Title (en)

ROCK DRILLING ELEMENT, DRILL STRING AND METHOD FOR TRANSFERRING IMPACT ENERGY FROM A TOP HAMMER UNIT TO A DRILL BIT

Title (de)

GESTEINSBOHRELEMENT, BOHRGESTÄNGE UND VERFAHREN ZUR ÜBERTRAGUNG VON AUFPRALLENERGIE VON EINER KOPFHAMMEREINHEIT AUF EINEN BOHRMEISSEL

Title (fr)

ELEMENT POUR CREUSER LA ROCHE, TRAIN DE TIGES ET PROCEDE DE TRANSFERT DE L'ENERGIE DE PERCUSSION D'UN MECANISME DE PERCUSSION VERS UN TREPAN

Publication

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Application

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Abstract (en)

[origin: WO2006121386A1] The present invention relates to a rock drilling element for percussive drilling that is designed to reduce the stress usually developed on a thread joint (5) when the shock wave transmits from a slender portion to a thicker part. The rock drilling element has an elongated body comprising a first portion (10A) and a second portion (10B). The first portion (10A) has a female (16) or male thread intended to be connected to a drill rod (1) or a drill tube. The first portion (10A) has an outer diameter (D1) approximately equal to the major diameter of said thread (16). The second portion (10B) has a male (15) or female thread intended to be connected to a drill bit or a guide tube. The second portion (10B) forms a guide portion for radial guiding in a hole being drilled. The length of the first portion (10A) is at least 500 mm, such that the thread joint is moved away from an unfavorable reflection area. Furthermore, the present invention relates to a drill string and a method of transferring impact energy in a drill string.

IPC 8 full level

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