Title (en)

Machine for producing spherical or toroidal, concave or convex surfaces on optical glasses.

Title (de)

Maschine zum Erzeugen von hohlen oder gewölbten Ring- oder Kugelflächen auf optischen Gläsern.

Title (fr)

Machine pour générer des surfaces sphériques ou toriques, concaves ou convexes sur des verres optiques.

Publication

EP 0176460 A1 19860402 (FR)

Application

EP 85430029 A 19850905

Priority

FR 8414235 A 19840914

Abstract (en)

1. Machine for generating concave or convex spherical or toric surfaces on optical glasses (32) comprising a frame (1) on which is mounted positionally stationary a grinding wheel (8) driven rotatively about the longitudinal axis thereof, and a glass-holding spindle (12) mounted movably on a pivoting support (10/11) about a vertical axis (10a), the longitudinal axis of the spindle (12) and that of the grinding wheel (8) being located in a same horizontal plane, the machine further comprising means for bringing together the grinding wheel (8) and the glass (32) and means for bringing about a relative rotational movement between the wheel and the glass, characterized in that the frame (1) comprises an arm (51) extending perpendicularly to the longitudinal axis of the wheel (8), the arm (51) and the coplanar axes of the wheel (8) and the glass-holding spindle (12) being in parallel planes, and in that the glass-holding spindle (12) is movable along the longitudinal axis of the support (10) and is articulated on the support to pivot horizontally about an axis (11a), a slide (37) being secured to said glass-holding spindle (12) and extending parallel to the longitudinal axis of said glass-holding spindle (12) and cooperating with one of the parts (382) of a slide block (38) comprising two pieces (381 /382) articulated with respect to one another on a rotational shaft (39) and the other part (381) cooperates with a graduated slide (44) extending parallel to the longitudinal axis of the wheel (8), said slide (44) being connected to a slideway (50) which itself slides in said horizontal arm (51), in that the machine further comprises means (56/47/48) for moving said slide block along said graduated slide (44), means (56/58/63/70) for moving the slide (50) with respect to said arm (51), means (41) for locking the part (382) of the slide block (38) on said slide (37), and in that said shaft (39) constitutes the rotational axis about which pivots the glass holding spindle (12) so as to generate said surfaces on said optical glasses (32).

Abstract (fr)

Une machine selon l'invention comprenant un bâti (1) sur lequel est montée une meule (8), entraînée en rotation autour de son axe longitudinal et une broche-porte-verre (12), des moyens pour rapprocher la meule et le verre et pour provoquer un mouvement relatif de la meule (8) et du verre (32) par des moyens de rotation, se caractérise en ce que la meule (8) est montée fixe en position sur le bâti (1) et que la broche-porte-verre (12) est montée mobile sur un support pivotant (10/11), l'axe longitudinal de ladite broche (12) et l'axe longitudinal de la meule (8) étant situés dans un même plan horizontal et en ce que l'axe de rotation (39) dans le plan horizontal de la broche-porte-verre (12) est perpendiculaire audit plan et est montée déplaçable sur la machine horizontalement et suivant deux directions perpendiculaires dont une est parallèle à l'axe longitudinal de la meule (8) pour faire décrire à la broche-porte-verre (12) des arcs de cercle de différentes valeurs et générer lesdites surfaces sur les verres optiques fixés à la partie antérieure de ladite broche.

IPC 1-7

B24B 13/04

IPC 8 full level

B24B 13/04 (2006.01)

CPC (source: EP)

B24B 13/043 (2013.01)

Citation (search report)

- [X] DE 1752466 A1 19710916 - TEXTRON INC
- [X] US 3624969 A 19711207 - DALTON ERNEST T
- [A] US 3492764 A 19700203 - DALTON ERNEST T
- [A] FR 1445522 A 19660715 - OPTIQUE TELEGIC SOC D
- [A] FR 2116127 A5 19720707 - AUTOFLOW ENG LTD

Designated contracting state (EPC)

BE CH DE GB IT LI

DOCDB simple family (publication)

EP 0176460 A1 19860402; **EP 0176460 B1 19880504**; DE 3562465 D1 19880609; ES 546843 A0 19861201; ES 8701002 A1 19861201; FR 2570312 A1 19860321; FR 2570312 B1 19880527

DOCDB simple family (application)

EP 85430029 A 19850905; DE 3562465 T 19850905; ES 546843 A 19850910; FR 8414235 A 19840914