

Title (en)  
EXTENDED DIRECTIONAL DRILLING

Title (de)  
ERWEITERTE DIREKTIONALE BOHRUNG

Title (fr)  
PROLONGÉE DIRECTIONNEL FORAGE

Publication  
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Application  
**EP 17780629 A 20170912**

Priority  
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• EP 2017072883 W 20170912

Abstract (en)  
[origin: WO2018046757A2] The present invention relates to drilling (particularly horizontally) a borehole in ground. In order to provide an extension in particular in term of run length of a drilling in ground in comparison to conventional trenchless approaches, a buoyancy enhanced drillpipe module is proposed, comprising a pipe, a first and a second connection unit fixed to the respective ends of the pipe, the connection units each allowing a connection of the drillpipe module respectively with another drillpipe module, and a passage for drilling fluid, wherein at least in a part of the space between the first and second connection unit a buoyancy unit is provided, wherein, for a drilling fluid having a density in the range of 1.0 to 1.1 kg/l and/or a debris laden drilling fluid having a density in the range of 1.1 to 1.5 kg/l, the buoyancy unit has a lower density than the drilling fluid and wherein the drillpipe module is dimensioned such a ratio between an absolute value of an effective weight force per meter of the drillpipe module in debris laden drilling fluid, with drilling fluid in the passage, and a total cross section of those elements of the drillpipe module that are due to transfer axial force is  $< 10,000 \text{ N/m}^3$ .

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