



(11) EP 2 090 512 A3

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
17.08.2011 Bulletin 2011/33

(51) Int Cl.:
B65B 43/10 (2006.01) **B65B 43/26 (2006.01)**
B31B 5/80 (2006.01) **B65B 47/04 (2006.01)**
B31B 1/44 (2006.01) **B31B 3/46 (2006.01)**

(43) Date of publication A2:
19.08.2009 Bulletin 2009/34

(21) Application number: 09151368.9

(22) Date of filing: 26.01.2009

(84) Designated Contracting States:
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 States:
AL BA RS

(30) Priority: 15.02.2008 IT FI20080026

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

(57) 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).

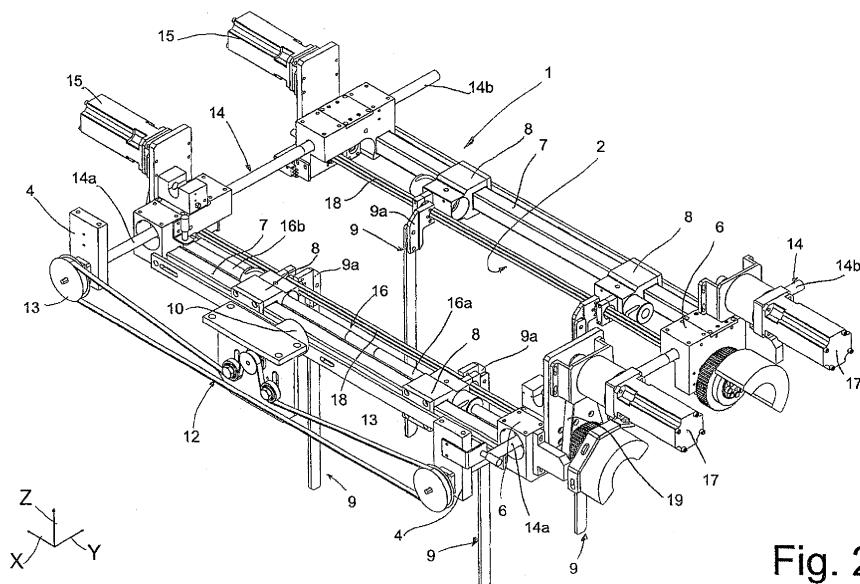


Fig. 2



EUROPEAN SEARCH REPORT

Application Number

EP 09 15 1368

DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (IPC)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
X	US 1 767 799 A (HERMANN JAHNE ERNST) 24 June 1930 (1930-06-24) * page 1, line 60 - page 2, line 13 * * figures 1-8 * -----	1-20	INV. B65B43/10 B65B43/26 B31B5/80 B65B47/04
X	DE 277 926 C (JOSEPH WESTON COYLE) 14 September 1914 (1914-09-14) * figures 7-12 * -----	1-20	B31B1/44 B31B3/46
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The present search report has been drawn up for all claims			
1	Place of search	Date of completion of the search	Examiner
EPO FORM 1503 03.82 (P04C01)	Munich	4 July 2011	Damiani, Alberto
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	
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EP 09 15 1368

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04-07-2011

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