A B S T R A C T

A DATA TRANSMISSION DEVICE

The device relates to an installation comprising a cavity (13) extending from the surface of the ground (17) and provided with at least one electrically conductive tubular element (21; 25). The device comprises a single-strand smooth cable (3) for supporting an action and/or measurement assembly (5), which cable is electrically conductive and has a breaking strength greater than 300 daN, and is disposed in the tubular element (21; 25). The surface of the cable (3) is electrically insulated at least in part from said tubular element (21; 25). The device includes transmitter means (9, 11) and receiver means (9, 11) for transmitting and receiving an electrical and/or electromagnetic signal, said means being situated in the vicinity of the surface (17) and in the cavity (13), and being electrically connected firstly to the cable (3) and secondly to the tubular element (21; 25) and/or to the formation (19). The invention is applicable to transmitting information and to controlling tools in an oil well.

Translation of the title and the abstract as they were when originally filed by the Applicant. No account has been taken of any changes that may have been made subsequently by the PCT Authorities acting ex officio, e.g. under PCT Rules 37.2, 38.2, and/or 48.3.