

Title (en)

Earth boring drill bit with matrix displacing material.

Title (de)

Gesteinsbohrmeissel mit Matrixersatzmaterial.

Title (fr)

Trépan de forage de roche avec matériaux de remplacement de matrice.

Publication

EP 0312487 A1 19890419 (EN)

Application

EP 88710036 A 19881012

Priority

US 10794587 A 19871013

Abstract (en)

A rotary drill bit for drilling earth formations is provided and includes a bit shank, a hard metal matrix (14) secured to a blank (10) and cutting elements (21, 22) on the exterior face thereof. The matrix includes a displacement material (D) having a different composition than the matrix material within the matrix. The displacement material is preferably less expensive than the matrix material and also has different material properties. The resulting bit may be custom-engineered for toughness, ductility, and impact resistance.

IPC 1-7

B22F 7/06; **E21B 10/46**

IPC 8 full level

B22F 7/06 (2006.01); **E21B 10/46** (2006.01)

CPC (source: EP)

B22F 7/06 (2013.01); **E21B 10/46** (2013.01)

Citation (search report)

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Designated contracting state (EPC)

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