

Title (en)

ENGRAVING DEVICE FOR RELATIVELY FRAGILE MATERIAL SLABS AND ENGRAVING METHOD THEREOF

Title (de)

GRAVURVORRICHTUNG FÜR RELATIV ZERBRECHLICHE MATERIALPLATTEN UND GRAVURVERFAHREN DAFÜR

Title (fr)

DISPOSITIF DE GRAVURE POUR DALLES DE MATÉRIAUX RELATIVEMENT FRAGILES ET PROCÉDÉ DE GRAVURE ASSOCIÉ

Publication

EP 4124433 A1 20230201 (EN)

Application

EP 22187564 A 20220728

Priority

IT 202100020618 A 20210730

Abstract (en)

A device (1) for engraving slabs (L) of relatively fragile material, such as ceramic or glass, adapted for use in combination with a multiaxial machine tool having a working head (2) placed above a substantially horizontal support surface (P), wherein the head (2) comprises a fork (3) movable along three Cartesian axes (X, Y, Z) and rotatable around a vertical axis (Z) and adapted to support a working unit (4). The device (1) comprises a movable member (8) operatively associable to the fork (3) and having at its lower end a rolling tool (9) with a substantially horizontal rotation axis ($R_{2</sub>2</sub>}$), configured to engrave a slab (L) resting on the support surface (P) along a predetermined engraving path. A method for engraving slabs (L) of relatively fragile material, such as ceramic and glass, using the device (1).

IPC 8 full level

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CPC (source: EP)

B28D 1/003 (2013.01); **B28D 1/043** (2013.01); **B28D 1/225** (2013.01); **B28D 7/00** (2013.01)

Citation (search report)

- [Y] CN 112519006 A 20210319 - FOSHAN SHENCHUANG ELECTROMECHANICAL CO LTD
- [Y] JP 2015223819 A 20151214 - MITSUBOSHI DIAMOND IND CO LTD
- [A] EP 1700677 A1 20060913 - MITSUBOSHI DIAMOND IND CO LTD [JP]
- [A] EP 3603913 A1 20200205 - DONATONI GIORGIO [IT]
- [A] WO 2015159270 A1 20151022 - TONCELLI DARIO [IT]

Designated contracting state (EPC)

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