

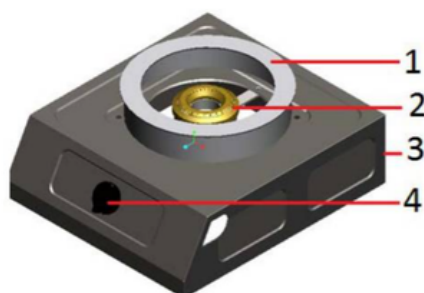
Efficiency Enhanced LPG Stove

Seeking parties interested in licensing and commercialization of technology.

Technology Brief

Conventional LPG cooking stoves operate at an average thermal efficiency of only 40%, with radiation dissipation accounting for the primary pathway of energy loss. This technology introduces an optimized physical redesign featuring a targeted circular ring that encompasses the burner assembly. By physically capturing and redirecting radiant heat back toward the cooking vessel, the system arrests radiation loss, raising overall stove efficiency by 6% while simultaneously reducing cooking duration and localized thermal pollution.

Block Diagram



Technical Applications

Decreases household Liquefied Petroleum Gas (LPG) cylinder consumption and reduces indoor thermal discomfort during daily meal preparation.

Scaled for high-duty commercial burners to lower operational fuel costs and improve working environment conditions in commercial kitchens. Optimizes fuel usage efficiency in resource-constrained environments or community kitchens relying on bottled LPG supplies.

Salient Features

- ✓ Radiation Containment Ring Architecture
- ✓ 6% Absolute Thermal Efficiency Increase
- ✓ Accelerated Heat Transfer

Glimpse of the Technology



REFERENCE NUMBER

iTNT-TECH-0173



TECHNOLOGY SECTOR

Clean Energy & Sustainability



IP STATUS

Patent Granted



APPLICATION NUMBER

916/CHE/2015



TECHNOLOGY READINESS LEVEL

TRL - 3

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