

Title (en)

Machine for working the peripheral edge of glass plates and for drilling these plates, and working method implemented by this machine

Title (de)

Maschine zum Bearbeiten der Außenkante von Glasplatten und zum Bohren dieser Platten sowie mit dieser Maschine implementiertes Arbeitsverfahren

Title (fr)

Machine de travail du bord périphérique de plaques de verre et de forage de ces plaques et procédé de travail mis en oeuvre par cette machine

Publication

EP 2719501 B1 20150805 (EN)

Application

EP 13187216 A 20131003

Priority

IT TO20120893 A 20121011

Abstract (en)

[origin: EP2719501A1] In a machine for working the peripheral edge of glass plates (L), the plate to be worked advances in a substantially vertical position in a first horizontal direction X parallel to the plane of the plate (L) through a workstation (W) comprising a first working head (H1) and a second working head (H2), which are movable in a second substantially vertical direction Y and include motor-driven rotating spindles that can each be coupled to a grinding tool (M). Three or more suction-cup carriages (C), which are movable independently of one another in the direction X, carry a plurality of suction cups (S) that can be engaged on the plate, for feeding the glass plate in the first direction X. The first and second working heads (H1, H2) are set on opposite sides with respect to the plane of lie of the glass plate, and are prearranged for mounting on the respective motor-driven spindles, instead of the grinding tools, a first drilling tool (F1) and a second drilling tool (F2) that are designed to engage coaxially the glass plate on opposite sides for carrying out drilling operations on the glass plate. The suction-cup carriages are each provided with a single aligned vertical series of suction cups (S) and each have a maximum dimension in the longitudinal direction X that substantially does not exceed the dimension in the longitudinal direction X of each suction pad. When it is necessary to carry out a drilling operation in an area of the glass plate (L) occupied by a suction-cup carriage (C), the carriage (C) is brought into a different position on the plate (L) or into a position out of engagement with the plate (L), whilst the correct position of the plate is in any case ensured by at least two of the remaining suction-cup carriages (C).

IPC 8 full level

B24B 9/10 (2006.01); **B24B 41/02** (2006.01); **B24B 47/22** (2006.01); **B28D 1/14** (2006.01)

CPC (source: EP)

B24B 9/102 (2013.01); **B24B 41/02** (2013.01); **B24B 47/22** (2013.01); **B28D 1/14** (2013.01); **B28D 7/046** (2013.01)

Cited by

ITUB20153972A1; CN111975612A; CN105798746A; CN112756664A; CN106002573A; CN108189248A; CN106696093A; CN107891447A; CN106926101A; IT201700108406A1; CN110126099A; CN105881147A; US2017304982A1; US10702966B2; CN105773352A; EP3106275A1; EP3170622A1; WO2018069472A1; US11565363B2; EP3525984B1

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)

EP 2719501 A1 20140416; EP 2719501 B1 20150805; IT TO20120893 A1 20140412

DOCDB simple family (application)

EP 13187216 A 20131003; IT TO20120893 A 20121011