

Title (en)
HOT-GAS PIPE FOR AN INTERNAL COMBUSTION ENGINE

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Application
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Priority
DE 3743851 A 19871223

Abstract (en)
[origin: WO8905911A1] A thin-walled pipe (11) is fastened inside the liquid-cooled envelope (13) by screws (16) distributed around the circumference of the pipe (11) in a cross-sectional plane. The screws (16) are lodged in carriers (17) arranged in the wall of the pipe (11) which have an internal screw-thread that mates with the screws (16). In the mounted position, a radial undersize is present in the region of each carrier (17) between the pipe (11) and the envelope (13), which is compensated when the screws (16) are tightened. For this purpose, the pipe (11) is distorted in the cross sectional plane of the screws (16) in the sections between the carriers (17). The size of the distortion is of the order of the thermal expansion of the pipe (11) to be expected at the operating temperature. This prevents constraining forces due to restricted thermal expansion from arising in the hot-pipe (11) during operation.

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