

Title (en)
FLUIDS INJECTION FLOW CONTROL DEVICE FOR USE IN OIL WELLS

Title (de)
FLUIDINJEKTIONSDURCHFLUSSSTEUERUNGSVORRICHTUNG ZUR VERWENDUNG IN ÖLBOHRLÖCHERN

Title (fr)
DISPOSITIF DE RÉGULATION DU DÉBIT D'INJECTION DE FLUIDES DESTINÉ À ÊTRE UTILISÉ DANS DES Puits DE PÉTROLE

Publication
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Application
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Priority
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Abstract (en)
This invention embodies a fluids injection flow control device (1) for use in oil wells, designed to maintain, within an established range, the injection rate within a determined layer between two packers (2,3), corresponding to the puncture zone of an injection well, causing a controlled pressure drop of the flow derived to said section without damaging the molecule of the viscous fluid; said device, which is axially coupled to a tubing string (7), consists of a variety of modules (4, 5, 6) formed by an upper coil carrier (4) onto which a primary coil (9) is helically wound which, initially connected to the pipe (7) through which the fluid flows, causes a certain load drop in an initial control component which shall be known as a side-pocket mandrel (11), which consists of two main parts namely the tubing string (11A) that allows for axial tubing continuity and the pocket (11B) in which a short (15) or long (14) flow direction vane is selectively installed that determines the outflow towards the unit by way of a transverse opening (11E) or its passage to the next module's corresponding coil (9) through transition tubing (12). The implementation of the device for each layer consists of an upper module provided with a pipeline fluid intake port (8), as many intermediate modules as deemed necessary interconnected via said transition tubes and an end module in which said outlet passage may or may not be blind-

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E21B 43/16 (2006.01)

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Citation (search report)

- [A] US 4333527 A 19820608 - HIGGINS ROBERT S, et al
- [A] GB 2243634 A 19911106 - AVA INT CORP [US]
- [A] US 4119146 A 19781010 - TAYLOR FRANK H
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DOCDB simple family (application)
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