

ABSTRACT

PIPE FOR CABLELESS BIDIRECTIONAL DATA TRANSMISSION AND THE CONTINUOUS CIRCULATION OF STABILIZING FLUID IN A WELL FOR THE EXTRACTION OF FORMATION FLUIDS AND A PIPE STRING COMPRISING AT LEAST ONE OF SAID PIPES

Pipe for cableless bidirectional data transmission and the continuous circulation (50) of a stabilizing fluid in a well for the extraction of formation fluids comprising: a hollow tubular body (51) which extends in length along a longitudinal direction X and which is configured at the ends for being coupled with respective drill or completion pipes (11); a radial valve (52) associated with the tubular body (51), the radial valve (52) being connectable to a pumping system (40) outside the tubular body (51); an axial valve (53) associated with the tubular body (51); a communication module (20) associated with the tubular body (51) comprising at least one metal plate selected from a transmitting metal plate (21), a receiving metal plate (22), a transceiver metal plate (35); an electronic processing and control unit (23) configured for processing signals to be transmitted by means of the at least one metal plate (21, 35) or signals received by means of the at least one metal plate (22, 35); one or more supply batteries (24) for feeding the metal plates (21, 22, 35) and the electronic processing and control unit (23).

Figure 1