

Title (en)  
CYLINDER HEAD FOR AN INTERNAL COMBUSTION ENGINE

Publication  
**EP 0079511 B2 19871014 (DE)**

Application  
**EP 82110057 A 19821030**

Priority  
US 32114181 A 19811113

Abstract (en)  
[origin: ES8400795A1] An improved port liner and its method of assembly into a cylinder head of an engine such that an air insulating layer is formed between the outer periphery of the liner and the inner diameter of an exhaust passage. The liner is a thin, stainless steel member having an arcuately-shaped section and a straight section which permits it to be inserted only one way into an exhaust passage. This is important for it allows for automated machine assembly of a valve guide which must be pressed through an opening located in the outer surface of the liner. The method of assembly also limits the physical contact between the liner and the cylinder head and this in conjunction with the air layer reduces the loss of thermal energy from the passing exhaust gases.

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**F02F 1/42**; **F02B 77/02**; **F01N 7/18**

IPC 8 full level  
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CPC (source: EP US)  
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