

Title (en)

Grinding device and use of same grinding device for rectifying cylindrical items, apparatus and method for rectifying cylindrical items

Title (de)

Schleifgerät, dessen Anwendung zum Schleifen von zylindrischen Gegenständen , Vorrichtung und Verfahren zum Schleifen von zylindrischen Gegenständen

Title (fr)

Dispositif de meulage, son utilisation pour meuler des objets cylindriques, machine et procédé pour meuler des objets cylindriques

Publication

EP 1681137 B2 20101110 (EN)

Application

EP 04425960 A 20041230

Priority

EP 04425960 A 20041230

Abstract (en)

[origin: EP1681137A1] The present invention relates to a grinding device (1) comprising a plurality of cylindrical abrasive bodies (4, 5, 8) each having a cylindrical support core (4b, 5b, 8b) and an outer layer (4c, 5c, 8c) for material removal, which is made of abrasive material. The grinding device further comprises a plurality of intermediate elements (6) alternated with the cylindrical abrasive bodies (4, 5, 8) to axially space the circumferential abrasive surfaces (4a, 5a, 8a) of said bodies apart. The intermediate elements (6) have a smaller diameter than the maximum diameter of the cylindrical support core (4b, 5b, 8b) of the cylindrical abrasive bodies (4, 5, 8) so as to define a series of circumferential cooling grooves (6a) enabling a cooling fluid to act on the overheated parts to a greater extent.

IPC 8 full level

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CPC (source: EP)

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Citation (opposition)

Opponent :

- DE 4235277 A1 19940421 - BLOHM MASCHINENBAU GMBH [DE]
- US 5611724 A 19970318 - DEGRAAFF WILLEM T [US]
- DE 20102684 U1 20010419 - SWAROVSKI TYROLIT SCHLEIF [AT]
- US 6517427 B1 20030211 - YOSHIKAWA MASAO [JP], et al
- DE 3422213 A1 19850103 - HAUNI WERKE KOERBER & CO KG [DE]

Cited by

CN107199495A; CN109551384A; US2012225615A1; ITPD20090280A1; WO2011036104A1; WO2018097956A1; JP2014050908A

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