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(54) Title: NON-ORIENTATING TUBING HANGER AND TREE

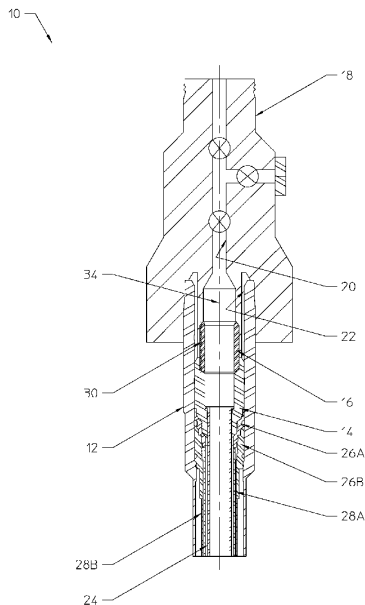


FIGURE 1

(57) Abstract: Systems and methods for landing a tubing hanger in a wellhead, landing a tree on the wellhead, and making electrical and hydraulic couplings between the tree and the tubing hanger without having to orient the tree or the tubing hanger relative to each other are provided. This is accomplished using a seal sub that is coupled to the tree and lowered with the tree into contact with the tubing hanger located in the wellhead. The seal sub features an electrical conductor that facilitates electrical coupling of the tree to the tubing hanger. The tubing hanger and seal sub may include a metal-to-metal and elastomeric seal arrangement designed to seal off electrical and hydraulic connections between these components when, the tree is positioned within the wellhead.

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