

Title (en)  
Helium charged hydraulic accumulators.

Title (de)  
Mit Helium gefüllter hydraulischer Speicher.

Title (fr)  
Accumulateur hydraulique rempli d'hélium.

Publication  
**EP 0215296 A1 19870325 (EN)**

Application  
**EP 86111176 A 19860812**

Priority  
US 76622385 A 19850816

Abstract (en)  
A helium charged accumulator is disclosed for use in hydraulic fluid pressure systems. The size of the accumulator is optimized for particular operating conditions of specific applications of the hydraulic systems by means of a formula. The formula has, as its terms, the volume of the hydraulic fluid required to power a given device, the compressibility factor of the particular gas used and the temperature and pressure of the gas at the beginning of, during, and at the end of the operation cycle of the accumulator.

IPC 1-7  
**F15B 1/047**

IPC 8 full level  
**F15B 1/10** (2006.01)

CPC (source: EP)  
**F15B 1/103** (2013.01); **F15B 2201/205** (2013.01); **F15B 2201/3153** (2013.01); **F15B 2201/3158** (2013.01); **F15B 2201/41** (2013.01); **F15B 2201/4155** (2013.01)

Citation (search report)  
• [X] DE 2103552 A1 19710805 - GRATZMULLER J  
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• [X] OLHYDRAULIK UND PNEUMATIK, vol. 26, no. 10, October 1982, pages 709-714, Mainz, DE; F. KORKMAZ: "Massnahmen zur Erhöhung der Energiekapazität von Hydrospeichern"  
• [A] ENERGIE FLUIDE, vol. 90, October 1976, pages 51-57, CFE, Paris, FR; M. GUILLON: "Methode pratique de dimensionnement des accumulateurs hydropneumatiques"

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