

Title (en)
MODULAR ABRASIVE MEDIUM WATER JET CUTTING HEAD

Title (de)
MODULARER ABRASIVMITTELWASSERSTRAHL-SCHNEIDKOPF

Title (fr)
TETE DE COUPE MODULAIRE A AGENT ABRASIF ET A JET D'EAU

Publication
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Application
EP 97910259 A 19971004

Priority
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Abstract (en)
[origin: US6012653A] PCT No. PCT/DE97/02290 Sec. 371 Date Jun. 4, 1998 Sec. 102(e) Date Jun. 4, 1998 PCT Filed Oct. 4, 1997 PCT Pub. No. WO98/15385 PCT Pub. Date Apr. 16, 1998A modular abrasive agent water jet cutting head (1) has a nozzle (4) issuing a high-speed water jet (16), a mixing chamber (10) through which the high speed water jet passes (16), an abrasive agent supply line (14), and a focussing nozzle (15) forming the outlet of the mixing chamber (10). A dosing unit (12) has an axial passage of the high-speed water jet (16). The passage (18) has one or more expansions or channels (11) extending radially and which are of reduced cross section at the passage. There are preferably in each case are formed as a slits, which are only slightly wider than the diameter of the thickest abrasive particle. The expansion or channel (11) is closely connected to the passage of the high-speed water jet (16) and introduces the abrasive agent into a chordal section of the water jet (16) which is oriented in the direction of the cutting action. From there the high-speed water jet (16) receives a track of abrasive agent on its surface.

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IPC 8 full level
B05B 1/00 (2006.01); **B24C 1/04** (2006.01); **B24C 5/04** (2006.01)

CPC (source: EP US)
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