

Title (en)
IMPROVED ABRADING WHEEL

Title (de)
MEULE À RODER AMÉLIORÉE

Title (fr)
VERBESSERTES SCHLEIFRAD

Publication
EP 4074459 A1 20221019 (EN)

Application
EP 22171607 A 20170331

Priority
• EP 22171607 A 20170331
• EP 21195510 A 20170331
• EP 17715119 A 20170331
• EP 2017057724 W 20170331

Abstract (en)
The present invention discloses an abrading wheel comprising a circular core having an outer periphery, a rim arranged orthogonally to said circular core on said outer periphery, said rim comprising an inner surface and an outer surface, and a grit material disposed on at least part of said outer surface. Further, a plurality of openings are arranged in the core for providing an airflow directed towards the inner surface, and wherein the outer surface of the rim is provided with a plurality of grooves, and where a main part of the grit material is disposed on said outer surface of said rim on spaces between said grooves. Thereby, the abrading wheel is cooled during operation, heat is more easily dissipated, and accumulation of particles from the product being grinded is minimised. Due to the plurality of openings in the circular core, air is forced onto the inner surface of the rim, thereby providing air cooling. Due to the presence of grooves on the outer surface, the surface area of said outer surface is inevitably increased thereby increasing the dissipation of heat and providing additional cooling to the abrading wheel. By disposing a main part of the grit material on spaces between the grooves, said grooves are kept free of grit material thereby minimising the risk of accumulation of material or particles in said grooves. The combination of cooling the abrading wheel and reducing the risk of accumulation of particles further increases the lifetime of said abrading wheel.

IPC 8 full level
B24D 5/10 (2006.01); **B24D 3/06** (2006.01)

CPC (source: EP US)
B24D 3/06 (2013.01 - EP US); **B24D 5/10** (2013.01 - EP US); **B24D 9/08** (2013.01 - US)

Citation (applicant)
US 2002035890 A1 20020328 - KUSACHI YOSHIKAZU [JP], et al

Citation (search report)
• [XDYL] US 2002035890 A1 20020328 - KUSACHI YOSHIKAZU [JP], et al
• [Y] US 6007415 A 19991228 - VAN OSENBRUGGEN ANTHONY ALFRED [NZ]
• [Y] US 3579928 A 19710525 - HELD GERHARD R
• [Y] EP 2075090 A1 20090701 - JTEKT CORP [JP]

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

DOCDB simple family (publication)
WO 2018177541 A1 20181004; BR 112019019667 A2 20200422; BR 112019019667 B1 20220927; CA 3056693 A1 20181004; CA 3056693 C 20220503; CN 110621443 A 20191227; DK 3600771 T3 20220509; DK 3957438 T3 20220829; EP 3600771 A1 20200205; EP 3600771 B1 20220330; EP 3957438 A1 20220223; EP 3957438 B1 20220615; EP 4074459 A1 20221019; ES 2915555 T3 20220623; ES 2924097 T3 20221004; MX 2019011498 A 20191101; NZ 757271 A 20220225; PL 3600771 T3 20220620; PL 3957438 T3 20220816; PT 3600771 T 20220617; PT 3957438 T 20220817; US 2021162565 A1 20210603

DOCDB simple family (application)
EP 2017057724 W 20170331; BR 112019019667 A 20170331; CA 3056693 A 20170331; CN 201780089252 A 20170331; DK 17715119 T 20170331; DK 21195510 T 20170331; EP 17715119 A 20170331; EP 21195510 A 20170331; EP 22171607 A 20170331; ES 17715119 T 20170331; ES 21195510 T 20170331; MX 2019011498 A 20170331; NZ 75727117 A 20170331; PL 17715119 T 20170331; PL 21195510 T 20170331; PT 17715119 T 20170331; PT 21195510 T 20170331; US 201716497735 A 20170331