

Title (en)  
DEVICE FOR PRESSURE REGULATION OF HYDRAULIC PUMPS

Title (de)  
VORRICHTUNG ZUR DRUCKREGELUNG VON HYDRAULIKPUMPEN

Title (fr)  
DISPOSITIF POUR REGULER LA PRESSION DE POMPES HYDRAULIQUES

Publication  
**EP 1463888 B1 20060517 (DE)**

Application  
**EP 02806046 A 20021209**

Priority

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Abstract (en)  
[origin: WO03058071A1] A pressure-regulation device for hydraulic pumps, in particular lubricating oil pumps on an internal combustion engine in motor vehicles is disclosed, which works in a variable pressure regulation range depending on the oil pressure requirement by means of a regulating piston with a controlled force application. Using an engine-speed-dependent oil pressure regulation in oil pumps with a supply amount regulation, significant advantages can be achieved in oil pump drive power, such that the fuel consumption of the corresponding internal combustion engine may be reduced. The above is achieved whereby a regulating piston and a regulating spring are provided for control of the supply amount regulator and a control device for the regulating piston is provided. The regulating piston (14, 51, 80) comprises a working area (15, 53, 90) for a permanent oil pressure and may be subjected to an additional force by the control device (23, 29, 56,71, 73).

IPC 8 full level  
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