

PATENT ALERT

ECO-INNOVATIONS

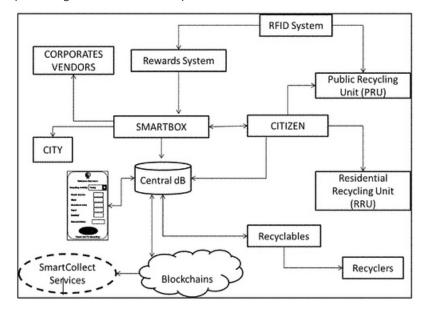
INNOVATIONS for a greener environment

by Madeleine Wéry – Centexbel Patent-Cell

Incentivized multi-stream recycling system with fill level, volume, weight, counters, shredder, compactor, consumer identification, display and liquid drainage system

Patent # US20200189844 Date of publication: 2020-06-18 Applicant(s): SOURCERECYCLE Inventor(s): SRIDHAR MIRAJKAR VENKOBARAO

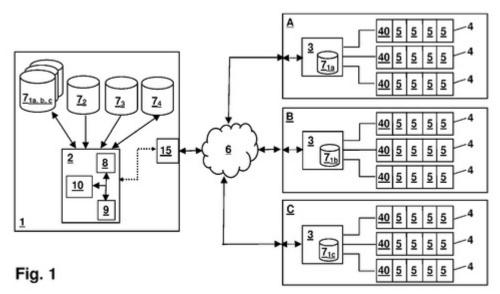
An embodiment relates to a trash collection device comprising a trash receptacle with a unique identification and an opening to receive a class of trash; an identification scanner for recognizing a user; a trash item counter; a fill level sensor; a display configured to interact with the user; a compactor; a solar panel configured to charge a battery; a data communicator configured to communicate date to a cloud storage; a processor configured to generate incentive for the user; wherein the trash collection device is configured to be modular and configurable to connect with another similar trash collection device to enable to collect additional trash class and is configured to interact with each other through a common software. The device, method and system are further used to generate recycling analytics by using the stored data to provide incentives to users and to facilitate planning of downstream operations.



Parameter manager, central device and method of adapting operational parameters in a textile machine Patent # EP3654114 Date of publication: 2020-05-20 Applicant(s): RIETER

Inventor(s): BLASER NIKLAUS, GRIESSHAMMER CHRISTIAN

It is proposed a parameter manager (2) for managing parameter of machines (4) and processes within spinning mills (A, B, C) in respect with at least one of production quality, usage of raw material, reduced waste, conversion costs like costs of energy, labour costs, maintenance costs and consumables costs as well as increase of production volume and ideal batch allocation to different machines (4) within the spinning mill (A, B, C). According to the invention said parameter manager (2) uses artificial intelligence algorithms comprising neural networks (12) alone or in combination with case-based reasoning (CBR) and traditional mathematical models. The invention concerns as well a central device and a method of adapting operational parameter in a textile machine (4).



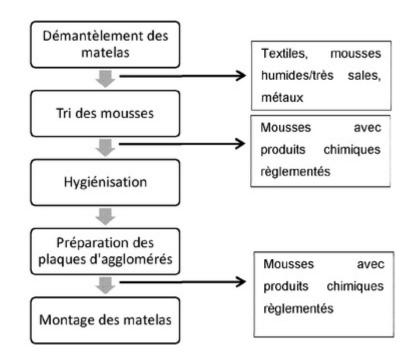
Method for manufacturing recycled foam sheets.

Patent # EP3656525 Date of publication: 2020-05-22 Applicant(s): SUEZ R R BELGIUM Inventor(s): ABOU'OU ANGÈLE

The invention relates to a method for manufacturing a sheet of polyurethane or a latex mattress from recycled single-material, said method comprising the following successive steps: has) a step of dismantling of worn mattress, making it possible to supply separate base materials, base materials comprising in particular polyurethane foams and latex foams, and b) a step of selecting the polyurethane foams, latex respectively not contaminated, the C) a step of crushing said foams obtained in step b), in order to obtain flakes of polyurethane foam, latex respectively, not contaminated with a mean particle size less than or equal to 20 mm, d) a step of forming a layer of polyurethane latex single-material respectively, comprising the mixture of the polyurethane foam flakes respectively of latex of step d) with a binder.

The invention is useful for making mattress and upholstery for furniture.



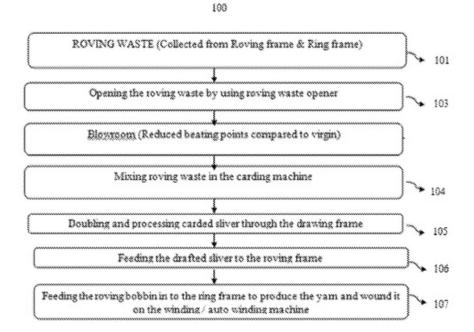


System for manufacturing textile products from roving waste material and method thereof

Patent # WO2020/152717 Date of publication: 2020-02-07 Applicant(s): SHARADHA TERRY PRODUCTS COIMBATORE Inventor(s): DEVARAJ VIKRAM KRISHNA

The present invention relates to textile products and the manufacture of yarns. More particularly, the present invention relates to a system for manufacturing textile products from roving waste material. Further, the present invention relates to the method of manufacturing 100% regenerated ring spun yarn, out of waste generated during spinning and additionally, the present invention relates to the method of manufacturing regenerated ring spun yarn with cotton waste, comber noil and carding flat waste which produces 100% cotton ring spun yarn. Advantageously the present invention relates to a cost-effective method for recycling roving waste generated during cotton spinning, and produces yarns of the highest possible quality when compared with the virgin fibers.

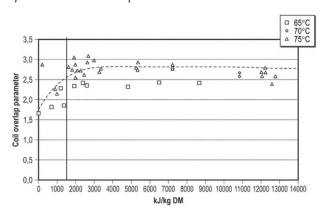
FIGURE 1:



Activated pectin-containing biomass compositions, products, and methods of producing

Patent # US20200046008 Date of publication: 2020-02-13 Applicant(s): CP KELCO Inventor(s): HANSEN JACK HARBO, HENRIKSEN WENCKE DYBVIK, PEDERSEN HEIDI LIVA, PEDERSEN TOMMY EWI, STAUNSTRUP JAN AAE

Methods for producing an activated pectin-containing biomass composition are provided. These methods include A) mixing a starting pectin-containing biomass material comprising an insoluble fiber component and an insoluble protopectin component with an aqueous solution of an alcohol to form a mixture; B) activating the starting pectin-containing biomass material to form an activated pectin-containing biomass material comprising the insoluble fiber component and a soluble pectin component by subjecting the starting pectin-containing biomass material to (i) an activating solution formed by adding hydrochloric acid and/or sulfuric acid to the mixture to adjust the pH of the mixture within the range from at or about 0.5 to at or about 2.5 and (ii) heat to a temperature greater than at or about 40 degrees Celsius; C) applying mechanical energy either (i) to the mixture of step A), (ii) during the activating of step B), or (iii) to the mixture of step A) and during the activating of step B); and (D) separating the activated pectin-containing biomass material from the mixture. Alcohol is generally present in the mixture. Activated pectin-containing biomass compositions are also provided.



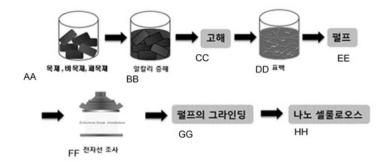
Method for manufacturing nanocellulose fiber having long fiber length by using eco-friendly electron ray process

Patent # WO2019/194378

Date of publication: 2019-10-10

Applicant(s): JEONJU UNIVERSITY OFFICE OF INDUSTRY UNIVERSITY COOPERATION Inventor(s): SHIN, Hye Gyeong, KIM, Hong Keon, KWAC, LEE KU, KIM, YONG-SUN

The present invention provides a method for manufacturing a nanocellulose fiber by using an eco-friendly process, comprising the steps of: (step 1) manufacturing pulp from wood or non-wood, which is a material; (step 2) irradiating, with electron rays, the pulp obtained in step 1; and (step 3) separating and obtaining nanocellulose by grinding the electron ray-irradiated pulp of step 2. In addition, the present invention provides, in order to obtain a nanocellulose fiber by means of electron ray emission without using a strong acid, a method for manufacturing a nanocellulose fiber having a long fiber length by using an electron ray process, the method compensating for the disadvantages of a chemical separation method and a physical separation method, and maximizing yield by means of an effective method while minimizing environmental pollution.



AA ... Wood, non-wood, waste wood BB ... Alkaline digestion CC ... Beating DD ... Bleaching EE ... Pulp FF ... Electron ray emission GG ... Grinding of pulp HH ... Nanocellulose Water-dispersible coating composition for paper making, and method for manufacturing eco-friendly type food wrapping paper with improved dampproofing properties and blocking properties by using same

Patent # WO2019/235767 Date of publication: 2019-12-12 Applicant(s): REPAPER Inventor(s): YOON, Cheol, LEE, SANG IL

The present technology relates to a coating composition for paper making and to a method for manufacturing an eco-friendly type food wrapping paper with improved damp-proofing properties and blocking properties by using same. The water-dispersible coating composition for paper making of the present technology is a coating composition for paper making, which comprises an acrylic polymer resin and a pigment, the acrylic polymer resin containing an acrylate, the pigment containing at least one of clay, talc, and calcium carbonate, wherein the pigment has a particle diameter of 1800 nm or smaller, and is blended with the acrylate while the acrylate is used as a binder.

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Glove e.g. leather glove, selective dyeing method, involves impregnating aqueous solution of sodium hypochlorite for permitting penetration of dye into polyurethane coating of glove, and immersing glove in new sodium hypochlorite bath

Patent # FR2900164 Date of publication: 2007-10-26 Applicant(s): VAILLE PIERRE, VAILLE LANNEREE CLAUDINE Inventor(s): VAILLE PIERRE, VAILLE LANNEREE CLAUDINE

Selective dyeing recycled gloveholes for registration, particularly the gloves with polyurethane (1) coating. The invention relates to a method for dyeing only the palm coated with polyurethane (1) from these gloves. For this purpose a chemical attack to the water as Javel allows a porosity of the coating, especially if foamed. The dyeing will be preferably with disperse dyes that have more affinity for the polyurethane. After rinsing, chemical as a last dipping water dissolves the dye Javel which will have been fixed on the fiber (2). Has the arrival only the hue (1) will be polyurethane coating. This method according to the invention is particularly intended for the management of the gloves by locating recycled.