Technology for Novel Fuel Efficient Domestic Cooking Burner for Piped Natural Gas (PNG)

Creating Future Fuels

CSIR-IIP's dedicated domestic PNG cooking burner is novel and highly fuel efficient technology with a repeatable thermal efficiency meeting the BIS IS:17153 specifications.

Introduction

- Due to the unavailability of a dedicated PNG burner/stove, the LPG stoves are being modified to use PNG by just changing the gas injectors.
- This modification compromises the efficiency of the burner & safety of users.
- Due to the difference in gas inlet pressure and flow rates "flame lift" is observed when PNG is used in LPG burners causing safety hazards.
- The CSIR-IIP developed technology is a self-aspiring atmospheric burner that confirms a repeatable performance of thermal efficiency of greater than 65% as per BIS standard.
- The burner is designed and developed to deliver a range of power output (1.5 kW to 2.25 kW) that meets the BIS standards.

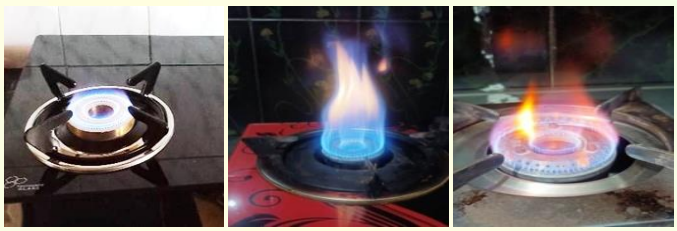
Salient Features

- This burner can save up to 25% PNG in comparison to the modified LPG burners
- Fuel worth ~Rs. 500 Cr/Y can be saved if all current PNG connections use this burner and ~Rs. 4000 Cr/Y can be saved for the new connections by 2028.
- It can help in the reduction of 2.8 MMTPA CO_2 emissions compared to modified LPG burners by 2028.
- It can benefit the entire stove and burner manufacturing sector (MSME) of India with a business potential of over Rs. 1000 Cr.
- 100% indigenous and patented technology

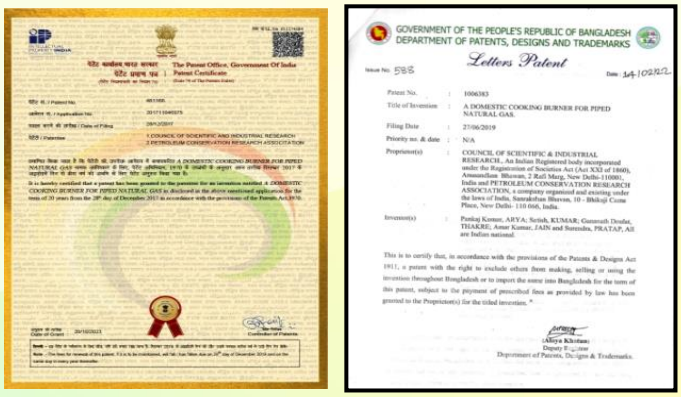
Commercialization of the technology

- The technology has been transferred to 42 Indian domestic stove and burner manufacturing companies.
- Available for purchase on online marketing platforms such as Amazon and Flipkart.
- Installed at major institutes like GAIL, MGL, IGL, Avantika Gas, Goa Natural Gas, Air Force Colony (Bangalore) and Shanti Kunj (Haridwar)

Energy Efficient PNG Stove with Logo



CSIR-IIP PNG Burner | Retrofitted Burners



Patent granted in India and Bangladesh

CSIR-IIP's PNG burner is beneficial to consumers, manufacturers, environment and reduction of fuel imports. CSIR-IIP is assisting the PNG distributors and burner manufacturers in promoting the novel PNG burner technology.

For detailed information please contact
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