

CONCEPTUAL DESIGN OF A NEW TYPE OF 'ENGINE' FOR VARIOUS APPLICATIONS WITH EXPECTED 10% HIGHER OVERALL EFFICIENCY

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ABSTRACT

Better utilization of petroleum fuels is the aim of this new design idea which can lead to development of higher efficiency prime mover for various types of applications say from an automobile to an air craft.

Vane motors and rotary vane air compressors are known products among mechanical engineers. Connecting mechanically a vane compressor with a vane motor by a coupling and by adding a combustion chamber in between a new type of engine can be created. The low specific speed lower pressure ratio vane compressors and vane motors can be converted into higher specific speed higher pressure ratio machines by doing certain design modifications and they can be used for making these engines.