

PATENT NO. 327638
DEVICE FOR IMPROVING FUEL EFFICIENCY OF A FOUR STROKE SPARK
IGNITION (SI) ENGINE

APPLICATION NO. 826/DEL/2010

APPLICANT

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ABSTRACT

A device for improving fuel efficiency in a four stroke spark ignition engine of an automobile. The device includes an air inlet valve adapted for controlled entry of air therein and a pumping unit coupled to the air inlet valve. The pumping unit is adapted to pump the air entering through the air inlet valve at pre-determined time intervals. Further, the pumping unit is coupled to an intake manifold of the engine such that the air pumped out of the pumping unit at the pre-determined time intervals is directed into the intake manifold. The air directed into the intake manifold is admitted into the engine for scavenging, thereby improving fuel efficiency thereof.

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CLAIM 1

A device (100) for improving fuel efficiency in a four stroke spark ignition engine (200) of an automobile, the device (100) comprising an air inlet valve (105) adapted for controlled entry of air therein; and a pumping unit (110) having an inlet port and an outlet port, the inlet port being coupled to the air inlet valve (105), the pumping unit (110) adapted to pump the air entering through the air inlet valve (105) at pre-determined time intervals; wherein the outlet port of the pumping (110) unit is coupled to an intake manifold (220) of the automobile such that the air pumped by the pumping unit (110) at the pre-determined time interval is directed into the intake manifold (220), and wherein the air directed into the intake manifold (220) is admitted into the engine (200) for scavenging, thereby improving fuel efficiency thereof.