OT-09

SOLAR TOWER | Modular urban device able to heat and/or cook food by solar energy

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TYPE OF RESULT
New technology
New product
New service
New knowledge or skill

COMMERCIAL MATURITY LEVEL
Conceptual idea
Proof of concept (design)
Validated in a controlled environment
Validated in a real environment
Successfully implanted

PROTECTION LEVEL
Non- applicable
Patent
Software
Know - how
Utility model

Name of the patent	Modular urban device capable of heating and / or cooking food using solar energy
File number	ES1185484Y
Filing date	30/03/2017
Patent grant status	Granted on 13/09/2017
Places where the patent is granted	Spain

Description of the solution. Problem solved

Solar Tower is a device that enables heating elaborated food and, if given the needed weather conditions, it is also possible to cook dishes by using clean, green, free solar energy exclusively.

Solar Tower does not only solve a technical problem, but also guarantees an easy, convenient, intuitive use and it requires low maintenance.

Solar Tower is designed for green areas of cities (squares, parks, recreational areas, university campus), where by its implantation urban picnic areas would be created and warm food could be cooked in them, which is an unusual situation because of the lack of equipment for cooking or heating the food up.

In short, it is intended to give a functional use to outdoor spaces where people go for lunch but where there are no proper places to sit and eat, and people have to have their meals in inadequate places such as sitting on benches, sitting on curbs, stairs or inside cars. Solar Tower may contribute to creation of new picnic areas, offering proper tables and seats, bins, pergolas or canopies. This way an ideal, adequate and functional space for those who would like to eat outdoors would be created.

This is an alternative to restaurants that can be more costly for workers and students, who could eat their own food in an adequate space especially designed for it.

Also, it develops a meeting point that contributes to sociability, since it is also aimed at groups or families who look forward to eat or celebrate outdoors in urban areas as well as cook their own food without going out of the city.

Fields of commercial application

Urban furniture companies that could offer this design to public administrations as a low-cost product what works with solar energy and without CO2 emissions.

Market opportunity

There is no other product designed for public spaces that solves the problematic of heating up your food or cooking without emissions. There are solar cookers but they have not achieved big success since their complex use and their design intended for private use.

Picnic areas with barbecues are usually located in country areas, they produce CO2 emissions and wastes such as ashes, smoke and oils, and they need specific utensils and other conditions.

This is the time to think and being eco-friendly. At this moment, protecting the environment is an indispensable requisite for all the products to be put in the market.

This product has been designed to send a positive message: it is possible to use renewable energies that do not need technology for carrying out daily tasks as heating up the food and cooking.

Competitive advantage

Innovative product, 100% sustainable and eco-friendly source of energy that turns the green urban areas into more gently and functional places.

Resources needed to be implemented

A company for developing the final product.

Materials: GRC, glass, metal and insulation elements.

AUTHOR
Álvaro Manzano Santana

CONTACT
Oficina Transferencia de Resultados de Investigación (OTRI)
arivero@fpct.ulpgc.es
928 45 99 56 / 43
https://otri.ulpgc.es/

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