

Title (en)

Apparatus for automatically separating labels from a perforated sheet.

Title (de)

Gerät zum automatischen Abtrennen von Etiketten von einem perforierten Blatt.

Title (fr)

Appareil pour séparer automatiquement des étiquettes d'une feuille perforée.

Publication

EP 0480105 A1 19920415 (EN)

Application

EP 90311111 A 19901010

Priority

- EP 90311111 A 19901010
- CA 2024481 A 19900831

Abstract (en)

Labels in sheet form are first separated into strips along spaced parallel perforation lines extending in the direction of sheet movement and then into individual labels along spaced perforation lines extending in a direction transverse to sheet movement. The strip separation step can be accomplished with one of three ways. The first embodiment includes a two driven pressure rollers (20) and (22) one of which (22) has a resilient exterior surface including discontinuous alternating larger and smaller diameter areas and the other (20) has a rigid continuous surface of different diameter sections. The rollers cooperate to clamp the sheet at points between the perforation lines as it moves and exert to a force along the perforating lines to burst same. The second embodiment involves moving belts which clamp the sheets between the perforation lines as it moves, gradually separating into different planes. The third embodiment includes a reciprocating element with fins and a pressure pad with slots aligned with the perforation lines to accomodate the reciprocating fins. Transverse separation is accomplished by first and second spaced pairs of rollers. The second pair of rollers is rotated at a higher speed than the first pair such that the labels are completely separated. The individual labels can be accumulated on a slowly moving conveyor. <IMAGE>

IPC 1-7

B26D 7/18; **B26F 3/00**

IPC 8 full level

B26D 7/18 (2006.01); **B26F 3/00** (2006.01)

CPC (source: EP)

B26D 7/1827 (2013.01); **B26F 1/20** (2013.01); **B26F 3/002** (2013.01)

Citation (search report)

- [A] FR 2454848 A1 19801121 - SITMA SPA [IT]
- [A] PATENT ABSTRACTS OF JAPAN vol. 10, no. 126 (M-477)(2183) May 10, 1986 & JP-A-60 252 560 (FUJI XEROX K.K.) December 13, 1985

Cited by

DE4232060C2; CN105014736A; CN105479517A; GB2258626A; GB2258626B; EP0680821A1; FR2719255A1; EP1247643A3; US7201343B2

Designated contracting state (EPC)

DE ES FR GB IT

DOCDB simple family (publication)

EP 0480105 A1 19920415; CA 2024481 A1 19920301; CA 2024481 C 19951226

DOCDB simple family (application)

EP 90311111 A 19901010; CA 2024481 A 19900831