

Title (en)

IMPROVEMENTS IN OR RELATING TO APPARATUS AND METHODS FOR FEEDING ARTICLES SUCH AS SHEETS OR BOARDS

Publication

EP 0183361 B1 19890913 (EN)

Application

EP 85307208 A 19851009

Priority

US 67429484 A 19841123

Abstract (en)

[origin: EP0183361A2] A rotary feeder feeds sheets or board-like articles (b) to nip rolls (18) in a box-making machine (6). The articles (b) are successively and individually fed from the bottom of a stack whose forward edge engages a gate (32) below which the articles are fed by driven feed members such as wheels (51), rolls or endless belts which engage the underside of the lowermost article (b). To raise and lower the articles relative to the surface of the feed members (51), a vertically reciprocable grate (55, 56) is provided between the drive members (51). The grate (55, 56) and drive members (51) are mounted in a vacuum box (36) in which a vacuum is created to hold the articles in proper position on the feed members (51) when the grate (55, 56) is lowered. The vacuum is also utilized to hold an article with sufficient force to produce the necessary friction between an article and the feed members (51) for the article to be fed. The feed members (51) are driven in two opposite directions through an oscillating rocker shaft (10) and gearing (70, 72, 74). One direction serves to convey an article (6) below the gate (32) to the nip rolls (18) and the other direction serves to relieve pressure of an article (b) against the gate (32) prior to conveyance to the nip rolls (18). The grate (55,56) is actuated through oscillatable shafts (52,52a) connected to the grate and driven from a cam and cam-follower assembly (90,94) which, in turn, is driven from a crank gear (16) that is also employed to drive the rocker shaft (10) through a linkage (12,14) or a quick return slide mechanism (12a, 12b, 13). A latch device (122,126) is also provided to releasably hold the grate (55,56) in raised position above the feed members (51) to interrupt the feeding operation.

IPC 1-7

B65H 3/02; **B65H 3/06**

IPC 8 full level

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CPC (source: EP)

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Cited by

CN116713155A; EP0441871A4; GB2274276A; GB2274276B; GB2276871A; GB2276871B; EP0794140A1; EP0465355A3; CN115008648A; EP0638496A1; FR2708579A1; US5464202A; EP0394707A1; FR2646414A1; US5026040A; CN107108137A; EP3208219A4; FR2701938A1; US5451042A; EP0379306A3; GB2228925A; GB2228925B; EP0325402A3; CN108996279A; WO9629269A1; WO9959905A1

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