

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202341027813 A

(19) INDIA

(22) Date of filing of Application :16/04/2023

(43) Publication Date : 05/05/2023

(54) Title of the invention : Incorporation of electric preheating and oil distribution in IC Engine

(51) International classification :F02C 073600, F16C 090200, F16C 331000, G06Q 100600, H04Q 110400
(86) International Application No :PCT//
Filing Date :01/01/1900
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

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(57) Abstract :

[06] A four stroke single cylinder I.C engine is selected for the experimentation of waste heat recovery from the exhaust gas temperature. Waste heat can be utilized for the heating purpose like preheating intake air and fuel, space heating, dryer etc. This paper includes the analysis of preheating intake air on emissions (CO, CO₂, HC and NO_x) and time required for fuel consumption. Engine exhaust gas temperature is used to preheat the inlet air, heat exchanger is used to transfer heat from exhaust gases to inlet air. Results show that on preheating the inlet air there is a considerable decrease in CO, HC and NO_x emissions. There are unaltered results obtained for CO₂ emissions. The time required for consumption of fuel increases considerably. Accompanied Drawing [FIG. 1] [FIG. 2] [FIG. 3] [FIG. 4] [FIG. 5] [FIG. 6]

No. of Pages : 15 No. of Claims : 4