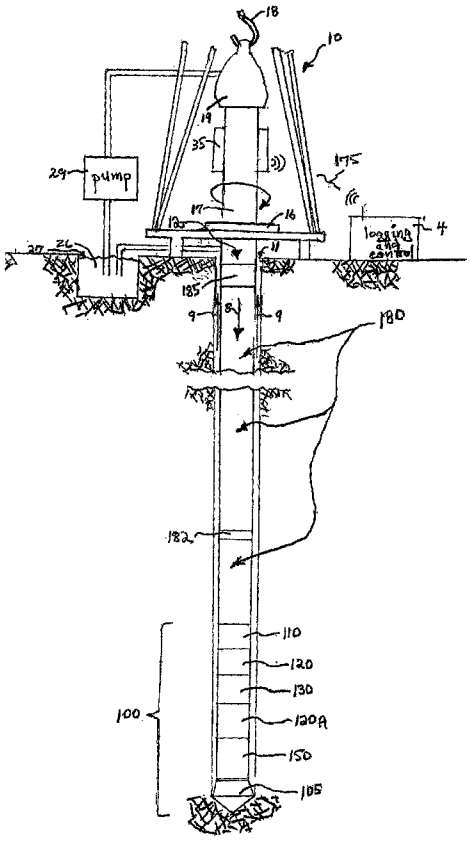
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(54) Title: BI-DIRECTIONAL DRILL STRING TELEMETRY SYSTEM FOR MEASUREMENT AND DRILLING CONTROL



(57) Abstract: The disclosure has application for use in conjunction with an operation of drilling an earth borehole (11) using: a drilling rig, a drill string (12) having its generally upper end mechanically coupleable with and suspendable from the drilling rig, and a bottom hole assembly adjacent the lower end the drill string, the bottom hole assembly (100) including a drill bit (15) at its lower end. A method is set forth for obtaining information about at least one parameter sensed at the bottom hole assembly, including the following steps: providing at least one measuring device in the bottom hole assembly, the at least one measuring device producing measurement data representative of a measured condition at the bottom hole assembly; providing an uphole processor system at the earth's surface; providing a drill string telemetry system coupled with the at least one measuring device and coupled with the uphole processor system; and transmitting the data from the measuring device to the uphole processor system via the drill string telemetry system.

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