

Title (en)
Intake manifold

Title (de)
Einlasskrümmer

Title (fr)
Collecteur d'admission

Publication
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Application
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Abstract (en)

An intake manifold is formed by vibration-welding a first joining member made of a synthetic resin and a second joining member made of a synthetic resin. The first joining member includes a plurality of first intake pipe halves disposed at intervals in parallel to each other, each forming a part of one of a plurality of intake pipes. At least one of the opposite ends of each of the plurality of first intake pipe halves is connected in common. The second joining member includes a plurality of second intake pipe halves, each forming the remainder of the corresponding intake pipe and being connected to each other at a bridging part positioned in the middle in the longitudinal direction of the intake pipes. The bridging part may be provided with a low-rigidity part that has a rigidity lower than that of parts adjacent thereto. Thus, the intake manifold formed by vibration-welding a plurality of joining members made of a synthetic resin can be produced efficiently and with high precision, while suppressing the amount of synthetic resin and improving the degree of freedom in the engine layout. <IMAGE>

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IPC 8 full level
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F02M 35/1036 (2013.01); **F02M 35/112** (2013.01); **F05C 2225/08** (2013.01)

Citation (search report)

- [Y] GB 2299375 A 19961002 - VOLKSWAGEN AG [DE]
- [Y] US 5992369 A 19991130 - MEHNE GEORG [DE]
- [A] US 5636605 A 19970610 - NOMIZO FUMIO [JP], et al
- [A] DE 19944855 A1 20010322 - MANN & HUMMEL FILTER [DE]
- [X] PATENT ABSTRACTS OF JAPAN vol. 1997, no. 11 28 November 1997 (1997-11-28)
- [A] PATENT ABSTRACTS OF JAPAN vol. 1998, no. 08 30 June 1998 (1998-06-30)
- [A] PATENT ABSTRACTS OF JAPAN vol. 1997, no. 09 30 September 1997 (1997-09-30)

Cited by
EP1522717A1; CN102734008A; CN100373041C; EP1878906A3; US7685985B2; US7032556B2

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