

Title (en)
COOLING MEANS FOR THE CUTTER OF A COAL CUTTING MACHINE

Publication
EP 0060827 B1 19840509 (DE)

Application
EP 82890023 A 19820216

Priority
AT 113581 A 19810312

Abstract (en)
[origin: ES8302845A1] The invention refers to a system for cooling the bits of a cutting machine and comprising a nozzle for the cooling water to be ejected under pressure, said nozzle being arranged at the area of the bit, the water supply to said nozzle being closable by means of a shutoff valve and the bit being supported on the bit holder for limited axial shifting movement under the action of the cutting pressure against the force of a spring and against the hydraulic pressure of the cooling water and the shutoff valve being coupled with the bit by means of a coupling member such that the shutoff valve is opened on shifting movement of the bit in direction of the cutting pressure. In this system the arrangement is such that the bit (6) has in a manner known per se the shape of a cap and is enclosing a bit shaft (3) adapted to be inserted into the bit holder (1), in that the cap-shaped bit (6) is supported on the shaft (3) for shifting movement in axial direction and in that the shutoff valve (11) and the coupling member (10) are arranged within the bit shaft (3). The coupling member is formed of a push rod (10) acting on the closure member (11) of the valve, said push rod being guided within a central bore (9) of the bit shaft and the closure member (11) closing the valve in opposite direction to the action of the cutting pressure and being moved in open position by the push rod (10) in direction of the acting cutting pressure.

IPC 1-7
E21C 35/22

IPC 8 full level
B23Q 11/10 (2006.01); **E21B 21/00** (2006.01); **E21C 35/187** (2006.01); **E21C 35/22** (2006.01)

CPC (source: EP US)
E21C 35/187 (2013.01 - EP US)

Cited by
US4542942A; EP0111143A3; EP0229238A1; GB2127459A; US4534597A; FR2571427A1; AT381364B; US4976496A; AT227U1; US4488759A; AT388210B; EP0160757A1; GB2135715A; EP0125232B1; EP0067145B1; EP0067144B1

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
EP 0060827 A1 19820922; EP 0060827 B1 19840509; AT 369859 B 19830210; AT A113581 A 19820615; AU 547795 B2 19851107; AU 8072882 A 19820916; BR 8201281 A 19830118; CA 1176665 A 19841023; DE 3260140 D1 19840614; ES 509902 A0 19830116; ES 8302845 A1 19830116; IN 155702 B 19850223; JP S57163040 A 19821007; JP S6257795 B2 19871202; MX 6604 E 19850814; PL 138252 B1 19860830; PL 235364 A1 19820927; RO 84541 A 19840621; RO 84541 B 19840830; SU 1269743 A3 19861107; US 4456306 A 19840626; YU 40082 A 19860228; ZA 821221 B 19830126

DOCDB simple family (application)
EP 82890023 A 19820216; AT 113581 A 19810312; AU 8072882 A 19820223; BR 8201281 A 19820310; CA 396819 A 19820223; DE 3260140 T 19820216; ES 509902 A 19820225; IN 199CA1982 A 19820220; JP 3883882 A 19820311; MX 10101682 U 19820312; PL 23536482 A 19820309; RO 10687682 A 19820311; SU 3416190 A 19820225; US 35393682 A 19820302; YU 40082 A 19820223; ZA 821221 A 19820224