

Title (en)

Stabilizing tool for earth boring drill strings and method of using same.

Title (de)

Stabilisator für Bohrgerüste und Anwendungsmethode.

Title (fr)

Stabilisateur pour tiges de forage et procédé d'utilisation.

Publication

EP 0056506 A1 19820728 (EN)

Application

EP 81300201 A 19810116

Priority

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Abstract (en)

A downhole stabilizing tool T communicating with a fluid conductive drill string D, said tool having a sleeve assembly S mounted for movement within a tool housing H between selected positions and having camming members therewith for actuating stabilization pads P mounted with the tool housing for lateral movement thereof in response to movement of the sleeve assembly between the selected positions, pawl members M mounted with the tool housing for cooperating with the sleeve assembly S for limiting movement of the sleeve assembly to the selected positions, and pawl engaging members E with the sleeve assembly for limiting movement of the sleeve assembly to the selected positions. Also described is an actuator assembly A for actuating the tool T. The actuator assembly includes a piston body member 74 adapted to be positioned within the stabilizing tool T and having programming members therewith for cooperatively engaging compatibly formed engaging surfaces with the stabilizing tool that are also spaced apart a programmed distance for moving the stabilization pads P between the selected positions. The disclosed method includes the steps of preprogramming the actuator assembly A prior to running the same into the fluid conductive drill string for selectively engaging the stabilizing tool T to expand the stabilization pads P laterally as desired.

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CPC (source: EP US)

E21B 7/06 (2013.01 - EP); **E21B 17/1078** (2013.01 - EP); **E21B 23/02** (2013.01 - EP); **E21B 23/04** (2013.01 - EP US)

Citation (search report)

- US 3092188 A 19630604 - FARRIS RALPH J, et al
- US 3123162 A 19640303
- US 3593810 A 19710720 - FIELDS ROGER Q
- US 3974886 A 19760817 - BLAKE JR JACK L
- US 2891769 A 19590623 - PAGE SR JOHN S, et al
- US 3027947 A 19620403 - FREDD JOHN V
- US 3894590 A 19750715 - TAKANO SHO, et al

Cited by

GB2136852A; EP0251543A3; FR2579662A1; EP0190529A1; US4821817A; US4951760A; US5070950A

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