

Title (en)
METHOD AND SYSTEM FOR FEEDING A COOLING FLUID DURING MACHINING OF A WORKPIECE BY MEANS OF A CUP GRINDING WHEEL, AND CUP GRINDING WHEEL USED THEREIN

Title (de)
VERFAHREN UND VORRICHTUNG FÜR DIE ZUFÜHRUNG VON KÜHLFLÜSSIGKEIT WÄHREND DER BEARBEITUNG EINES WERKSTÜCKS MIT EINER TOPFSCHLEIFSCHEIBE, SOWIE DIE DAFÜR VERWENDETE TOPFSCHLEIFSCHEIBE

Title (fr)
PROCÉDÉ ET SYSTÈME POUR DISTRIBUER UN LIQUIDE DE REFROIDISSEMENT PENDANT L'USINAGE D'UNE PIÈCE AVEC UNE MEULE BOISSEAU, AINSI QUE LA MEULE

Publication
EP 3260236 A3 20180516 (EN)

Application
EP 17176579 A 20170619

Priority
IT UA20164592 A 20160622

Abstract (en)
[origin: EP3260236A2] During machining of a workpiece (L) by means of a cup grinding wheel (8) controlled by a rotating spindle (3), coolant is fed into the area of contact between the annular front surface (91) of the cup grinding wheel (8) and the workpiece (L) being machined, by means of passages (81) formed in the body of the cup grinding wheel (8) and leading to said annular front surface (91). These passages (81) receive coolant fed by one or more coolant dispensers (10) arranged in fixed positions on the outside of the spindle (3) and configured to direct jets of coolant inside the cup grinding wheel body and through the aforesaid passageways leading to the annular front surface (91) of the cup grinding wheel (8). In the annular front surface (91) of the cup grinding wheel (8), at least one circumferential continuous groove (T) is formed that follows a wavy path, in order to cover a predominant portion of the radial extension of the aforesaid annular front surface (91) of the cup grinding wheel (8).

IPC 8 full level
B24B 13/04 (2006.01); **B24B 57/02** (2006.01); **B24D 7/10** (2006.01)

CPC (source: EP)
B24B 13/043 (2013.01); **B24B 57/02** (2013.01); **B24D 7/10** (2013.01)

Citation (search report)

- [I] EP 0483561 A1 19920506 - EATON CORP [US]
- [A] EP 1859904 A1 20071128 - SAINT GOBAIN ABRASIVES INC [US], et al
- [A] DE 2425179 A1 19750102 - PRAMET N P Z PRASKOVE METALURG
- [A] US 5674116 A 19971007 - MERRILL DANIEL L [US], et al

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CN114603494A; CN109531309A; CN110788686A; JP2020019111A; JP2022135073A; WO2022186346A1; WO2021197027A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3260236 A2 20171227; EP 3260236 A3 20180516; EP 3260236 B1 20190327; ES 2732431 T3 20191122; IT UA20164592 A1 20171222

DOCDB simple family (application)
EP 17176579 A 20170619; ES 17176579 T 20170619; IT UA20164592 A 20160622