

Title (en)

MULTI-PART PISTON FOR AN INTERNAL COMBUSTION ENGINE AND METHOD FOR THE PRODUCTION THEREOF

Title (de)

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Title (fr)

PISTON EN PLUSIEURS PARTIES POUR UN MOTEUR À COMBUSTION INTERNE ET PROCÉDÉ DE FABRICATION

Publication

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Application

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Abstract (en)

[origin: WO2011006469A1] The present invention relates to a method for producing a multi-part piston (10, 110) for an internal combustion engine, comprising the following method steps: producing an upper piston part (11) and a lower piston part (12), each having an inner support element (22, 26; 122, 126) having joining surfaces (24, 28; 124, 128) and an outer support element (23, 27; 123, 127) having joining surfaces (25, 29; 125, 129), applying a high-temperature solder material in the area of at least one joining surface (24, 28 or 25, 29; 124, 128 or 125, 129), assembling the upper piston part (11) and the lower piston part (12) to form a piston body by establishing a contact between the joining surfaces (24, 28 or 25, 29; 124, 128 or 125, 129), placing the piston body in a vacuum furnace and evacuating the vacuum furnace; heating the piston body at a pressure of at most 10-2 mbar to a soldering temperature of at most 1300°C; cooling the soldered piston (10, 110) at a pressure of at most 10-2 mbar until the high-temperature solder material is completely solidified. The present invention further relates to a piston (10, 110) that can be produced by means of said method.

IPC 8 full level

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