

Title (en)

METHOD FOR THE PRODUCTION OF AN ELECTROMAGNETIC HYDRAULIC VALVE

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES ELEKTROMAGNETISCHEN HYDRAULIKVENTILS

Title (fr)

PROCEDE DE FABRICATION DE SOUPAPE HYDRAULIQUE ELECTROMAGNETIQUE

Publication

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Application

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Abstract (en)

[origin: WO03085237A1] The invention relates to an electromagnetic hydraulic valve (1), which consists essentially of an electromagnet (2) with an armature (3) and a valve housing (4) comprising an axial bore (5) and a piston valve (6). The valve housing (4) has several annular grooves (8, 9, 10), in which are configured several respective radial openings (11, 12, 13), which open into the axial bore (5), said radial openings connecting the hydraulic valve (1) in a fluidic manner to a pressure connection (P), a tank connection (T) and two consumer connections (A, B). The piston valve (6), which is connected to the armature (3) of the electromagnet (2) in a force-transmitting manner, comprises two annular control sections (14, 15), which alternatively connect the pressure connection (P) and the tank connection (T) to one of the consumer connections (A, B) by the axial displacement of the piston valve (6). According to the invention, the radial openings (11, 12, 13) in the valve housing (4) are configured as windows with a quadrangular cross-section, whose cross-sectional area that is released by the control sections (14, 15) of the piston valve (6) is a ring segment that can be modified in such a way that the flow through the radial openings (11, 12, 13) is linear in relation to the respective position of the armature (3) of the electromagnet (2) in all positions of the piston valve (6).

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Citation (search report)

See references of WO 03085237A1

Citation (examination)

- DE 3012453 A1 19811008 - GROSS LOTHAR
- EP 0075507 A1 19830330 - THOMSON CSF [FR], et al
- US 2969773 A 19610131 - HENRY AUGUSTUS P

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