

Title (en)  
Manipulator

Title (de)  
Handhabungsgerät

Title (fr)  
Manipulateur

Publication  
**EP 0888852 A1 19990107 (DE)**

Application  
**EP 98110873 A 19980615**

Priority  
DE 19728638 A 19970704

Abstract (en)  
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.

Abstract (de)  
Es wird ein Handhabungsgerät für das manuelle Bewegen von Lasten bzw. von Arbeitsgeräten vorgeschlagen. Dieses besteht aus einer Standsäule (11) und wenigstens einem daran angeordneten axialverschiebbaren Querarm (26,27) mit einer Werkzeughalterung (30). Der Querarm (26,27) besteht aus wenigstens einer längs verschiebbaren Welle, welcher in einer Linearlagereinheit geführt ist. Die Linearlagereinheit ist in bevorzugter Weise ein Rohr (20,21), das an seinen Enden Kugelbüchsen (22-25) aufweist. <IMAGE>

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 (search report)  
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