TECHNOLOGY OFFER

ORGANIC SEMICONDUCTOR DIODE

The increasing production volume of flexible electronic devices together with the slow degradation of plastics will in the near future generate a lot of non-biodegradable and environmentally harmful waste. Biocompatibility, reuse and biodegradability in the consumer electronics field will significantly alleviate environmental problems and reduce the costs associated with recycling.

TECHNOLOGY DESCRIPTION

The present invention consists of an innovate semiconductor diode with organic insulation, printed by inkjet on conductive nano paper substrates. This diode has excellent physical, chemical, mechanical and thermal properties of cellulose nanofibers (CNF)

APPLICATION AND TARGET MARKET

The target market of the present technology comprises companies interested in manufacturing flexible and lightweight electronic products using green and cost-effective processes, such as the printing sector.

COMPETITIVE ADVANTAGES

- Green, simple and low-cost manufacturing process.
- Allows increasing production roll by roll.
- Mechanical flexibility, solubility and adaptability.
- Easily recyclable due to abundant and renewable raw materials.

ENGINEERING AND ENVIRONMENT

Universitat de Girona

TIME-TO-MARKET

TRL 3

DEAL SOUGHT

License agreement

RESEARCH GROUP

Advanced Biomaterials and Nanotechnology (BIMATEC)

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