

Title (en)  
Valve combination

Title (de)  
Ventilkombination

Title (fr)  
Combinaison de soupapes

Publication  
**EP 1344945 A3 20040616 (DE)**

Application  
**EP 03090044 A 20030220**

Priority  
DE 10211299 A 20020314

Abstract (en)  
[origin: EP1344945A2] The valve combination consists of pressure scales, a load holding valve and a proportional valve, the piston of which can move axially in borings in one or more housings containing input and output cavities. The proportional valve (2) has a hollow piston, and the load holding valve (3) and pressure scales (1) have stacks of laminar disks (6) to relieve the main part of excess energy.

IPC 1-7  
**F15B 11/00**; **F15B 11/044**; **F16K 47/08**

IPC 8 full level  
**F15B 11/00** (2006.01); **F15B 11/044** (2006.01); **F15B 13/00** (2006.01)

CPC (source: EP)  
**F15B 11/003** (2013.01); **F15B 11/044** (2013.01); **F15B 2013/008** (2013.01); **F15B 2211/30515** (2013.01); **F15B 2211/30535** (2013.01); **F15B 2211/3111** (2013.01); **F15B 2211/3144** (2013.01); **F15B 2211/31576** (2013.01); **F15B 2211/327** (2013.01); **F15B 2211/329** (2013.01); **F15B 2211/46** (2013.01); **F15B 2211/50572** (2013.01); **F15B 2211/50581** (2013.01); **F15B 2211/5153** (2013.01); **F15B 2211/528** (2013.01); **F15B 2211/6054** (2013.01)

Citation (search report)

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- [A] EP 0902194 A1 19990317 - HEILMEIER & WEINLEIN [DE]
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CN106855070A; US8042451B2

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT SE SI SK TR

DOCDB simple family (publication)  
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