

WELLBORE DRILLING SYSTEM

Abstract

An aspect of the present invention relates to a wellbore drilling system comprising a drilling tower and a tubular racking device having at least a lower first tubular racker assembly and at least a second tubular racker assembly operable at a greater height than the first tubular racker assembly. The system further comprises one or more well center tools, each adapted for operation above the well center of the drill floor, e.g. an iron roughneck tool for making up and breaking out of threaded tubular joints. According to the present invention, the tubular racking device comprises a third tubular racker assembly which is vertically mobile and which is operable for tubular transfer between the firing line and the drilling tubulars storage rack in combination with the second tubular racker assembly, e.g. in case of failure of the first tubular racker assembly, and wherein at least one well center tool is adapted to be connected to the motion arm of the third tubular racker assembly, which well center tool is operable above the drill floor, whilst the first and second tubular racker assemblies are operable in combination for tubular transfer between the firing line and the drilling tubulars storage rack.

Fig. 1