

Title (en)  
INTAKE SYSTEM WITH AIR FILTER

Title (de)  
ANSAUGSYSTEM MIT LUFTFILTER

Title (fr)  
SYSTEME D'ASPIRATION POURVU D'UN FILTRE A AIR

Publication  
**EP 1224389 B1 20070822 (DE)**

Application  
**EP 00964273 A 20001005**

Priority  
• DE 19951408 A 19991026  
• EP 0009718 W 20001005

Abstract (en)  
[origin: US2003034004A1] An air intake system for intake air of an internal combustion engine comprising a filter insert (19) in a housing (10) connected to the air conducting system by a plurality of inlets (13) and an outlet (22). The air inlets are provided with individual intake nozzles or fittings and lead to a single common air chamber (20) in the filter housing. The inlets (13) can be individually opened and closed by flap valves (24), thereby allowing the acoustics to be influenced favorably and enabling, for example, the respective intake fittings to be connected or disconnected depending on the temperature. The intake system requires only a limited number of components, and the design of the preferably wedge-shaped air chamber minimizes flow losses in the housing, which in turn decreases the intake noise. Shunt resonators (28) can also be formed using cover elements (29) and (30).

IPC 8 full level  
**F02M 35/14** (2006.01); **F02M 35/02** (2006.01); **F02M 35/10** (2006.01); **F02M 35/12** (2006.01)

CPC (source: EP US)  
**F02M 35/1266** (2013.01 - EP US); **F02M 35/14** (2013.01 - EP US); **F02M 35/161** (2013.01 - EP US); **F02M 35/02** (2013.01 - EP US); **F02M 35/10013** (2013.01 - EP US); **F02M 35/10393** (2013.01 - EP US); **F02M 35/116** (2013.01 - EP US); **F05C 2225/08** (2013.01 - EP US)

Citation (examination)  
• US 4826517 A 19890502 - NORMAN PETER J [CA]  
• DE 19717196 A1 19981029 - MANN & HUMMEL FILTER [DE]

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)  
**US 2003034004 A1 20030220**; **US 6705272 B2 20040316**; AT E371106 T1 20070915; DE 19951408 A1 20010503; DE 50014593 D1 20071004; EP 1224389 A1 20020724; EP 1224389 B1 20070822; ES 2291220 T3 20080301; WO 0131190 A1 20010503

DOCDB simple family (application)  
**US 12851302 A 20020424**; AT 00964273 T 20001005; DE 19951408 A 19991026; DE 50014593 T 20001005; EP 0009718 W 20001005; EP 00964273 A 20001005; ES 00964273 T 20001005