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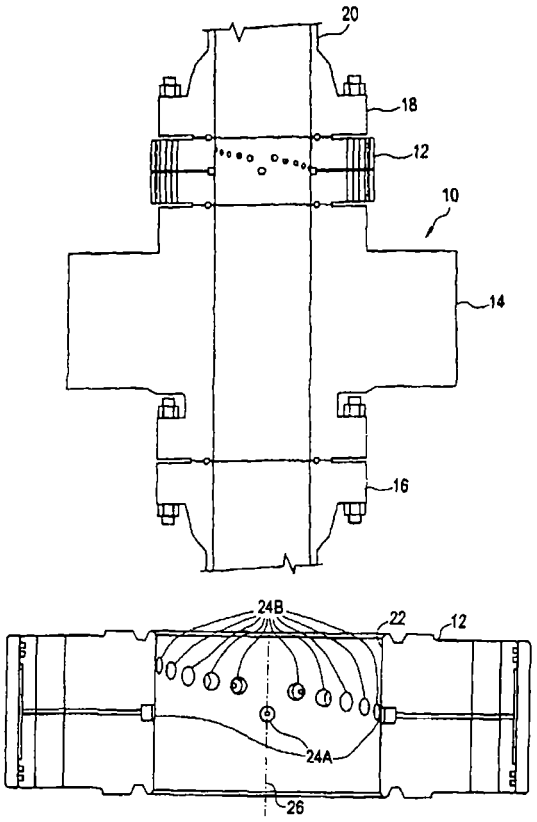
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(54) Title: APPARATUS AND METHOD FOR SENSING THE PROFILE AND POSITION OF A WELL COMPONENT IN A WELL BORE



(57) Abstract: A method and apparatus for sensing the profile and position of a well component in a well bore and transmitting this information to a surface mounted display unit to aid an operator in performing subsea well operations is disclosed. The apparatus includes an instrumented flange (12) with appropriate end connections to allow connecting the flange between the annular preventer (14) and the drilling riser (20). The instrumented flange is sufficiently long to allow a first plurality of sensor units (24A) to be arranged circumferentially around the axial bore (22) of the flange in a single plane and a second plurality of sensor units (24B) to be arranged in a helical pattern along the axis (26) of the flange. The output signals of the sensor units are processed at a signal processing unit which then transmits the information to a display unit at the surface.

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ACTION

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