

Title (en)
Method for producing a cylinder head unit having valve seats and a valve seat member

Title (de)
Verfahren zur Herstellung eines Zylinderkopfes mit zweiteiliger Ventilsitzungen

Title (fr)
Procédé de fabrication d'une culasse avec des composants formant siège-soupape

Publication
EP 0773351 A1 19970514 (EN)

Application
EP 96114721 A 19960913

Priority
JP 23726495 A 19950914

Abstract (en)
A method is provided for producing a cylinder head unit of an internal combustion engine. Said cylinder head unit comprising a cylinder head body, an air intake system communicating with a combustion chamber at an at least one intake port opening, an exhaust system communicating with the combustion chamber at an at least one exhaust port opening. The intake and exhaust port openings are each operable by respective intake and exhaust valves guided by respective valve guides accommodated in respective valve guide holes, whereby a valve seat made of a material different from that of the cylinder head body is bonded to each of the respective intake and exhaust port openings. Each valve seat is provided by metallurgically bonding a respective valve seat member onto a valve seat seating surface of the respective intake and exhaust port openings. An annular projection consisting of two surfaces and projecting from the inner circumferential side of the valve seat seating surface of the respective opening is formed. Further, the valve seat member has an outer circumferential surface sloping towards its center and a bottom surface continuing from the outer circumferential surface and sloping with a smaller gradient than that of the outer circumferential surface towards the center of said openings. Said bottom surface is in line-contact with said projection when said valve seat member is set onto said respective valve seat seating surface. <IMAGE>

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CPC (source: EP)
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Citation (search report)
• [DA] EP 0228282 A2 19870708 - TOYOTA MOTOR CO LTD [JP]
• [A] EP 0195177 A2 19860924 - TOCCO INC [US]
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• [A] PATENT ABSTRACTS OF JAPAN vol. 007, no. 173 (M - 232) 30 July 1983 (1983-07-30)

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