

Title (en)

Hydropneumatic damper for damping pressure pulsations in fluid pumping plants

Title (de)

Hydropneumatischer Dämpfer für die Dämpfung der Schläge einer Pumpeinrichtung

Title (fr)

Amortisseur hydropneumatique pour l'amortissement des pulsations de pression d'une installation de pompage

Publication

EP 1903217 A1 20080326 (EN)

Application

EP 06425648 A 20060922

Priority

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Abstract (en)

A hydropneumatic damper (1) for damping pressure pulsations in a fluid pumping plant comprises one or more hollow containers (5) each of which defines in its inside a chamber (6) hermetically closed by a substantially flat elastic membrane (7) which separates the chamber (6) from a fluid flowing in a main piping of the plant, the chamber (6) containing an inert gas, as well as a duct (2) which is suitable to allow the mounting thereof in line with the plant main piping, the duct (2) being provided with openings (4) which are suitable for fluid-tight connection of the hollow containers (5). Thanks to the arrangement in line with the main piping and to the particular structure of the membrane (7), the damper (1) according to the present invention allows to achieve output pulsation values down to 0,05% of the input pulsations and high velocity of response to the input pulsations, and is also easier to be cleaned.

IPC 8 full level

F15B 1/02 (2006.01)

CPC (source: EP)

F15B 1/021 (2013.01); **F15B 21/008** (2013.01)

Citation (applicant)

- US 2005139277 A1 20050630 - BALTES HERBERT [DE]
- EP 0078721 A1 19830511 - MILTON ROY DOSAPRO [FR]

Citation (search report)

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