

Title (en)

SERIES-PARALLEL SELECTOR FOR STEERING AND IMPLEMENT

Publication

EP 0051603 B1 19860319 (EN)

Application

EP 81900682 A 19800516

Priority

US 8000577 W 19800516

Abstract (en)

[origin: WO8103364A1] Prior art interrupted series type load sensitive hydraulic systems have not had the capability of both providing full speed simultaneously vehicle cornering and implement correction while preventing the same when the implements are operating at a high pressure level, and preventing low torque motor stall. Herein, an input flow path (22) delivers pressurized fluid flow from a source (12) to a first priority (steering) circuit (14). A series flow path (24) delivers the output flow from the circuit (14) to an implement circuit (16). A parallel flow path (26) delivers a portion of the flow from the source (12) to the implement circuit (16). A valving structure (42) is in the series flow path (24). The valving structure (42) is opened in response to load pressure in the implement circuit (16) being at or below a selected value and is closed in response to the load pressure in the implement circuit being above said value. Generally, flow through the parallel flow path (26) is blocked when differential pressure in the steering circuit (14) is below a specified value. High speed turning and implement correction are provided at low pressures and are prevented when the implement is operating at high pressure level. Low torque motor stall is prevented. Utilization of vehicle horsepower is enhanced with the selectable series/parallel circuitry.

IPC 1-7

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IPC 8 full level

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