

Title (en)
HYDRAULIC CONTROL DEVICE.

Title (de)
HYDRAULISCHE STEUEREINRICHTUNG.

Title (fr)
SYSTEME DE COMMANDE HYDRAULIQUE.

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Application
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Abstract (en)
[origin: WO9308378A1] The invention concerns a hydraulic control device for turning the camshaft (10) of an internal-combustion engine. A sprocket wheel (15) driven by the engine is linked, by means of a linkage element (20) and helical gearing (25, 26) plus straight-tooth bevels (22, 23), with the camshaft (10). Translational motion of the linkage element (20) produces relative rotational motion between the drive sprocket (15) and the camshaft. The translation motion of the linkage element is produced by a hydraulic piston (29) acted on by an axial-piston pump (36 to 40) which is located in the control device and which aspirates hydraulic fluid from a reservoir located in the engine and feeds it through outlet valves (50) to the pressure space (32) in front of the hydraulic piston (29). Connected to the hydraulic piston is an electromagnetically operated proportional-action pressure valve (65) which is controlled by appropriate actuation of the electromagnet, thus increasing or decreasing the pressure in the pressure space (32). Controlling the pressure in this pressure space causes the linkage element (20) and the camshaft (10) to rotate relative to the sprocket wheel (15).

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