

Title (en)

PERCUSSIVE DRILL BIT, DRILLING SYSTEM COMPRISING SUCH A DRILL BIT AND METHOD OF DRILLING A BORE HOLE

Title (de)

SCHLAGBOHRER, BOHRSYSTEM MIT EINEM SOLCHEN BOHRER UND VERFAHREN ZUM BOHREN EINES BOHRLOCHS

Title (fr)

TREPAN A PERCUSSION, SYSTEME DE FORAGE COMPRENANT CE TREPAN ET PROCEDE DE FORAGE D'UN TROU DE FORAGE

Publication

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Application

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Abstract (en)

[origin: WO2004104362A1] A percussion drill bit for drilling into a subterranean earth formation, the drill bit having a central longitudinal axis and being operable by applying axial percussive motion along the axis and rotary motion about the axis, the drill bit comprising: a plurality of blades (61, 62, 63) protruding from the drill bit; a plurality of flow channels (71, 72,73) stretching along the drill bit in a substantially radial direction whereby the successive flow channels are formed between two adjacent blades; shear cutters (9) which are provided in a row on or close to the leading edge of at least one of said blades with respect to the direction of rotary motion trailingly adjacent to the flow channel that is associated with it, for running a fluid through and thereby removing cutting debris accumulating in front of the row of shear cutters; and in addition to these shear cutters; axial cutters (10, 11) which are located, with respect to the direction of rotary motion, in a trailing position with respect to said row of shear cutters and its associated flow channel.

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