

Title (en)

HYDRAULIC SYSTEM WITH SELECTIVE PRESSURE UPSTAGING

Publication

EP 0025609 B1 19830518 (EN)

Application

EP 80105575 A 19800917

Priority

US 7900735 W 19790917

Abstract (en)

[origin: WO8100742A1] An improvement in a hydraulic system (10) having a variable displacement pump (12) and being capable of delivering pressurized fluid from the pump (12) to selectively engage at least three work circuits (18) with a first (20) of the circuits (18) being normally operable up to a first pressure and a second (22) of the circuits (18) being normally operable up to a second and lower pressure. The improvement comprises circuitry (80, 92, 94, 98, 108, 120, 122, 124, 126) for selectively operating a third (24) of the circuits (18) at one of the first or second pressures or at an upstaged pressure which exceeds the first pressure and circuitry (128) for reducing the displacement of the pump (12) in response to the third circuit (24) being operated at the upstaged pressure. Such upstaged pressure is available in a controlled manner for working against particularly heavy loads. Thus, a third and higher operating level is added to a system which already operates at at least two pressure levels.

IPC 1-7

F15B 11/02; F15B 11/16

IPC 8 full level

E02F 9/22 (2006.01); F15B 11/02 (2006.01); F15B 11/16 (2006.01)

CPC (source: EP)

E02F 9/2232 (2013.01); E02F 9/2282 (2013.01); E02F 9/2296 (2013.01); F15B 11/022 (2013.01); F15B 11/16 (2013.01); F15B 2211/20538 (2013.01); F15B 2211/20553 (2013.01); F15B 2211/30505 (2013.01); F15B 2211/30525 (2013.01); F15B 2211/3116 (2013.01); F15B 2211/3138 (2013.01); F15B 2211/31576 (2013.01); F15B 2211/329 (2013.01); F15B 2211/45 (2013.01); F15B 2211/50518 (2013.01); F15B 2211/5157 (2013.01); F15B 2211/528 (2013.01); F15B 2211/55 (2013.01); F15B 2211/5756 (2013.01); F15B 2211/6054 (2013.01); F15B 2211/6355 (2013.01); F15B 2211/67 (2013.01); F15B 2211/71 (2013.01); F15B 2211/7135 (2013.01); F15B 2211/78 (2013.01)

Citation (examination)

US 4123907 A 19781107 - BIANCHETTA DONALD L, et al

Cited by

FR2548291A1; EP0564939A1; EP0089412A3

Designated contracting state (EPC)

BE CH DE FR GB IT LI SE

DOCDB simple family (publication)

WO 8100742 A1 19810319; DE 3063346 D1 19830707; EP 0025609 A1 19810325; EP 0025609 B1 19830518; JP S56501133 A 19810813

DOCDB simple family (application)

US 7900735 W 19790917; DE 3063346 T 19800917; EP 80105575 A 19800917; JP 50059080 A 19790917