

Title (en)  
ENGINE

Title (de)  
MOTOR

Title (fr)  
MOTEUR

Publication  
**EP 2131031 B1 20171220 (EN)**

Application  
**EP 08722159 A 20080314**

Priority  
• JP 2008054763 W 20080314  
• JP 2007099000 A 20070405

Abstract (en)  
[origin: EP2131031A1] In a water-cooled, one-cylinder engine formed with a water jacket 21 along the whole circumference between a cylinder bore wall 27 and a cylinder body outer wall 28, a bolt through-hole 24 for inserting a through bolt 5 which couples a cylinder body 3 with a cylinder head 4 is formed in the cylinder body outer wall 28. Parts of areas around the bolt through-holes 24 are extruded into a water jacket 21 and make projections 32A to 32D. Areas on the cylinder bore wall 27 that face the projections 32A to 32D are cut in an axial direction to make thin wall portions 33A to 33D. Thereby, it is possible to downsize an engine without lowering the engine capacity.

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

CPC (source: EP)  
**F02F 1/10** (2013.01); **F02F 1/14** (2013.01); **F02F 7/0004** (2013.01); **F02B 2275/02** (2013.01); **F02F 2007/0063** (2013.01)

Cited by  
DE102015006930A1; EP3842629A1; US2015330328A1; US10082100B2; EP2860381A1; EP3130778A1

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