

Title (en)
Hydraulic vehicle steering pump driven by combustion engine

Title (de)
Von einem Verbrennungsmotor angetriebene hydraulische Lenkpumpe

Title (fr)
Pompe de direction hydraulique entraînée par moteur à combustion

Publication
EP 1293669 A3 20050413 (DE)

Application
EP 02019785 A 20020904

Priority
DE 10145992 A 20010918

Abstract (en)
[origin: EP1293669A2] A hydraulic accumulator (7) is coupled to the pump (2) and the steering actuator (4) and the specific feed volume of the pump is such that at low motor (1) rev count pressure medium is fed from both pump and accumulator. Above a rev count threshold the actuator is supplied solely from the pump (2). The accumulator volume is such that at full volume the accumulator can shuttle the actuator (4) repeatedly between endstops. Sensor (10) directly or indirectly monitoring the accumulator pressure connects operably to the e.g. forklift brake so as to forcibly initiate braking below a pressure value limit.

IPC 1-7
F04B 23/02; F04B 17/05; B66F 9/22; B62D 5/07; F15B 1/02

IPC 8 full level
F04B 17/05 (2006.01); **F04B 23/02** (2006.01)

CPC (source: EP)
F04B 17/05 (2013.01); **F04B 23/02** (2013.01)

Citation (search report)
• [A] DE 19955312 A1 20010613 - JUNGHEINRICH AG [DE]
• [A] GB 876727 A 19610906 - CLARK EQUIPMENT CO
• [A] EP 0525329 A2 19930203 - UNION CARBIDE IND GASES TECH [US]

Cited by
CN105644620A; CN107246420A; CN105545135A; CN102305222A; CN102913412A; CN109591886A; EP2420626A1; DE102010039509A1

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