

Title (en)  
Hydraulic linear drive device

Title (de)  
Hydraulischer Linearantrieb

Title (fr)  
Entraînement linéaire hydraulique

Publication  
**EP 2420681 A2 20120222 (DE)**

Application  
**EP 11006709 A 20110817**

Priority  
DE 102010034610 A 20100818

Abstract (en)  
The hydraulic linear drive (1) has a hydraulic cylinder (2) which has three pressure chambers (4,6,8) that are limited to the working surfaces (A1,A2,A3), where the pressure chambers are charged with high pressure, low pressure or tank pressure over a hydro-machine (10) and a valve arrangement. The hydro-machine has a variable drive (12). The area ratios of the working surfaces are adjusted, so that the drive is operated in the same speed range.

Abstract (de)  
Offenbart ist ein hydraulischer Linearantrieb mit einem mit drei Druckräumen (4,6,8) ausgeführten Hydraulikzylinder (2), dessen Wirkflächen (A 1 ,A 2 ,A 3 ) so aufeinander abgestimmt sind, dass in einem Eilgang und in einem Krafthub ein Antrieb einer den Hydraulikzylinder mit Druckmittel versorgenden Hydromaschine (10) in etwa im gleichen Drehzahl/Drehmomentbereich arbeitet.

IPC 8 full level  
**F15B 11/024** (2006.01); **F15B 11/036** (2006.01)

CPC (source: EP)  
**F15B 11/024** (2013.01); **F15B 11/036** (2013.01); **F15B 2211/20515** (2013.01); **F15B 2211/20561** (2013.01); **F15B 2211/27** (2013.01); **F15B 2211/30505** (2013.01); **F15B 2211/3058** (2013.01); **F15B 2211/625** (2013.01); **F15B 2211/7055** (2013.01); **F15B 2211/785** (2013.01)

Citation (applicant)  
• US 5522212 A 19960604 - KUBIK PHILIP A [US]  
• DE 102008039011 A1 20100225 - MAE MASCHINEN UND APPBAU GOETZ [DE]

Cited by  
CN108603521A; CN107243774A; EP3705733A1; EP3109485A1; CN106286437A; JP2015031364A; DE102018203367A1; US10100847B2; US10670052B2; JP2015031365A; CN105452678A; EP3032112A4; WO2016008151A1; WO2017140499A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 2420681 A2 20120222; EP 2420681 A3 20140924; EP 2420681 B1 20200108; DE 102010034610 A1 20120223**

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