

INFRAKAT

The heat returned to the environment takes place by saving 70% of fuel and CO2.

The fuel can be:

- 1) LPG
- 2) Methane
- 3) Biogas
- 4) Hydrogen, in this case, we have Zero CO2 emission.

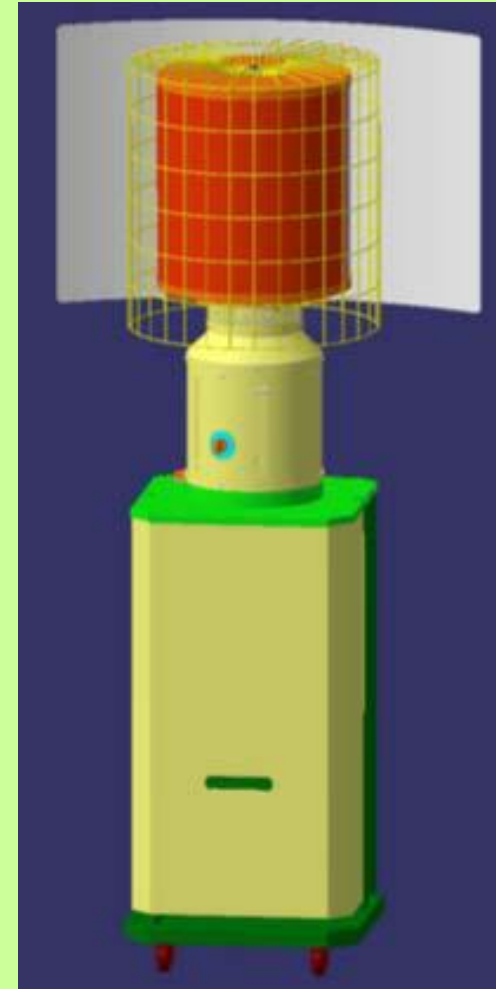
INFRAKAT

HEAT WITH SAVINGS OF 70% CONSUMPTION AND CO2

The **INFRAKAT** range represents a very diverse family of innovative and environmentally friendly products with the following potential applications:

- ✓ Industrial
- ✓ Home
- ✓ Outdoor
- ✓ Camper

INFRAKAT 's innovative infrared technology makes it unique and allows for a very high energy efficiency with both methane gas and LPG.



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HEAT WITH SAVINGS OF 70% CONSUMPTION AND CO2

ZERO

Emission **CO**
Unburned **HC**

-70%

Fuel consumption
compared to
traditional heating
systems

-70%

Emission **CO2**
Using Hydrogen, in
this case, we have
Zero CO2 emission.

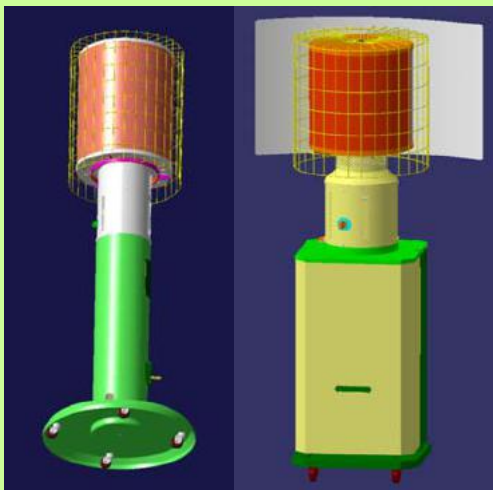
The duration of the **INFRAKAT** has been tested in a live environment of 90 m3 with gas burner for over 10 years:

15000 operating hours

7200 Ignition cycles

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From design to realization:

- More prototypes already built and tested
- Business plan ready to go
- Project Layout of Production Facility Completed
- Sales price range of the product: 800-900 €
- Two international Patented
- **All models are also supplied without a gas cylinder, with direct attachment to the user's network gas.**



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Campi di applicazione

1. Warehouses and industrial processing rooms.
2. Vehicle repair workshops.
3. Automotive bodyshops.
4. Construction and naval sites.
5. Florovivative greenhouses.
6. Intensive horticulture greenhouses.
7. Livestock farms.
8. Drying for fabrics and leather.
9. Military barracks and training camps.
10. Displaced collection tents.
11. Alpine shelters.
12. Airport thawers.
13. Emergency heater: various uses.
14. Outdoor mobile sites.
15. Outside trade markets.
16. Mobile stands.
17. External sets for Movies.
18. Sports venues: swimming, tennis, bowls, etc.
19. External stages.
20. Churches and locals of worship.
21. Mountain huts.
22. Skin heaters for thermotopes.
23. Heaters for civil use, housing and similar.

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Patents to protect INFRAKAT

Italy - Patent certificate for Industrial Invention N° 0001400045 2010

Holder: La Rude SRL BS.

(Data Pres. Domanda: Classifica 25/05/2010 F23d14 14)

Title: “**Dispositivo per un riscaldamento ambientale a raggi infrarossi**”.

Inventor: Tenci Pier Luigi

European – Granting the European patent application n° 11 739 170.6 –

Holder: La Rude SRL BS.

Title: “**Infrared rays device for environmental heating**”, published on July 15, 2015 - N° EP 2 577 165.

Inventor: Tenci Pier Luigi

It is a patent that has also been recognized by INVITALIA classifying it as a highly innovative technology in the industrial field.

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Patent to protect INFRACOOKER



(11) **EP 3 081 863 B1**

(12) **EUROPEAN PATENT SPECIFICATION**

(45) Date of publication and mention
of the grant of the patent:
08.01.2020 Bulletin 2020/02

(51) Int Cl.:
F24C 1/08 (2006.01) *F24C 15/18 (2006.01)*

(21) Application number: 16159556.6

(22) Date of filing: 10.03.2016

(54) **PORTABLE INFRARED RAYS HEADER FOR ENVIRONMENTAL HEATING**

TRAGBARES INFRAROTHEIZGERÄT FÜR DIE UMGEBUNGSHEIZUNG

ÉLÉMENT CHAUFFANT À RAYONS INFRAROUGES PORTABLE POUR CHAUFFAGE AMBIANT

(84) Designated Contracting States:
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GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO
PL PT RO RS SE SI SK SM TR

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(73) Proprietor: La Rude SRL
25128 Brescia (IT)

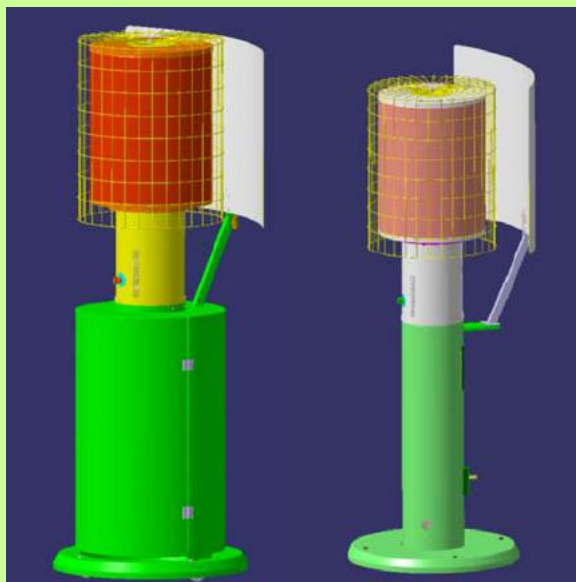
(72) Inventor: TENCI, Pier Luigi
25128 Brescia (IT)

(74) Representative: Sangiacomo, Ines
Biesse S.r.l.
Via Corfù, 71
25124 Brescia (IT)

(56) References cited:
EP-A1- 2 577 165 FR-A- 585 958
US-A- 2 088 280 US-A- 2 596 329
US-A- 3 509 869 US-A- 4 452 225
US-A1- 2005 175 950

INFRAKAT

HEAT WITH SAVINGS OF 70% CONSUMPTION AND CO2



INFRAKAT 8.5kW

Industrial sheds of more than 200 square meters with air turnover $\geq 9 \text{ m}^3/\text{h}$.

In the Outdoor version, it can be used outdoors even in moderate rain.

Consumption INFRAKAT

Gas Methane da **0.33** m³/h a **0.85** m³/h
Gas LPG da **0.24** kg/h a **0.7** kg/h

-70%

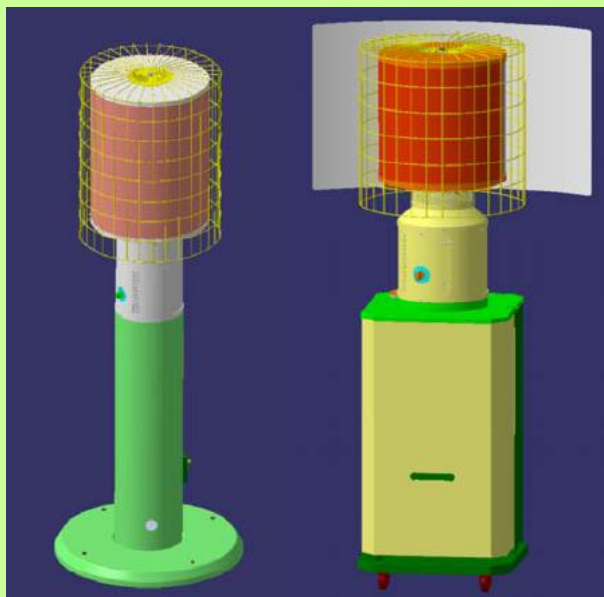
Consumption conventional heating

Gas Methane da **1.1** m³/h a **2.8** m³/h
Gas LPG da **0.8** kg/h a **2.3** kg/h

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HEAT WITH SAVINGS OF 70% CONSUMPTION AND CO2



INFRAKAT 4.5kW

volume rooms up to 110 m³ with air turnover is 4 m³/hour.

-70%

Consumption **INFRAKAT**

Gas Methane da **0.14** m³/h a **0.45** m³/h
Gas LPG da **0.12** kg/h a **0.37** kg/h

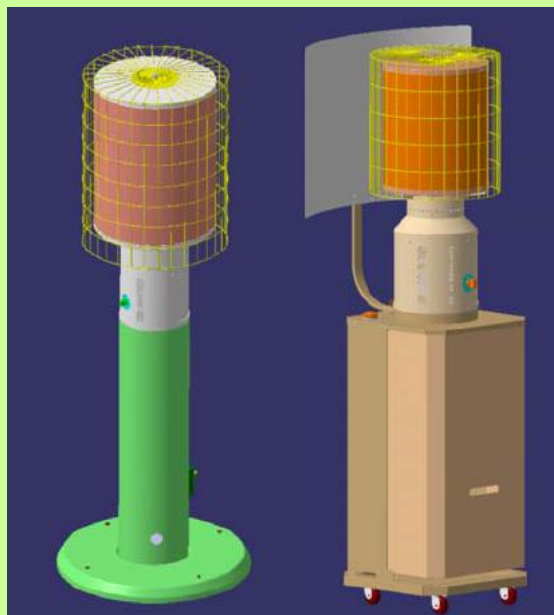
Consumption conventional heating

Gas Methane da **0.47** m³/h a **1.5** m³/h
Gas LPG da **0.4** kg/h a **1.2** kg/h

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INFRAKAT

HEAT WITH SAVINGS OF 70% CONSUMPTION AND CO2



INFRAKAT 2.7kW

volume rooms up to 65 m³ with air turnover is 2.5 m³/h.

-70%

Consumption **INFRAKAT**

Gas Methane da **0.036** m³/h a **0.26** m³/h
Gas LPG da **0.03** kg/h a **0.22** kg/h

Conventional heating consumption

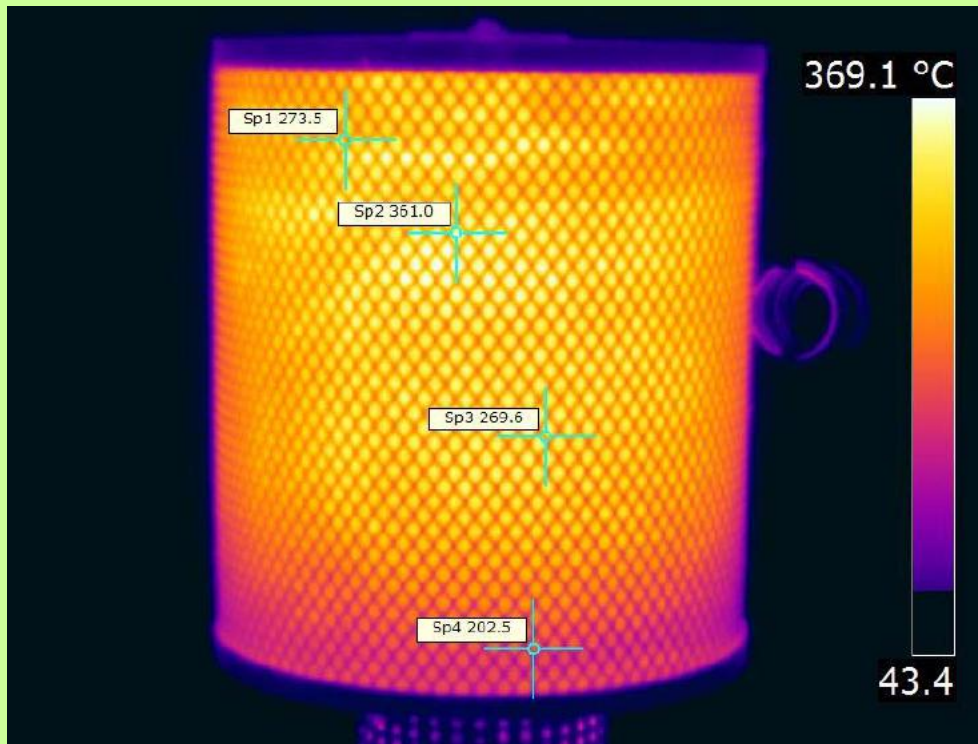
Gas Methane da **0.12** m³/h a **0.86** m³/h
Gas LPG da **0.1** kg/h a **0.73** kg/h

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INFRAKAT

HEAT WITH SAVINGS OF 70% CONSUMPTION AND CO2

INFRAKAT & INFRACOOKER antibacterial and antiviral properties



In INFRAKAT and INFRACOOKER, there is an internal flame temperature of about 1200 degrees Celsius. The temperature of the combustion air in transit is about 350 degrees Celsius and this air, disintegrates Viruses and Bacteria.

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