

Title (en)  
Heat-insulating piston.

Title (de)  
Wärmeisolierter Kolben.

Title (fr)  
Piston thermiquement isolé.

Publication  
**EP 0412660 A1 19910213 (EN)**

Application  
**EP 90307647 A 19900712**

Priority  
JP 20564789 A 19890810

Abstract (en)  
A heat-insulating piston has a piston head comprising a piston head base portion (1) consisting of a ceramic material, a heat-insulating member (3) jointed to the piston head base portion (1) and consisting of a whisker fired member of the same ceramic material as that of the piston head base portion (1), and a laminate (5) jointed to the surface (10) of the heat-insulating member that faces the combustion chamber, as well as to the surface that slides and consisting of the same ceramic material as that of the heat-insulating member (3). The heat-insulating member (3) is stably jointed to the piston head base portion (1) and laminate by utilising the same ceramic material for the heat-insulating member (3), piston head base portion (1) and laminate, whereby the strength of the piston head can be improved. Furthermore, the heat-insulating capability of the piston can be improved, whilst the thermal capacity of the laminate is made small, whereby the suction efficiency can also be improved.

IPC 1-7  
**F02B 77/11; F02F 3/12**

IPC 8 full level  
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CPC (source: EP)  
**F02F 3/003** (2013.01); **F02F 3/12** (2013.01); **F05C 2251/042** (2013.01); **F05C 2253/16** (2013.01)

Citation (search report)  
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• [A] EP 0111989 B1 19870819  
• [A] GB 2061383 A 19810513 - SAAB SCANIA AB

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