

Title (en)  
STRAIGHT-LINE INSERT MACHINE

Publication  
**EP 0270663 B1 19910529 (EN)**

Application  
**EP 87904595 A 19870616**

Priority  
US 87647686 A 19860620

Abstract (en)  
[origin: WO8707881A1] A straight-line insert machine for inserting materials (600) into a newspaper jacket (100). The jacket is positioned in a moving pocket (300) which is hinged but closed at the bottom such that when the pocket opens, as vacuum is applied to the walls of the pockets, the jacket opens. Vacuum flanges moving at the same linear speed as the pockets mate with vacuum stems attached to the pockets for a predetermined time and apply vacuum to the walls (320, 340) of the pocket so that the front and rear portions of the newspaper jacket are held against the fixed (340) and movable (320) walls, respectively, as the pocket opens. The pockets and vacuum system are synchronously driven. Camming action is used to open and close the pockets. Insert hoppers (500) place insert materials into the open jackets. Because the machine is modular, additional insert hoppers and pockets can be added. A gripper-conveyor system (700), which is also synchronously driven with the pockets and vacuum system, picks up the newspaper with inserts from the top of a closed pocket and delivers the newspaper with inserts to a drop-off point such as a tray (780) or a stacker.

IPC 1-7  
**B65H 5/30; B65H 39/02**

IPC 8 full level  
**B65H 39/045** (2006.01); **B65H 5/30** (2006.01); **B65H 29/04** (2006.01); **B65H 29/24** (2006.01); **B65H 39/02** (2006.01); **B65H 39/065** (2006.01)

IPC 8 main group level  
**B65H** (2006.01)

CPC (source: EP)  
**B65H 5/30** (2013.01); **B65H 39/02** (2013.01); **B65H 2301/431711** (2013.01); **B65H 2301/432** (2013.01); **B65H 2406/351** (2013.01)

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**WO 8707881 A1 19871230**; AU 599127 B2 19900712; AU 7691987 A 19880112; EP 0270663 A1 19880615; EP 0270663 B1 19910529; ES 2004739 A6 19890201; FI 880792 A0 19880219; FI 880792 A 19880219; FI 92683 B 19940915; FI 92683 C 19941227; FI 941887 A0 19940422; FI 941887 A 19940422; FI 96021 B 19960115; FI 96021 C 19960425; JP H01501059 A 19890413; JP H0772050 B2 19950802; NZ 220544 A 19890927

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**US 8701484 W 19870616**; AU 7691987 A 19870616; EP 87904595 A 19870616; ES 8701796 A 19870619; FI 880792 A 19880219; FI 941887 A 19940422; JP 50421787 A 19870616; NZ 22054487 A 19870603