

Title (en)

AUTOMATIC CONVEYING AND HANDLING DEVICE FOR ARTICLES, ESPECIALLY PRINTED CIRCUIT BOARDS

Publication

EP 0216086 A3 19890614 (DE)

Application

EP 86110668 A 19860801

Priority

DE 3529313 A 19850814

Abstract (en)

[origin: US4828878A] Objects such as for example printed circuit boards are transported for treating through a treatment container which accommodates a treating medium in a lower plane being supported by clamps of object supports, and then the object supports with the clamps are returned to a starting position in an upper plane.

IPC 1-7

H05K 13/00

IPC 8 full level

B65G 49/02 (2006.01); **B65G 35/06** (2006.01); **B65G 49/04** (2006.01); **C25D 7/00** (2006.01); **H05K 3/00** (2006.01); **H05K 13/00** (2006.01)

CPC (source: EP US)

B65G 35/06 (2013.01 - EP US); **H05K 3/0085** (2013.01 - EP US); **H05K 13/0061** (2013.01 - EP US); **Y10S 134/902** (2013.01 - EP US)

Citation (search report)

- [A] FR 2301307 A1 19760917 - APPLIC MECA POUR IND LABO [FR]
- [A] FR 2216200 A1 19740830 - CHAZELEC [FR]

Cited by

EP0641156A1

Designated contracting state (EPC)

BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)

EP 0216086 A2 19870401; **EP 0216086 A3 19890614**; AT 397329 B 19940325; AT A217986 A 19930715; CA 1267732 A 19900410; CN 1007776 B 19900425; CN 86106250 A 19870318; CS 594386 A2 19910716; DE 3529313 A1 19870226; JP H055728 B2 19930125; JP S6296223 A 19870502; KR 870002756 A 19870406; US 4828878 A 19890509

DOCDB simple family (application)

EP 86110668 A 19860801; AT 217986 A 19860812; CA 515882 A 19860813; CN 86106250 A 19860813; CS 594386 A 19860811; DE 3529313 A 19850814; JP 18794486 A 19860812; KR 860006710 A 19860814; US 89719686 A 19860814