

Title (en)  
Cylinder block with welded bridge-elements

Title (de)  
Zylinderkurbelgehäuse mit geschweissten Brücken

Title (fr)  
Bloc-cylindres avec éléments formant ponts soudés

Publication  
**EP 0869270 A3 19990526 (DE)**

Application  
**EP 98104647 A 19980314**

Priority  
DE 19714062 A 19970405

Abstract (en)  
[origin: EP0869270A2] The cast housing (11) has a coolant jacket chamber (18) formed between cylinder tube walls (14,15) and a coolant jacket wall (16). The chamber is formed by cast wall faces (20,22) of the three walls, which are without undercuts as seen from the cylinder head seat face. Bridge elements (23-28) are fitted into the coolant jacket chamber, to connect the three walls and form free coolant transfer openings. The bridge elements may consist of welded, glued, wedged or shrunk into place mouldings. They are supported on shoulders in the wall faces, or engage into undercut apertures in the walls.

IPC 1-7  
**F02F 7/00**

IPC 8 full level  
**F01P 3/02** (2006.01); **F02F 1/10** (2006.01); **F02F 1/14** (2006.01); **F02F 7/00** (2006.01)

CPC (source: EP KR)  
**F02F 1/10** (2013.01 - EP KR); **F02F 1/108** (2013.01 - EP KR); **F02F 7/00** (2013.01 - EP); **F02F 7/00** (2013.01 - KR);  
**F02F 2001/104** (2013.01 - EP KR); **F02F 2001/106** (2013.01 - EP KR)

Citation (search report)  
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• [X] PATENT ABSTRACTS OF JAPAN vol. 013, no. 405 (M - 868) 7 September 1989 (1989-09-07)  
• [X] PATENT ABSTRACTS OF JAPAN vol. 008, no. 087 (M - 291) 20 April 1984 (1984-04-20)  
• [X] PATENT ABSTRACTS OF JAPAN vol. 010, no. 326 (M - 532) 6 November 1986 (1986-11-06)  
• [X] PATENT ABSTRACTS OF JAPAN vol. 096, no. 002 29 February 1996 (1996-02-29)  
• [X] PATENT ABSTRACTS OF JAPAN vol. 018, no. 585 (M - 1700) 9 November 1994 (1994-11-09)

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