

Title (en)
DEVICE FOR TRANSPORTING FOLDED PRODUCTS

Publication
EP 0250772 A3 19890510 (DE)

Application
EP 87106361 A 19870430

Priority
DE 3621834 A 19860628

Abstract (en)
[origin: US4828242A] To move a plurality of interconnected segments which a zig-zag, accordion or bellows pleat arrangement on or between which sheet elements such as projecting elements from a folded sheet are located along a transport path and to permit, selectively, expansion or compression of the segments for handling of sheet elements, and compact storage, an endless belt, preferably a gear belt sprocket chain or the like, is provided engageable with the segments. Preferably, lifting rollers are provided, selectively engageable with the belt to slightly raise the segments from transport rails, and decrease friction of the segments with respect to the rails. The segments can be stored, when empty or loaded, when collapsed against each other, and spread apart for sheet material handling. A plurality of such system can be located or adjacent each other, so that, when the segments are spread apart, suitable mixing or insertion steps can be carried out. To permit a space-saving arrangement, the transport path can be sinuous, with 180 DEG rotating elements, having carrying rods engaging the segments coupled to a disk, turning the segments about an arcuate path defined by the travel of the carrying rods on the disk. The segments can be raised, again, by placing a cam track adjacent the disk, on which the carrying rods can run off by means of cam follower rollers.

IPC 1-7
B65H 29/00; **B41F 13/54**

IPC 8 full level
B65G 23/00 (2006.01); **B41F 13/54** (2006.01); **B65H 5/02** (2006.01); **B65H 5/30** (2006.01); **B65H 5/32** (2006.01); **B65H 20/00** (2006.01); **B65H 29/00** (2006.01); **B65H 45/12** (2006.01)

CPC (source: EP US)
B41F 13/54 (2013.01 - EP US); **B65H 29/00** (2013.01 - EP US); **B65H 2701/11231** (2013.01 - EP US)

Citation (search report)
• [Y] US 3122362 A 19640225 - WILLI VOLLRATH, et al
• [Y] NL 7012051 A 19720216
• [A] DE 278133 C

Cited by
EP0336149A3; GB2569708A; GB2569708B

Designated contracting state (EPC)
AT BE CH DE ES FR GB IT LI LU NL SE

DOCDB simple family (publication)
US 4828242 A 19890509; AT E65063 T1 19910715; AU 592200 B2 19900104; AU 7465287 A 19880107; CA 1289580 C 19910924; DE 3621834 C1 19870917; DE 3771278 D1 19910814; EP 0250772 A2 19880107; EP 0250772 A3 19890510; EP 0250772 B1 19910710; ES 2023377 B3 19920116; JP H0620954 B2 19940323; JP S6366047 A 19880324

DOCDB simple family (application)
US 6076487 A 19870610; AT 87106361 T 19870430; AU 7465287 A 19870624; CA 539372 A 19870610; DE 3621834 A 19860628; DE 3771278 T 19870430; EP 87106361 A 19870430; ES 87106361 T 19870430; JP 15798787 A 19870626