

Title (en)  
VENTILATION DEVICE FOR A CRANKCASE OF AN INTERNAL COMBUSTION ENGINE

Title (de)  
ENTLÜFTUNGSVORRICHTUNG FÜR EIN KURBELGEHÄUSE EINER BRENNKRAFTMASCHINE

Title (fr)  
DISPOSITIF D'AERATION POUR CARTER DE MOTEUR A COMBUSTION INTERNE

Publication  
**EP 0964982 A1 19991222 (DE)**

Application  
**EP 98909439 A 19980211**

Priority  
• DE 19706383 A 19970219  
• EP 9800756 W 19980211

Abstract (en)  
[origin: DE19706383A1] The invention relates to a ventilation device (1) for a crankcase of an internal combustion engine with a balancer shaft (2) with mass-balance weights (3, 4), which is embodied in the cylinder head above the gas shuttle valves of the internal combustion engine, and which has at least one opening at least for the entry of gas, as well as a gas flow control chamber (9) which passes inside the balancer shaft (2), which gas flow control chamber is connected with a suction system of the internal combustion engine; a chamber fitted outside the balancer shaft is connected to the crankcase. The invention seeks to design a ventilation device for the crankhouse of an internal combustion engine, which device has improved oil separation capacity while being easy to construct. To this end, the at least one opening (12) is fitted in at least one mass-balance weight (3, 4) and discharges onto at least one axially running feeder bore hole (13) which is connected with at least one oil-draining radial bore hole (14) embodied in the mass-balance weight.

IPC 1-7  
**F01M 13/04**

IPC 8 full level  
**F01M 3/04** (2006.01); **F01M 13/04** (2006.01)

CPC (source: EP KR US)  
**F01M 3/04** (2013.01 - EP US); **F01M 13/04** (2013.01 - KR); **F01M 2013/0422** (2013.01 - EP US)

Citation (search report)  
See references of WO 9837316A1

Designated contracting state (EPC)  
DE FR GB IT

DOCDB simple family (publication)  
**DE 19706383 A1 19980903**; **DE 19706383 C2 20000518**; DE 59807873 D1 20030515; EP 0964982 A1 19991222; EP 0964982 B1 20030409; JP 2000509783 A 20000802; KR 20000071109 A 20001125; US 6279553 B1 20010828; WO 9837316 A1 19980827

DOCDB simple family (application)  
**DE 19706383 A 19970219**; DE 59807873 T 19980211; EP 9800756 W 19980211; EP 98909439 A 19980211; JP 53622298 A 19980211; KR 19997007397 A 19990816; US 36768599 A 19991102