

Title (en)

Method and apparatus for the movement of perforating needles

Title (de)

Verfahren und Einrichtung zum Bewegen von Punkturnadeln

Title (fr)

Méthode et appareil pour mettre en mouvement des aiguilles de perforation

Publication

EP 0734988 A3 19980513 (DE)

Application

EP 96104310 A 19960319

Priority

- DE 19511052 A 19950325
- DE 19518430 A 19950519

Abstract (en)

[origin: US5765459A] Point needles in a collecting cylinder are driven in a two stage extension process to initially needle or pierce the leading edge of a product web being cut. Once the cut has been made, the needle tips are moved further radially outwardly from the cylinder to secure the cut edge. As the signatures are transferred to a folding cylinder, the needle points are retracted along a single stage retraction curve which is different from the path traveled during the two stage extension process.

IPC 1-7

B65H 45/16; **B41F 13/62**

IPC 8 full level

B41F 13/54 (2006.01); **B65H 45/16** (2006.01); **B65H 45/28** (2006.01)

CPC (source: EP US)

B65H 45/165 (2013.01 - EP US); **Y10T 83/0467** (2015.04 - EP US); **Y10T 83/2105** (2015.04 - EP US); **Y10T 83/219** (2015.04 - EP US); **Y10T 83/658** (2015.04 - EP US); **Y10T 83/6635** (2015.04 - EP US)

Citation (search report)

- [A] EP 0151412 A2 19850814 - HEIDELBERGER DRUCKMASCH AG [DE]
- [A] DE 4316352 A1 19941117 - ZIRKON DRUCKMASCHINEN GMBH [DE]
- [A] DE 2925376 A1 19810115 - WINDMOELLER & HOELSCHER
- [A] DE 4307142 C1 19940511 - PEGUFORM WERKE GMBH [DE]

Designated contracting state (EPC)

CH DE FR GB IT LI SE

DOCDB simple family (publication)

US 5765459 A 19980616; EP 0734988 A2 19961002; EP 0734988 A3 19980513; EP 0734988 B1 20010926; JP 2695406 B2 19971224; JP H08259106 A 19961008; US 6125728 A 20001003

DOCDB simple family (application)

US 62146296 A 19960325; EP 96104310 A 19960319; JP 6831696 A 19960325; US 8876898 A 19980602