

Title (en)

Hydraulic piston pump with positively driven inlet valves.

Title (de)

Hydraulische Kolbenpumpe mit zwangsläufig angetriebenen Einlassventilen.

Title (fr)

Pompe hydraulique à pistons et à clapets d'aspiration commandés.

Publication

**EP 0180510 A1 19860507 (FR)**

Application

**EP 85402018 A 19851018**

Priority

FR 8416051 A 19841019

Abstract (en)

1. An hydraulic pump having at least one reciprocably movable piston, each piston being associated with an inlet valve which is urged towards the closed position by a return spring, characterised by the fact that said return spring (16) is associated with a pusher element (15) actuated cyclically by a cam (21) driven by the pump drive shaft (1) ; such that, when the pusher element (15) is actuated by the cam (21), the action of the spring (16) on the valve (11) is nullified during the inlet phase and re-established at the end of said phase, which has the result that the valve (11) is free during this period and opens only if the inlet pressure is greater than the residual pressure prevailing in the cylinder (6) associated with said valve.

Abstract (fr)

Pompe hydraulique comportant au moins un piston animé d'un mouvement de va-et-vient, chaque piston étant associé à un clapet d'aspiration qui est rappelé en position de fermeture par un ressort de rappel. Le ressort de rappel (16) est associé, d'une part, audit clapet (11) et, d'autre part, à un poussoir (15) actionné cycliquement par une came (21) entraînée par l'arbre d'entraînement (1) de la pompe; de telle sorte que l'action dudit ressort (16) sur clapet d'aspiration (11) soit annulée pendant la phase d'aspiration et rétablie à la fin de ladite phase.

IPC 1-7

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IPC 8 full level

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CPC (source: EP)

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Citation (search report)

- [A] DE 3044363 A1 19810604 - LEDUC RENE HYDRO SA [FR]
- [A] GB 581735 A 19461023 - OLIVER BEVIR, et al

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BE1015545A3; DE19708922B4; US10107279B2; WO2004106735A1

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