

Title (en)

Core bit with hydrodynamic core destruction.

Title (de)

Kernbohrmeissel mit hydrodynamischer Kernzerstörung.

Title (fr)

Trépan carottier avec destruction hydrodynamic du noyau.

Publication

EP 0512329 B1 19950222 (DE)

Application

EP 92106929 A 19920423

Priority

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Abstract (en)

[origin: EP0512329A2] The bit according to the invention contains a body (1) and rock-destroying members (3) of the cutting and shearing type which are fastened to its matrix (2). The body (1) is provided with a swirl chamber (4) with tangentially orientated inlet passages (5) and a central outlet passage (6). Tangentially arranged outlet passages (9) are made in the bottom part of the body (1). The part of the matrix (2) nearest to the body (1) is designed in the shape of a hollow truncated cone which is turned with the top surface (12) towards the body (1). The cone is constructed with a changing steepness of the generatrix (10) of the conical surface and with the base (11) and the top surface (12), which are designed according to the Archimedean spiral. Continuous radial grooves (13) are made on the side face of the matrix (2). The radial grooves (13) are connected to the outlet passages (9) by a hollow space (14) made in the body (1). <IMAGE>

IPC 1-7

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IPC 8 full level

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