

Title (en)  
CYLINDER HEAD WITH LIQUID-TYPE COOLING

Title (de)  
ZYLINDERKOPF MIT FLÜSSIGKEITSKÜHLUNG

Title (fr)  
CULASSE À REFROIDISSEMENT PAR LIQUIDE

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Application  
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Abstract (en)  
[origin: WO2013014113A1] The invention relates to a cylinder head (1) with liquid-type cooling, having one inlet duct (2), which issues into a combustion chamber, and one outlet duct (3) per cylinder, having a fuel injection device (7) which issues into the combustion chamber and which adjoins the inlet duct (2) and the outlet duct (3), and also having at least one cooling chamber (20) which is arranged in the cylinder head (1), wherein, in a region of the fire deck (9), there is arranged a cooling distribution duct (11) which runs substantially parallel to the fire deck (9) and which is in particular drilled or pre-cast and which issues into an annular chamber (8) surrounding the fuel injection device (7), wherein the annular chamber (8) has at least one substantially radial first cooling bore (13) directed toward a valve web region (14) which is formed between inlet duct (2) and outlet duct (3) and which adjoins the fire deck (9). To improve the cooling of thermally critical regions, there extends laterally from the annular chamber (8) and/or from the cooling distribution duct (11) at least one further cooling bore (15, 16) which is preferably directed substantially tangentially toward the outlet duct (3).

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