

Title (en)
PARALLEL MANIPULATOR HAVING BACKLASH-FREE GEARINGS

Title (de)
PARALLELMANIPULATOR MIT SPIELFREIEN GETRIEBEN

Title (fr)
MANIPULATEUR PARALLELE COMPORTANT DES ENGRENAGES SANS JEU

Publication
EP 1515826 A1 20050323 (DE)

Application
EP 03724771 A 20030603

Priority

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- DE 20209440 U 20020613

Abstract (en)
[origin: CA2489455A1] A delta robot comprises motor/gearing units (5), to each an arm (2) is assigned and which are each mounted on one side of a triangle. Each motor/gearing unit (5) comprises a gearing (52) whose at least one gearing step is tensioned in a rotationally symmetrical manner. The gearing (52) is backlash-free over the entire range of motion of the gearing (52) due to a connection of gearing components with material fit or with form fit. This delta robot makes it possible to optimize practically all aspects essential to the delta robot, particularly the rigidity, control behavior, space requirements, speed and positioning accuracy.

IPC 1-7
B25J 9/10; **B25J 17/02**; **F16H 1/28**; **F16H 55/18**

IPC 8 full level
B25J 11/00 (2006.01); **B23Q 1/50** (2006.01); **B25J 9/10** (2006.01); **B25J 17/00** (2006.01); **B25J 17/02** (2006.01); **F16H 1/28** (2006.01); **F16H 1/32** (2006.01)

CPC (source: EP US)
B23Q 1/5456 (2013.01 - EP US); **B25J 9/0051** (2013.01 - EP US); **B25J 9/103** (2013.01 - EP US); **B25J 17/0266** (2013.01 - EP US)

Citation (search report)
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