

Title (en)

Cutting elements faced with superhard material

Title (de)

Schneidelement mit einer Oberfläche aus superhartem Werkstoff

Title (fr)

Élément de coupe avec une surface en matériaux extra-dur

Publication

EP 0878602 A3 19990825 (EN)

Application

EP 98303775 A 19980514

Priority

GB 9709861 A 19970516

Abstract (en)

[origin: EP0878602A2] A preform element, such as may be used as a cutting element in a drag-type rotary drill bit, comprises a polycrystalline diamond facing table bonded to a tungsten carbide substrate. The rear face of the facing table is formed with a series of elongate ribs and grooves, and the front face of the substrate is formed with a series of elongate ribs and grooves which interengage the grooves and ribs respectively in the facing table. The ribs and grooves on each surface include ribs which are spaced from adjacent grooves so that the part of the surface which extends from the bottom of a groove to the apex of the adjacent rib is non-linear and discontinuous. The discontinuity between each rib and groove may be an intervening surface portion which is flat, inclined, curved or otherwise shaped. <IMAGE>

IPC 1-7

E21B 10/56

IPC 8 full level

E21B 10/56 (2006.01); **E21B 10/573** (2006.01)

CPC (source: EP)

E21B 10/5735 (2013.01)

Citation (search report)

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- [A] EP 0133386 A2 19850220 - MEGADIAMOND IND INC [US]
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- [A] EP 0733777 A2 19960925 - CAMCO DRILLING GROUP LTD [GB]
- [AD] US 5120327 A 19920609 - DENNIS MAHLON D [US]
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Cited by

EP3339562A1; BE1015197A5; US9138872B2

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