

Title (en)
VITRIFIED GRINDSTONE HAVING ROUGH-TEXTURED HOMOGENEOUS STRUCTURE

Title (de)
VERGLASTER SCHLEIFSTEIN MIT GROBTEXTURIERTER HOMOGENER STRUKTUR

Title (fr)
MEULE VITRIFIÉE DOTÉE D'UNE STRUCTURE HOMOGENE À TEXTURE RUGUEUSE

Publication
EP 3778120 A1 20210217 (EN)

Application
EP 19781836 A 20190301

Priority
• JP 2018074258 A 20180406
• JP 2019008220 W 20190301

Abstract (en)
Provided is a vitrified grindstone having a rough-textured (porous) homogeneous structure, the vitrified grindstone being capable of grinding even hard-to-cut materials without generating a burn and while retaining shape-maintenance properties. According to this vitrified grindstone having a rough-textured homogeneous structure, abrasive grains fill the vitrified grindstone at a proportion of 23-35 vol% together with an inorganic hollow filler, the abrasive grains being homogeneous so as to have a standard deviation σ of 8.7 or less in a frequency distribution map of abrasive grain area, which is a proportion of solids including the abrasive grains per unit area at a plurality of locations in a cross-section of the vitrified grindstone. This results in high homogeneity in a grindstone structure and maintains shape-maintenance properties (reduction in the amount of wear of the grindstone) even with respect to a rough texture having a low volume ratio of abrasive grains, and therefore the generation of burns in a to-be-cut material is suppressed while properties are maintained even with respect to hard-to-cut materials.

IPC 8 full level
B24D 3/18 (2006.01); **B24D 3/00** (2006.01); **B24D 3/02** (2006.01)

CPC (source: EP KR)
B24D 3/18 (2013.01 - EP KR); **B24D 3/34** (2013.01 - EP KR)

Citation (search report)
See references of WO 2019193887A1

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 3778120 A1 20210217; CN 112135710 A 20201225; JP 2019181613 A 20191024; KR 20200138393 A 20201209;
TW 201943500 A 20191116; US 2021362298 A1 20211125; WO 2019193887 A1 20191010

DOCDB simple family (application)
EP 19781836 A 20190301; CN 201980024619 A 20190301; JP 2018074258 A 20180406; JP 2019008220 W 20190301;
KR 20207031880 A 20190301; TW 108110048 A 20190322; US 201917045598 A 20190301