

Title (en)

TRACKBALL DEVICE FOR CONTROLLING AN ELECTRONIC APPARATUS, AND PRODUCTION PROCESS

Title (de)

ROLLKUGELVORRICHTUNG ZUR STEUERUNG EINER ELEKTRONISCHEN VORRICHTUNG UND HERSTELLUNGSVERFAHREN

Title (fr)

DISPOSITIF A BOULE ROULANTE PERMETTANT DE COMMANDER UN APPAREIL ELECTRONIQUE, ET PROCEDE DE PRODUCTION ASSOCIE

Publication

**EP 1542856 A2 20050622 (EN)**

Application

**EP 03758092 A 20030902**

Priority

- EP 0350605 W 20030902
- FR 0211394 A 20020913

Abstract (en)

[origin: WO2004024423A2] The invention proposes a device (20) of the type comprising a generator of control signals which comprises a mobile contact rod (70T) which is elastically restored by a spiral torsion spring (50T) whose cylindrical body (48T) is accommodated in the housing and whose second axial end (54T) is immobilized, characterized in that the span of second axial end of the spring is accommodated in a duct (46L, 46T) of the housing with at least one turn of this span which is thermowelded into the concave wall (47L, 47T) of the duct so as to immobilize it in rotation. According to the process, the thermowelding is carried out by heating by Joule effect of the turns by means of two electrodes (E1, E2).

IPC 1-7

**B29C 65/44**; **B29C 65/46**; **G06F 3/033**

IPC 8 full level

**B29C 65/44** (2006.01); **G06F 3/033** (2006.01); **G06F 3/0354** (2013.01); **B29C 65/46** (2006.01)

CPC (source: EP KR)

**B29C 65/44** (2013.01 - EP); **B29C 66/522** (2013.01 - EP); **B29C 66/54** (2013.01 - EP); **G06F 3/0354** (2013.01 - KR); **G06F 3/03549** (2013.01 - EP); **B29C 65/46** (2013.01 - EP); **B29C 66/742** (2013.01 - EP); **B29L 2031/345** (2013.01 - EP)

Citation (search report)

See references of WO 2004024423A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

**WO 2004024423 A2 20040325**; **WO 2004024423 A3 20050203**; AU 2003274107 A1 20040430; AU 2003274107 A8 20040430; CA 2494610 A1 20040325; CN 1305660 C 20070321; CN 1681640 A 20051012; EP 1542856 A2 20050622; FR 2844619 A1 20040319; FR 2844619 B1 20041210; JP 2005538461 A 20051215; KR 20050043955 A 20050511; TW 200414060 A 20040801

DOCDB simple family (application)

**EP 0350605 W 20030902**; AU 2003274107 A 20030902; CA 2494610 A 20030902; CN 03821600 A 20030902; EP 03758092 A 20030902; FR 0211394 A 20020913; JP 2004535532 A 20030902; KR 20057004329 A 20050312; TW 92125172 A 20030912