

Title (en)

Device for removing sheets from a pile and for transporting the sheets away from the pile

Title (de)

Vorrichtung zur Abnahme von Bogen von einem Stapel und zum Transport der Bogen weg vom Stapel

Title (fr)

Dispositif pour enlever des feuilles d'une pile et pour transporter les feuilles loin de la pile

Publication

EP 0844203 A3 19981223 (DE)

Application

EP 97117801 A 19971014

Priority

DE 19648742 A 19961125

Abstract (en)

[origin: EP0844203A2] An apparatus for sheet (21) removal and transport from a stack (22) has an endless perforated toothed belt (1) circulating about a return wheel (8) and a suction wheel (7), the latter having vacuum connection line (14) openings which align with the perforation in the belt. The novelty is that (a) engagement of the teeth of the belt and the suction wheel is ensured by two toothed rings which extend from the peripheral edges of the suction wheel towards a central ridge which forms a peripheral guide path with the vacuum connection line openings; (b) only the belt edges, in the region of the suction wheel toothed rings, are provided with teeth in the form of two toothed rings separated by a guide face, which contacts the guide path of the suction wheel, so that the belt perforations align with the vacuum connection line openings; (c) the perforations are located in grooves which correspond to the tooth spacing and which are formed in a friction material layer on the belt side opposite its toothed side; and (d) a guide block (11) is positioned immediately after the suction wheel in the belt travel direction and has a guide path (23) for contacting the guide face of the belt. Preferably, the friction material layer consists of polyurethane or rubber.

IPC 1-7

B65H 3/12

IPC 8 full level

B65H 3/12 (2006.01)

CPC (source: EP)

B65H 3/12 (2013.01)

Citation (search report)

- [DA] US 4750730 A 19880614 - NILSSON INGVAR [SE], et al
- [A] US 2852255 A 19580916 - FISCHER PAUL E
- [A] FR 2269416 A1 19751128 - MATSUO MASAHIRO [JP]
- [A] T.H. ANDERSON: "MAIL FEEDER", IBM TECHNICAL DISCLOSURE BULLETIN, vol. 16, no. 2, July 1973 (1973-07-01), NEW YORK US, pages 481 - 482, XP002081224

Cited by

CN106976748A; US8905662B2

Designated contracting state (EPC)

AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

EP 0844203 A2 19980527; EP 0844203 A3 19981223; EP 0844203 B1 20000802; DE 19648742 A1 19980528; DE 19648742 C2 19990624

DOCDB simple family (application)

EP 97117801 A 19971014; DE 19648742 A 19961125