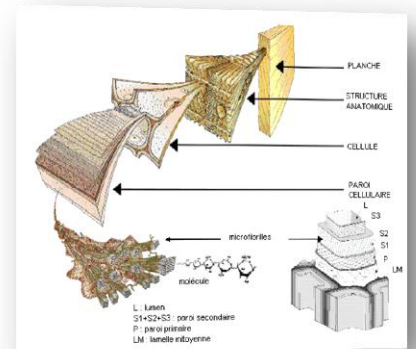


Bulletin de Veille technologique n°2

## Valorisation du Bois

Novembre 2016



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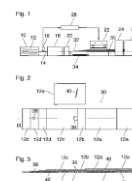
## BREVETS, PUBLICATIONS

### LES BREVETS

#### PROCEDE DE FABRICATION DE BOIS EN PLACAGE STRATIFIE (Germany)

14/07/2016 The invention relates to a method for producing veneer-layer wood, wherein panels (12) of a veneer are examined for flaws and flaw-free panels are glued, stacked in a plurality of layers, and pressed, wherein, for panels that are not flaw-free, at least if the flaws do not exceed a certain size, the locations of the flaws in the stack are calculated and stored and a stacking sequence in which the panels (12) are stacked is determined in accordance with the stored locations of the flaws in a number of layers of the already stacked panels (12).

POLL MEIER RALF



#### METHOD FOR TREATING LIGNIN-BASED MATERIAL (Finland)

10/08/2016 A method of treating lignin-based material is provided, comprising the steps of subjecting lignin separated from lingo-cellulosic raw material to hydrothermal carbonization process at an elevated temperature, where carbonized lignin having increased carbon content is obtained, and stabilizing the obtained carbonized lignin under inert atmosphere at a stabilization temperature higher than the temperature of the hydrothermal carbonization process.

Samples of claims:

10 - Use of the final carbon product obtained according to any of the claims 7 - 9 in functional or constructional applications.

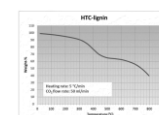
11 - Use according to claim 10, characterized in that the final carbon product is used in the production of rubber or elastomer articles, such as tyres or belts, in the production of steel or electrode carbon, or as activated carbon.

12 - Use of the stabilized carbonized lignin obtained according to any of the claims 1 to 6 in constructional applications.

VALMET TECH OY



FIG. 1



#### WOOD BARK-BASED NANOCOMPOSITE STRUCTURAL MATERIAL (Russia)

10/07/2016 present invention relates to the production of composite construction materials and can be used in making wood-mineral plates used as load-bearing walls, self-supporting walls and partitions, structural sound-and heat-insulation boards and panels. Nanocomposite material contains mineral filler, cement and water, wherein the wood matrix is formed from particles of 0.5-1.5 mm ultrafine pine bark, and the mineral filler of the structure is 50-250 Nm particles of nanosized basalt. EFFECT: disclosed material is more environmentally friendly and has improved fire resistance and sound- and heat-insulating properties, improved physical and mechanical properties, is resistant to oxidative decomposition and biologically active media..

FEDERALNOE G  
AVTONOMNOE  
OBRAZOVATELNOE

#### METHOD OF PRODUCING HYDROPHOBIC AND LIPOPHOBIC PAPER USING MICROFIBRILLAR CELLULOSE FIBRES (Russia)

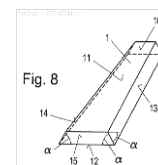
10/07/2016 pulp and paper industry. SUBSTANCE: invention relates to pulp and paper industry and can be used in manufacture of paper, in particular hydro- and lipophobic paper. Method involves preliminary preparation of material from pine and hardwood pulp, paper pulp preparation by way of addition in prepared raw water to produce fibrous suspension with mass concentration of 6 percent, grinding obtained suspension, preparing composition by adding into produced paper mass of microcrystalline cellulose obtained from vegetable raw materials with a non-hydrolysis method, in form of hydrogel, introduction of a dimer of alkyl ketene and polyamide polyamine epichlorohydrin resin, production of paper samples on sheet-making apparatus. EFFECT: obtained product is widely used in paper industry, in production of packaging materials, including oil and fat foods.

ZAKRYTOE  
AKTSIONERNOE  
OBSSHHESTVO

#### LAMELLAE MADE OF NATURAL WOOD, PLANKS, BEAMS AND PANELS PRODUCED WITH SAME (Austria)

13/07/2016 The invention relates to new blades made of natural wood with bounded by straight converging for length-side flanks high trapezoid-shaped, mutually parallel Wide or principal planes, which are characterized in that their two mutually parallel principal planes (11, 12; 11' 12', 11'', 12''), of the converging longitudinal side edges (13, 14; 13', 14'', 13''', limited 14), the shape of each geometrically similar, a) isosceles, or b) is not isosceles have trapezoids. It relates further from the said lamina (1, 1', 1'') formed planks, beams formed with these boards and further monolayer and multilayer boards with the additional use of the fins 1, 1', 1''.

JOHANN OFFNER  
BETEILIGUNGS



### PREFABRICATED COMPOSITE PANEL (Austria)

20/07/2016 In a composite precast (1) comprising a traction layer (2) and, with the tension member (2) connected to the concrete layer (3), it is proposed that the tension member (2) facing to one of the concrete layer (3), tensile layer inside (4) a predetermined plurality of predetermined-shaped recesses (5), in which recesses (5), the concrete layer (3) to form a formally bond between the concrete layer (3) and tension member (2) engages.

According to claim 6, the tension member (2) is a layer of wood, preferably as cross laminated timber panel, formed.

### NOISE FIELD (Germany)

21/07/2016 Noise field that is included as part of a noise barrier on a support structure in this, consisting of a frame structure, a panel of a sound-facing side of the noise field and a cover on an opposite to the sound-side facing side of the noise field, characterized in that the sound absorbing material (3) is configured as an insulation mat with a sound-facing side and that the frame construction (2) covering the right angles to the sound-side facing sides of the insulating mat and that the fairing (5) is configured as a tightly woven fabric, and this, the area lying on the sound-facing side of the insulating mat flush cover and that the cover (4) covering a the sound side facing opposing surface of the insulating mat flush. The cover is made of wood planks or wooden plate or more wood panels there.

### PROCESS (UK)

03/08/2016 A process for forming a dissolving grade cellulose-containing pulp comprising: providing a cellulose feedstock, comprising at least one non-wood material, such as maize, cotton, sugar cane, wheat, rice, barley, rapeseed, switch grass, bamboo, kernel shells, coconut shells and fruit bunches; treating the cellulose feedstock in a chemical cooking process, such as alkaline sulphate process, to form a cellulose-containing pulp; and bleaching the cellulose-containing pulp to form a dissolving grade cellulose-containing pulp. The cellulose feedstock additionally comprises one or more wood-based materials, such as softwood and/or hardwood. The pulp can be used to produce a cellulosic solution by the application of a viscose process to form viscose or by dissolving the pulp in an ionic liquid. Also disclosed is use of the pulp for manufacturing paper, paperboard, tissue, trays and/or other fibrous products.

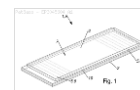
### GLUELESS FULL WOOD CONSTRUCTION AND PLYWOOD PANEL (Germany)

04/08/2016 Glueless Full wood construction for the construction of buildings, formed of at least two wall components (2a-b, 4) with corner connecting elements, wherein each of the at least two wall components (2a-b, 4) comprising a laminated wood panel (6a-d), an upper flange (8a-c) formed of two squared timbers (10a-b), the (6a-d) are connected to an upper end of the plywood board (6a-d) on opposite lying sides of the plywood board, and a lower flange (12a-c) formed of two squared timbers (14a-b), the (6a-d) are connected to a lower end of the plywood board (6a-d) on opposite lying sides of the plywood board, a first wall member (2a-b) an upper flange (8a-b) and a lower flange (12a-b) having squared timbers that by at least extend one side of the associated laminated wood panel (6a-b) in longitudinal direction the Kanthoelzer so that the top flange (8a-b) of the first wall member (2a-b) and the bottom chord (12a-b) of the first wall member (2a-b) are each a slit-shaped corner connecting member (16a-d) is formed, and wherein a second wall member (4) has on at least one side at least two tapping connecting elements (18a-d), wherein the tapping connecting elements (18a-d) are formed formally engage the slotted connecting elements (16a-d), so that the first wall member (2a-b) is connected to the second wall member (4).

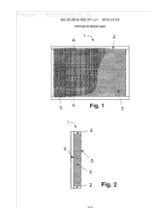
### WOOD DERIVED MULTILAYER PRODUCT WITH INTEGRATED ELECTRIC CIRCUIT AND MANUFACTURING PROCESS (Portugal)

18/08/2016 Wood derived multilayer glued or laminated product having an integrated electric circuit, comprising a paper layer and conducting elements of conductive ink deposited on said paper layer, said elements being suitable for forming an electric circuit and said paper layer has a rugosity inferior to 60 micrometres. The paper layer may be of kraft paper. The product may comprise one or more additional kraft paper layers, in particular having a hole for receiving electric components such that the top surface of product remains flat. The product may include a fibreboard substrate of MDF. The paper layer may be a decorative paper layer glued with the circuit facing the substrate. The manufacture process comprises depositing conductive ink elements on a paper layer having rugosity inferior to 60 micrometres for forming an electric circuit; and incorporating, by gluing or laminating, said paper layer into the multilayer product.

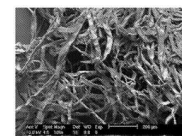
### MMK HOLZ BETON FERTIGTEILE



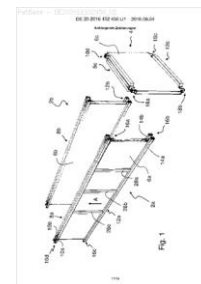
FASA GMBH



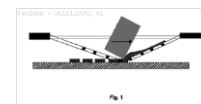
INNOVIA FILMS



### ROSNER BERNHARD



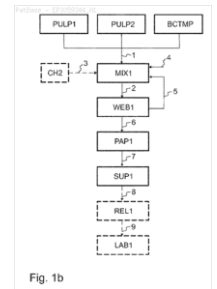
### CTR CENTI NANOTECNOLOGIA MATERIAIS TECH FUNCIONAIS INTELIGENTES



**A METHOD FOR MANUFACTURING PAPER COMPRISING BLEACHED CHEMITHERMO-MECHANICAL PULP SUITABLE FOR A RELEASE LINER AND PRODUCTS AND USES THEREOF (Finland)**

24/08/2016 The invention relates to paper and method for manufacturing paper suitable for use as a layer of a release liner, the paper having density equal to or less than 1200 kg/m<sup>3</sup>, the paper having a ratio of grammage to thickness of the paper in micrometres equal to or higher than 1.0, wherein the grammage refers to the weight of the paper in grams per square meter, the paper comprising cellulose fibres from - bleached chemical pulp and - bleached chemithermomechanical pulp, wherein the bleached chemithermomechanical pulp comprises cellulose fibres from hardwood and softwood.

UPM

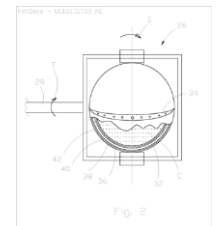


**MOLDING PROCESS AND ASSOCIATED MOLDING APPARATUS (Italy)**

25/08/2016 The present invention refers to a molding process and a molding apparatus for the molding of recycled paper and/or recycled wood that allow to obtain articles of three-dimensional development of low weight.

The present invention refers, in general, to a molding process and a molding apparatus that utilizes this molding process. More particularly, the present invention refers to a process and a corresponding apparatus for the molding of articles by using paper and/or wood and, more precisely, pulp of paper and/or wood, recycled and milled paper and/or paper powder. While initially the recycled paper was used mainly for the packaging, nowadays the recycled paper is used, as the pulp of recycled wood, to obtain various types of items.

Pas d'organisations

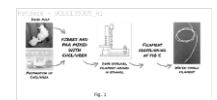


**PROCESS FOR PRODUCING SHAPED ARTICLES BASED ON CELLULOSE (Finland)**

01/09/2016 The present invention relates to a process for producing shaped articles, where the process comprises the steps, where cellulosic material is suspended in a DES comprising choline chloride and a hydrogen bond donor selected from urea, malonic acid, oxalic acid, phenylacetic acid and glycerol, whereby a dispersion is obtained, and shaped articles are formed from the dispersion. The present invention also relates to shaped articles obtainable by the process and to their uses.

The process according to claim 1, characterized in that the cellulosic material is selected from pulp fibres derived from wood-based pulps and from natural fibres.

VTT (FINLAND)



### CRUDE MIXTURE FOR MANUFACTURING WOOD CONCRETE (Russia)

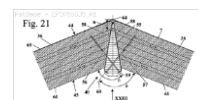
10/08/2016 FIELD: construction. SUBSTANCE: invention relates to industry of construction materials and can be used in manufacturing materials based on wood filler. In order to achieve technical result the crude mixture for manufacturing wood concrete, containing cement binding agent, wood filler and water, according to invention, contains secondary wood filler of 0.315-20 mm fraction as wood filler produced from used wood chipboards, at the following component ratio, weight percent: cement 39-43; said wood filler 21-25; water - the rest. EFFECT: improved conditions of cement hydration in wood concrete mixture, high strength of wood concrete, reduced power consumption and wastes utilisation. 1 cl, 2 tbl

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 AVTONOMNOE  
 OBRAZOVATELNOE

### TOWER FOR A WIND POWER ASSEMBLY AND METHOD FOR PRODUCING THE SAME (Germany)

17/08/2016 A tower (3) for a wind power plant (1) has at least one annular segment (7 to 16) of wood, which has a polygonal cross-section. The segment (7 to 16) is constructed from at their vertically extending edges interconnected wooden boards (36, 37, 38, 39). The wood panels (36, 37, 38, 39) are at their abutting edges (40) over between the wood panels (36, 37, 38, 39) arranged vertically extending splines (55) connected. For a method for manufacturing of the tower (3) provides that the wood panels (36, 37, 38, 39) are provided with a coating and are connected in a later step into ring segments (7 to 16). Here are vertical wedges (55) between circumferentially adjacent wood panels (36, 37, 38, 39) and connected to the wood panels (36, 37, 38, 39) bonded.

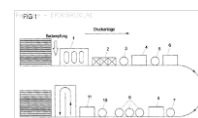
MERK TIMBER



### METHOD FOR MANUFACTURING A COMPOSITE WOOD BOARD, IN PARTICULAR A COMPOSITE WOOD BOARD WITH A DECORATION LAYER (Malta)

24/08/2016 The present invention relates to a method for producing a wood-based panel, in particular a provided with a decorative layer wood panel, comprising the steps of providing at least one wooden fiber carrier plate, moistening of at least a portion of a surface of at least one wooden fiber carrier plate with aqueous vapor, grinding of at least some sections moistened surface of wooden fiber carrier plate, and applying at least one decorative layer to at least partially wetted and sanded surface of wooden fiber carrier plate.

FLOORING TECH



### LIGNOCELLULOSE POLYMER COMPOSITE MATERIAL (Russia)

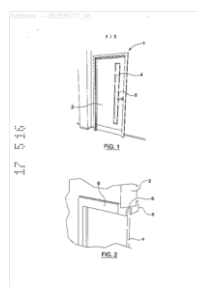
27/08/2016 FIELD: chemistry. SUBSTANCE: invention relates to production of lignocellulose polymer composite materials and products based thereon and can be used for producing construction, structural and finishing materials, as well as for production of furniture, products of domestic and industrial purposes. Lignocellulose polymer composite material contains a polymer matrix and lignocellulose filler, polymer matrix used is polyethylene in amount of 80-20 wt percent, the filler is represented by buckwheat husks in amount of 20-80 wt percent. Besides, using natural dyes of polyphenolic nature, extracted from buckwheat husks with molten polymer, allows to produce finished product of different shades of brown colour. EFFECT: technical result consists in improvement of ecological compatibility of the ready product due to increased share of used wastes of buckwheat processing and minimal usage of chemical additives in the manufacturing technique and production of materials and products with high level of technical characteristics. 1 cl, 2 tbl

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 AVTONOMNOE  
 OBRAZOVATELNOE

### GLAZED FIRE DOOR (UK)

31/08/2016 A glazed fire door 1 provided with at least one aperture having a glazing panel 4 therein, with a fireproof beading 8 and/or lining is provided between the door and the panel, the beading and/or lining comprising a composite material of a polymer and wood. The composite may be a blend of wood fibre and polyvinylchloride (PVC), and may be foamed and may be extruded. The beading may have an inner profile with two perpendicular abutment surfaces (14a and 14b, Fig. 5) and a lip (14c, Fig. 5) extending perpendicularly from one of them. The profile may have an elongated Z shape with two adjacent longer legs extending perpendicular to each other and a smaller leg, forming a lip, extending perpendicularly from one of the longer legs. The beading may have a rounded or smooth outer profile (15, Fig. 5).

RAM EXTRUSION



## LES PUBLICATIONS

### MODIFICATION OF EUCALYPTUS AND SPRUCE ORGANOSOLV LIGNINS WITH FATTY ACIDS TO USE AS FILLER IN POLY(LACTIC ACID) (PLA) FILMS

Reference Reactive and Functional Polymers, Volume 104, 1 July 2016, Pages 45-52  
 Organization(s) **UNIVERSITY OF THE BASQUE COUNTRY (SPAIN)**  
 Author(s) Gordobil, O., Egúés, I., Labidi, J.

### DOUGLAS BARK DRY FRACTIONATION FOR POLYPHENOLS ISOLATION: FROM FORESTRY WASTE TO ADDED VALUE PRODUCTS

Reference Industrial Crops and Products, Volume 86, August 2016, Pages 12–15  
 Organization(s) **INRA, UMR 1083 (FRANCE)**  
 Author(s) Trivelato, P.a, Mayer, C.b, Barakat, A.b, Fulcrand, H.a, Aouf, C.a

### AN OLIVE TREE PRUNING BIOREFINERY FOR CO-PRODUCING HIGH VALUE-ADDED BIOPRODUCTS AND BIOFUELS: ECONOMIC AND ENERGY EFFICIENCY ANALYSIS

Reference BioEnergy Research, pp 1 - 17  
 Organization(s) **Universidad de Jaén (SPAIN) - CINVESTAV, Unidad Guadalajara de Ingeniería Avanzada (MEXICO)**  
 Author(s) J. M. Romero-GarcíaA. SanchezEmail authorG. Rendón-AcostaJ. C. Martínez-PatiñoE. RuizG. MagañaE. Castro

### WOOD-DERIVED MATERIALS FOR GREEN ELECTRONICS, BIOLOGICAL DEVICES, AND ENERGY APPLICATIONS

Reference Chemical Reviews, Volume 116, Issue 16, 24 August 2016, Pages 9305-9374  
 Organization(s) **University of Maryland (USA) - Northeastern University (USA) - National Renewable Energy Laboratory (USA) - USDA Forest Service (USA) - Royal Institute of Technology (SWEDEN)**  
 Author(s) Zhu, H.ab , Luo, W.a, Ciesielski, P.N.c, Fang, Z.a, Zhu, J.Y.d, Henriksson, G.e, Himmel, M.E.c, Hu, L.a

### LIGNIN VALORIZATION THROUGH CATALYTIC LIGNOCELLULOSE FRACTIONATION: A FUNDAMENTAL PLATFORM FOR THE FUTURE BIOREFINERY

Reference ChemSusChem, Volume 9, Issue 13, 7 July 2016, Pages 1544-1558  
 Organization(s) **Stockholm University (SWEDEN)**  
 Author(s) Galkin, M.V., Samec, J.S.M.

### NANOFIBRILLATED CELLULOSE/NANOGRAPHITE COMPOSITE FILMS

Reference Cellulose, Volume 23, Issue 4, 1 August 2016, Pages 2487-2500  
 Organization(s) **Mid Sweden University (SWEDEN)**  
 Author(s) Osong, S.H.a , Dahlström, C.a, Forsberg, S.b, Andres, B.b, Engstrand, P.a, Norgren, S.a, Engström, A.-C.b

## ACTUALITES

### FRANCE

#### [Des lignines modifiées pour fabriquer des encres biosourcées](#) (Formule verte; 06-07-2016)

Le Laboratoire Génie des Procédés Papetiers (LGP2) de Grenoble INP-Pagora, vient de publier un communiqué de presse sur une thèse de doctorat proposant d'utiliser de la lignine, une macromolécule aromatique extraite de la biomasse lignocellulosique, en remplacement de résines pétrosourcées pour la formulation d'encres à destination de l'emballage alimentaire.

#### [Nativ illustre la volonté de la marque de proposer un concept qui valorise le bois dans son état presque originel, associé à des matériaux vertueux, pour en faire une porte performante et respectueuse de l'environnement](#) (BatiPresse; 13-07-2016)

Alliant écologie, esthétisme et innovation technologique, Nativ permet au bois de susciter l'émotion par la connexion des sens et offre un terrain d'expression jusqu'alors inégalé pour une porte d'entrée.

Avec ses 94 mm d'épaisseur, l'ouvrant de la porte Nativ figure parmi les plus épais du marché. Cette spécificité est la conséquence de l'assemblage de composants particulièrement performants : Red Cedar massif, âme à haute isolation thermique, panneau en fibre de bois pour l'isolation phonique. Le seuil bénéficie d'un rupteur de pont thermique.

#### [SAS Isonat : avis municipal favorable à l'exploitation mais des réserves](#) (Le Progrès; 22-07-2016)

Lors du dernier conseil municipal, les élus ont émis un avis favorable quant au dossier déposé par la SAS Isonat à Mably (ex-Buitex) pour obtenir l'autorisation d'exploiter une production de panneaux d'isolation à base de fibres de bois.

#### [4 contrats d'appui pour 3 entreprises](#) (La Depeche; 09-08-2016)

La société King Tree, implantée à Labrugière, a pour projet de construire une unité industrielle de production d'extrait de bois de châtaigniers régionaux destinés à des applications en santé animale et humaine. La Région lui a accordé un contrat d'appui Immobilier d'un montant de 150 000 € pour le développement d'une nouvelle usine ainsi qu'un contrat d'appui PME d'un montant de 1 M€ pour l'acquisition de l'ensemble du matériel nécessaire à sa production.

L'entreprise Palfrance, implantée à Gaillac, est spécialisée dans la production de palettes, caisses et emballages en bois. Elle bénéficie d'un contrat d'appui PME d'un montant de 174 200 € pour l'achat de matériel.

#### [Bellier : 40 ans et une dynamique d'innovation](#) (LeBoisInternational; 13-08-2016)

Basée à Fay-aux-Loges, dans le Loiret, l'entreprise Bellier, spécialisée dans l'escalier sur-mesure, souffle ses quarante bougies. Jean Pierre Bellier ouvre une menuiserie générale en 1976 à Sully-la-Chapelle (45). En 1982 l'entreprise se spécialise dans l'escalier. Sa réputation grandit régionalement et aujourd'hui Samuel Poisson, qui a repris l'entreprise en 2003, continue de la faire évoluer en misant sur la qualité et l'innovation.

#### [Du bois dans la ville](#) (AdivBois; 17-08-2016)

Le magazine Décideurs met en avant la solution bois pour la ville durable dans son numéro de Juillet-Août.

« Au-delà de l'engouement de plus en plus manifeste des particuliers pour les maisons en bois, les villes, les promoteurs et les aménageurs sont incités à se saisir du renouveau de ce matériau... au point d'en faire celui du XXI<sup>e</sup> siècle ? »

[Accéder à l'article.](#)

#### [Dom'Innov : des éléments modulaires pour la construction bois](#) (Enviscope; 24-08-2016)

Les blocs proposés par la société Dom'Innov, sont conçus pour pouvoir être transportés et manipulés facilement sur un chantier. Ils pèsent 30 kilos, sont longs de 2,80 mètres, pour 60 cm de large et 30 centimètres d'épaisseur. L'épaisseur permet d'enfermer entre deux panneaux de bois aggloméré, et par exemple un panneau isolant de fibre de bois.

Les panneaux sont fabriqués à partir d'éléments fournis par une usine de Sully-sur-Loire (Nièvre) qui produit des éléments à partir de bois récoltés dans un rayon de 200 kilomètres, en Bourgogne et dans le Centre. Les essences sont principalement des résineux.

Dom' Innov transforme dans son usine de Sainte-Hélène du Lac, ces panneaux pour en faire les éléments de son système constructif.

#### [Recherche – CNRS](#) (AdivBois; 29-08-2016)

Le Journal du CNRS publiait cet été en état des lieux des recherches en cours et un véritable plaidoyer pour ce matériau aussi révolutionnaire que méconnu, qui trouve ses applications aussi bien dans la construction multi-étage qu'en robotique ou en chimie.

[Lire l'article.](#)

[EPF : nouveau bureau](#) (Fordaq; 02-08-2016)

Lors de son assemblée générale, la fédération européenne des industries du panneau, EPF, a élu un nouveau bureau, la France étant représentée par Bernard Retureau d'Égger, et la Belgique par Bernard Thiers (Unilin).

[Finland: 86% of the imported wood originated from Russia](#) (IHB; 09-08-2016)

In May, Finland's wood import was 0.90 million solid cubic metres (with bark). 86% of the imported wood originated from Russia. During the first five months of 2016, the real exports value of Finnish forest industry products was €4.86 billion (deflated using wholesale price index, 1949=100). In real terms, the exports of forest industry products increased 3% from the previous year. Forest industry products accounted 23 per cent of the total value of Finnish goods exports.

**MONDE (AMERIQUE, CANADA ET ASIE)**

[The global engineered wood products market to rise sharply by 2020](#) (IHB; 06-07-2016)

The global engineered wood products market will be driven by demand for cost-effective and environmentally friendly wood products all through 2020 and will grow at a CAGR of more than 26%.

According to a report made by Technavio, vendors in the market are coming up with latest machines and systems with innovative accessories to produce engineered wood and veneers. At present, they are using different types of resins based on amino-formaldehyde and urea-melamine to manufacture engineered wood. In the report, the market is further categorized into four product segments, including I-beams, glulam, laminated veneer lumber (LVL), and others.

[Lignine : investissement en attente pour Borregaard et Ryam](#) (Formule Verte; 18-07-2016)

En juin 2015, le Norvégien Borregaard et l'Américain Rayonier Advanced Materials (Ryam) avaient signé une lettre d'intention concernant la création d'une nouvelle unité de production de lignine à proximité de l'usine de pâte de Ryam à Fernandina Beach en Floride.

Si tous les indicateurs sont au vert, une usine, détenue à 55% par Borregaard et 45% par Ryam, sortira de terre 18 mois plus tard. Elle fabriquera de la cellulose de spécialités et de la lignine brute de type lignosulfonate.

[EPA issues wood products formaldehyde rule, guided by CARB](#) (PR Newswire; 27-07-2016)

The Environmental Protection Agency rolled out a formaldehyde emission standard, working with the California Air Resources Board (CARB) in setting the rules that are mandated by Congress. The EPA moved to reduce exposure to formaldehyde vapors from laminate panel and engineered wood products produced domestically or imported into the United States.

[Alternative market opportunities discussed at 2016 PFI conference](#) (Biomass Magazine; 28-07-2016)

Michael Scanlon (national sales and marketing manager at American Wood Fibers) shared information on American Wood Fibers' product lines, focusing on equine pellets. He said the process for creating an animal bedding pellet is a little different than fuel pellets, one difference being the raw material used. According to Scanlon, softwood should be used to produce pellets for animals as some hardwoods can be harmful.

[USA : le béton cogne le CLT](#) (Fordaq; 10-08-2016)

La fédération américaine NRMCA (National Ready Mixed Concrete Association) s'élève par vidéo contre les tentatives en cours pour établir le CLT (Cross Laminated Timber) comme solution pour les bâtiments multi-étage. Ce qui risquerait alors de faire perdre des marchés au béton.

[Research shows natural extract Robuvit® heightens performance in training and workouts](#) (PR Newswire; 23-08-2016)

Those who are looking to boost their performance during their workout, can look to a new supplement that has recently received expanded availability in the U.S. The French oak wood extract Robuvit® was found in a 2015 study<sup>1</sup> to speed up recovery between periods of physical activity by reducing levels of oxidative stress in the system. Study participants who supplemented with Robuvit® reported increased endurance and boosted muscle recovery time, allowing people to perform longer, more frequently and more efficiently.

[Biochar seen as potential market for forest](#) (The Journal; 30-08-2016)

Biochar is created by chipping and burning low-value wood in a specialized gasification plant to create electrical energy. A byproduct is a form of activated carbon (biochar) used as a soil amendment to hold nutrients and moisture.

"Biochar is a good value-added product for our ponderosa pine forests and would be a benefit to the agricultural community," said David Casey, forest supervisor for the San Juan National Forest.



## PROJETS DE RECHERCHE

Lien vers le projet	Consortium	Budget	Financement	Durée	Statut
<a href="#">W2C</a>	VIJOCAR, <b>WECO WINDOWS</b>	71 429 €	H2020	2016-06-01 TO 2016-10-31 (5 months)	En cours
	<p><b>Eco-innovative, frameless Wood window with premium design, highest energy saving performance and maximum open area</b></p> <p>We, the consortium responsible of W2C, composed by WECO and VIJO will place in the market a triple-glazed, high-performance insulating Wood window named W2C “Window to See”. Its unique design has been patented and has received two international recognized awards (Red Dot Award 2015, Architect’s Newspaper ‘15). W2C will be the first window in the market that combines the strict energy-saving standards demanded by the Passive House Institute and a frameless design that maximizes the window’s open area.</p>				
<a href="#">URBANREC</a>	<b>AIMPLAS ASOCIACION INVESTIGACION MATERIALES PLASTICOS CONEXAS</b> , ASSO CITES REGIONS RECYCLAGE GESTION DURABLE RESSOURCES, CONSORCIO VALENCIA INTERIOR V3, CTR SCI TECH IND TEXTILE BELGE, DIPUTACION PROVINCIAL VALENCIA, GROUP VANHEEDE ENVIRONMENT, INST BADAWCZY, INST FRAUNHOFER, INST OCHRONY SRODOWISKA PANSTWOWY, INST TECH IZMIR, INTERGEMEENTEELIJKE MAATSCHAPPIJ VOOR OPENBARE GEZONDHEID ZUID WEST VLAANDEREN, MIASTO STOLECZNE WARSZAWA, OPENBARE VLAAMSE AFVALSTOFFENMAATSCHAPPIJ, BLUEPLASMA POWER, BORNOVA BELEDIYESI, COLCHONES DELAX, ECOFRAGMENTATION EUROPE, EUROSPUMA SOCIEDADE INDUSTRIAL ESPUMAS SINTETICAS, IZNAB, PROCOTEX, RAMPF ECO SOLUTIONS, RESCOLL	9 978 984 €	H2020	2016-06-01 TO 2019-11-30 (42 months)	En cours

	<p><b>Developing the sustainable market of residential Mediterranean solid biofuels.</b>          URBANREC project aims to develop and implement an eco-innovative and integral bulky waste management system (enhancing prevention, improving logistics and allowing new waste treatments to obtain high added value recycled products) and demonstrate its effectiveness in different regions. The waste treatments considered in the project include i) rebonding and chemical glycolysis for the PUR materials, to prepare renewable adhesives, ii) needle felt to obtain isolation panels from textiles, iii) fibre reinforced composites from textiles, iv) Wood Plastic composites (WPC) and v) catalytic hydro-gasification with plasma for mixed hard plastics to obtain chemicals or fuel.</p>				
	<p><b>UNIV DUNDEE, CHAIN BIOTECH, ENGINEERING PHYSICAL SCI RESEARCH COUNCIL EPSRC, GREEN BIOLOGICS, JAMES HUTTON, REBIO TECH</b></p>	<p>1 251 190 £</p>	<p>GTR</p>	<p>2016-09-01 to 2021-08-31</p>	<p>En cours</p>
<p><a href="#">MaxBio</a></p>	<p><b>Maximizing Conversion Yields in Biorefining</b>          In order to reduce greenhouse gas emissions and mitigate global warming while still managing to fuel and feed the world, many industries need to move towards using renewable carbon neutral feedstocks and away from using oil and petrochemicals. 'Bio'refineries making advanced transportation fuels and chemicals from plant biomass (i.e. agricultural wastes such as straw, or Wood cuttings) have the potential to revolutionize the industrial landscape and make production of our fuels and chemicals more sustainable, but this will only succeed if sufficient value can be extracted from the feedstock to make the refining economically competitive with oil refining. This MaxBio project aims to improve the economics of biorefining by optimizing several different stages of the process in a holistic way that ensures that yields of end products are increased beyond what's currently possible.</p>				

## AGENDA

Nom de l'évènement	Lieu	Descriptif	Dates
<a href="#">EUROBOIS</a>	Lyon	Le salon du bois dans la construction, de la machine à bois et des composants. Rendez-vous national, Eurobois couvre l'ensemble des métiers de la filière bois.	15-18 novembre 2016
<a href="#">EXPOBOIS</a>	Paris	Salon professionnel dédié à l'ensemble de la filière bois, Expobois présente toutes les solutions et technologies pour la transformation et la valorisation du bois et rassemble des fabricants de machines (1ère et 2ème transformations), d'équipements et d'outils et des prestataires de service pour optimiser le travail du bois.	22-25 novembre 2016
<a href="#">CONSTRUIRE ET RÉNOVER EN BOIS</a>	Paris	le Groupe Moniteur organise, en partenariat avec ADIVbois, une conférence sur la thématique « Construire et rénover en bois ». Au programme : échanges sur les multiples intérêts du bois construction, point sur les techniques, innovations et perspectives, témoignages experts et retours d'expériences.	30 novembre 2016
<a href="#">PANORABOIS</a>	Clermont-Ferrand	De la construction bois à la gestion forestière en passant par le bois énergie, les solutions d'aménagements intérieur et extérieur, les équipements et outillages pour les professionnels ainsi que les métiers de la filière à travers l'Espace Formation et les organismes de conseils aux professionnels et aux particuliers.	27-29 Janvier 2017
<a href="#">LEGNO&amp;EDILIZIA</a>	Verona	There is a new format for this edition, which has been expanded to include all areas of construction in which wood can offer sound, successful solutions: Structures, Roofing and coverings, Flooring, Doors and windows.  The exhibition will make Verona the Italian hub for the use of wood in all areas of construction.	9-12 Février 2017