

Title (en)
Manipulator

Title (de)
Handhabungsgerät

Title (fr)
Manipulateur

Publication
EP 0888852 B1 20021211 (DE)

Application
EP 98110873 A 19980615

Priority
DE 19728638 A 19970704

Abstract (en)
[origin: EP0888852A1] The appliance consists of an upright column and an axially movable cross arm with tool holder. The cross arm is formed by at least one longitudinally moveable shaft guided in a linear bearing unit. The unit consists of a tube with spherical liners at the ends. The cross arm may be of two shafts, each with its own linear guide unit. The axial distance between the shafts is larger than five times the shaft diameter. The linear bearing is located on the upright, and the cross arm is fastened to it via a cross clamp. At least one of the unit tubes is a non-processed precision tube. Weight compensation is via a counterweight or a spring-loaded cable.

IPC 1-7
B25H 1/00

IPC 8 full level
B23B 45/14 (2006.01); **B25H 1/00** (2006.01)

CPC (source: EP)
B25H 1/0028 (2013.01)

Citation (examination)

- US 4969625 A 19901113 - SINGER MARTIN [US], et al
- DE 1150789 B 19630627 - GEORG MOESSMER DIPL ING

Cited by
CN104925639A; CN110919871A; GB2511784A; GB2511784B

Designated contracting state (EPC)
AT BE CH DE DK ES FI FR GB IT LI NL PT SE

DOCDB simple family (publication)
EP 0888852 A1 19990107; EP 0888852 B1 20021211; AT E229409 T1 20021215; DE 19728638 A1 19990107; DE 59806591 D1 20030123

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EP 98110873 A 19980615; AT 98110873 T 19980615; DE 19728638 A 19970704; DE 59806591 T 19980615