

Title (en)

CUTTING DEVICE WITH SYNCHRONIZED CALIBRATION UNITS

Title (de)

SCHNEIDEINRICHTUNG MIT SYNCHRONISIERTEN KALIBRATIONSEINHEITEN

Title (fr)

DISPOSITIF DE DECOUPE A UNITES D'ETALONNAGE SYNCHRONISEES

Publication

EP 1516232 A1 20050323 (EN)

Application

EP 03714998 A 20030411

Priority

- FI 0300280 W 20030411
- FI 20020770 A 20020422

Abstract (en)

[origin: WO03089999A1] A cutting device for cutting an object by working the material of the object. The cutting device comprises a cutting table (1), a portal robot (3) above the cutting table for moving a cutting head (2). The portal robot comprises a portal beam (4), a carriage (5) connected to the portal beam, a vertical transfer device (6), a cutting head for accomplishing vertical motion, and a turning device (7) for tilting the cutting head to form a splay in the object. Moreover, the device comprises a main control unit (10). The turning device (7) comprises a turning device frame (11) detachably connected to the vertical transfer device (6). The cutting head setting actuators (8, 9) are mounted on the frame (11). An auxiliary control device (12) is mounted in the turning device frame (11). The auxiliary control device (12) is connected via a data bus (13) to the main control unit (10). The auxiliary control device (12) contains turning device-specific calibration data for eliminating errors caused by inaccuracies of the transfer mechanism of the entire cutting device by using compensating corrections corresponding to the errors, so that the auxiliary control device is arranged to adjust the setting actuators (8, 9) on the basis of the calibration data and control data obtained from the main control unit to accurately adjust the angle of inclination of the cutting head (2).

IPC 1-7

G05B 19/401; B23Q 15/00; B23Q 17/22

IPC 8 full level

B23Q 1/01 (2006.01); **B23Q 1/62** (2006.01); **B23Q 17/22** (2006.01)

CPC (source: EP)

B23Q 1/012 (2013.01); **B23Q 1/626** (2013.01); **B23Q 17/22** (2013.01); **G05B 2219/45036** (2013.01); **G05B 2219/45041** (2013.01); **G05B 2219/50353** (2013.01)

Citation (search report)

See references of WO 03089999A1

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 03089999 A1 20031030; AU 2003219202 A1 20031103; EP 1516232 A1 20050323; FI 117854 B 20070330; FI 20020770 A0 20020422; FI 20020770 A 20031023

DOCDB simple family (application)

FI 0300280 W 20030411; AU 2003219202 A 20030411; EP 03714998 A 20030411; FI 20020770 A 20020422