

Title (en)  
Low-noise engine and its assembling method

Title (de)  
Maschine mit niedrigem Lärmpegel und Verfahren zum Zusammenbau

Title (fr)  
Moteur à faible bruit et méthode d'assemblage

Publication  
**EP 0860605 A1 19980826 (EN)**

Application  
**EP 97102947 A 19970222**

Priority  
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Abstract (en)  
An engine (10) having sound absorbing members (11b,12b) capable of reducing the noise of the engine effectively, and a method of assembling an engine (10) having sound absorbing members (11b,12b) by covering a noise generating engine component (2a) with cover members (11a,11c,12a) through sound absorbing members, comprising the steps of: applying an unfoamed foaming material (31) to one or both of the inner face of the cover members (11a,11c,12a) and the component; covering the component with the cover members; heating the component to foam the foaming material thereby to expand the sound absorbing members; and assembling the integrated component with the engine body (10). <IMAGE>

IPC 1-7  
**F02M 59/00**; **F02B 77/13**

IPC 8 full level  
**F02B 77/13** (2006.01); **F02M 39/00** (2006.01); **F02M 59/00** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP US)  
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Citation (search report)

- [A] US 3684053 A 19720815 - FACHBACH HEINZ, et al
- [A] EP 0691462 A1 19960110 - STEYR NUTZFAHRZEUGE [AT]
- [A] US 3534828 A 19701020 - LEPAGE LEONARD STUART, et al
- [A] GB 2094948 A 19820922 - MASSEY FERGUSON PERKINS LTD
- [A] EP 0341330 A1 19891115 - ESSEX COMPOSITE SYSTEMS [US]
- [A] US 5266133 A 19931130 - HANLEY JOHN L [US], et al
- [A] PATENT ABSTRACTS OF JAPAN vol. 014, no. 454 (M - 1031) 28 September 1990 (1990-09-28)

Cited by  
GB2333810A; CN103061884A; EP2539574A4; IT202000005560A1; GB2364551A; GB2364551B; WO0075498A1; WO2016015891A1

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