

Title (en)  
HYDRO-TRANSFORMER

Title (de)  
HYDRO-TRANSFORMATOR

Title (fr)  
HYDROTRANSFORMATEUR

Publication  
**EP 1101039 A1 20010523 (DE)**

Application  
**EP 99948659 A 19990720**

Priority  
• DE 9902238 W 19990720  
• DE 19835676 A 19980806  
• DE 19844648 A 19980929

Abstract (en)  
[origin: US6499295B1] The present invention relates to a hydro-transformer including a hydraulic machine, a switching valve and a control means. A work port of the switching valve, which may optionally be connected hydraulically with a pressure port of the switching valve or a drain port of the switching valve, is connected with a first port of the hydraulic machine. The second port of the hydraulic machine is in hydraulic connection with a drive member. The switching valve is driven by the control means in response to a signal characterizing the volume flow into the hydraulic machine. Where the driver member is a cylinder, its extension may be carried out at a constant velocity and independently of a load, and energy may be recovered upon retraction. Due to the provision of a further switching valve between the second part of the hydrostatic motor and the drive member, a higher pressure may be generated at the drive member in the presence of a low pressure at the pressure port of the switching valve.

IPC 1-7  
**F15B 11/05**; **F15B 21/14**

IPC 8 full level  
**F15B 1/02** (2006.01); **F15B 11/028** (2006.01); **F15B 11/05** (2006.01); **F15B 21/08** (2006.01); **F15B 21/14** (2006.01)

CPC (source: EP US)  
**F15B 1/02** (2013.01 - EP US); **F15B 11/055** (2013.01 - EP US); **F15B 21/087** (2013.01 - EP US); **F15B 21/14** (2013.01 - EP US); **F15B 2211/212** (2013.01 - EP US); **F15B 2211/214** (2013.01 - EP US); **F15B 2211/30525** (2013.01 - EP US); **F15B 2211/3059** (2013.01 - EP US); **F15B 2211/3122** (2013.01 - EP US); **F15B 2211/6313** (2013.01 - EP US); **F15B 2211/632** (2013.01 - EP US); **F15B 2211/6336** (2013.01 - EP US); **F15B 2211/665** (2013.01 - EP US); **F15B 2211/6654** (2013.01 - EP US); **F15B 2211/7052** (2013.01 - EP US); **F15B 2211/7058** (2013.01 - EP US)

Citation (search report)  
See references of WO 0008339A1

Cited by  
US7593095B2; CN103321974A

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)  
**US 6499295 B1 20021231**; EP 1101039 A1 20010523; EP 1101039 B1 20021211; JP 2002522710 A 20020723; WO 0008339 A1 20000217

DOCDB simple family (application)  
**US 76218601 A 20010409**; DE 9902238 W 19990720; EP 99948659 A 19990720; JP 2000563945 A 19990720