

Title (en)
Hydraulic circuit of construction machine

Title (de)
Hydraulikkreislauf für Baumaschinen

Title (fr)
Circuit hydraulique pour engin de construction

Publication
EP 1193400 B1 20050202 (EN)

Application
EP 01302602 A 20010321

Priority
JP 2000274757 A 20000911

Abstract (en)

[origin: EP1193400A2] To provide a way to prevent sharp decrease in the speed of main body actuators by ensuring a sufficient amount of hydraulic fluid to be fed to the main body actuators even if the pressure in the attachment circuit of a hydraulic shovel approaches the relief pressure. When the pressure in an independent attachment circuit 37, which is adapted to control an attachment of a hydraulic shovel, approaches a given relief pressure in the course of operating the attachment together with other main body actuators, a controller 71 detects the increase of the pressure by means of a pressure sensor 66 and shifts an electromagnetic selector valve 68 to the channel-communicating position so that priority hydraulic fluid branching off from a pressure compensation flow dividing valve 38 to an external channel 67 flows through the electromagnetic selector valve 68 into a tank 39. As a result, the discharge rate of a pump 33 is increased by the amount equivalent to the decrease in the discharge pressure so that a greater amount of hydraulic fluid is fed from the independent attachment circuit 37 into a main circuit 36 of the main body actuators. Therefore, sharp decrease in the speed of the main body actuators is prevented. <IMAGE>

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