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(54) Title: COUNTERACTING COUPLING ASSEMBLY FOR FORCE DISTRIBUTION IN A RACK AND PINION SYSTEM OF A JACKUP VESSEL

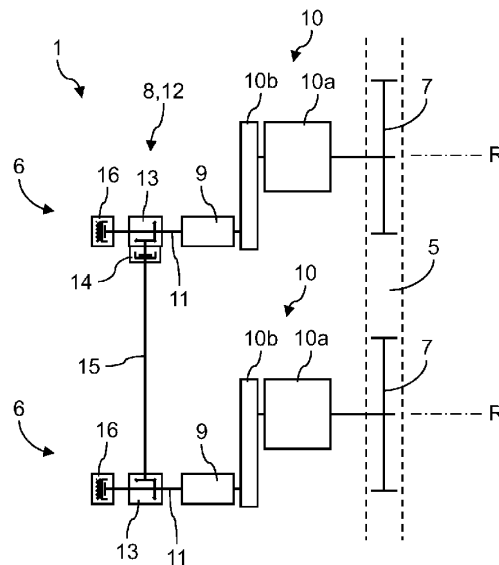


Fig. 3

(57) Abstract: Rack and pinion system for jacking in a jackup vessel, comprising: a rack arranged to be fixed to a leg of the jackup vessel; and at least two pinion drive assemblies arranged to be mounted to the hull at different respective pinion levels along the hull, each pinion drive assembly comprising at least one pinion rotatably drivable along the rack for jacking; and at least one counteracting coupling assembly configured to selectively mutually couple or decouple pinion drive assemblies such that respective pinion rotational forces of the pinion drive assemblies, when mutually coupled, counteract each other via the at least one counteracting coupling assembly. The system may be used for distributing pinion rotational forces among the different levels when the vessel is supported on its legs, in particular under dynamic loading of the hull such as during lifting operations.

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