

Title (en)

IMPROVED ROBOTIC ARM.

Title (de)

VERBESSERTER ROBOTERARM.

Title (fr)

BRAS ROBOTIQUE AMELIORE.

Publication

**EP 0124540 A4 19860710 (EN)**

Application

**EP 83903263 A 19830921**

Priority

US 43831482 A 19821101

Abstract (en)

[origin: WO8401740A1] The invention pertains to robot arms. It is directed at eliminating the movement of robot arm segments caused by external forces such as inadvertent bumping, movement caused by motor slippage and movement caused to one arm segment by the movement of the other arm segments. The invention includes a robot arm (10) comprising a multi-axis, open-loop system of coupled structural members (16, 28, 32, 36) wherein each structural member (16, 28, 32, 36) is pivotably coupled to one another to form a member of joints (26, 30, 34, 38) wherein position calibration is provided by way of position sensors (124, 152, 156) disposed at each joint (26, 30, 34, 38), and control means (12, 24, 22) for manipulating each joint (26, 30, 34, 36) in a predetermined manner and for monitoring the output of each position sensor (124, 152, 156), the control means (12, 14, 22) first causing all structural members (16, 28, 32, 36) to move with respect to one another so that each position sensor (124, 152, 156) outputs a home signal, the control means (24, 12, 22) then manipulating each structural member (16, 28, 32, 36) in a predetermined sequence until each structural member (16, 28, 32, 36) is caused to be within a predetermined distance from its home position.

IPC 1-7

**B25J 9/00; B66D 1/34; G01D 5/34**

IPC 8 full level

**B25J 9/00** (2006.01); **B25J 9/04** (2006.01); **B25J 9/10** (2006.01); **B25J 9/16** (2006.01); **G05B 19/18** (2006.01)

CPC (source: EP)

**B25J 9/046** (2013.01); **B25J 9/10** (2013.01); **B25J 9/104** (2013.01); **B25J 9/1692** (2013.01)

Citation (search report)

- No relevant documents have been disclosed
- No relevant documents have been disclosed

Designated contracting state (EPC)

AT BE CH DE FR GB LI LU NL SE

DOCDB simple family (publication)

**WO 8401740 A1 19840510**; EP 0124540 A1 19841114; EP 0124540 A4 19860710; FI 842665 A0 19840702; FI 842665 A 19840702; IL 69862 A0 19831230; IL 69862 A 19860930; JP S59501942 A 19841122

DOCDB simple family (application)

**US 8301431 W 19830921**; EP 83903263 A 19830921; FI 842665 A 19840702; IL 6986283 A 19830928; JP 50330883 A 19830921