

Title (en)  
STRATIFIED SCAVENGING TWO-CYCLE ENGINE

Title (de)  
ZWEITAKTMOTOR MIT SCHICHTSPÜLUNG

Title (fr)  
MOTEUR A DEUX TEMPS A BALAYAGE STRATIFIE

Publication  
**EP 0971110 A4 20000906 (EN)**

Application  
**EP 98944286 A 19980929**

Priority  
• JP 9804360 W 19980929  
• JP 28783097 A 19971003

Abstract (en)  
[origin: WO9918338A1] A stratified scavenging two-cycle engine capable of meeting the regulation for an emission rate of THC in exhaust gases with a simple construction, comprising a cylinder (4) receiving a piston (1) vertically slidably and having an exhaust port (14) and a scavenging port (16) in a side wall thereof, a scavenging channel (22) connecting a crank chamber (8) and the scavenging port (16), an air supply flow passage (24) connected to the scavenging channel (22) for supplying an air via a check valve (26), and an air-fuel mixture supply flow passage (20) for supplying an air-fuel mixture to the crank chamber (8), wherein, during a suction stroke, in which the crank chamber (8) becomes negative in pressure, an air charging quantity ratio  $R = q_a/Q_f$ , which is a ratio of an air charging quantity  $q_a$  flowing through the air supply flow passage (24), to an air-fuel mixture charging quantity  $Q_f$  flowing through the air-fuel mixture supply flow passage (20), satisfies  $0.7 \leq R \leq 1.4$ .

IPC 1-7  
**F02B 25/16**; **F02B 23/00**

IPC 8 full level  
**F02B 17/00** (2006.01); **F02B 25/14** (2006.01); **F02B 25/16** (2006.01); **F02B 25/22** (2006.01); **F02B 75/02** (2006.01)

CPC (source: EP)  
**F02B 17/00** (2013.01); **F02B 25/14** (2013.01); **F02B 2075/025** (2013.01)

Citation (search report)  
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• [A] FR 2678682 A1 19930108 - THERY GEORGES [FR]  
• [A] DE 19520944 A1 19960111 - SEEBECK NORBERT DIPL ING [DE]  
• [A] DE 4007466 A1 19910214 - KNOTT FRANZ JOSEF [DE]  
• [A] PATENT ABSTRACTS OF JAPAN vol. 1997, no. 09 30 September 1997 (1997-09-30)  
• [A] PATENT ABSTRACTS OF JAPAN vol. 007, no. 029 (M - 191) 5 February 1983 (1983-02-05)  
• See references of WO 9918338A1

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