ISTITUTO ITALIANO
DI TECNOLOGIA

TITLE

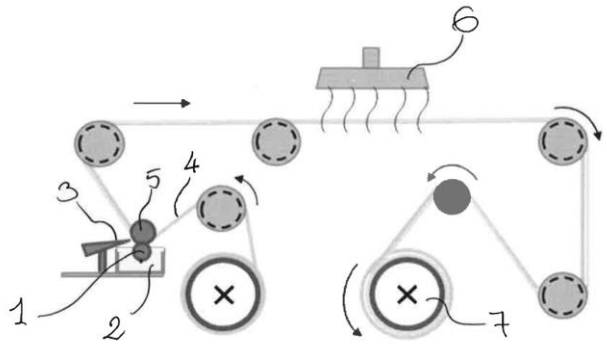
Processo per preparare film auto-supportanti di polimeri conduttori

INVENTORS

Francesco Greco, Alessandra Zucca, Barbara Mazzolai, Virgilio Mattoli, Shinji Takeoka, Kento Yamagishi, Tohinori Fujie

DESCRIPTION

The invention concerns a roll-to-roll (R2R) process for the preparation of nanofilms of conductive polymers, through their deposition on flexible polymer films (rolls) acting as temporary substrates. The present R2R process has advantageous properties such as continuous, high throughput printing on large rolls, large area patterning/processing, cost-effectiveness, speed of execution and use of industry-ready/mass-scale manufacturing technology. The present nanofilms have several advantageous characteristics, such as strength, flexibility, ability to adhere to different substrates, and high biocompatibility, which make them suitable for numerous different technological applications. In particular they can be applied in the biomedical field, as in the development of sensors and other skin-contact electronic devices and in large area flexible electronics manufacturing.



APPLICATIONS

Nano-films, flexible electronics, skin-contact electronics, sensors

KEYWORDS

Conductive, polymers, flexible, nanofilms, roll-to-roll

BIBLIOGRAPHIC DATA

A roll-to-roll (r2r) process for preparing biocompatible, ultra-conformable free-standing nanofilms of conductive polymers

Application Number	IT 102015902336763
Priority Date	09/03/2015
Applicants	Fondazione Istituto Italiano di Tecnologia

CONTACTS

Technology Transfer Office	Augusta Galano	augusta.galano@iit.it
		+39 010 71781 568