

Title (en)
Cutting structure for drill bit

Title (de)
Schneidstruktur für Bohrmeissel

Title (fr)
Structure de coupe pour trépan de forage

Publication
EP 1227214 B1 20040630 (EN)

Application
EP 01307913 A 20010918

Priority
• GB 0102160 A 20010127
• GB 0117852 A 20010723

Abstract (en)
[origin: EP1227214A2] A drill bit for drilling a borehole having a bit body with an axis of rotation, a leading face, and a plurality of blades upstanding from the leading face. At least one of the blades terminates in a gauge pad having a gauge surface arranged, in use, to face a wall of the borehole. The gauge surface being devoid of cutting elements and terminating at an end remote from the blade at a junction with a gauge pad end wall. The gauge pad carries a cutter having a face and a cutting edge located radially inward of the gauge surface, and the junction of the gauge surface and the gauge pad end wall crosses, radially, between the face of the cutter and the wall of the borehole. The gauge surface may be a substantially continuous surface, and may have at least one additional cutter located angularly between two adjacent blades of the drill bit. <IMAGE>

IPC 1-7
E21B 10/42

IPC 8 full level
E21B 7/06 (2006.01); **E21B 10/42** (2006.01); **E21B 10/43** (2006.01)

CPC (source: EP US)
E21B 7/064 (2013.01 - EP); **E21B 10/43** (2013.01 - EP US); **E21B 17/1092** (2013.01 - EP)

Cited by
US7845430B2; CN116241187A; CN105849355A; US8066085B2; US8727036B2; US8869919B2; WO2009022116A1; US7926596B2; US7971661B2; US10920496B2; US11542754B2; WO2007012858A1

DOCDB simple family (publication)
EP 1227214 A2 20020731; **EP 1227214 A3 20030319**; **EP 1227214 B1 20040630**; DE 60104082 D1 20040805; DE 60104082 T2 20050728

DOCDB simple family (application)
EP 01307913 A 20010918; DE 60104082 T 20010918