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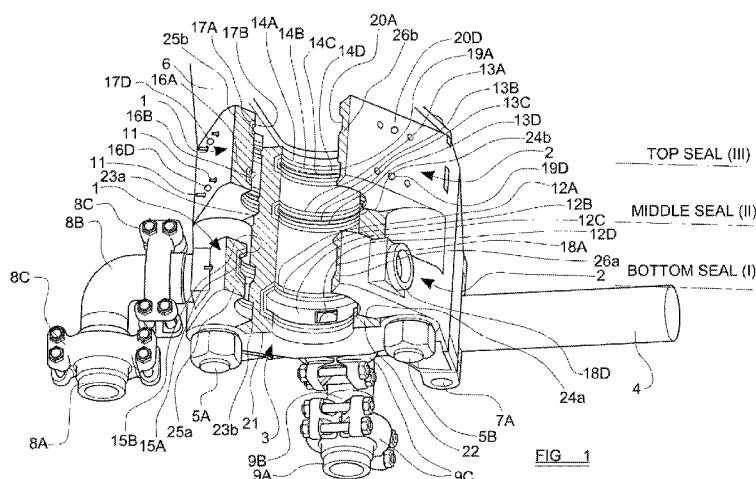
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(54) Title: APPARATUS FOR CONTINUOUS CIRCULATION DRILLING OF A WELLBORE



(57) **Abstract:** An apparatus for continuous circulation drilling comprising a tubular body having a main passage extending along a longitudinal axis of the tubular body from a first end of the tubular body to a second end of the tubular body, a side passage and a control passage, the side passage and control passage both extending through the tubular body into the main passage, the tubular body containing a valve assembly which is operable to close the main passage when the side passage is open and to close the side passage when the main passage is open, the assembly further comprising a hydraulic connector which is operable to clamp around the tubular body, the connector comprising a housing with an interior surface which is provided with first and second grooves which, when the connector is clamped around the tubular body, each form a channel which extends in continuous loop around the exterior of the tubular body, there being at least one passage extending through the housing from an exterior surface of the housing into each of the channels, wherein the tubular body is further provided with two grooves which extend around an exterior surface of the body so that, when the connector is clamped around the tubular body, the connector housing engages with the grooves, the grooves thus restricting longitudinal movement of the connector relative to the tubular body, and the side passage and control passage each connect the main passage with one of the channels formed by the connector.