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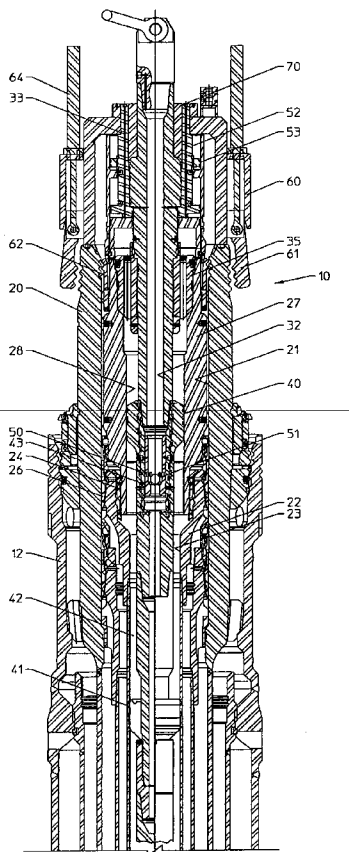
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(54) Title: OPEN WATER RUNNING TOOL AND LOCKDOWN SLEEVE ASSEMBLY

(57) Abstract: A running tool 10, a lockdown sleeve 27, and a seal ring 24 are provided for axially fixing upward movement of a tubular hanger with respect to a subsea wellhead. The running tool 10 includes a tool latching and unlatching mechanism 51 for axially connecting the running tool to the subsea wellhead housing, a tool force applicator 64 for exerting a downward setting force, and a sleeve latching mechanism 73 for securing the lockdown sleeve to the subsea wellhead housing 20. The seal 24 is provided between the lockdown sleeve and one of the tubular hanger and the wellhead housing. The method of the invention includes running the tool and sleeve in open water to the subsea wellhead housing, locking the tool to the housing, setting the seal, locking the sleeve to the housing, then retrieving the tool in open water.



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