

Title (en)

DEVICE FOR SEPERATING LIQUIDS FROM GASES

Title (de)

VORRICHTUNG ZUR ABSCHIEDUNG VON FLÜSSIGKEITEN AUS GASEN

Title (fr)

DISPOSITIF DE SÉPARATION DES LIQUIDES À PARTIR DE GAZ

Publication

EP 2052136 B1 20110504 (DE)

Application

EP 07788217 A 20070803

Priority

- EP 2007058085 W 20070803
- DE 102006038700 A 20060818

Abstract (en)

[origin: US2009241919A1] The invention relates to a device for separating liquids from gases, especially for separating oil particles from blow-by gases of the crankcase ventilation of internal combustion engines. Proceeding from the drawbacks of the known prior art, a device is to be provided that is characterized by a simple, cost-effective and space-saving construction and with which a high separation performance can be achieved. As a solution, it is proposed that the individual flow tubes 2 have at least one tangentially arranged gas inlet 3 at their end facing towards the direction of gas inlet and are closed at the front side 2a adjacent thereto by means of a cover 5, wherein a combined rotational and axial flow with a vortex component is generated in the flow tubes 2, wherein the rotational flow in the individual tubes 2 repeatedly rotates by 360°. The individual flow tubes 2 are part of a base support that has a circumferential edge 1a. A base support has, for example, from 30 to 40 flow tubes 2 that are immediately adjacent to one another or are arranged in the form of groups. The flow tubes 2 have an inner diameter D of, for example, 5 mm and a length of from 10 to 20 mm. Due to the tangential introduction, the gas flow reaches higher rotational frequencies, and greater centrifugal forces are produced, whereby a clearly improved separating performance is achieved. The device may be designed as a very small and effective component that requires only a small installation space.

IPC 8 full level

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CPC (source: EP US)

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