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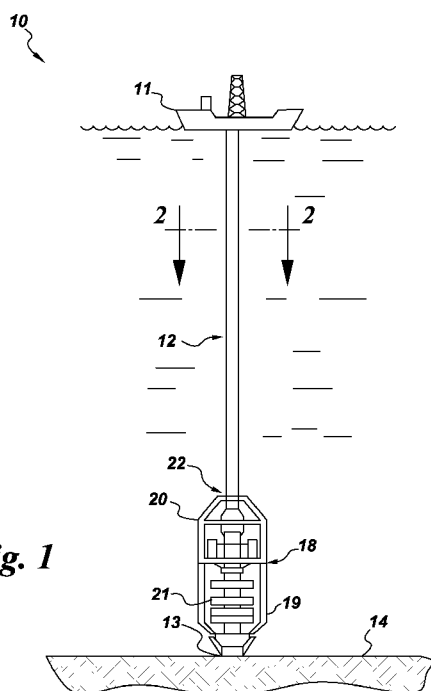
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(54) **Title:** FLOW CONTROL SYSTEM

Fig. 1



(57) **Abstract:** A flow control system for drilling a well comprises a conduit defining a channel configured to accommodate a drill pipe and a flow of a returning drilling fluid, and an acoustic sensor array configured to detect a flow rate of the returning drilling fluid. The flow control system further comprises a flow control device configured to control the flow rate of the returning drilling fluid and to be actuated in response to an event detected by the sensor array, the flow control device being proximate to the sensor array.



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