

Innovative technology generating an invisible antimicrobial coating for health prevention to be applied in indoor/outdoor spaces.

Summary

Profile type

Technology offer

Company's country

Italy

POD reference

TOIT20230428022

Profile status

PUBLISHED

Type of partnership

**Commercial agreement with
technical assistance**

Targeted countries

• World

Contact Person

[Rita Elste - Tomsone](#)

Term of validity

**2 May 2023
1 May 2024**

Last update

2 May 2023

General Information

Short summary

Italian company, active in the field of biotechnology research for the healthcare sector, developed and double-patented an innovative coating that prevents bacteria presence on indoor surfaces with the aim of slashing HAI rates (Healthcare Associated Infections) and reducing the use of chemicals up to 98%. The company is currently selecting distributors to extend the reach of its innovation in each marketplace. License agreement is considered.

Full description

The Italian company, boasting strong ties with a leading University for microbiology research in Italy, other R&D centres and universities in Europe and an electrostatic technology developer in the USA, developed an innovative coating that prevents bacteria presence on indoor surfaces. Granting a 99.99% antimicrobial residual efficacy 24/7 for 3 months, the solution represents a concrete shift in paradigm preventing bacteria presence in any indoor environment - preventative solution. The innovation offered meets the needs of the major bacteria-sensitive environments and is considered an effective risk management procedure in the healthcare sector aimed at reducing HAI rates (Healthcare Associated Infections).

Additionally, the solution suits other bacteria-sensitive industries:

1. Food processing, where strict levels of hygiene are required and monitored. Here, the solution is a valuable tool to pursue a high-safety production facility.
2. High foot-traffic public spaces. Continuous protection in all these public spaces means slashed costs for disinfection, healthier environments, and slashed use of chemicals, contributing to the reach of smart city goals.

The system offered comprises 3 different formulations, a range of electrostatic sprayers and a certification procedure.

Distributors offer the application of the coating in their end users' premises. After each treatment, they release a certification through a proprietary certification procedure, giving the evidence of the appropriate application of the coating. The certification is a marketing tool to get across the message "always safe spaces". The 4-application-per-year system and the certification beneficially bind end users to a long-term commitment with distributors through recurrent sale agreements.

The company is currently selecting distributors to extend the reach of its innovation in each marketplace. The ideal partner should be a distributor engaged in the sale of recurrent services (i.e. supply of cleaning/disinfection services, technical maintenance/assistance, etc.) and/or medical devices in the healthcare sector, including hospitals and nursing homes.

License agreement with industrial partners is also considered.

Advantages and innovations

The company developed 3 proprietary formulations which, once electrostatically applied in indoor spaces, molecularly interact with surfaces and generate an invisible, long lasting, non-leaching antimicrobial coating, covalently bond to targeted areas.

A valuable innovation in the field of antimicrobial coatings. The coating attracts pathogens by electrostatic action. Its molecular micro spikes puncture the microbe's external membrane by physical action and instantly kill them on contact, with no poisoning. This physical action avoids two of the most detrimental issues in healthcare: the development of bacteria resistance to antimicrobials (AMR) – generally caused by the continuous and excessive use of biocides, among others - and the biofilm generation over time.

Operational advantages: The 3 formulations are to be applied through fit-for-purpose electrostatic devices - EPA tested and CE certified - which allow for a 360° surface coverage, with no need to free up spaces. This extremely efficient technology eliminates the dispersion of product. A 1000smq room can be treated in just 90' on average, with only 2lts of product, for a result lasting months. Rooms are accessible right after 10' drying time.

Technical advantages: Just 4 applications per year for a 24/7 protection. Thanks to its extremely high efficacy and extraordinary duration over time, this technology reduces the use of chemicals up to 98% compared to a daily conventional sanitization. Being non-leaching - it remains permanently attached to surfaces -, the coating is completely safe for humans and the environment.

Competitive advantages: Being far less expensive than daily conventional sanitizations, it appeals to a wider customer base. Company's selective distribution strategy safeguards the margins of distribution chain, and the disruptive innovation grants a competitive advantage in the market.

Technical specification or expertise sought

Stage of development

Already on the market

Sustainable Development goals

- **Goal 6: Clean Water and Sanitation**
- **Goal 3: Good Health and Well-being**

IPR Status

IPR granted

Partner Sought

Expected role of the partner

The ideal partner should be a distributor engaged in the sale of recurrent services (i.e. supply of cleaning/disinfection services, technical maintenance/assistance, etc.) and/or medical devices in the healthcare sector, including hospitals and nursing homes.

Distributors have the opportunity to extend their portfolio with an innovative, sought-after tool, which generates competitive advantage.

The company considers selective distribution agreements, license agreements, or services agreements for its distribution. Sole distributorship is evaluated per each marketplace.

License agreements with industrial partners are considered in any over regulated market where regulatory compliance is a hurdle.

Type of partnership

Commercial agreement with technical assistance

Type and size of the partner

- **Other**
- **Big company**
- **SME 11-49**
- **SME 50 - 249**

Dissemination

Technology keywords

- **03004011 - Care, Hygiene, Beauty**
- **06004 - Micro- and Nanotechnology related to Biological sciences**
- **03004010 - Special chemicals, intermediates**
- **06001018 - Virus, Virology/Antibiotics/Bacteriology**
- **06002008 - Microbiology**

Targeted countries

- **World**

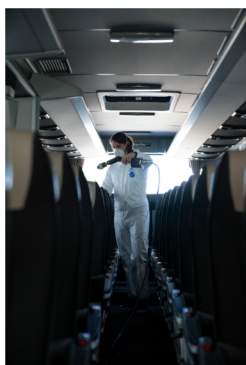
Market keywords

- **05007007 - Other medical/health related (not elsewhere classified)**

Sector groups involved

Media

Images



[_DSC2312 copia.jpg](#)



[DSC00171.jpg](#)



[_DSC2641.jpg](#)

PDF documents



[Brochure En.pdf](#)

3