Title (en)
METHOD OF SAWING AN OBJECT AND WIRE SAW APPARATUS

Title (de)
VERFAHREN ZUM SÄGEN EINES GEGENSTANDS UND DRAHTSÄGEVORRICHTUNG

Title (fr)
PROCÉDÉ DE SCIAGE D'UN OBJET ET APPAREIL DE SCIE À FIL

Publication
EP 3292968 A1 20180314 (EN)

Application
EP 17189752 A 20170907

Priority
TW 105129735 A 20160913

Abstract (en)
A method of sawing an object (700) includes providing a wire saw apparatus (2), which includes tank (20) defining a receiving space (21) having an opening (211) and receiving a cutting liquid (200), an ultrasonic vibrator (3) disposed in the tank (20), and multiple sawing wires (4) located above the opening (211) and spaced apart from the cutting liquid (200) . The method further includes driving the ultrasonic vibrator (3), reciprocating the sawing wires (4), and moving the object (700) toward the sawing wires (4), so that the object (700) is cut by the sawing wires (4) to form multiple cut grooves (400), and subsequently a part of the object (700) is immerged into the cutting liquid (200), each of the cut grooves (400) having a width (W) allowing the cutting liquid (200) to enter the cut grooves (400) by capillary action.

IPC 8 full level
B28D 5/00 (2006.01); **B28D 5/04** (2006.01)

CPC (source: CN EP)
B28D 5/0076 (2013.01 - EP); **B28D 5/045** (2013.01 - EP); **B28D 5/047** (2013.01 - CN EP)

Citation (applicant)
CN 103085179 A 20130508 - ZHAO JUNYONG

Citation (search report)
- [YA] JP 2010194706 A 20100909 - KYOCERA CORP
- [Y] TW 201410385 A 20140316 - AUO CRYSTAL CORP [TW]
- [A] JP 2016101611 A 20160602 - KYOCERA CORP
- [AD] CN 103085179 A 20130508 - ZHAO JUNYONG
- [A] JP H01216759 A 19890830 - OSAKA TITANIUM, et al

Cited by
CN114851413A; CN115609770A

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)
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DOCDB simple family (application)
EP 17189752 A 20170907; CN 201710790107 A 20170905; JP 2017166567 A 20170831; TW 105129735 A 20160913