

Title (en)

OIL MIST SEPARATOR OF A CRANKCASE VENTILATION DEVICE OF AN INTERNAL COMBUSTION ENGINE

Title (de)

ÖLNEBELABSCHIEDER EINER KURBELGEHÄUSEENTLÜFTUNGSEINRICHTUNG EINER BRENNKRAFTMASCHINE

Title (fr)

SÉPARATEUR DE BROUILLARD D'HUILE D'UN DISPOSITIF DE PURGE DE CARTER DE VILEBREQUIN D'UN MOTEUR À COMBUSTION INTERNE

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2011141258A1] The invention relates to an oil mist separator (1) of a crankcase ventilation device of an internal combustion engine, comprising a separator housing (10), a raw gas channel (12) conducting raw gas out of the crankcase of the internal combustion engine into a raw gas region (11.1) of the separator (1), a clean gas channel discharging clean gas from the clean gas region (11.2) of the separator (1), and an oil recirculation channel (14) recirculating oil separated from the crankcase ventilation gas into the crankcase of the internal combustion engine. A valve (2) which opens the oil recirculation channel (14) if a predeterminable pressure difference between the two sides of the valve (2) is no longer met is arranged in the course of said oil recirculation channel. The oil mist separator (1) according to the invention is characterized in that the valve (2) has a float element as a valve body (20), the density of said float element being lower than the density of oil. Said float element can be raised in the closed position thereof against a valve seat (21) by an oil level in the oil recirculation channel (14) that rises starting from the crankcase. The weight of the valve body (20) and the size of a valve channel (22) enclosing the valve body (20) are matched to each other such that, when a predeterminable velocity of a gas flow is reached in the valve channel (22) in the direction from the crankcase to the separator housing (10), the valve body (20) can be raised against the valve seat (21) into the closed position by the gas flow and a gas pressure difference acting on the valve body (20).

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See references of WO 2011141258A1

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