

Title (en)

Multi-directional cutters for bi-center drillout bits

Title (de)

Mehrrichtungsschneidelemente für bi-zentrales Bohrwerkzeug zum Bohren eines Verrohrungsschuhs

Title (fr)

Éléments de coupe multidirectionnels pour trépan de forage bi-central adapté pour forer un sabot de tubage

Publication

EP 1182323 B1 20030910 (EN)

Application

EP 01305833 A 20010705

Priority

US 22704900 P 20000821

Abstract (en)

[origin: US2002020565A1] A drillout bi-center bit includes first and second axes of rotation separated by a distance D, a first region of radius D centered on one of the axes of rotation, a second region of radius D centered on the other of the axes of rotation, and a third region defined by the overlap between the first and second regions, wherein the cutters provided within the third region are designed to withstand cutting in opposing cutting directions. This may be achieved by providing each cutter with two cutting faces, or by providing two groups of cutters, one group arranged to cut in one direction, the other group being designed to cut upon rotation in the other direction, one of the groups protruding from the bit body of the bit to a greater depth than the other group.

IPC 1-7

E21B 10/26; **E21B 10/42**; **E21B 10/56**

IPC 8 full level

E21B 10/26 (2006.01); **E21B 10/42** (2006.01); **E21B 10/43** (2006.01); **E21B 10/56** (2006.01); **E21B 10/567** (2006.01)

CPC (source: EP US)

E21B 10/265 (2020.05 - EP US); **E21B 10/5673** (2013.01 - EP US); **E21B 10/5676** (2013.01 - EP US)

Cited by

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DOCDB simple family (publication)

US 2002020565 A1 20020221; DE 60100727 D1 20031016; DE 60100727 T2 20040722; EP 1182323 A1 20020227; EP 1182323 B1 20030910; ZA 200105680 B 20020206

DOCDB simple family (application)

US 68219301 A 20010803; DE 60100727 T 20010705; EP 01305833 A 20010705; ZA 200105680 A 20010711