

# Air flow with ultraviolet radiation barrier for sanitizing environments



**INVENTORS:** Giovanni Romano  
Franco Fusi  
Guido Toci  
Barbara Patrizi

**CO-OWNERS:** CNR – INO Istituto Nazionale di Ottica

**PATENT STATUS:** Filed

**PRIORITY NUMBER:** 102020000032918

**PUBLICATION:** -

**PUBLISHED AS:** PCT available

## Invention



- **It arises** from the collaboration between the University of Florence and the National Institute of Optics
- **General applications:** public health, devices for antimicrobial sterilization
- **Specific application:** photo-sterilization of SARS-Cov-2
  
- **Idea in brief:** vertical barrier of UVC rays, interposed between people in a static position
- **Advantages in brief:** compatible with the presence of the people themselves, safe

# Drawings & pictures

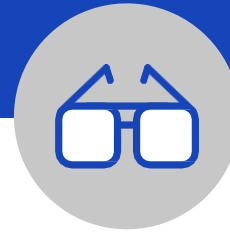


## Examples:

- Offices, restaurants, canteens, public establishments
- Cinemas, theaters, etc.
- Public transportation systems
- Warehouses, cold rooms, stables



# Industrial applications



## **Competitive Advantages**

- ❖ continuously sanitizing of closed environments
- ❖ Compatible with the presence of people
- ❖ No dead times or restrictions of use during the sanitification process

## **A safe system**

- ❖ Presence sensors
- ❖ UVC much safer than UVA, UVB

## **Addressees:**

- ❖ R&D, production, marketing:
- ❖ Companies of the biomedical, sanitification and public health sectors
- ❖ Companies of the photonics, optics and lighting sectors

## **Users:**

- ❖ Companies of the public and private sectors with needs of environmental sanitification
- ❖ Public Administration, Public Health, Nursing Homes

# Inventors



**Prof. Giovanni Romano, Univ. Florence**



**Dr. Guido Toci, CNR-INO**



**Prof. Franco Fusi, Univ. Florence**



**Dr. Barbara Patrizi, CNR-INO**



## Possible Developments



- ❖ TRL 2 – 3
- ❖ Currently benefiting from a Tuscany Region funding (SAVES US project)
- ❖ Prototyping
- ❖ Safety and efficacy tests
- ❖ Patent available by exclusive or non-exclusive licence
- ❖ Inventors available for R&D and consulting activities

For more information



## Office for Technological Transfer, University of Florence

Headquarters: Piazza S. Marco 4 – 50121 Florence

web: [www.unifi.it](http://www.unifi.it)

E-mail: [brevetti@unifi.it](mailto:brevetti@unifi.it)

For more information



## Office for Technological Transfer, Tuscany Region

Headquarters: Via Luigi Carlo Farini, 8 50121 Florence

E-mail: [urtt@regione.toscana.it](mailto:urtt@regione.toscana.it)

