

Title (en)

SAW BEADS WITH REDUCED FLATTENING BEHAVIOR AND A SAW CORD COMPRISING SUCH BEADS

Title (de)

SÄGEKÜGELCHEN MIT REDUZIERTEM VERFLACHUNGSVERHALTEN UND EINE SÄGESCHNUR MIT SOLCHEN KÜGELCHEN

Title (fr)

BILLES DE SCIE À COMPORTEMENT D'APLATISSEMENT RÉDUIT ET CORDON DE SCIE COMPRENANT DE TELLES BILLES

Publication

EP 3580004 A1 20191218 (EN)

Application

EP 18701500 A 20180201

Priority

- EP 17155169 A 20170208
- EP 2018052465 W 20180201

Abstract (en)

[origin: WO2018145980A1] A recurring problem in the use of saw cords for sawing natural or man-made stone-like materials, such as marble, granite, brick, concrete and the like, is that during the use of the saw cord the beads may develop a flat face inhibiting the rotation of the saw cord and hence leading to a preferred wear at one side of the saw cord. As only one side of the saw cord beads is eroded away the saw cords have to be discarded prematurely. The inventors have found that in order to overcome this flattening problem it is beneficial that the average working length, that is the average axial length of the bead that contacts the workpiece, must increase monotonically with decreasing diameter. In this way the loss in contact area between the bead and the workpiece due to the reduced diameter of the bead is compensated by an increased working length. As a result the contact pressure on the bead remains about constant throughout the useful life of the bead which is not the case for prior art beads. In prior art beads the contact pressure on the bead increases as the contact area diminishes with decreasing diameter.

IPC 8 full level

B23D 61/18 (2006.01); **B28D 1/08** (2006.01)

CPC (source: EP)

B23D 61/185 (2013.01); **B28D 1/08** (2013.01)

Citation (search report)

See references of WO 2018145980A1

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)

WO 2018145980 A1 20180816; CN 110366468 A 20191022; EP 3580004 A1 20191218

DOCDB simple family (application)

EP 2018052465 W 20180201; CN 201880010386 A 20180201; EP 18701500 A 20180201