

Title (en)
TURBOCHARGING AND PRECOMBUSTION CHAMBER SPARK PLUG INTERNAL COMBUSTION ENGINE, IGNITION METHOD AND APPLICATION

Title (de)
FREMDGEZÜNDETE BRENNKRAFTMASCHINE MIT AUFLADUNG UND VORKAMMER-ZÜNDKERZE

Title (fr)
MOTEUR A COMBUSTION INTERNE A SURALIMENTATION ET BOUGIE A PRECHAMBRE, PROCEDE D ALLUMAGE ET APPLICATION

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Application
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Abstract (en)
[origin: WO2004036012A2] The invention concerns an internal combustion engine with at least one engine component, the engine component comprising a combustion chamber (4) for a fuel mixture including fuel and oxidant constituents, a system for igniting the fuel mixture with an igniter (7), sequential passageway devices for the fuel and oxidant constituents and for the combustion products, the engine being of the turbocharging type by over-pressurization of oxidant constituents upstream of the engine component. The invention is characterized in that the ignition system comprises a substantially spherical closed head (6) (12a) enclosing the igniter in a precombustion chamber, the head including a plurality of orifices (5) for communicating the combustion chamber with the precombustion chamber so that the fuel mixture can pass into the precombustion chamber. In another embodiment of the invention, at least one of the passageway devices is a direct injector in the combustion chamber for all or part of the fuel and/or oxidant constituents. The invention also concerns a method and an application.

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