

EP3399101 - A material for a biodegradable package

SILBO SP Z O O

Published 2018-11-07

A biodegradable package material in the form of a continuous strand, in which the continuous strand comprises paper coated at least on one side with a biodegradable polymer and the continuous strand comprises at least on one side a layer of print of biodegradable water paint, whose printable substrate is starch.

The continuous strand can comprise openings of any shape with elements of a biodegradable film or mesh welded into them.

The continuous strand can comprise alternating strands of paper and film and/or a biodegradable mesh.

A method for the production of package material for fruits and vegetables, wherein the continuous strand of paper is initially coated at least on one side with a biodegradable polymer and wound on a reel, in which the continuous strand is covered by a print of water paint, whose printable substrate is starch; subsequently, the layer with the print is subjected to drying by hot air in a temperature of 70°C - 90°C; subsequently, the continuous strand is wound on a reel and cut off.

Openings of any shape are cut out with laser in the continuous strand and subsequently elements of a biodegradable film are welded into them, the heaters being applied on the side of the continuous strand.

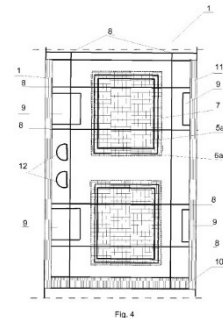


Fig. 4

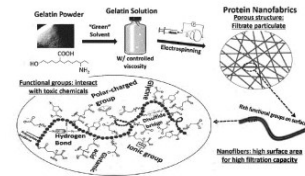
US20180311599 - Stabilized protein fiber air filter materials and methods

WASHINGTON STATE UNIVERSITY

Published 2018-11-01

Stabilized air filters formed from mats of crosslinked protein-containing fibers are provided.

The fibers are formed into a mat with pores that allow air to pass through while physically filtering particulate matter.



The protein in the protein-containing fibers also serves to chemically filter polluted air passed through the filter.

Specifically, chemical functional groups from the many amino acids that comprise the protein of the protein-containing nanowire react with certain chemical pollutants (e. g., carbon monoxide and formaldehyde) in order to capture or otherwise neutralize the pollutant.

Accordingly, the single fiber mat performs two filtering functions.

Methods for making the air filters from crosslinked protein-containing nanofibers are also provided.

EP3388229 - Breakable film for capsules with extractable substances and capsule sealed with such film

CORAPACK

Published 2018-10-17

(...)film for the sealing of a capsule for extractable substances, consisting of at least one carrier layer of non-woven PLA-based fabric (1) and a gas-barrier layer (2), mutually coupled, wherein said carrier layer (1) is composed of a non-wove(...)of a non-woven fabric of a plastic weldable and compostable material said barrier layer (2) is composed of a cellulose-based core layer (2') on the outer surfaces of which there are provided thin protective coatings (2''), obtained by deposi(...)

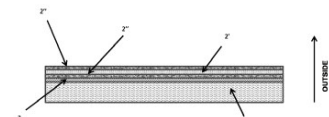


Fig. 1

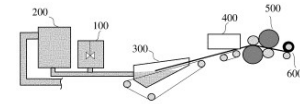
US20180271768 - Biocellulose slurry, and dry biocellulose material, method for manufacturing dry biocellulose material and skin care film using the same

TCI

Published 2018-09-27

A bio-cellulose slurry is provided.

The bio-cellulose slurry comprises the following components: bio-cellulose; a backbone fiber selected from the group consisting of rayon fibers, polyethylene terephthalate (PET) fibers, nylon fibers and c(...)



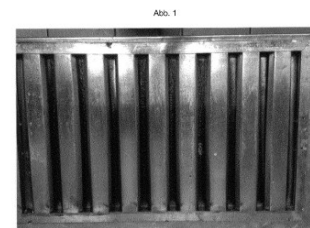
The bio-cellulose slurry is useful in manufacturing a dry bio-cellulose material with outstanding water absorption rate and wet strength.

EP3375857 - Cleaning agents based on plants of the pumpkin family

GLACHTSIOU SOFIA (Inventor)

Published 2018-09-19

The invention relates to the use of the fruit flesh fruits of plants from the family of curcubits (curcubitacea) or juice, brew or extract thereof as a cleaning agent for cleaning and care of surfaces and textiles, especially in the home and kitchen area, and a corresponding cleaning agents based on the pulp of plants from the family of curcubits (Cucurbitaceae), and its preparation.

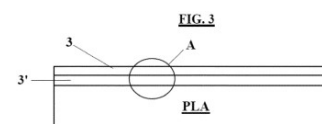


EP3357823 - An innovative tray of biodegradable type for carrying findings and delicate objects

METALPLUS

Published 2018-08-08

(...)for carrying delicate objects and comprising the steps of: - Arrangement of a layer forming the body of the tray of PLA material; - Arrangement of a layer of nonwoven fabric of Lyocell type; - Coupling said layer of nonwoven fabric with said layer of PLA forming the body of the tray, in such a manner as to cover at least said part of the tray for carrying objects; - And wherein said coupling betwe(...)under a preset pressure, for a preset time and subsequent cooling, in such a manner that melted parts of the body of PLA bind by solidification with fibers of nonwoven fabric.

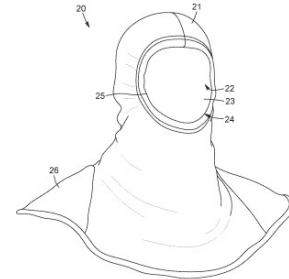


US20180207453 - Firefighter protective hood and gloves with regenerated cellulose fiber

INNOTEX

Published 2018-07-26

A firefighter protective hood that protects the coat/helmet/self-contained breathing apparatus facepiece interface area of a user, and a firefighter protective glove that protects the hand and wrist of the user are provided. The firefighter protective hood and glove respectively include a hood-shaped structure and a glove-shape structure. The hood-shaped structure and the glove-shaped structures each include a body-contacting layer made of a fabric of flame-retardant regenerated cellulose fibers. The structure and composition of the body-contacting layer promote comfort of the user and evaporative cooling. Outer layer(s) extend outwardly over the body-contacting layer and act as thermal and mechanical barriers. The combination of such layers allows maintaining relatively high perspiration transmission and evaporation, and substantially good thermal and mechanical properties.



AU2018100437 - Combination pyrolysis and steam explosion of biomass

HILL DERRICK GRAHAM (*Inventor*)

Published 2018-05-10

The disclosed integrated manufacturing plant produces bio-coal from biomass feedstock and bamboo cellulose fibre from bamboo feedstock using an arrangement and configuration of equipment that is constructed into modular units each having the dimensional and load capacity characteristics of a standard intermodal container enabling the entire arrangement to be transported cost effectively by road, rail and sea and quickly re-assembled at locations where plentiful quantities of biomass feedstock are identified. The concept of a transportable manufacturing plant for bio-coal effectively eliminates the significant costs of transporting biomass feedstock to the manufacturing plant, and is a key enabler to commercial manufacture of bio-coal, which competes with alternate fuels in a price driven market. Each modular unit is provided with duplicated inter-connection points enabling the relative positions of inter-connected units to be optimised such that the assembled plant layout has a degree of independence from the constraints of the installation site. The integrated bamboo cellulose fibre manufacturing equipment utilises unused heat energy from the bio-coal manufacturing process, maximising thermal efficiency of the plant to cost-effectively manufacture a high quality, chemical free, bamboo cellulose fibre for use in textiles destined for the high-end fashion industry.

