

Title (en)  
Filter, in particular suction filter

Title (de)  
Filter, insbesondere Ansaugfilter

Title (fr)  
Filtre en particulier filtre d'admission

Publication  
**EP 1111228 A3 20020522 (DE)**

Application  
**EP 00128054 A 20001221**

Priority  
DE 19962888 A 19991224

Abstract (en)  
[origin: EP1111228A2] The filter (3) is in a housing (2) having a sound absorbing membrane (4) in a moveable section (2b) of the housing having an air inlet (5). Vibration in the vertical direction (9) reduces the noise level generated before (7) the filter. The upper (2a) and lower (2c) parts of the housing are joined together.

IPC 1-7  
**F02M 35/14**

IPC 8 full level  
**F02M 35/14** (2006.01)

CPC (source: EP)  
**F02M 35/1222** (2013.01); **F02M 35/1272** (2013.01); **F02M 35/14** (2013.01)

Citation (search report)  
• [XY] DE 19747271 A1 19990429 - BAYERISCHE MOTOREN WERKE AG [DE]  
• [E] WO 0116477 A1 20010308 - MANN & HUMMEL FILTER [DE], et al  
• [A] DE 1052169 B 19590305 - SIGISMUND WILMAN  
• [A] DE 19737701 A1 19990304 - MANN & HUMMEL FILTER [DE]  
• [Y] PATENT ABSTRACTS OF JAPAN vol. 009, no. 149 (M - 390) 25 June 1985 (1985-06-25)  
• [A] PATENT ABSTRACTS OF JAPAN vol. 009, no. 135 (M - 386) 11 June 1985 (1985-06-11)

Cited by  
DE102008030197A1; JP2018035699A; EP1808594A1; US7540353B2; JP2018035697A; DE10226205B4; EP1645748A1; EP1350945A3; DE10221448B4; CN107781077A; JP2018035700A; JP2016217201A; EP1619659A1; EP1365120A1; EP2172640A1; FR2936843A1; EP1865187A3; EP1813801A1; EP2138700A3; EP3324033A1; CN108071532A; US7350496B2; DE102014009212A1; US7717230B2; USRE42490E; US9872405B2; US6881237B2; DE102015212041A1; WO2017001272A1; JP2010180773A; EP2138700A2; US10364779B2

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