

Title (en)
Fluid operated linear-to-rotary actuator.

Title (de)
Druckmittelbetätigte Drehantriebs-Stellvorrichtung.

Title (fr)
Dispositif d'actionnement rotatif à fluide sous pression.

Publication
EP 0089568 A1 19830928 (DE)

Application
EP 83102387 A 19830311

Priority
DE 3210050 A 19820319

Abstract (en)
1. Fluid operated rotary drive or actuator device, with (a) a cylinder (1) and two pistons (5) which are adapted to move to and fro therein oppositely in mutual dependency, (b) a control shaft (9) with pinion, which shaft extends transversely with respect to the cylinder axis and is arranged symmetrically with respect to the two pistons (5) and the cylinder axis, (c) two guides (6, 7) which start from the piston heads are disposed parallel to the cylinder axis, extend to over the control shaft (9), are arranged on each of the two pistons (5) and comprise, at their outer side, guide surfaces which guide the piston in the cylinder (1), and the said guides are situated approximately opposite one another relatively to the longitudinal axis of the cylinder, one guide (6) comprising at its inner side a rack (8) (drive guide) which co-operates with the pinion, characterised in that the guides (6) provided with a rack (8) comprise, in their surface facing towards the cylinder wall, in each case a groove (23) which is situated parallel and symmetrically with respect to the cylinder longitudinal axis, and in the said groove there is positively and slidably accommodated the non-rack guide (7) of the other piston which is situated opposite offset by 180 degrees about the longitudinal axis of the cylinder.

Abstract (de)
Die Erfindung betrifft eine druckmittelbetätigte Drehantriebs- oder -stellvorrichtung, bei der die mit der Zahnstange (8) versehene Antriebsführung (6) im Querschnitt eine U-förmig ausgebildete Führungsnut (23) aufweist und das offene Ende dabei auf die Zylinderwand weist und die um 180° versetzt gegenüberliegende Führung (7) ohne Zahnstange des anderen Kolbens aufnimmt, wobei das geschlossene Ende des U's nach innen zur Stellwand weist und die Zahnstange (8) trägt. Weiterhin sind zur Dämpfung der Kolbenbewegungen in den Endstellungen Dämpfungseinrichtungen (28) wenigstens in einem Kolben vorgesehen.

IPC 1-7
F15B 15/06

IPC 8 full level
F15B 15/06 (2006.01); **F15B 15/08** (2006.01)

CPC (source: EP)
F15B 15/065 (2013.01)

Citation (search report)
• FR 2367207 A1 19780505 - NORBRO PNEUMATICS LTD [GB]
• DE 2647385 B2 19800221
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