

Title (en)  
Hydraulic suspension

Title (de)  
Hydraulische Federung

Title (fr)  
Suspension hydraulique

Publication  
**EP 1496009 B1 20070905 (DE)**

Application  
**EP 04103115 A 20040701**

Priority  
• DE 10330344 A 20030705  
• DE 10343742 A 20030922

Abstract (en)  
[origin: EP1496009A1] Hydraulic spring, especially for a cantilever arm, has at least a hydraulic cylinder (10) with chambers (14, 16), a control valve (22) that is connected to at least one of the chambers via a hydraulic line (18, 20) and provides a connection to a hydraulic oil pump (30) and tank (28). Linking the two chambers is a connection line (40). A control unit (54) monitors and regulates the position of the cylinder piston using a sensor (50) and a pressure limiting unit (44) connected to the connection line.

IPC 8 full level  
**B66F 9/22** (2006.01); **B66F 9/065** (2006.01); **E02F 9/22** (2006.01); **F15B 11/028** (2006.01); **F15B 13/02** (2006.01); **F15B 21/04** (2006.01)

CPC (source: EP US)  
**B66F 9/065** (2013.01 - EP US); **B66F 9/22** (2013.01 - EP US); **E02F 9/2207** (2013.01 - EP US); **F15B 11/028** (2013.01 - EP US); **F15B 13/021** (2013.01 - EP US); **F15B 21/008** (2013.01 - EP US); **F15B 2211/30525** (2013.01 - EP US); **F15B 2211/3058** (2013.01 - EP US); **F15B 2211/3116** (2013.01 - EP US); **F15B 2211/3144** (2013.01 - EP US); **F15B 2211/327** (2013.01 - EP US); **F15B 2211/40515** (2013.01 - EP US); **F15B 2211/41536** (2013.01 - EP US); **F15B 2211/41581** (2013.01 - EP US); **F15B 2211/426** (2013.01 - EP US); **F15B 2211/45** (2013.01 - EP US); **F15B 2211/473** (2013.01 - EP US); **F15B 2211/50518** (2013.01 - EP US); **F15B 2211/50545** (2013.01 - EP US); **F15B 2211/5151** (2013.01 - EP US); **F15B 2211/526** (2013.01 - EP US); **F15B 2211/528** (2013.01 - EP US); **F15B 2211/55** (2013.01 - EP US); **F15B 2211/6313** (2013.01 - EP US); **F15B 2211/6336** (2013.01 - EP US); **F15B 2211/6346** (2013.01 - EP US); **F15B 2211/7052** (2013.01 - EP US); **F15B 2211/7053** (2013.01 - EP US); **F15B 2211/765** (2013.01 - EP US)

Cited by  
CN113007159A; CN112010166A; CN108328524A; EP4344520A1; CN110319242A; EP1897847A3; EP1762535A3; DE102005039251A1; EP1754836A3; EP1762535A2; EP1754836A2; US7845896B2

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