

Title (en)
LINEAR MOTION RESISTANCE CELL.

Title (de)
WIDERSTANDSZELLE FÜR LINEARMOTOR.

Title (fr)
CELLULE DE RESISTANCE A UN MOUVEMENT LINEAIRE.

Publication
EP 0179818 A4 19870921 (EN)

Application
EP 85901930 A 19850424

Priority
• AU PG888685 A 19850115
• AU PG468884 A 19840424

Abstract (en)
[origin: WO8504935A1] The linear motion resistance cell comprises a cylinder (51) in which a piston (23) moves under the influence on an actuation rod (28) sealed within the cylinder by end seals (29). The piston (23) divides the cylinder into two chambers (52) and (53) which are filled with a working fluid which is forced from one chamber to the other through passages (31) and (32) in the piston during movement of the piston. Valve means (54, 55) are provided in conjunction with the passages controlled by the rotation of a control disk (30) by a control shaft (30a) and a control wheel (21), opening and closing selected ones of the passages through the piston [some of which are provided with variously orientated non-return valves (54, 55)]. Rotation of the control disk (30) enables operation of the cell to be effected in a selected one of the following three modes: (i) controlled resistance to movement in both directions; (ii) controlled resistance to movement in one predetermined direction only with relatively low resistance to movement in the other direction; and (iii) controlled resistance to movement in the opposite predetermined direction to (ii) with relatively low resistance to movement in the other direction. The linear motion resistance cell has a particular application to use in exercise machines.

IPC 1-7
F16F 9/44; **A63B 21/00**

IPC 8 full level
A63B 21/008 (2006.01); **F16F 9/44** (2006.01)

CPC (source: EP)
A63B 21/00069 (2013.01); **A63B 21/0083** (2013.01); **A63B 21/4045** (2015.10); **F16F 9/44** (2013.01); **A63B 2209/08** (2013.01)

Citation (search report)
• [X] GB 2123922 A 19840208 - TOKICO LTD
• [X] US 4305486 A 19811215 - COWAN ARNOLD A
• [A] US 4291787 A 19810929 - BRENTHAM JERRY D
• See references of WO 8504935A1

Designated contracting state (EPC)
AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)
WO 8504935 A1 19851107; EP 0179818 A1 19860507; EP 0179818 A4 19870921; NO 855326 L 19860219

DOCDB simple family (application)
AU 8500090 W 19850424; EP 85901930 A 19850424; NO 855326 A 19851227