

Title (en)  
INTERNAL COMBUSTION ENGINE WITH REDUCED NOISE AND HEAT EMISSION

Publication  
**EP 0154939 A3 19871104 (DE)**

Application  
**EP 85102582 A 19850307**

Priority  
DE 3409101 A 19840313

Abstract (en)  
[origin: US4715335A] There is disclosed an internal combustion engine with reduced emission of sound, heat and harmful substances. The characteristics of an air-cooled engine are optimized as a result of withdrawal of heat by oil in uniform distribution along the entire peripheries of the cylinders. For this purpose, there was developed a lower piston portion which effects uniform distribution of cooling oil along the periphery. The external cooling is improved in that the entire periphery of each free-standing cylinder is provided with a recessed ring-shaped oil guide and in that the free-standing cylinders are located in a common chamber which is cooled by oil sprays. More pronounced uniformity of such cooling action along the entire periphery of each cylinder allows for the selection of a higher temperature level of the cylinders which is important for combustion of vegetable oils in lieu of mineral oil products. At the same time, the above construction strives to accomplish the object of improving the power density and running characteristics of a diesel engine.

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