

Title (en)

Apparatus to establish a predetermined orientation of a surface of a workpiece

Title (de)

Vorrichtung zum Herstellen einer festgelegten Ausrichtung einer Oberfläche eines Werkstücks

Title (fr)

Appareil pour établir une orientation prédéterminée d'une surface d'une pièce de travail

Publication

EP 1927470 A3 20080618 (EN)

Application

EP 07121293 A 20040514

Priority

EP 04102128 A 20040514

Abstract (en)

[origin: EP1595699A1] A reduction to the traveling motion of bottles (B1) along a delivery conveyor (12) in an intermittent motion decorating machine (10) is provided by one (66,68) of a pair of workpiece feed cams (66,68;70,72) rotatably supported in a side-by-side relation to rotate about spaced horizontal axes lying in a common horizontal plane. The workpiece feed cams (66,68;70,72) have feed cam tracks (66A,68A) for receiving cam followers (74,75) of each of plurality of horizontal bottle carriers (76). One of the feed cam tracks (66A,68A) reduces the speed of the bottle carriers (76) from a relatively high entry speed corresponding to the through put speed in the decorating machine (10) to the speed of the deliver conveyor for more densely populating the delivery conveyor (12) with workpieces (B1). Carrier transfer members (52,53,54,55) at each of opposite ends of the workpiece feed cams (66,68) transfer the bottle carriers (76) from one to the other of the workpiece feed cam (66,68). A drive (14,15,21,38) rotates the workpiece feed cams (66,68), carrier return cams (70,72) and carrier transfer members (52,53,54,55). The decorating machine (10) is provided with a registration station (R) preceding spaced apart decorating stations (P1-PN). The registration station (R) includes a drive to reduce the clamping pressure by chucks (79) on a workpiece (B1) while establishing a predetermined orientation of each workpiece (B1) relative to the decorating stations (P1-PN). <IMAGE>

IPC 8 full level

B41F 15/30 (2006.01); **B41F 15/08** (2006.01); **B41F 15/18** (2006.01)

CPC (source: EP)

B41F 15/08 (2013.01); **B41F 15/0872** (2013.01); **B41F 15/18** (2013.01); **B41F 15/30** (2013.01)

Citation (search report)

- [A] US 3237555 A 19660301 - JONES ROBERT G, et al
- [A] US 2004020746 A1 20040205 - TWEEDY MARK R [US], et al
- [A] US 3311051 A 19670328 - RUDOLPH ROME R, et al
- [A] US 6581750 B1 20030624 - TWEEDY MARK R [US], et al
- [A] US 6257136 B1 20010710 - MCCOY GARY W [US], et al
- [A] US 3897725 A 19750805 - DERRICKSON CHARLES H

Cited by

CN102627021A; EP4063020A1; CN106626733A; EP2643249B1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 1595699 A1 20051116; EP 1927470 A2 20080604; EP 1927470 A3 20080618

DOCDB simple family (application)

EP 04102128 A 20040514; EP 07121293 A 20040514