

Title (en)

HYDRAULIC SYSTEM WITH LOAD SENSING

Publication

EP 0582099 A3 19940824 (DE)

Application

EP 93110985 A 19930709

Priority

US 92376292 A 19920803

Abstract (en)

[origin: US5245827A] A hydraulic system includes a hydraulic pump which provides pressurized fluid at an output port as a function of pressure in a load sensing port, a hydraulic reservoir, and a load pressure sensing line connected to the load sensing port. A solenoid operated implement control valve controls fluid communication to and from a hydraulic function such as a cylinder. A supply control valve has a first position wherein the reservoir is communicated with the load sensing port and a second position wherein the pump output port is communicated with the load sensing port. A spring urges the valve member to its first position, and a solenoid is energizable to move the valve member to its second position. The solenoid is energized when the implement control valve is activated so that the supply control valve communicates pump pressure to the load sensing port and the pump will operate at full capacity whenever the second hydraulic function is operated.

IPC 1-7

F15B 11/05; A01B 63/10

IPC 8 full level

A01B 63/10 (2006.01); **F15B 11/00** (2006.01); **F15B 21/08** (2006.01)

CPC (source: EP US)

F15B 21/08 (2013.01 - EP US)

Citation (search report)

- [A] EP 0010860 A1 19800514 - EATON CORP [US]
- [A] EP 0477370 A1 19920401 - HITACHI CONSTRUCTION MACHINERY [JP]
- [A] EP 0115590 A2 19840815 - BOSCH GMBH ROBERT [DE]

Cited by

CN103148038A

Designated contracting state (EPC)

AT BE DE ES FR GB IT SE

DOCDB simple family (publication)

US 5245827 A 19930921; AT E147139 T1 19970115; AU 4431093 A 19940210; AU 659751 B2 19950525; BR 9303240 A 19940315; CA 2101235 A1 19940204; CA 2101235 C 19950627; DE 59304948 D1 19970213; EP 0582099 A2 19940209; EP 0582099 A3 19940824; EP 0582099 B1 19970102; ES 2095527 T3 19970216; JP H06159305 A 19940607; MX 9304408 A 19940331

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US 92376292 A 19920803; AT 93110985 T 19930709; AU 4431093 A 19930729; BR 9303240 A 19930730; CA 2101235 A 19930723; DE 59304948 T 19930709; EP 93110985 A 19930709; ES 93110985 T 19930709; JP 19246793 A 19930803; MX 9304408 A 19930721