

ABSTRACT**PISTON VALVE FOR MULTI-TYPE HYDRAULIC PILING HAMMER**

A hydraulic control valve for the hydraulic cylinder 80 of a pile driving hammer, the valve including a body 10 housing a piston 20 which in the first position shown allows high pressure fluid from supply 30 to pass via ports 11, 25, 24, 12 to lift the cylinder piston and the connected hammer weight. The piston 20 is held in the first position by control fluid pressure applied through line 40 to port 15. When pressure in line 40 reduces piston 20 moves to the right assisted by pressure through port 12 and transfer passageway 14, and thus connecting port 12 to low pressure return fluid line 50 through ports 26 and 13 and connecting both sides 83, 84 of the cylinder piston 81 together. The cylinder piston and the connected hammer weight then free falls under gravity. Pressure applied to the control line 40 then moves the piston back to the left and the cycle is repeated. The arrangement may be applied to many constructions of pile driving equipment and is simple in construction.

FIG. 2 is to be published.