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(54) Title: FORMATION SENSING AND EVALUATION DRILL

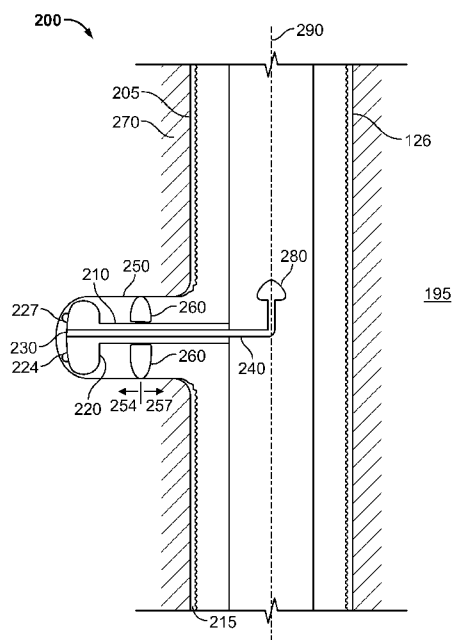


FIG. 2

(57) Abstract: The present disclosure relates methods and apparatuses for testing and sampling of underground formations or reservoirs. The apparatus may include at least one extendable element configured to penetrate a formation. The at least one extendable element may include at least one drill bit with a nozzle configured to receive formation fluids. The at least one extendable element may include at least one sensor disposed on the at least one extendable element. The at least one extendable element may also include a source of stimulus for stimulating the formation. The at least one extendable element may be configured to detach and/or attach from/to a bottom hole assembly (BHA). One method may include steps for performing testing on the formation for estimating a parameter of interest of the formation. Another method may include steps for performing testing to estimate a parameter of interest of the formation fluid.



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