

Title (en)
Hydraulic system with selective pressure upstaging.

Title (de)
Hydrauliksystem mit wahlweiser Druckerhöhung.

Title (fr)
Système hydraulique avec augmentation sélective de pression.

Publication
EP 0025609 A1 19810325 (EN)

Application
EP 80105575 A 19800917

Priority
US 7900735 W 19790917

Abstract (en)
An improvement is disclosed 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.

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