Title (en)
Traverse device

Title (de)
Changiervorrichtung

Title (fr)
Dispositif de va-et-vient

Publication
EP 1081082 A2 20010307 (EN)

Application
EP 00118313 A 20000823

Priority
JP 24702299 A 19990901

Abstract (en)
The present invention provides a simply structured traverse device that can arbitrarily change a traverse range to obtain packages in an arbitrary form. A traverse device comprises an oscillating member 11 having a yarn guide, a voice coil motor 12 connected to the oscillating member 11 and driven normally and reversely within a predetermined range, and control means 13 for controlling oscillation of the voice coil motor 12, the control means determining a range within which the oscillating member 11 is oscillated . <IMAGE>

IPC 1-7 (main, further and additional classification)
B65H 54/28

IPC 8 full level (invention and additional information)
B65H 54/28 (2006.01); **B65H 54/32** (2006.01)

CPC (invention and additional information)
B65H 54/2827 (2013.01); **B65H 54/2833** (2013.01); **B65H 54/2881** (2013.01); B65H 2701/31 (2013.01)

Cited by
FR2826644A1; DE10152485B4; DE102005022448A1; CN102745545A; CN105151895A; WO03002443A1; WO03020624A1

Designated contracting state (EPC)
DE IT

EPO simple patent family
EP 1081082 A2 20010307; EP 1081082 A3 20020605; EP 1081082 B1 20060726; DE 60029523 D1 20060907; DE 60029523 T2 20070809; JP 2001072334 A 20010321; JP 3292177 B2 20020617

INPADOC legal status

2014-05-22 [REG DE R119] APPLICATION DEEMED WITHDRAWN, OR IP RIGHT LAPSED, DUE TO NON-PAYMENT OF RENEWAL FEE
- Document : DE 60029523
- Effective date : 20140301

2014-04-30 [PG25 DE] LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO
- Ref Country Code : DE
- Free text : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES
- Effective date : 20140301

2012-12-31 [PGFP DE] POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE
- Ref Country Code : DE
- Payment date : 20120822
- Year of fee payment : 13

2011-05-31 [PG25 IT] LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO
- Ref Country Code : IT
- Free text : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES
- Effective date : 20100823

2010-04-30 [PGFP IT] POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE
- Ref Country Code : IT
- Payment date : 20090820
- Year of fee payment : 10

2007-07-04 [26N] NO OPPOSITION FILED
- Effective date : 20070427

2006-09-07 [REF] CORRESPONDS TO:
- Document : DE 60029523 P 20060907

2006-07-26 [AK] DESIGNATED CONTRACTING STATES:
- Kind Code of Ref Document : B1
- Designated State(s) : DE IT

2006-04-19 [RTI1] TITLE (CORRECTION)
- Free text : TRAVERSE DEVICE

2003-07-30 [17Q] FIRST EXAMINATION REPORT
- Effective date : 20030617

2003-02-26 [AKX] PAYMENT OF DESIGNATION FEES
- Designated State(s) : DE IT

2002-11-13 [17P] REQUEST FOR EXAMINATION FILED
- Effective date : 20020916

2002-06-05 [AK] DESIGNATED CONTRACTING STATES:
- Kind Code of Ref Document : A3
- Designated State(s) : AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

2002-06-05 [AX] REQUEST FOR EXTENSION OF THE EUROPEAN PATENT TO:
- Free text : AL;LT;LV;MK;RO;SI

2001-03-07 [AK] DESIGNATED CONTRACTING STATES:
- Kind Code of Ref Document : A2
- Designated State(s) : AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

2001-03-07 [AX] REQUEST FOR EXTENSION OF THE EUROPEAN PATENT TO:
- Free text : AL;LT;LV;MK;RO;SI