

Title (en)
DEVICE FOR FOLDING PAPER BAGS INTO A Z SHAPE

Publication
EP 0093390 B1 19861029 (DE)

Application
EP 83104113 A 19830427

Priority
DE 3216505 A 19820503

Abstract (en)
[origin: ES8402229A1] In an apparatus for folding paper sacks to Z shape, co-operating scoring wheels are provided on both sides of the conveying plane of an inlet double belt conveyor consisting of individual double conveyor belts disposed at the ends of the articles. The scoring wheels are spaced apart by a distance equal to the desired spacings of the fold-lines of the Z folds and are mounted on pairs of shafts parallel to the roller shafts of the inlet conveyor. One of the individual belts adjoins a double conveyor belt which extends obliquely to the other and which is extended by a straight individual belt which, in relation to the inlet conveyor, is closer to the other individual belt by a distance equal to the shortening of the articles caused by the folding. The end rollers of the upper and lower belts of the oblique double belt conveyor with the adjacent rollers of the straight conveyor belts can be alternately raised from the rollers of the associated double belt conveyor so that each passing sack is clamped by only one pair of rollers. Over substantially the length of the oblique conveyor belt, a folding bar is provided above and another below the conveying planes. These bars extend in the conveying direction from a position beyond the scored zones of the sacks, pass through the conveying plane in opposite senses, also intersect in a vertical plane and terminate at a spacing from each other substantially in a horizontal plane.

IPC 1-7
B31B 35/74; **B65H 45/00**

IPC 8 full level
B31B 1/26 (2006.01); **B31B 19/36** (2006.01); **B31B 31/00** (2006.01); **B31B 31/26** (2006.01); **B31B 50/98** (2017.01); **B65H 45/20** (2006.01)

CPC (source: EP US)
B65H 45/20 (2013.01 - EP US); **B31B 70/36** (2017.07 - EP US); **B31B 70/982** (2017.07 - EP US)

Citation (examination)
• EP 0092259 A1 19831026 - WINDMOELLER & HOELSCHER [DE], et al
• DE 6929888 U 19720531 - GARTEMANN & HOLLMANN GMBH [DE]

Cited by
CN111646101A; CN107776966A

Designated contracting state (EPC)
FR GB IT SE

DOCDB simple family (publication)
EP 0093390 A1 19831109; **EP 0093390 B1 19861029**; BR 8302245 A 19840103; CA 1203256 A 19860415; DE 3216505 A1 19831103; DE 3216505 C2 19901129; DK 160244 B 19910218; DK 160244 C 19910722; DK 193383 A 19831104; DK 193383 D0 19830502; ES 521993 A0 19840201; ES 8402229 A1 19840201; FI 72297 B 19870130; FI 72297 C 19870511; FI 831356 A0 19830421; FI 831356 L 19831104; JP H0514607 B2 19930225; JP S58191142 A 19831108; SU 1228784 A3 19860430; US 4508529 A 19850402

DOCDB simple family (application)
EP 83104113 A 19830427; BR 8302245 A 19830502; CA 426813 A 19830427; DE 3216505 A 19820503; DK 193383 A 19830502; ES 521993 A 19830502; FI 831356 A 19830421; JP 6908183 A 19830419; SU 3584513 A 19830426; US 49088983 A 19830502