(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :02/05/2025

(21) Application No.202511042911 A

(43) Publication Date : 23/05/2025

(54) Title of the invention : AN EXHAUST-BASED THERMOELECTRIC GENERATOR APPARATUS FOR ONBOARD POWER

(51) International classification :H10N0010130000, F01N0005020000, H01L0023467000, H10N0010170000, H02J0003380000

(86) International Application No :NA
Filing Date :NA

(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 :
An exhaust-based thermoelectric generator apparatus (100) is disclosed, designed to convert vehicle exhaust heat into onboard electrical energy. The system comprises a thermoelectric module housing (102) mounted on an exhaust pipe (101), a hot-side exchanger (103), and a cold-side sink (104) with fan (105). A power conditioning unit (109) processes the generated electricity. Vibration-damping supports (108) and thermal regulation (106) enhance performance, stability, and efficiency.

No. of Pages : 13 No. of Claims : 5