

Title (en)

Folding device and method for erecting boxes starting from T-shaped or double-T-shaped flat blanks

Title (de)

Faltvorrichtung und Verfahren zum Aufrichten von Schachteln mit flachen Teilen mit T-Form oder Doppel-T-Form

Title (fr)

Dispositif et procédé de pliage pour le montage de boîtes en partant d'éléments plats en forme de T ou de double T

Publication

EP 2090512 A2 20090819 (EN)

Application

EP 09151368 A 20090126

Priority

IT FI20080026 A 20080215

Abstract (en)

An apparatus for forming boxes starting from flat blanks (F) comprises an erecting station wherein the blanks (F), fed along a horizontal feeding direction (Y), are subjected to the action of a mandrel (101), movable vertically and adapted to push the blanks (F) against fixed folding means (104), arranged in proximity to the lower end of the run of the mandrel. The erecting station comprises a folding device with movable folding means (9) rotating on respective vertical planes, parallel to said feeding direction (Y), adapted to interfere with respective lateral flaps (F1, F2, F3, F4) of a T-shaped or double-T-shaped blank (F) to cause folding along longitudinal folding lines thereof, i.e. parallel to said feeding direction (Y), the device further comprising, or being associated to, further fixed folding means (103) adapted to engage with the blanks to perform, in an initial step of downward movement of the mandrel (101), foldings along transverse lines, consequently allowing the rotating folding means (9) to engage with the lateral flaps (F1, F2, F3, F4).

IPC 8 full level

B65B 43/10 (2006.01); **B31B 3/46** (2006.01); **B31B 5/80** (2006.01); **B31B 50/44** (2017.01); **B65B 43/26** (2006.01); **B65B 47/04** (2006.01)

CPC (source: EP US)

B31B 50/00 (2017.07 - EP); **B31B 50/282** (2017.07 - EP US); **B31B 50/44** (2017.07 - EP); **B31B 50/46** (2017.07 - EP); **B31B 50/804** (2017.07 - EP); **B31B 2100/00** (2017.07 - EP); **B31B 2120/30** (2017.07 - EP); **B65B 43/10** (2013.01 - EP); **B65B 43/265** (2013.01 - EP); **B65B 47/04** (2013.01 - EP)

Cited by

CN104859189A; CN108481805A; CN107572054A; CN114474850A; CN102219078A; IT201700026029A1; CN102241161A; CN102241164A; CN105501538A; CN111108040A; US10946988B2

Designated contracting state (EPC)

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 SE SI SK TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

EP 2090512 A2 20090819; **EP 2090512 A3 20110817**; IT FI20080026 A1 20090816

DOCDB simple family (application)

EP 09151368 A 20090126; IT FI20080026 A 20080215