

Title (en)

DEVICE FOR MIXING AIR AND FUEL IN THE COMBUSTION CHAMBER OF AN INTERNAL COMBUSTION ENGINE

Title (de)

VORRICHTUNG ZUR DURCHMISCHUNG VON LUFT UND TREIBSTOFF IM BRENNRAUM EINES VERBRENNUNGSMOTORS

Title (fr)

DISPOSITIF POUR MELANGER L'AIR ET LE CARBURANT DANS LA CHAMBRE DE COMBUSTION D'UN MOTEUR A COMBUSTION INTERNE

Publication

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Application

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Priority

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Abstract (en)

[origin: WO9821452A1] A device suitable for internal combustion engines in which gasses are exchanged through inlet (4) and outlet valves (5) consists of a blade wheel (10) mounted directly behind the valve disk (6) on the valve stem (8) of the inlet valve (4). When the valve (4) is actuated, the intake air flows between the valve disk (6) and valve seat (12) through the mechanically or electrically driven blade wheel (10). The blade wheel (10) superimposes a movement of rotation on the gas stream. As a result, the gas is better swirled and air and fuel are more intimately mixed in the combustion chamber. In the case of an injection engine, the injection nozzle (15) can be directly oriented towards the turning blade wheel (10), so that the fuel hits the same and is better atomised.

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