

Title (en)

Tool for and method of geological formation evaluation testing

Title (de)

Werkzeug und Verfahren zur Erkundung und zum Testen geologischer Formationen

Title (fr)

Outil et procédé pour tester et évaluer de formations géologiques

Publication

EP 0950795 B1 20041110 (EN)

Application

EP 99300512 A 19990125

Priority

US 6090898 A 19980415

Abstract (en)

[origin: EP0950795A2] A geological formation tester tool (100) comprises a pulse generator (114), for generating a pulsed pressure waveform in a geological formation, wherein the pulsed pressure waveform is created about a first center frequency and wherein the pulse generator includes means for varying the center frequency at least one receiver probe (110), the or each receiver probe spaced apart a predetermined distance from the pulse generator and in contact with the geological formation; and at each receiver probe, a sensor (118) operably connected to the or each receiver probe for sensing a first arrival time at each receiver probe, of the pulsed pressure waveform. A method of determining properties of a geological formation comprises: providing a downhole tool (100) having a pulse generator (114) and at least one receiver probe (110), the or each receiver probe spaced apart a predetermined distance from the pulse generator; generating a pulsed pressure waveform in the geological formation with the pulse generator; wherein the pulsed pressure waveform is created about a first center frequency and wherein the center frequency is variable sensing, at the receiver probe, a first arrival time of the pulsed pressure waveform; and determining the velocity of the pulsed pressure waveform. <IMAGE>

IPC 1-7

E21B 47/14; **E21B 49/00**; G01V 1/44

IPC 8 full level

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CPC (source: EP)

E21B 49/00 (2013.01); **E21B 49/008** (2013.01)

Cited by

US6585045B2; CN100347406C; CN100344994C; CN103221635A; US9574437B2; US11655709B2; WO2004074869A3; US7823689B2; WO0214652A1; WO2006008172A3; WO2021150276A1

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