



Cu-PAPER: ANTIBACTERIAL PAPER

Cellulosic material with a biocide agent based on copper.

The growing concentration of people in large urban areas brings along several challenges, among them, to protect the health of population from bacterial and fungal attacks. In fact, when 80% of infectious diseases are transmitted through touch, the development of materials and additives with antibacterial and/or fungicidal properties is highly desirable.

THE TECHNOLOGY

Mechanism for adding copper microparticles in a plant cellulosic matrix. These technologies add antimicrobial and antifungal properties to products based on cellulose, such as paper, cardboard, pasteboard, among others. This mechanism enables the use of copper particles either dry or in a solution, favoring the adaptation to different productive processes.

The use of microparticles does not produce negative effects on human health, as it does with nanoparticles.

DEVELOPMENT LEVEL

Validated technology in a pilot scale of paper production.

Technology validated in an industrial scale at a pulp recycling plant.

LEAD RESEARCHER

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INTELLECTUAL PROPERTY

Patent pending.

MAIN BENEFITS AND ADVANTAGES

The material obtained is antibacterial and fungicidal, biodegradable, adaptable to different productive processes favoring the manufacture of several products; innocuous and safe for human health due to the use of microparticles and it also improves the mechanical properties of paper.

APPLICATIONS AND USES

Several applications such as packaging, filters, hospital supplies, medical centers, building materials, among others.

TECHNOLOGICAL OFFER

- Technology available for licencing.

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