Title (en)

Sheet settling system

Title (de)

Bogenablagesystem

Title (fr)

Système de mise en position de feuilles

Publication

EP 0765830 A1 19970402 (EN)

Application

EP 96307022 A 19960926

Priority

GB 9519743 A 19950928

Abstract (en)

In a sheet printing or coating machine, sheets 14 are travelling successively into contact with datum stops 18 carried by a rotating impression cylinder in order accurately to register, that is to say locate in position, each sheet relative to that cylinder just prior to being gripped by grippers carried by that cylinder. This enables a cylinder in rolling contact with the impression cylinder to print on or coat the sheet with accuracy as the sheet is drawn through the nip between the cylinders. However, because these machines operate at high speeds, there is a tendency for the sheets to move about as they are being fed to the datum stops, so that precise registration is not achieved. This is remedied by providing vacuum and/or magnetic forces to damp such movement by settling each sheet rapidly on a support surface 12 as it is fed into contact with the datum stops. The vacuum force is provided by drawing air through an array of holes 26 in the support surface into an underlying chamber 24 evacuated through a pipe 28 by a vacuum pump, and is adjustable either by controlling the flow rate through the pump or by controllably venting the chamber or pipe to atmosphere. The magnetic force is provided by a row of permanent or electro-magnets 22 in the support surface, and can be adjusted by varying their position perpendicular to that surface. Alternatively, in the case of electro-magnets, the magnetic force is adjustable by varying their supply of electrical power. <IMAGE>

IPC 1-7

B65H 9/14

IPC 8 full level

B41F 21/12 (2006.01); B41F 17/14 (2006.01); B65H 5/22 (2006.01); B65H 9/00 (2006.01); B65H 9/14 (2006.01)

CPC (source: EP)

B65H 9/14 (2013.01)

Citation (search report)

- [X] DE 1074059 B
- [X] DE 2518220 A1 19761104 MABEG & CO
- [X] GB 564322 A 19440922 HEADLEY TOWNSEND BACKHOUSE
- [A] EP 0623536 A1 19941109 LTG LUFTTECHNISCHE GMBH [DE]

Cited by

CN108724965A; DE19819888B4; EP0955257A3; US11279150B2

Designated contracting state (EPC)

BE CH DE ES FR GB IT LI NL

DOCDB simple family (publication)

**EP 0765830 A1 19970402**; GB 9519743 D0 19951129; JP H09174814 A 19970708

DOCDB simple family (application)

EP 96307022 A 19960926; GB 9519743 A 19950928; JP 29218496 A 19960930