

Title (en)

Device for transferring springs to an assembly machine

Title (de)

Transfereinrichtung für Federn zu einer Montagemaschine

Title (fr)

Dispositif de transfert de ressorts à une machine d'assemblage

Publication

EP 0774310 A1 19970521 (DE)

Application

EP 96117839 A 19961107

Priority

DE 19542844 A 19951117

Abstract (en)

The device has a guide in which the springs to be transferred are held. There are pushers (30) to go against the end loops of the springs (26) to transfer them. The pushers may be made of spring material and their ends may be prestressed against each other. The pusher ends may have pushing pads (32,33) on them. The side spacing between the pushers may be adjustable. The guide may be synchronously driven bands (8,9), for which a support may be provided in the pusher zone.

Abstract (de)

Transfereinrichtung (6) für Federn (26) zu einer Montagemaschine, wobei die zu transferierenden Federn (26) in einer Führungseinrichtung gehalten sind, wobei zum Transfer der Federn (26) an den Endwindungen der Federn (26) ansetzende Schieber (30) vorgesehen sind. <IMAGE>

IPC 1-7

B21F 33/04

IPC 8 full level

B23P 19/00 (2006.01); **B21F 33/04** (2006.01); **B65G 47/82** (2006.01)

CPC (source: EP US)

B21F 33/04 (2013.01 - EP US)

Citation (applicant)

- DE 3416110 C2 19861002
- US 3774652 A 19731127 - STURM H

Citation (search report)

- [XA] US 2862630 A 19581202 - NELSON MARTIN J, et al
- [X] GB 911398 A 19621128 - SPUHL AG
- [XA] GB 813117 A 19590506 - FREDERICK GRAY HODGES JR
- [XA] US 1887215 A 19321108 - OWEN DAVID T
- [DA] US 3774652 A 19731127 - STURM H

Cited by

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Designated contracting state (EPC)

CH DE ES FR GB IT LI

DOCDB simple family (publication)

EP 0774310 A1 19970521; EP 0774310 B1 20000322; DE 19542844 A1 19970522; DE 59604752 D1 20000427; ES 2145962 T3 20000716; JP 3313596 B2 20020812; JP H09225751 A 19970902; US 5788051 A 19980804

DOCDB simple family (application)

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