

Title (en)  
Double acting electromagnetic linear motor

Title (de)  
Doppelt wirkender elektromagnetischer Linearmotor

Title (fr)  
Moteur linéaire électromagnétique à double effet

Publication  
**EP 0569669 B1 19960508 (DE)**

Application  
**EP 93102606 A 19930219**

Priority  
DE 4208366 A 19920316

Abstract (en)  
[origin: EP0569669A1] A double-acting electromagnetic linear motor (10) is proposed which has a small construction as well as a large dynamic range and high energy density with a wet configuration. The linear motor (10) has a pressure tube (21) having two magnetically non-conductive intermediate pieces (27, 28) between which a centre piece (29) is located which conducts magnetic flux. Two permanent magnets (35, 36) of annular shape and opposing polarity are arranged on the external circumference of the pressure tube (21) so that they lie within the electromagnetic coil (18) and the pressure tube (21). The shapes of the force/movement characteristics can be favourably influenced, with simple magnetic pole shapes, by different tab coincidence of the armature (33) and pole shoes (31, 32). <IMAGE>

IPC 1-7  
**H01F 7/16**

IPC 8 full level  
**H01F 7/16** (2006.01); **H01F 7/122** (2006.01)

CPC (source: EP)  
**H01F 7/1615** (2013.01); **H01F 7/122** (2013.01); **H01F 2007/1684** (2013.01)

Cited by  
US8138871B2; CN104167895A; WO2019217439A1; KR20210003233A; JP2021531642A; EP3776606A4; US11664144B2; US2023368955A1

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