

Title (en)  
Improvements in or relating to apparatus and methods for feeding articles such as sheets or boards.

Title (de)  
Vorrichtung und Verfahren zum Zuführen von Gegenständen wie Blätter oder Platten.

Title (fr)  
Procédé et dispositif pour alimenter en articles tels que des feuilles ou des plaques.

Publication  
**EP 0183361 A2 19860604 (EN)**

Application  
**EP 85307208 A 19851009**

Priority  
US 67429484 A 19841123

Abstract (en)  
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 3/06**

IPC 8 full level  
**B65H 3/06** (2006.01); **B65H 3/08** (2006.01); **B65H 3/12** (2006.01)

CPC (source: EP)  
**B65H 3/063** (2013.01); **B65H 3/08** (2013.01); **B65H 3/34** (2013.01); **B65H 2406/30** (2013.01); **B65H 2406/3122** (2013.01)

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Designated contracting state (EPC)  
BE DE FR GB IT LU NL SE

DOCDB simple family (publication)  
**EP 0183361 A2 19860604; EP 0183361 A3 19860910; EP 0183361 B1 19890913**; AU 4902485 A 19860529; AU 589913 B2 19891026; CA 1251230 A 19890314; DE 3572957 D1 19891019; JP S61127535 A 19860614

DOCDB simple family (application)  
**EP 85307208 A 19851009**; AU 4902485 A 19851024; CA 492999 A 19851015; DE 3572957 T 19851009; JP 23090385 A 19851016