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ФЕДЕРАЛЬНОЕ ГОСУДАРСТВЕННОЕ БЮДЖЕТНОЕ ОБРАЗОВАТЕЛЬНОЕ
УЧРЕЖДЕНИЕ ВЫСШЕГО ОБРАЗОВАНИЯ
«УРАЛЬСКИЙ ГОСУДАРСТВЕННЫЙ ЛЕСОТЕХНИЧЕСКИЙ УНИВЕРСИТЕТ»
(УГЛУТУ)

УДК 608.3.
ИНВ №1/17

УТВЕРЖДАЮ
Проректор по научной работе
д-р сель.-хоз. наук, проф.
_____ С.В. Залесов
« ____ » _____ 20__ г.

**ОТЧЕТ
О ПАТЕНТНЫХ ИССЛЕДОВАНИЯХ**

«Модификация лигнина в процессах получения полимерных материалов со специальными свойствами из растительного сырья»

номер (шифр) работы 10.8747.2017/БЧ
часть 2

Начальник НИЧ
канд. тех. наук, доцент

_____ А.И. Сафронов
подпись, дата

Руководитель НИР
д.т.н., профессор

_____ В.В.Глухих
подпись, дата

Екатеринбург 2017

РЕФЕРАТЫ ИЗОБРЕТЕНИЙ ИНОСТРАННЫЕ
(МПК С 08L 97/00)

METHOD OF COMPOSITE FIBROUS ADSORBENT PRODUCING

Изобретатель(и): [RU]; SAZANOV JURIJ NIKOLAEVICH [RU]; DOBROVOLSKAJA IRINA PETROVNA [RU]; IVANOVA ELENA ANDREEVNA [RU]; POPRJADUKHIN PAVEL VASILEVICH [RU]; PANKOVA GALINA ARONOVNA [RU]; SAPRYKINA NATALJA NIKOLAEVNA [RU]; IPATOVA ELENA VLADIMIROVNA [RU]; FEDOROVA GALINA NIKOLAEVNA [RU]; KULIKOVA EVGENIJA MIKHAJLOVNA [RU] KRUTOV STEPAN MINAEVICH ±

Заявитель(и): FED GOSUDARSTVENNOE BJDZHETNOE UCHREZHDENIE [RU] NAUKI INST VYSOKOMOLEKULJARNYKH SOEDINENIJ ROSSIJSKOJ A ±

Индекс(ы) по классификации: - международной (МПК): [C08L97/00](#); [D01F6/54](#); [D01F8/00](#)
- cooperative: [C08L97/00](#); [D01F6/54](#); [D01F8/00](#) далее

Номер заявки: RU20150128597 20150715

Номера приоритетных документов: RU20150128597 20150715

Реферат документа RU2604620 (C1)

FIELD: manufacturing technology. SUBSTANCE: invention relates to carbonic adsorbents production. Described is method of composite fibrous adsorbent production, characterized by that initial components taken are hydrolyzed lignin and polyacrylonitrile, making their mixed at ratio of 80:20 by weight, this mixture is placed into pyrolysis reactor, performing its blowdown by nitrogen flow, after that, mixture is heated in pyrolysis reactor at rate of temperature raising of 15 deg. · min until mixture temperature of 800 °C, maintaining this temperature for 0.5 hours, stopped heating and performing cooling of carbonized fibers to room temperature under nitrogen at rate of its flow of 50 cm · min. EFFECT: producing adsorbent based on wood processing wastes in large quantities, having higher heat resistance and strength. 1 cl

Технология производства. ВЕЩЕСТВО: изобретение относится производство углеродных адсорбентов. Описал это метод изготовления композитных волокнистых адсорбента, характерно, что первоначальные компоненты получения гидролизного лигнина и полиакрилонитрила, делая их смешанными в пропорции 80: 20 по весу, эта смесь помещается в пиролизные, выполняя его продувки в потоке азота, после этого, смесь нагревается в пиролизные темпами повышения температуры 15 град. · min until смесь температуре 800 ° C, поддержания этой температуры 0.5 часов, остановили Отопление и выполнение охлаждения обугленный волокон до комнатной температуры под азота в размере его потока 50 см · min. ЭФФЕКТ: производство адсорбентов на основе древесины, переработка отходов в больших количествах, имея более высокой термостойкостью и strength. 1 cl

Composition comprising derivatized lignin for fuel production

Ссылка на эту страницу [SE1550813 \(A1\) - Composition comprising derivatized lignin for fuel production](#)

Изобретатель(и): JOAKIM LÖFSTEDT; ALEXANDER PAPCHIKINE; CHRISTIAN DAHLSTRAND; SUPAPORN SAWADJOON; JOSEPH SAMEC ±

Заявитель(и): [SE] REN FUEL K2B AB ±

Индекс(ы) по классификации: - международной (МПК): [C08H7/00](#); [C08L97/00](#); [C10L1/14](#); [C07G1/00](#)
- cooperative: [C08L97/00](#); [C10L1/14](#); [C07G1/00](#) далее
Номер заявки: SE20150050813 20150615
Номера приоритетных документов: SE20150050813 20150615

Реферат не найден для документа SE1550813 (A1)

Библиографические данные: WO2017006215 (A1) — 2017-01-12

A METHOD FOR INCREASING THE REACTIVITY OF LIGNIN, A RESIN COMPOSITION COMPRISING SAID LIGNIN AND USE OF SAID RESIN COMPOSITION

Ссылка на эту страницу [WO2017006215 \(A1\) - A METHOD FOR INCREASING THE REACTIVITY OF LIGNIN, A RESIN COMPOSITION COMPRISING SAID LIGNIN AND USE OF SAID RESIN COMPOSITION](#)
Изобретатель(и): [SE]; ARESKOGH DIMITRI [SE] ZAFAR ASHAR ±
Заявитель(и): [FI] STORA ENSO OYJ ±
Индекс(ы) по классификации: - международной (МПК): [B27N3/00](#); [C08G8/28](#); [C08G8/38](#); [C08H7/00](#); [C08L61/06](#); [C08L97/00](#); [C09J161/06](#); [C09J197/00](#)
- cooperative: [B27N3/00](#); [C08G8/24](#); [C08G8/38](#); [C08L97/00](#); [C09J161/12](#); [C09J197/00](#)
Номер заявки: WO2016IB53865 20160629 [Global Dossier](#)
Номера приоритетных документов: [SE20150050956](#) 20150703

Реферат документа WO2017006215 (A1)

The present invention relates to a method for increasing the reactivity of lignin which method comprises the following steps; providing a mixture comprising lignin and an alkali solution wherein the concentration of the alkali solution of the mixture is between 5-50% by weight, storing said mixture for a period of at least 1 day whereby the reactivity of the lignin is increased. The present invention also relates to a resin composition comprising said lignin and use of said resin composition.

Библиографические данные: US2017002129 (A1) — 2017-01-05

A COMPOSITION IN THE FORM OF A LIGNIN POLYOL, A METHOD FOR THE PRODUCTION THEREOF AND USE THEREOF

Ссылка на эту страницу [US2017002129 \(A1\) - A COMPOSITION IN THE FORM OF A LIGNIN POLYOL, A METHOD FOR THE PRODUCTION THEREOF AND USE THEREOF](#)
Изобретатель(и): [NL]; GRÜNBAUER HENRI J M [SE] ARESKOGH DIMITRI ±
Заявитель(и): [FI] STORA ENSO OYJ ±
Индекс(ы) по классификации: - международной (МПК): [C07G1/00](#); [C08G18/64](#); [C08H7/00](#); [C08J9/14](#); [C08L97/00](#)
- cooperative: [C07G1/00](#); [C08G18/6492](#); [C08H6/00](#); [C08J9/141](#); [C08L97/005](#); [C08G2101/00](#); [C08J2203/14](#); [C08J2375/04](#); [C08L2201/02](#)
Номер заявки: US201415101537 20141203 [Global Dossier](#)
Номера приоритетных документов: US201415101537 20141203 ; [SE20140050776](#) 20140619 ; [US201361912119P](#)

документов: [20131205](#) ; [WO2014IB66545](#) [20141203](#)

Также опубликовано, как: [WO2015083092 \(A1\)](#) [EP3077447 \(A1\)](#) [CN105916915 \(A\)](#) [CA2932275 \(A1\)](#)

Реферат документа [US2017002129 \(A1\)](#)

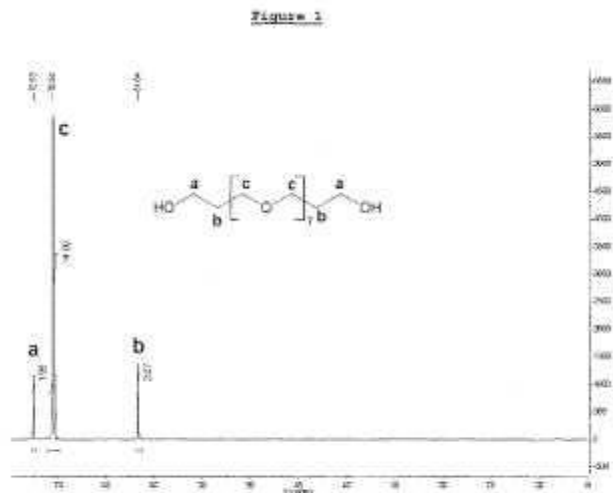


Figure 1: ^{13}C -NMR spectrum of pure PEG400 different from Example 1. Peak shifts are adjusted relative to the CDCl_3 solvent triplet centered at 77.1 ppm. Peak annotations have been conducted using standard ^{13}C -NMR shift table available elsewhere.

The present invention relates to a composition comprising a lignin polyol, a method for the manufacturing of said composition and use thereof in different application areas, such as in adhesives, binders, castings, foams (such as in rigid polyurethane and polyisocyanurate foams for thermal insulation and construction applications, semi-rigid, flexible, moulded, laminated, microcellular and viscoelastic polyurethane foams), fillers, glues, sealants, elastomers and rubbers. The present invention also relates to a method for the manufacturing of a foam and use of this foam.

Библиографические данные: [TW201630739 \(A\)](#) — 2016-09-01

Impregnated plate, laminate, and resin composition

Ссылка на эту страницу [TW201630739 \(A\)](#) - [Impregnated plate, laminate, and resin composition](#)

Изобретатель(и): [JP]; OHASHI YASUNORI [CN]; ZHOU LIN [JP]; YAMAMOTO MAIKO [JP]; KIMURA HAJIME [JP]; OTSUKA KEIKO [JP] MATSUMOTO AKIHIRO ±

Заявитель(и): [JP]; HARIMA CHEMICALS INC [JP] OSAKA MUNICIPAL TECH RES INST ±

Индекс(ы) по - международной (МПК): [B32B27/04](#); [C08L61/10](#); [C08L97/00](#)

классификации: - cooperative: [B32B5/28](#); [C08J5/04](#); [C08L61/06](#); [H05K1/03](#)

Номер заявки: TW20150142251 20151216

Номера приоритетных документов: [JP20140254366](#) [20141216](#)

Также опубликовано, как: [WO2016098666 \(A1\)](#)

Реферат документа [TW201630739 \(A\)](#)

Fig. 1



In an impregnated plate including a substrate and a resin composition impregnated in the substrate, a resol-based phenolic resin and lignin modified with a carboxylic acid are contained in the resin composition.

Библиографические данные: WO2016194600 (A1) — 2016-12-08

RESIN COMPOSITION, METHOD FOR PRODUCING RESIN COMPOSITION, AND MOLDED ARTICLE

Ссылка на эту страницу	WO2016194600 (A1) - RESIN COMPOSITION, METHOD FOR PRODUCING RESIN COMPOSITION, AND MOLDED ARTICLE
Изобретатель(и):	[JP]; OHASHI YASUNORI [JP]; ZHOU LIN [JP]; YAMAMOTO MAIKO [JP]; KIMURA HAJIME [JP]; OTSUKA KEIKO [JP] MATSUMOTO AKIHIRO ±
Заявитель(и):	[JP]; HARIMA CHEMICALS INCORPORATED [JP] OSAKA MUNICIPAL TECH RES INST ±
Индекс(ы) по классификации:	- международной (МПК): C08L101/00 ; C08L61/06 ; C08L97/00 - cooperative: C08L101/00 ; C08L61/06 ; C08L97/00
Номер заявки:	WO2016JP64575 20160517 Global Dossier
Номера приоритетных документов:	JP20150111934 20150602
Также опубликовано, как:	JP2016222835 (A)

Реферат документа WO2016194600 (A1)

The resin composition contains a thermosetting resin and a lignin modified by a carboxylic acid and phenols.

Библиографические данные: US2016333146 (A1) — 2016-11-17

METHOD AND APPARATUS FOR SEPARATING LIGNOCELLULOSE PARTICLE FRACTION AND LIGNIN PARTICLE FRACTION, LIGNIN PARTICLE COMPOSITION, LIGNOCELLULOSE PARTICLE COMPOSITION AND THEIR USE

Ссылка на эту страницу	US2016333146 (A1) - METHOD AND APPARATUS FOR SEPARATING LIGNOCELLULOSE PARTICLE FRACTION AND LIGNIN PARTICLE FRACTION, LIGNIN PARTICLE COMPOSITION, LIGNOCELLULOSE PARTICLE COMPOSITION AND THEIR USE
Изобретатель(и):	[FI] MIETTINEN MAUNO ±
Заявитель(и):	[FI] UPM-KYMMENE CORP ±
Индекс(ы) по классификации:	- международной (МПК): B01J20/24 ; B01J20/28 ; B01J20/30 ; B03D1/02 ; B03D3/06 ; C08H7/00 ; C08H8/00 ; C08L97/00 ; C08L97/02 - cooperative: B01J20/24 ; B01J20/28016 ; B01J20/3085 ; B03D1/02 ; B03D3/06 ; C08H6/00 ; C08H8/00 ; C08L97/005 ; C08L97/02 ; B01D21/00 ; B03D2203/001 ; C08L2205/02 ; D21H17/23
Номер заявки:	US201515110784 20150109 Global Dossier

Номера приоритетных документов: [FI20140005020 20140113](#) ; [WO2015FI50010 20150109](#)
Также опубликовано, как: [WO2015104459 \(A1\)](#) [UY35950 \(A\)](#) [FI20145020 \(A\)](#) [EP3094667 \(A1\)](#) [CA2933763 \(A1\)](#)

Реферат документа US2016333146 (A1)

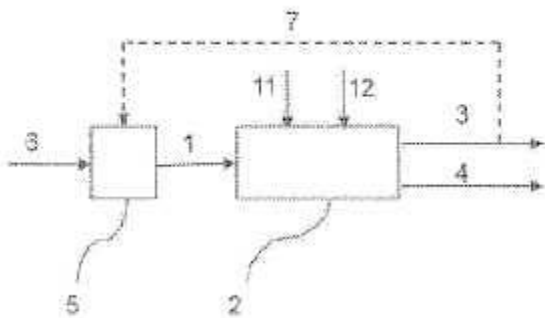


Fig. 1

The invention relates to a method and an apparatus for separating lignocellulose particle fraction (3) and lignin particle fraction (4), in which crude lignin (1) formed from starting material (6) comprises lignocellulose particles and lignin particles. According to the invention, the method comprises adding stabilizing chemical (11) and/or hydrophobic chemical (12) into the crude lignin (1) in at least one step, and treating the crude lignin by separating the lignin particle fraction (4) and lignocellulose particle fraction (3) from each other in at least one separation step (2,8,9,10). Further, the invention relates to a lignocellulose particle fraction and a lignin particle fraction and their uses.

Библиографические данные: JP2016188366 (A) — 2016-11-04

LIGNIN DERIVATIVE COMPOUND, LIGNIN RESIN, LIGNIN RESIN COMPOSITION, AND METHOD FOR PRODUCING LIGNIN DERIVATIVE COMPOUND

Ссылка на эту страницу	JP2016188366 (A) - LIGNIN DERIVATIVE COMPOUND, LIGNIN RESIN, LIGNIN RESIN COMPOSITION, AND METHOD FOR PRODUCING LIGNIN DERIVATIVE COMPOUND
Изобретатель(и):	FUSHIMI TAKAOMI; KOBAYASHI KENJI; TAKAHASHI KENJI; KURODA KOSUKE ±
Заявитель(и):	MORIN CHEM IND CO LTD; UNIV KANAZAWA; KANAZAWA INST OF TECH ±
Индекс(ы) по классификации:	- международной (МПК): C08H7/00 ; C08K7/06 ; C08K7/08 ; C08L97/00 - cooperative:
Номер заявки:	JP20160061142 20160325 Global Dossier
Номера приоритетных документов:	JP20150066350 20150327

Реферат документа JP2016188366 (A)

PROBLEM TO BE SOLVED: To provide an inexpensive lignin resin.**SOLUTION:** There is provided a lignin derivative compound which has such a chemical structure that two or more hydroxy groups of lignin or lignophenol are substituted with an aminoalkoxy group having a primary amino group. There is also provided a lignin resin obtained by reaction of a polyvalent epoxy compound having two or more epoxy groups in the molecule, and a polycarboxylic acid having two or more carboxyl groups in the molecule or a polycarboxylic anhydride having two or more acid anhydride groups in the molecule. **SELECTED DRAWING:** None

Библиографические данные: CN106046570 (A) — 2016-10-26

Enzymatic hydrolysis lignin and silicon dioxide composite reinforced weather-resistant sealing rubber strip for switch cabinet

Ссылка на эту страницу	CN106046570 (A) - Enzymatic hydrolysis lignin and silicon dioxide composite reinforced weather-resistant sealing rubber strip for switch cabinet	
Изобретатель(и):	LU HOUPING ±	
Заявитель(и):	HEFEI YICHUANG SHEET METAL TECH CO LTD ±	
Индекс(ы) по классификации:	- международной (МПК):	B29C35/02 ; C08F222/06 ; C08F255/02 ; C08K13/02 ; C08K3/04 ; C08K3/06 ; C08K3/30 ; C08K3/36 ; C08L23/16 ; C08L27/18 ; C08L51/06 ; C08L97/00
	- cooperative:	
Номер заявки:	CN20161569789 20160719	Global Dossier
Номера приоритетных документов:	CN20161569789 20160719	

Реферат документа CN106046570 (A)

The invention discloses an enzymatic hydrolysis lignin and silicon dioxide composite reinforced weather-resistant sealing rubber strip for a switch cabinet. The sealing rubber strip is prepared from the following raw materials in parts by weight: 100 to 105 parts of an ethylene propylene terpolymer, 15 to 17 parts of OMMT, 20 to 22 parts of high density polyethylene, 7 to 9 parts of molybdenum disulfide, 2 to 3 parts of polytetrafluoroethylene powder, 3 to 4 parts of DOP, 0.2 to 0.22 part of dibenzoyl peroxide, 4 to 5 parts of maleic anhydride, 2.5 to 3 parts of sulfur powder, 12 to 14 parts of carbon black, 2 to 3 parts of lead tetraoxide, 0.8 to 1 part of an antiaging agent MB, 3 to 4 parts of nanometer silicon dioxide, 9 to 10 parts of enzymatic hydrolysis lignin, 12 to 14 parts of acetone, a proper amount of de-ionized water and a proper amount of absolute ethyl alcohol. The prepared sealing rubber strip is used for the switch cabinet, and is high in waterproof and heatproof performance, weather resistance and aging resistance, firm and durable.

Библиографические данные: TW201628861 (A) — 2016-08-16

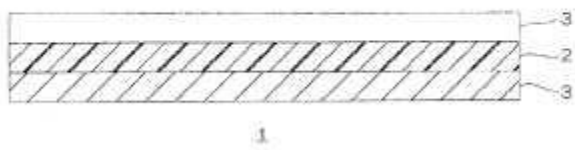
Impregnated plate, laminate, and resin composition

Ссылка на эту страницу	TW201628861 (A) - Impregnated plate, laminate, and resin composition	
Изобретатель(и):	[JP]; OHASHI YASUNORI [CN]; ZHOU LIN [JP]; YAMAMOTO MAIKO [JP]; KIMURA HAJIME [JP]; OTSUKA KEIKO [JP] MATSUMOTO AKIHIRO ±	
Заявитель(и):	[JP]; HARIMA CHEMICALS INC [JP] OSAKA MUNICIPAL TECH RES INST ±	

Индекс(ы) по классификации: - международной (МПК): [B32B27/04](#); [C08L61/10](#); [C08L97/00](#)
 - cooperative: [B32B5/28](#); [C08J5/04](#); [C08L61/12](#); [H05K1/03](#)
 Номер заявки: TW20150142250 20151216
 Номера приоритетных документов: [JP20140254365](#) 20141216
 Также опубликовано, как: [WO2016098667 \(A1\)](#)

Реферат документа TW201628861 (A)

【圖1】



An impregnated plate includes a substrate and a resin composition impregnated in a substrate, wherein the resin composition contains a reaction product of lignin, phenols, and aldehydes.

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- Worldwide База д

Библиографические данные: US2016312029 (A1) — 2016-10-27

Composition Comprising Esters Of Lignin And Organic Solvent

Ссылка на эту страницу [US2016312029 \(A1\) - Composition Comprising Esters Of Lignin And Organic Solvent](#)

Изобретатель(и): [SE]; SAMEC JOSEPH [SE]; LÖFSTEDT JOAKIM [SE]; DAHLSTRAND CHRISTIAN [SE]; OREBOM ALEXANDER [SE] SAWADJOON SUPAPORN ±

Заявитель(и): [SE] REN FUEL K2B AB ±

Индекс(ы) по классификации: - международной (МПК): [C08L97/00](#); [C10L1/02](#); [C10M107/20](#)
 - cooperative: [C07G1/00](#); [C08H6/00](#); [C08L97/005](#); [C10L1/026](#); [C10M107/20](#); [C11C3/00](#); [C10L2200/0469](#); [C10M2209/003](#)

Номер заявки: US201415104664 20141216 [Global Dossier](#)

Номера приоритетных документов: [SE20130051508](#) 20131216 ; [SE20140050764](#) 20140619 ; [SE20140051310](#) 20141103 ; [WO2014SE51506](#) 20141216

Также опубликовано, как: [WO2015094098 \(A1\)](#) [US2016312030 \(A1\)](#) [SG11201604775T \(A\)](#) [WO2015094099 \(A1\)](#) [JP2017503065 \(A\)](#) далее

Реферат документа US2016312029 (A1)

The present invention relates to a composition comprising an organic solvent and lignin or lignin derivatives; wherein at least one of the hydroxyl groups of the lignin

or lignin derivatives have been substituted with ester groups forming esterified lignin or lignin derivatives. The composition may be used for preparing fuels.

Библиографические данные: US2016312031 (A1) — 2016-10-27

INORGANIC/LIGNIN TYPE POLYMER COMPOSITE NANOPARTICLES, PREPARATION METHOD THEREFOR AND APPLICATION THEREOF

Ссылка на эту страницу [US2016312031 \(A1\) - INORGANIC/LIGNIN TYPE POLYMER COMPOSITE NANOPARTICLES, PREPARATION METHOD THEREFOR AND APPLICATION THEREOF](#)

Изобретатель(и): [CN]; QIU XUEQING [CN]; YANG DONGJIE [CN]; GUO WENYUAN [CN]; ZHOU MINGSONG [CN]; HUANG JINHAO [CN]; YI CONGHUA [CN] LI YUAN ±

Заявитель(и): [CN] UNIV SOUTH CHINA TECH ±

Индекс(ы) по классификации: - международной (МПК): [C08H7/00](#); [C08K3/22](#); [C08K3/26](#); [C08K3/36](#); [C08L97/00](#)
- cooperative: [C08H6/00](#); [C08K3/00](#); [C08K3/0033](#); [C08K3/22](#); [C08K3/26](#); [C08K3/36](#); [C08K9/04](#); [C08L97/005](#); [C08K2003/0893](#); [C08K2003/2227](#); [C08K2003/2241](#); [C08K2003/2296](#); [C08K2003/265](#); [C08K2003/267](#) далее

Номер заявки: US201415105345 20141128 [Global Dossier](#)

Номера приоритетных документов: [CN20131687595 20131216](#) ; [WO2014CN92437 20141128](#)

Также опубликовано, как: [CN103709772 \(A\)](#) [CN103709772 \(B\)](#) [WO2015090138 \(A1\)](#)

Реферат документа US2016312031 (A1)

The preparation method includes: adding an activating agent into a basic alkaline lignin solution first, then adding a carboxylating agent and reacting to obtain a carboxylated alkaline lignin; dissolving a phosphorylating agent into water, adding epichlorohydrin, and reacting to obtain a hydroxyl phosphate type compound; mixing the carboxylated alkaline lignin and the hydroxyl phosphate type compound and reacting to obtain a lignin type polymer; adding an inorganic nanoparticle suspension into the lignin type polymer and adding an acid for codeposition to obtain the product after aging and drying.

Библиографические данные: CA2942297 (A1) — 2015-09-17

BITUMEN COMPOSITION

Ссылка на эту страницу [CA2942297 \(A1\) - BITUMEN COMPOSITION](#)

Изобретатель(и): [NL]; SLAGHEK THEODOOR MAXIMILIAAN [NL]; VAN VLIET DAVE [NL]; GIEZEN CECILE [NL] HAAKSMAN INGRID KARIN ±

Заявитель(и): [NL] NEDERLANDSE ORGANISATIE VOOR TOEGEPAST-NATUURWETENSCHAPPELIJK ONDERZOEK TNO ±

Индекс(ы) по классификации: - международной (МПК): [C04B24/34](#); [C04B26/26](#); [C08L95/00](#); [C08L97/00](#)
- cooperative: [C08L95/00](#); [C08L97/002](#); [C08L97/005](#) далее

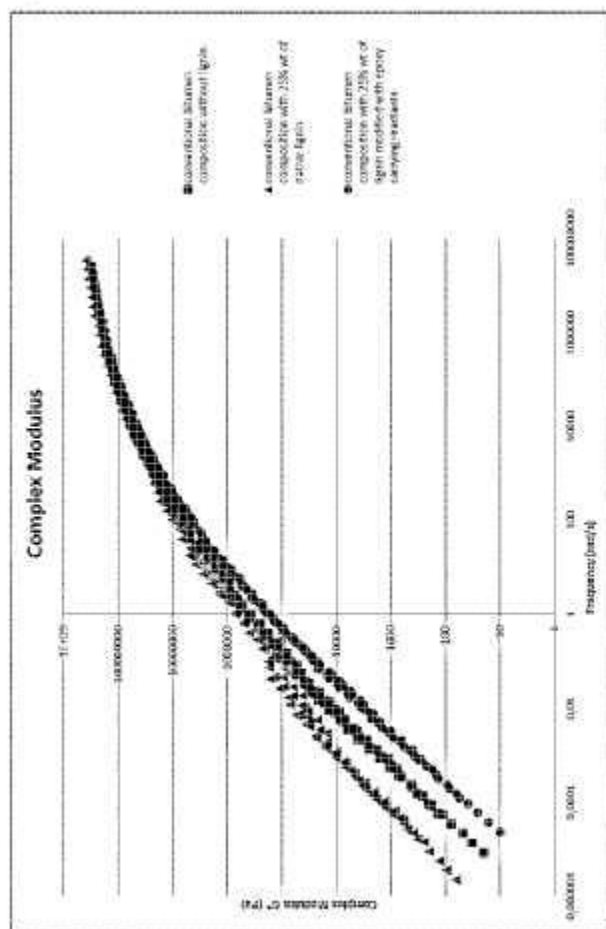
Номер заявки: CA20152942297 20150313 [Global Dossier](#)

Номера приоритетных документов: [EP20140159436 20140313](#) ; [WO2015NL50163 20150313](#)

Также опубликовано, как: [EP2918640 \(A1\)](#) [WO2015137813 \(A1\)](#) [EP3116953 \(A1\)](#) [AU2015230105 \(A1\)](#)

Реферат документа CA2942297 (A1)

Figure 1



The invention is directed to a bitumen composition, to a paving, to a roofing, to a method for preparing a bitumen composition, to a method for increasing the stiffness of a bitumen composition, to a method of adjusting the physical properties of a bitumen composition, and to the use of a bitumen composition. The bitumen composition of the invention comprises a lignin compound or derivative thereof, wherein 10 wt.% or more by weight of said lignin compound or derivative thereof is molecularly dissolved in said bitumen composition.

Библиографические данные: CN106009162 (A) — 2016-10-12

PE resin-plastic material and preparing method thereof

Ссылка на эту страницу [CN106009162 \(A\) - PE resin-plastic material and preparing method thereof](#)

Изобретатель(и): WANG HUAIDONG ±

Заявитель(и): CHANGZHOU HOUDE RENEWABLE RESOURCES TECH CO LTD ±

Индекс(ы) по классификации: - международной (МПК): [B29C47/92](#); [C08K13/06](#); [C08K3/22](#); [C08K3/36](#); [C08K5/09](#); [C08K9/10](#); [C08L23/06](#); [C08L97/00](#)

- cooperative:

Номер заявки: CN20161455274 20160622 [Global Dossier](#)

Номера приоритетных документов: CN20161455274 20160622

Реферат документа CN106009162 (A)

The invention provides a PE resin-plastic material. The PE resin-plastic material comprises, by weight, 20-30 parts of wood meal particles, 25-35 parts of polyethylene, 30-60 parts of silicon-dioxide inertia epoxy resin filler, 5-12 parts of lignin, 0.5-1.8 parts of interface modifier, 1.5-3 parts of lubricant, 1-3 parts of stearic acid, 0.6-1 part of polyethylene wax, 3-6 parts of fire retardant, 1.5-3.5 parts of coupling agent, 0.5-1 part of anti-scouring processing modifier and 2-4 parts of coloring agent. The invention further provides a preparing method of the material. According to the PE resin-plastic material and the preparing method, a reasonable formula and a proper processing technology are selected, and the defects of existing products are overcome; the reasonable physical formula is selected through multiple experiments, and prilling, extruding and forming are carried out; the interface compatibility and the mechanical performance of the obtained product are greatly improved.

Библиографические данные: WO2016157141 (A1) — 2016-10-06

AN ACTIVATED LIGNIN COMPOSITION, A METHOD FOR THE MANUFACTURING THEREOF AND USE THEREOF

Ссылка на эту страницу	WO2016157141 (A1) - AN ACTIVATED LIGNIN COMPOSITION, A METHOD FOR THE MANUFACTURING THEREOF AND USE THEREOF	
Изобретатель(и):	[SE]; ARESKOGH DIMITRI [SE]	ZAFAR ASHAR ±
Заявитель(и):	[FI] STORA ENSO OYJ ±	
Индекс(ы) по классификации:	- международной (МПК):	C08H7/00 ; D21D1/00 ; C08G8/20 ; C08G8/24 ; C08L97/00 ; C09J161/12 ; C09J197/00
	- cooperative:	B27N3/002 ; C08G8/38 ; C08L97/005 ; C09J161/12 ; C09J197/005
Номер заявки:	WO20161B51871 20160401	Global Dossier
Номера приоритетных документов:	US201562141930P 20150402	

Реферат документа WO2016157141 (A1)

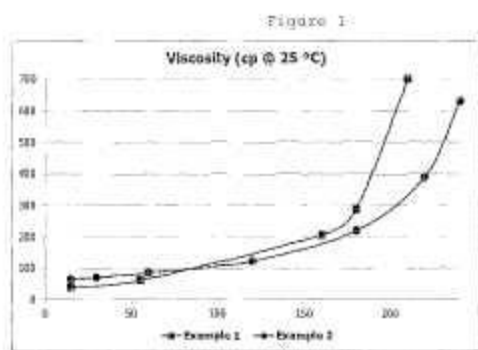


Figure 1: Viscosity development during synthesis of resins in Example 1 and Example 2.

The present invention relates to an activated lignin composition, its manufacture and its use thereof. It also relates to a resin comprising lignin, its manufacture and use.

Библиографические данные: CN105968852 (A) — 2016-09-28
Anti-ultraviolet radiation lignin-based zinc oxide composite particles and preparation method and application thereof

Ссылка на эту страницу	CN105968852 (A) - Anti-ultraviolet radiation lignin-based zinc oxide composite particles and preparation method and application thereof	
Изобретатель(и):	QIU XUEQING; YANG DONGJIE; ZHONG RUISENG; WANG HUAN; QIAN YONG; OUYANG XINPING; YI CONGHUA ±	
Заявитель(и):	SOUTH CHINA UNIV OF TECHNOLOGY(SCUT) ±	
Индекс(ы) по классификации:	- международной (МПК):	C08K3/22 ; C08L97/00 ; D06M11/44 ; D06M15/01 ; D06M101/34
	- cooperative:	
Номер заявки:	CN20161357493 20160525	Global Dossier
Номера приоритетных документов:	CN20161357493 20160525	

Реферат документа CN105968852 (A)

The invention belongs to the technical field of nanocomposites, and discloses anti-ultraviolet radiation lignin-based zinc oxide composite particles for fabric and a preparation method and application in the fabric of the particles. The preparation method comprises the following steps that 1, pH of a lignin sulfonate aqueous solution is adjusted to be alkaline, heating is conducted, an active agent is added for reacting, a carboxylated reagent is added, an isothermal reaction is conducted, and carboxylated lignin sulfonate is obtained; 2, carboxylated lignin sulfonate prepared in the first step is prepared into an aqueous solution, the pH is adjusted to be alkaline, a zinc salt is added for reacting, reacting is conducted by heating, the pH is adjusted to be 9 to 11, reacting is conducted continuously, a cross-linking agent is added for reacting, cooling, ageing, separating and drying are conducted, and the lignin-based zinc oxide composite particles are obtained. According to the composite particles, agglomeration among nano zinc oxide particles is overcome, the particles are dispersed uniformly, adhesion to fabric fibers is improved, effective protection of UVA and UVB full-wave bands is provided, and the problem that the ultraviolet-protection capacity is limited is solved.

Библиографические данные: CN105949735 (A) — 2016-09-21

Modified lignin polylactic acid plastic with excellent performance

Ссылка на эту страницу	CN105949735 (A) - Modified lignin polylactic acid plastic with excellent performance	
Изобретатель(и):	CHEN YUELIN ±	
Заявитель(и):	CHANGXING ZHONGHAO CHEMICAL CO LTD ±	
Индекс(ы) по классификации:	- международной (МПК):	B29C47/92 ; C08K3/34 ; C08L67/04 ; C08L97/00
	- cooperative:	
Номер заявки:	CN20161415035 20160614	Global Dossier
Номера приоритетных документов:	CN20161415035 20160614	

Реферат документа CN105949735 (A)

The invention discloses a preparation technology of modified lignin polylactic acid plastic with excellent performance. The preparation technology includes the steps of 1, carrying out lignin modification, wherein 20-25 parts by weight of enzymatic hydrolysis lignin and 25 parts by weight of pretreatment liquid are taken and evenly mixed, heat preservation is carried out for 80-90 min at the constant temperature of 38 DEG C, drying is carried out at 80-100 DEG C after treatment is finished, enzyme denaturalization is carried out,

modified enzymatic hydrolysis lignin is obtained, and modified enzymatic hydrolysis lignin is ground and then screened with a 60-mesh screen for use; 2, preparing blending plastic, wherein 1-2 parts by weight of modified lignin, 30-38 parts by weight of polylactic acid and 1 part by weight of mica powder are taken, fully stirred and evenly mixed, the mixed materials are subjected to extrusion molding through a twin-screw extruder, the temperature of a first temperature zone is set to be 80 DEG C, the temperature of a second temperature zone is set to be 180 DEG C, the temperature of a third temperature zone is set to be 200 DEG C, and the temperature of a fourth temperature zone is set to be 150 DEG C.

Библиографические данные: CN105924833 (A) — 2016-09-07

Wood-plastic composite packing material and preparation method thereof

Ссылка на эту страницу [CN105924833 \(A\) - Wood-plastic composite packing material and preparation method thereof](#)

Изобретатель(и): KUANG XUEMING ±

Заявитель(и): SUZHOU BEILITE LOGISTICS EQUIPMENT CO LTD ±

Индекс(ы) по классификации: - международной (МПК): [C08K13/02](#); [C08K3/34](#); [C08K5/03](#); [C08K5/12](#); [C08K5/42](#); [C08L23/06](#); [C08L27/06](#); [C08L5/08](#); [C08L97/00](#)
- cooperative:

Номер заявки: CN20161334529 20160519 [Global Dossier](#)

Номера приоритетных документов: CN20161334529 20160519

Реферат документа CN105924833 (A)

The invention provides a wood-plastic composite packing material and a preparation method thereof. The wood-plastic composite packing material is prepared from lignin, chitosan, polyvinyl chloride, high-density polyethylene, bentonite, decabrominated dipheny ethane, calcium lignosulphonate, sodium dodecyl benzene sulfonate, stearyl alcohol, polyethylene wax, ethylene bis-stearamide, a calcium-zinc stabilizer, dicyclohexyl phthalate and diisobutyl phthalate. The preparation method of the wood-plastic composite packing material comprises the following steps that lignin and chitosan are placed in an oven to be dried, polyvinyl chloride, high-density polyethylene and bentonite are placed into the oven to be dried, then all the components are added into a high-speed mixer to be mixed, and finally the mixed materials are added into a single screw extruder for extrusion granulating. The wood-plastic composite packing material has the very good mechanical property, elasticity and flexibility and is excellent in impact resistance.

Библиографические данные: CN105924463 (A) — 2016-09-07

Modified lignin-nylon 6 composite material containing siloxane benzoxazine and preparation method of modified lignin-nylon 6 composite material

Ссылка на эту страницу [CN105924463 \(A\) - Modified lignin-nylon 6 composite material containing siloxane benzoxazine and preparation method of modified lignin-nylon 6 composite material](#)

Изобретатель(и): SHI TIEJUN ±

Заявитель(и): SHI TIEJUN ±

Индекс(ы) по классификации: - международной (МПК): [C07F7/18](#); [C08H7/00](#); [C08L77/02](#); [C08L97/00](#)
- cooperative:

Номер заявки: CN20161310856 20160510 [Global Dossier](#)

Номера приоритетных документов: CN20161310856 20160510

Реферат документа CN105924463 (A)

The invention provides a modified lignin-nylon 6 composite material containing siloxane benzoxazine and a preparation method of the modified lignin-nylon 6 composite material. Resin

not only can improve the compatibility of inorganic filler with a matrix polymer, but also can be subjected to ring opening polymerization under the heating condition, and therefore the heat resistance and the mechanical property of the composite material are improved. According to the composite material, the preparation process is simple, multiple raw materials can be chosen, industrialized production is easy to achieve, the cost is low, and the yield reaches up to 85%.

Библиографические данные: JP2016155940 (A) — 2016-09-01

LIGNIN COMPOSITION AND USE THEREOF

Ссылка на эту страницу [JP2016155940 \(A\) - LIGNIN COMPOSITION AND USE THEREOF](#)
Изобретатель(и): MATSUBARA YUSUKE; KOJO ATSUSHI \pm
Заявитель(и): OJI HOLDINGS CORP \pm
Индекс(ы) по классификации: - международной (МПК): [C08J5/18](#); [C08L97/00](#)
- cooperative:
Номер заявки: JP20150034896 20150225 [Global Dossier](#)
Номера приоритетных документов: JP20150034896 20150225

Реферат документа JP2016155940 (A)

PROBLEM TO BE SOLVED: To provide a lignin composition applicable to a water-soluble resin as an ultraviolet absorber.
SOLUTION: A lignin composition is obtained by a manufacturing method that includes: obtaining a processed raw material suspension by carrying out a chemical treatment of a raw material suspension obtainable by adding at least water to a lignocellulose raw material; and obtaining a lignin composition containing water-soluble lignin from the processed raw material suspension.
SELECTED DRAWING: Figure 1

Библиографические данные: CN105860501 (A) — 2016-08-17

Heat-resistant and water-resistant polyurethane composite material

Ссылка на эту страницу [CN105860501 \(A\) - Heat-resistant and water-resistant polyurethane composite material](#)
Изобретатель(и): GONG WENXIANG \pm
Заявитель(и): XUZHOU GLOBAL POLYURETHANE CO LTD \pm
Индекс(ы) по классификации: - международной (МПК): [C08G18/32](#); [C08G18/38](#); [C08G18/44](#); [C08G18/61](#); [C08G18/66](#); [C08G18/69](#); [C08G18/75](#); [C08K13/06](#); [C08K3/26](#); [C08K3/34](#); [C08K5/098](#); [C08K7/14](#); [C08K9/04](#); [C08L25/06](#); [C08L3/02](#); [C08L63/00](#); [C08L75/06](#); [C08L97/00](#)
- cooperative:
Номер заявки: CN20161249145 20160419 [Global Dossier](#)
Номера приоритетных документов: CN20161249145 20160419

Реферат документа CN105860501 (A)

The invention discloses a heat-resistant and water-resistant polyurethane composite material, which comprises the following raw materials including polycarbonate diol, terminal hydroxyl liquid silicon rubber, terminal hydroxyl liquid nitrile rubber, 1, 4-hexamethylene diisocyanate, nano calcium carbonate, cetyl trimethyl ammonium bromide modified montmorillonoid, starch,

zinc oxide, molybdenum trioxide, epoxy resin, diocetanoate dibutyltin, 1, 4-bi(2-hydroxyl ethoxy) benzene, 4, 4'-diamino-diphenyl sulfone, silicon-containing chain extendors, polyhedral oligomerization octa(aminophenyl) polyhedral silsesquioxane, calcium stearate, high boiling solvents lignin, nanometer carbon fiber and polystyrene. The heat-resistant and water-resistant polyurethane composite material provided by the invention has the advantages of high intensity, excellent heat-resistant performance and good water-resistant performance, and can meet the use requirements in various fields.

Библиографические данные: US2016230009 (A1) — 2016-08-11

COMPOSITIONS INCLUDING ESTERIFIED LIGNIN AND POLY (LACTIC ACID) AND CARBON FIBERS PRODUCED THEREFROM

Ссылка на эту страницу [US2016230009 \(A1\) - COMPOSITIONS INCLUDING ESTERIFIED LIGNIN AND POLY \(LACTIC ACID\) AND CARBON FIBERS PRODUCED THEREFROM](#)

Изобретатель(и): [US]; THUNGA MAHENDRA [CN]; CHEN KEKE [US] KESSLER MICHAEL RICHARD ±

Заявитель(и): [US] UNIV IOWA STATE RES FOUND INC ±

Индекс(ы) по классификации: - международной (МПК): [C08H7/00](#); [C08L67/04](#); [C08L97/00](#); [D01F6/92](#); [D01F8/14](#); [D01F8/18](#); [D01F9/17](#); [D01F9/26](#)

- cooperative: [C01B31/00](#); [C01B31/02](#); [C08H6/00](#); [C08L67/04](#); [C08L97/005](#); [D01F6/625](#); [D01F6/92](#); [D01F8/14](#); [D01F8/18](#); [D01F9/00](#); [D01F9/17](#); [D01F9/26](#); [C08L2203/12](#); [Y10T428/2929](#); [Y10T428/298](#) далее

Номер заявки: US201615099483 20160414 [Global Dossier](#)

Номера приоритетных документов: US201615099483 20160414 ; [US201314048532 20131008](#) ; [US201261711584P 20121009](#)

Также опубликовано, как: [US2014099505 \(A1\)](#) [US9340425 \(B2\)](#)

Реферат документа US2016230009 (A1)

The present invention relates to compositions comprising esterified lignin and poly(lactic acid). In various embodiments, the present invention provides fibers comprising the esterified lignin and poly(lactic acid) blend, carbon fibers made therefrom, and methods of making the fiber and the carbon fibers.

Библиографические данные: US2016230008 (A1) — 2016-08-11

RESIN COMPOSITION, RUBBER COMPOSITION, AND CURED ARTICLE

Ссылка на эту страницу [US2016230008 \(A1\) - RESIN COMPOSITION, RUBBER COMPOSITION, AND CURED ARTICLE](#)

Изобретатель(и): [JP] MURAI TAKETOSHI ±

Заявитель(и): [JP] SUMITOMO BAKELITE CO ±

Индекс(ы) по классификации: - международной (МПК): [C08L61/06](#); [C08L7/00](#); [C08L97/00](#)

- cooperative: [C08G8/32](#); [C08L61/06](#); [C08L61/14](#); [C08L7/00](#); [C08L97/00](#); [C08L97/005](#); [C08L91/00](#) далее

Номер заявки: US201415029929 20141016 [Global Dossier](#)

Номера приоритетных документов: [JP20130215144 20131016](#) ; [WO2014JP77607 20141016](#)

Также опубликовано, как: [EP3059287 \(A1\)](#) [WO2015056757 \(A1\)](#)

Реферат документа US2016230008 (A1)

A resin composition having improved mechanical strength, hardness, and low heat generation property (low fuel consumption property) is developed, and when the same is used particularly in a rubber composition, a rubber composition that has a low $\tan \delta$ (loss tangent) around 60° C., an improved E' (storage elastic modulus), and a reduced load on the environment is provided. A resin composition containing a lignin derivative (A), as well as either a modified novolac type phenol resin (B) or a cashew resin (B'), is provided. In one or a plurality of embodiments, the modified novolac type phenol resin (B) has a softening point of 150° C. or lower, and the modified novolac type phenol resin (B) is obtained by modification with a plant-derived compound.

Библиографические данные: US2016222045 (A1) — 2016-08-04

HIGH VALUE LIGNIN DERIVATIVES, POLYMERS, AND COPOLYMERS AND USE THEREOF IN THERMOPLASTIC, THERMOSET, COMPOSITE, AND CARBON FIBER APPLICATIONS

Ссылка на эту страницу: [US2016222045 \(A1\) - HIGH VALUE LIGNIN DERIVATIVES, POLYMERS, AND COPOLYMERS AND USE THEREOF IN THERMOPLASTIC, THERMOSET, COMPOSITE, AND CARBON FIBER APPLICATIONS](#)

Изобретатель(и): [US] ARGYROPOULOS DIMITRIS S ±

Заявитель(и): [US] UNIV NORTH CAROLINA STATE ±

Индекс(ы) по классификации: - международной (МПК): [C07G1/00](#); [C08H7/00](#); [C08L97/00](#); [D01F9/17](#)

- cooperative: [C01B31/02](#); [C07G1/00](#); [C08H6/00](#); [C08L97/005](#); [D01F9/17](#); [D02G3/02](#)

Номер заявки: US201615078384 20160323 [Global Dossier](#)

Номера приоритетных документов: US201615078384 20160323 ; [US201313771653 20130220](#) ; [US201261601181P 20120221](#)

Также опубликовано, как: [US2013255216 \(A1\)](#) [US9340426 \(B2\)](#)

Реферат документа US2016222045 (A1)

The present disclosure relates to reactive modified lignin, methods of preparing such modified lignin, and materials, such as polymer systems, incorporating the modified lignin. More specifically, the lignin can be modified by selectively masking reactive functional groups such that the material has a modulated reactivity and is thus better suited for incorporation into and/or formation of further materials, such as carbon fibers.

Библиографические данные: CN105820520 (A) — 2016-08-03

Novel biomass plastic material and preparation method thereof

Ссылка на эту [CN105820520 \(A\) - Novel biomass plastic material and preparation method thereof](#)

страницу
Изобретатель(и): LI MINGHUA ±
Заявитель(и): JINBAOLI TECH (SUZHOU) CO LTD ±
Индекс(ы) по классификации: - международной (МПК): [C08K5/19](#); [C08K5/3437](#); [C08K5/3462](#); [C08K5/42](#); [C08K5/55](#); [C08L3/02](#); [C08L5/00](#); [C08L5/04](#); [C08L5/08](#); [C08L67/02](#); [C08L67/04](#); [C08L71/02](#); [C08L89/00](#); [C08L97/00](#)
 - cooperative:
Номер заявки: CN20161263787 20160426 [Global Dossier](#)
Номера приоритетных документов: CN20161263787 20160426

Реферат документа CN105820520 (A)

The invention discloses a novel biomass plastic material which comprises the following raw materials in parts by weight: 10-35 parts of poly(butylene succinate), 10-35 parts of polylactic acid, 10-25 parts of polyhydroxybutyrate, 5-25 parts of polytrimethyl-ethylene terephthalate, 5-20 parts of chitosan, 5-20 parts of fucose, 5-10 parts of corn starch, 5-10 parts of soy protein, 5-10 parts of lignin, 5-10 parts of xanthan gum, 5-10 parts of chitosan, 5-10 parts of sodium alginate, 2-5 parts of chelating agent, 2-5 parts of adhesive and 2-5 parts of heat stabilizer. The environmental protection property of the plastic material can be improved, and the biodegradation function of the plastic material is remarkably enhanced. Meanwhile, the invention also discloses a corresponding preparation method.

Библиографические данные: KR20160080692 (A) — 2016-07-08

PHENOL RESIN COMPOSITION AND PROCESS OF PREPARING FOR THE SAME

Ссылка на эту страницу [KR20160080692 \(A\) - PHENOL RESIN COMPOSITION AND PROCESS OF PREPARING FOR THE SAME](#)
Изобретатель(и): [KR]; GANG SHIN KWUI MIN JAE [KR]; KI [KR] PARK SANG HUN ±
Заявитель(и): [KR] KOLON INC ±
Индекс(ы) по классификации: - международной (МПК): [C08G8/10](#); [C08G8/28](#); [C08L61/06](#); [C08L61/14](#); [C08L97/00](#)
 - cooperative: [C08G8/10](#); [C08G8/28](#); [C08L61/06](#); [C08L61/14](#); [C08L97/00](#) [далее](#)
Номер заявки: KR20140193416 20141230 [Global Dossier](#)
Номера приоритетных документов: KR20140193416 20141230

Реферат документа KR20160080692 (A)

The present invention relates to a phenol resin composition and a manufacturing method of the composition. The phenol resin composition comprises reactants containing a phenol resin, formaldehyde, lignin, and a catalyst, and comprises an internal release agent with respect to the reactants. The phenol resin of the present invention has the rapid hardening of the phenol resin during the molding of a shell mold by applying and making the lignin react with the phenol resin for casting, and has excellent disintegrability and the flexural strength of the mold obtained therefrom.

Lignin fiber modified carbon fiber/epoxy resin composite material and preparation method thereof

Ссылка на эту страницу	CN105647121 (A) - Lignin fiber modified carbon fiber/epoxy resin composite material and preparation method thereof	
Изобретатель(и):	HUANG WENCHENG ±	
Заявитель(и):	SUZHOU ZHENZHAN TECH MAT CO LTD ±	
Индекс(ы) по классификации:	- международной (МПК):	C08K5/103 ; C08K7/06 ; C08L1/24 ; C08L1/28 ; C08L63/00 ; C08L97/00
	- cooperative:	
Номер заявки:	CN20161128255 20160308	Global Dossier
Номера приоритетных документов:	CN20161128255 20160308	

Реферат документа CN105647121 (A)

The invention discloses a lignin fiber modified carbon fiber/epoxy resin composite material. The composite material is composed of, by weight, 50-80 parts of bisphenol-A epoxy resin, 2-8 parts of lignin fiber, 5-10 parts of carbon fiber, 3-6 parts of viscose, 2-5 parts of sodium carboxymethylcellulose, 1-3 parts of hydroxyethyl cellulose, 5-10 parts of tung oil, 5-10 parts of dimethicone, 5-15 parts of stearin, 5-10 parts of polyoxyethene bisglyceryl borate, 3-6 parts of curing agent and 3-8 parts of reactive diluent. The invention further discloses a preparation method of the composite material. The composite material has excellent performance like high specific strength, specific modulus, fatigue strength and high temperature resistance, is high in crack resistance and fracture toughness, high in stability and widely applicable in the fields of aerospace and aviation, automobiles and bicycles.

RESIN COMPOSITION, MOLDED BODY, AND PRODUCTION METHOD

Ссылка на эту страницу	US2016215143 (A1) - RESIN COMPOSITION, MOLDED BODY, AND PRODUCTION METHOD	
Изобретатель(и):	[JP]; GOTOU AKIHITO KOBUNE [JP]; MIKA NAKAMURA [JP]; YUKI MARUYAMA [JP] TETSUSHI ±	
Заявитель(и):	[JP] HITACHI CHEMICAL CO LTD ±	
Индекс(ы) по классификации:	- международной (МПК):	C08L61/06 ; C08L97/00
	- cooperative:	C08L61/04 ; C08L61/06 ; C08L97/005 ; C08K5/04 далее
Номер заявки:	US201415025343 20140930	Global Dossier
Номера приоритетных документов:	JP20130204117 20130930 ; JP20140006575 20140117 ; WO2014JP76149 20140930	
Также опубликовано, как:	TW201529740 (A) WO2015046588 (A1) WO2015046588 (A8)	

Реферат документа US2016215143 (A1)

Disclosed is a resin composition containing lignin and a phenol resin, the lignin being one resulting from separation of a cellulose component and a hemicellulose component from a

decomposition product obtained by subjecting a plant raw material to a decomposition treatment, and the lignin and the phenol resin being mixed in a solvent. It is possible to provide a resin composition capable of being melt kneaded at low temperatures and having excellent processability and moldability, a production method for the same, and a molded product using the same.

Библиографические данные: CN105778284 (A) — 2016-07-20

Plant-fiber reinforced plastic material and preparing method thereof

Ссылка на эту страницу [CN105778284 \(A\) - Plant-fiber reinforced plastic material and preparing method thereof](#)

Изобретатель(и): SHI MINXIN ±

Заявитель(и): SUZHOU FUZHONG PLASTIC CO LTD ±

Индекс(ы) по классификации: - международной (МПК): [C08J5/04](#); [C08K13/02](#); [C08K3/26](#); [C08K3/34](#); [C08K5/09](#); [C08K5/098](#); [C08L23/08](#); [C08L23/12](#); [C08L25/06](#); [C08L97/00](#); [C08L97/02](#)

- cooperative:

Номер заявки: CN20161222640 20160412 [Global Dossier](#)

Номера приоритетных документов: CN20161222640 20160412

Реферат документа

The invention provides a plant-fiber reinforced plastic material and a preparing method thereof. The plant-fiber reinforced plastic material is prepared from polypropylene, polystyrene, ethylene-vinyl acetate resin, lignin fibers, bamboo powder, calcium carbonate, talcum powder, gamma-aminopropyltriethoxysilane, polypropylene grafted maleic anhydride, p-aminophenol, polyethylene wax, zinc stearate, stearic acid, paraffin oil and isopropyl alcohol. The preparing method includes the following steps that 1, lignin fibers and bamboo powder are mixed, put into a drying oven and dried for 24 hours-26 hours at the temperature of 100 DEG C-110 DEG C; 2, the mixture is poured into a double-roller open mill and fully mixed at the temperature of 165 DEG C-170 DEG C; 3, the mixture is poured into a mold and subjected to hot press molding at the temperature of 170 DEG C-175 DEG C and the pressure of 10 MPa-20 MPa, and the plant-fiber reinforced plastic material is obtained; The plant-fiber reinforced plastic material has the good mechanical performance and the good toughness, and meanwhile impact resistance is high.

Библиографические данные: CN105778322 (A) — 2016-07-20

Polyvinyl chloride composite material and preparation method thereof

Ссылка на эту страницу [CN105778322 \(A\) - Polyvinyl chloride composite material and preparation method thereof](#)

Изобретатель(и): LIU YANSHENG ±

Заявитель(и): TIANJIN BINPU PRODUCTIVITY PROMOTION CO LTD ±

Индекс(ы) по классификации: - международной (МПК): [C08K3/22](#); [C08K9/06](#); [C08L27/06](#); [C08L97/00](#)

- cooperative:

Номер заявки: CN20141793247 20141220 [Global Dossier](#)

Номера приоритетных документов: CN20141793247 20141220

Реферат документа CN105778322 (A)

The invention relates to a polyvinyl chloride composite material and a preparation method thereof. The polyvinyl chloride composite material contains lignin/nanometer rare earth oxide. The preparation method comprises the following steps: carrying out surface modification on the nanometer rare earth oxide, preparing a lignin/nanometer rare earth oxide composite material, and carrying out a melt blending technology to prepare the polyvinyl chloride composite material. The polyvinyl chloride composite material has the advantages of good compatibility of all components, excellent comprehensive mechanical performances, and realization of special rare earth characteristics, flame retardation and ultraviolet resistance due to addition of the nanometer rare earth oxide and lignin.

Библиографические данные: TW201613987 (A) — 2016-04-16

Lignin-based biomass epoxy resin, method for manufacturing the same, and compositions including the same

Ссылка на эту страницу	TW201613987 (A) - Lignin-based biomass epoxy resin, method for manufacturing the same, and compositions including the same
Изобретатель(и):	[TW]; SHEEN YUUNG-CHING WANG [TW]; YI-TING CHENWEI [TW]; SU-MEI [TW]; SU YI-CHE [TW] CHUANG WEN-PIN ±
Заявитель(и):	[TW] IND TECH RES INST ±
Индекс(ы) по классификации:	- международной (МПК): C08H7/00 ; C08L97/00 - cooperative: C08G59/027 ; C08G59/1455 ; C08G59/42 ; C08K3/0016 ; C08K5/0025 ; C08K9/04
Номер заявки:	TW20150118709 20150610
Номера приоритетных документов:	TW20140135456 20141014 ; TW20150118709 20150610
Также опубликовано, как:	TWI549997 (B) EP3009462 (A1) US2016102170 (A1) CN106188501 (A)

Реферат документа TW201613987 (A)

Disclosed is a method of forming a lignin-based biomass epoxy resin, including: (a) mixing a lignin, an anhydride compound, and a solvent to react for forming a first intermediate product, (b) reacting the first intermediate compound with a first polyol to form a second intermediate compound, and (c) reacting the second intermediate compound with an epoxy compound to form a lignin-based biomass epoxy resin.

Библиографические данные: CN105754209 (A) — 2016-07-13

A lignin/polypropylene composite material

Ссылка на эту страницу	CN105754209 (A) - A lignin/polypropylene composite material
Изобретатель(и):	LIU YANSHENG ±
Заявитель(и):	TIANJIN BINPU PRODUCTIVITY PROMOTION CO LTD ±
Индекс(ы) по классификации:	- международной (МПК): C08H7/00 ; C08K5/12 ; C08K5/523 ; C08L23/12 ; C08L51/06 ; C08L97/00 - cooperative:
Номер заявки:	CN20141792804 20141220 Global Dossier

Реферат документа CN105754209 (A)

The invention relates to a lignin/polypropylene composite material, particularly to a lignin/polypropylene composite material prepared through adding a compatibilizer and a plasticizer and having good compatibility. The composite material comprises 100 parts by mass of polypropylene, 10-50 parts by mass of lignin, 0-20 parts by mass of the compatibilizer, 0-10 parts by mass of the plasticizer and 0.1-1 part by mass of a coupling agent. The compatibilizer is maleic anhydride grafted polypropylene the grafting ratio of which is 0.8-1.2%. The plasticizer is one selected from a group comprising triphenyl phosphate, dibutyl phthalate and dioctyl phthalate. Through adding the compatibilizer and the plasticizer, compatibility of a lignin/polypropylene blending system is improved, thus facilitating improvement of mechanical properties of the composite material.

Библиографические данные: CN105733288 (A) — 2016-07-06

Ball raw material composition formula

Ссылка на эту страницу	CN105733288 (A) - Ball raw material composition formula	
Изобретатель(и):	TIAN JIANPIN ±	
Заявитель(и):	TIAN JIANPIN ±	
Индекс(ы) по классификации:	- международной (МПК):	C08K13/02 ; C08K3/04 ; C08K3/26 ; C08K3/34 ; C08L101/00 ; C08L91/02 ; C08L97/00
	- cooperative:	
Номер заявки:	CN20141759250 20141210	Global Dossier
Номера приоритетных документов:	CN20141759250 20141210	

Реферат документа CN105733288 (A)

The present invention relates to the technical field of chemical formulations, and in particular relates to a ball raw material composition formula. The ball raw material composition formula comprises the following components by weight: 3-11% of lignin, 5-12% of oil, 45-55% of a sizing material, 12-18% of kaolin, 10-15% of carbon black, 33-41% of calcium carbonate, 11-19% of 3MgO.4SiO₂.H₂O powder, 5-9% of a complexing agent, 11-17% of white factice and 3-9% of a vulcanizing agent. The object of the present invention is to provide a simple-ratio well-elastic ball raw material composition formula.

Библиографические данные: CN105713353 (A) — 2016-06-29

Novel composite aging-resistant textile material and preparing method thereof

Ссылка на эту страницу	CN105713353 (A) - Novel composite aging-resistant textile material and preparing method thereof	
Изобретатель(и):	SHEN XUELONG ±	
Заявитель(и):	WUJIANG ZEWANG TEXTILE CO LTD ±	
Индекс(ы) по классификации:	- международной	C08K13/04 ; C08K3/04 ; C08K3/36 ; C08K5/1545 ; C08K7/12 ;

(МПК): [C08L1/28](#); [C08L33/20](#); [C08L5/08](#); [C08L67/00](#); [C08L67/02](#);
[C08L67/04](#); [C08L77/00](#); [C08L89/04](#); [C08L97/00](#); [C08L97/02](#)

- cooperative:

Номер заявки: CN20161246542 20160420 [Global Dossier](#)
Номера приоритетных документов: CN20161246542 20160420

Реферат документа CN105713353 (A)

The invention discloses a novel composite aging-resistant textile material. The novel composite aging-resistant textile material comprises, by weight, 20-45 parts of polyester fibers, 20-45 parts of nylon fibers, 20-45 parts of hollow fibers, 10-25 parts of hydroxypropyl methyl cellulose, 20-45 parts of dacron, 20-45 parts of acrylon, 5-15 parts of sisal hemp, 15-25 parts of flax, 5-10 parts of lignin fibers, 15-25 parts of chitin fibers, 5-10 parts of wool, 5-10 parts of asbestos fibers, 2-5 parts of nanometer ceramic powder, 2-5 parts of nanometer graphite powder, 2-5 parts of nanometer silicon powder, 5-15 parts of tannic acid, 2-10 parts of poly-beta-hydroxybutyrate, 5-10 parts of poly-epsilon-caprolactone, 5-10 parts of stabilizer and 5-10 parts of adhesive. The prepared textile material has the good aging resistance. Meanwhile, the invention discloses a corresponding preparing method.

Библиографические данные: WO2016104634 (A1) — 2016-06-30

THERMOPLASTIC RESIN COMPOSITION AND MOLDED ARTICLE THEREOF

Ссылка на эту страницу [WO2016104634 \(A1\) - THERMOPLASTIC RESIN COMPOSITION AND MOLDED ARTICLE THEREOF](#)

Изобретатель(и): [JP]; NODERA AKIO OHASHI [JP]; YASUNORI ZHOU [JP]; LIN YAMAMOTO [JP] MAIKO [±](#)

Заявитель(и): [JP]; LION IDEMITSU COMPOSITES CO LTD [JP] HARIMA CHEMICALS INC [±](#)

Индекс(ы) по классификации: - международной (МПК): [C08L101/00](#); [C08L97/00](#)
- cooperative: [C08L101/00](#); [C08L97/00](#)

Номер заявки: WO2015JP86078 20151224 [Global Dossier](#)

Номера приоритетных документов: [JP20140263476](#) [20141225](#)

Реферат документа WO2016104634 (A1)

A thermoplastic resin composition containing 99 to 50 mass% of a thermoplastic resin (A) and 50 to 1 mass% of an acetic acid lignin (B); and a molded article comprising said thermoplastic resin composition.

Библиографические данные: JP2016113595 (A) — 2016-06-23

COMPOSITE MATERIAL, FORMED BODY, AND PRODUCTION METHOD THEREFOR

Ссылка на эту страницу [JP2016113595 \(A\) - COMPOSITE MATERIAL, FORMED BODY, AND PRODUCTION METHOD THEREFOR](#)

Изобретатель(и): KOJIMA KAZUE; KATO KAZUO; URUSHIBARA MASARU; GOTO SHINYA; YANO HIROYUKI [±](#)

Заявитель(и):	DENSO CORP; UNIV KYOTO ±	
Индекс(ы) по классификации:	- международной (МПК):	B29C70/06 ; B32B29/00 ; C08J5/24 ; C08L1/02 ; C08L61/04 ; C08L97/00 ; D21H19/24
	- cooperative:	
Номер заявки:	JP20140255911 20141218	Global Dossier
Номера приоритетных документов:	JP20140255911 20141218	

Реферат документа JP2016113595 (A)

PROBLEM TO BE SOLVED: To provide: a composite material of a phenolic resin and a vegetable fiber defibrated product that can exhibit a high elastic modulus even when the cellulose component content is reduced; a formed body thereof; and a production method therefor.
SOLUTION: Provided is a composite material of a vegetable fiber defibrated product and a phenolic resin, and a formed body 1 thereof; the vegetable fiber defibrated product contains a cellulose component and a lignin component; the content of cellulose component in the composite material is 15 mass% to 30 mass%; in producing the composite material, first, a resin solution obtained by dissolving a phenolic resin into a solvent is impregnated into a porous body composed of a vegetable fiber defibrated product; then, the solvent in the porous body is evaporated; and furthermore, in the production of the formed body 1, the forming is carried out at temperatures above the hardening temperature of the phenolic resin.
SELECTED DRAWING: Figure 1

Библиографические данные: WO2016204682 (A1) — 2016-12-22

COMPOSITION COMPRISING DERIVATIZED LIGNIN FOR FUEL PRODUCTION

Ссылка на эту страницу [WO2016204682 \(A1\) - COMPOSITION COMPRISING DERIVATIZED LIGNIN FOR FUEL PRODUCTION](#)

Изобретатель(и):	[SE]; DAHLSTRAND CHRISTIAN [SE]; OREBOM ALEXANDER SAMEC [SE]; JOSEPH SAWADJOON [SE]; SUPAPORN LÖFSTEDT [SE] JOAKIM ±	
Заявитель(и):	[SE] REN FUEL K2B AB ±	
Индекс(ы) по классификации:	- международной (МПК):	C07G1/00 ; C08H7/00 ; C08L97/00 ; C10G1/08 ; C10G3/00
	- cooperative:	C07G1/00 ; C08H6/00 ; C08L97/005 ; C10G1/083 ; C10G3/42 ; C10G3/50
Номер заявки:	WO2016SE50584 20160615	Global Dossier
Номера приоритетных документов:	SE20150050813 20150615 ; SE20160050594 20160503	

Реферат документа WO2016204682 (A1)

The present invention relates to a composition comprising lignin and a solvent where the lignin is functionalized with an ether group.

Библиографические данные: WO2016086078 (A1) — 2016-06-02

PROCESSES FOR PRODUCING LIGNIN-BASED ENZYMATIC HYDROLYSIS ENHANCERS, AND COMPOSITIONS PRODUCED THEREFROM

Ссылка на эту [WO2016086078 \(A1\) - PROCESSES FOR PRODUCING LIGNIN-BASED](#)

страницу	ENZYMATIC HYDROLYSIS ENHANCERS, AND COMPOSITIONS PRODUCED THEREFROM
Изобретатель(и):	[US]; PYLKKANEN VESA RETSINA [US] THEODORA ±
Заявитель(и):	[US] API IP HOLDINGS LLC ±
Индекс(ы) по классификации:	- международной (МПК): C08H7/00 ; C08L97/00 ; C13K1/02 ; D21C3/04 ; D21C3/06 ; D21C3/20 - cooperative: C08H6/00 ; C08H8/00 ; C12N9/2437 ; C12P19/02 ; C12P19/14 ; C12Y302/01004
Номер заявки:	WO2015US62560 20151125 Global Dossier
Номера приоритетных документов:	US201462085464P 20141128 ; US201514951033 20151124
Также опубликовано, как:	US2016152779 (A1)

Реферат документа W02016086078 (A1)

This disclosure provides lignin-based enzymatic hydrolysis enhancer that includes ethanol-soluble, partially sulfonated lignin. Some embodiments provide a lignin-based enzymatic hydrolysis enhancer comprising AVAP® lignin. Certain embodiments provide a lignin-based enzymatic hydrolysis enhancer comprising AVAP® lignin and lignosulfonates. In some variations, a process for producing a lignin-based enzymatic hydrolysis enhancer comprises fractionating biomass with an acid, a solvent for lignin, and water, to generate cellulose-rich solids and a liquid containing hemicellulose and lignin; recovering the lignin; and generating a lignin-based enzymatic hydrolysis enhancer comprising the lignin. Surprisingly, the lignin-based enzymatic hydrolysis enhancer is experimentally able to enhance glucose yields by 10% or more.

Библиографические данные: JP2016094540 (A) — 2016-05-26

METHOD FOR PRODUCING THERMOPLASTIC RESIN COMPOSITION

Ссылка на эту страницу	JP2016094540 (A) - METHOD FOR PRODUCING THERMOPLASTIC RESIN COMPOSITION
Изобретатель(и):	ENDO TAKASHI; IWAMOTO SHINICHIRO; IMAI TAKAAKI ±
Заявитель(и):	NAT INST ADVANCED IND SCIENCE & TECH; DAIO SEISHI KK ±
Индекс(ы) по классификации:	- международной (МПК): C08B15/08 ; C08J3/205 ; C08L101/00 ; C08L23/12 ; C08L97/00 - cooperative:
Номер заявки:	JP20140231404 20141114 Global Dossier
Номера приоритетных документов:	JP20140231404 20141114

Реферат документа JP2016094540 (A)

PROBLEM TO BE SOLVED: To provide a method for producing a thermoplastic resin composition that is relatively inexpensive, does not cause problems such as thermal recycling and solvent treatment, and has high strength.SOLUTION: The present invention provides a method for producing a thermoplastic resin composition (S), in which: pulp fiber comprising lignin is atomized (20) to obtain cellulose nanofiber; and dispersion liquid (C) of the cellulose nanofiber and low-melting thermoplastic resin (Rx) are dried (30x) at a temperature for melting the low-melting thermoplastic resin (Rx) or higher, primary-kneaded (40x) at 90-130°C, and added with compatibilizer Rz, to make the thermoplastic resin composition (S).SELECTED DRAWING: Figure 1

Библиографические данные: WO2016080469 (A1) — 2016-05-26

LIGNIN RESIN COMPOSITION, CURED OBJECT, AND MOLDED OBJECT

Ссылка на эту страницу	WO2016080469 (A1) - LIGNIN RESIN COMPOSITION, CURED OBJECT, AND MOLDED OBJECT
Изобретатель(и):	[JP]; NAKAGAWA HIROSHIGE [JP]; MATSUMOTO MITSUTAKA [JP] MURAI TAKETOSHI ±
Заявитель(и):	[JP] SUMITOMO BAKELITE CO ±
Индекс(ы) по классификации:	- международной (МПК): C08G8/24 ; C08L61/10 ; C08L97/00 - cooperative: C08G8/24 ; C08L97/00
Номер заявки:	WO2015JP82467 20151118 Global Dossier
Номера приоритетных документов:	JP20140235142 20141120

Реферат документа WO2016080469 (A1)

Provided is a lignin resin composition which comprises a lignin derivative having a weight-average molecular weight of 500-4,000 and a phenolic novolak resin having a weight-average molecular weight of 1,000-3,000, the content of the lignin derivative being not higher than the content of the phenolic novolak resin. In particular, lignin-resin-composition cured objects (molded objects) obtained by melt-mixing the lignin resin composition, adding hexamethylenetetramine to this mixture, and heating the resultant mixture have high bending strength. The lignin resin composition is utilizable as a thermosetting resin that is a phenolic-resin substitute.

Библиографические данные: US2016137832 (A1) — 2016-05-19

FIBER REINFORCED COMPOSITE

Ссылка на эту страницу	US2016137832 (A1) - FIBER REINFORCED COMPOSITE
Изобретатель(и):	[FI]; VALKONEN SANNA BAASKE [DE]; MATTHIAS MEHLHASE [DE]; SABRINA KLEIN [DE]; ROLAND BIESALSKI [DE]; MARKUS REHAHN [DE]; MATTHIAS DUETSCH [DE]; MICHAEL RINGENA [DE] OKKO ±
Заявитель(и):	[FI] UPM KYMMENE CORP ±
Индекс(ы) по классификации:	- международной (МПК): C08K7/14 ; C08L63/00 ; C08L97/02 - cooperative: C08H6/00 ; C08K7/14 ; C08L63/00 ; C08L97/005 ; C08L97/02 ; C08L2205/02 далее
Номер заявки:	US201414890068 20140515 Global Dossier
Номера	FI20130005528 20130517 ; WO2014FI50369 20140515

приоритетных
документов:

Также опубликовано, [US9580593 \(B2\)](#) [WO2014184444 \(A1\)](#) [UY35569 \(A\)](#) [JP2016517913 \(A\)](#)
как: [JP6010256 \(B2\)](#) [далее](#)

Реферат документа US2016137832 (A1)

The present invention relates to a fiber reinforced composite comprising a reinforcing constituent of fibers embedded in a resin matrix, wherein the resin matrix comprises epoxy resin crosslinked with aminated lignin. The invention further relates to a method for the production of a fiber reinforced composite.

Библиографические данные: JP2016069574 (A) — 2016-05-09

RESIN COMPOSITION FOR VIBRATION CONTROL

Ссылка на эту страницу	JP2016069574 (A) - RESIN COMPOSITION FOR VIBRATION CONTROL
Изобретатель(и):	MIYAWAKI YUKIHIRO ±
Заявитель(и):	NIPPON CATALYTIC CHEM IND ±
Индекс(ы) по классификации:	- международной (МПК): C08L97/00 ; C09K3/00 ; F16F15/02 - cooperative: C08L97/00 ; C09K3/00 ; F16F15/02
Номер заявки:	JP20140202238 20140930 Global Dossier
Номера приоритетных документов:	JP20140202238 20140930
Также опубликовано, как:	WO2016052516 (A1)

Реферат документа JP2016069574 (A)

PROBLEM TO BE SOLVED: To provide a compound for vibration control which can inexpensively obtain a vibration control material capable of exhibiting excellent vibration property over a wide temperature area, and also excellent in appearance.SOLUTION: The resin composition for vibration control includes lignin and/or lignin derivative.SELECTED DRAWING: None

Библиографические данные: JP2016069513 (A) — 2016-05-09

RUBBER COMPOSITION AND MOLDED BODY

Ссылка на эту страницу	JP2016069513 (A) - RUBBER COMPOSITION AND MOLDED BODY
Изобретатель(и):	GOTO AKIHIRO; KOFUNE MIKA; NAKAMURA YUKI; MARUYAMA TETSUSHI ±
Заявитель(и):	HITACHI CHEMICAL CO LTD ±
Индекс(ы) по классификации:	- международной (МПК): C07G1/00 ; C08H7/00 ; C08K3/22 ; C08K5/07 ; C08K5/09 ; C08L21/00 ; C08L97/00 - cooperative:
Номер заявки:	JP20140200196 20140930 Global Dossier
Номера приоритетных документов:	JP20140200196 20140930

Реферат документа JP2016069513 (A)

PROBLEM TO BE SOLVED: To provide a rubber composition capable of using lignin derived from plant as raw material from the point of view of reducing environmental loads, capable of being melting mixing with a rubber and a curing reaction in the rubber and excellent in processability and moldability, and a molded body using the composition.SOLUTION: There is provided a rubber composition containing lignin which is derived from plant raw material and has weight average molecular weight of 100 to 2,000 and is soluble to an organic solvent and a rubber.SELECTED DRAWING: None

Библиографические данные: JP2016060749 (A) — 2016-04-25

LIGNIN DERIVATIVE FOR RUBBER REINFORCEMENT, LIGNIN RESIN COMPOSITION AND RUBBER COMPOSITION

Ссылка на эту страницу [JP2016060749 \(A\) - LIGNIN DERIVATIVE FOR RUBBER REINFORCEMENT, LIGNIN RESIN COMPOSITION AND RUBBER COMPOSITION](#)

Изобретатель(и): WATANABE MASAYUKI; NURIKI YUTAKA; TSUJI SHIHO; MIYAWAKI SHOICHI; MURAI TAKETOSHI ±

Заявитель(и): JUJO PAPER CO LTD; SUMITOMO BAKELITE CO ±

Индекс(ы) по классификации: - международной (МПК): [C08L21/00](#); [C08L61/06](#); [C08L97/00](#)
- cooperative:

Номер заявки: JP20140186847 20140912 [Global Dossier](#)

Номера приоритетных документов: JP20140186847 20140912

Реферат документа JP2016060749 (A)

PROBLEM TO BE SOLVED: To provide a lignin derivative for rubber reinforcement capable of adding excellent elastic modulus and tensile property, a rubber composition having good balance of rubber elastic modulus and hysteresis loss property and a lignin resin composition capable of manufacturing the rubber composition.SOLUTION: The lignin derivative for rubber reinforcement can exhibit functions as a reinforcement agent by adding it to a rubber composition and contains sulfur of 0.05 mass% or more. One obtained by a biomass digestion process using an agent containing sulfur is preferably used for such lignin derivative for rubber reinforcement. Also the biomass digestion process is preferably for example a craft digestion process and an alkali solution containing for example sodium sulfide, calcium carbonate and sodium hydroxide is used as the agent for this.SELECTED DRAWING: None

Библиографические данные: JP2016060813 (A) — 2016-04-25

THERMOSETTING RESIN COMPOSITION

Ссылка на эту страницу [JP2016060813 \(A\) - THERMOSETTING RESIN COMPOSITION](#)

Изобретатель(и): YAMAOKA SHINOBU; KOYAMA HIROTO; MASUDA TAKAO; TAKO TERUFUSA ±

Заявитель(и): IDEMITSU KOSAN CO; UNIV HOKKAIDO ±

Индекс(ы) по классификации: - международной (МПК): [C08G18/64](#); [C08G59/40](#); [C08K5/17](#); [C08L61/04](#); [C08L97/00](#)
- cooperative: [C08K5/17](#); [C08K5/29](#); [C08L61/04](#); [C08L63/00](#);

[C08L97/00](#)

Номер заявки: JP20140189287 20140917 [Global Dossier](#)
Номера приоритетных документов: JP20140189287 20140917
Также опубликовано, как: [WO2016043218 \(A1\)](#) [TW201627388 \(A\)](#)

Реферат документа JP2016060813 (A)

PROBLEM TO BE SOLVED: To provide a thermosetting resin composition good in processability, strength and heat resistance by obtaining purified lignin from a lignin-containing material with energy saving at good efficiently and using the purified lignin.**SOLUTION:** The thermosetting resin composition containing purified lignin obtained by adding lignin obtained by removing alcohol from an alcohol phase separated at a temperature which a first solvent is two phase separated after treating herbaceous biomass as a raw material under following conditions in the first solvent which is a mixed solvent of water and at least one kind of alcohol selected from aliphatic alcohol having 4 to 8 carbon atoms to a second solvent which is an organic solvent excluding alcohol contained in the first solvent or a mixed solvent of the organic solvent and water and removing the second solvent from a solution ;which the lignin is dissolved in the second solvent, and a lignin reactive compound having a functional group reactive with the purified lignin. Condition A: Feeding concentration of the war material to the mixed solvent is 1 mass% to 50 mass%. Condition B: The treatment temperature is 100 DEG C to 350 DEG C. Condition C: The treatment time is 0.1 hours to 10 hours.**SELECTED DRAWING:** None

Библиографические данные: JP2016060750 (A) — 2016-04-25

LIGNIN DERIVATIVE FOR RUBBER REINFORCEMENT, LIGNIN RESIN COMPOSITION AND RUBBER COMPOSITION

Ссылка на эту страницу [JP2016060750 \(A\) - LIGNIN DERIVATIVE FOR RUBBER REINFORCEMENT, LIGNIN RESIN COMPOSITION AND RUBBER COMPOSITION](#)

Изобретатель(и): WATANABE MASAYUKI; NURIKI YUTAKA; TSUJI SHIHO; MIYAWAKI SHOICHI; MURAI TAKETOSHI ±

Заявитель(и): JUJO PAPER CO LTD; SUMITOMO BAKELITE CO ±

Индекс(ы) по классификации: - международной (МПК): [C08L21/00](#); [C08L61/06](#); [C08L97/00](#)
- cooperative:

Номер заявки: JP20140186848 20140912 [Global Dossier](#)

Номера приоритетных документов: JP20140186848 20140912

Реферат документа JP2016060750 (A)

PROBLEM TO BE SOLVED: To provide a lignin derivative for rubber reinforcement capable of adding excellent elastic modulus and tensile property, a rubber composition having good balance of rubber elastic modulus and hysteresis loss property and a lignin resin composition capable of manufacturing the rubber composition.**SOLUTION:** The lignin derivative for rubber reinforcement can exhibit functions as a reinforcement agent by adding it to a rubber composition and is obtained by a biomass digestion process using an agent containing no sulfur. The biomass digestion process is preferably an alkali digestion process and for example an alkali solution mainly containing sodium hydroxide is used as the agent for this.**SELECTED DRAWING:** None

Chitosan and cellulose compound plastic material and preparation method thereof

Ссылка на эту страницу	CN105504356 (A) - Chitosan and cellulose compound plastic material and preparation method thereof	
Изобретатель(и):	PENG XIAORU ±	
Заявитель(и):	SUZHOU FAST INFORMATION TECH CO LTD ±	
Индекс(ы) по классификации:	- международной (МПК): C08K13/02 ; C08K3/22 ; C08K5/05 ; C08K5/053 ; C08K5/20 ; C08L1/02 ; C08L31/04 ; C08L5/08 ; C08L97/00 - cooperative:	
Номер заявки:	CN2016130021 20160118	Global Dossier
Номера приоритетных документов:	CN2016130021 20160118	

Реферат документа CN105504356 (A)

The invention relates to a chitosan and cellulose compound plastic material and a preparation method thereof. The method comprises the following steps (1) respectively weighing chitosan, cellulose, lignin, polyvinyl acetate, sodium hydroxide, carbamide, sodium isoascorbate, propofol, glycerin, sodium dehydroacetate, isomaltitol, sodium oxamate and water according to weight parts, mixing the components, and stirring for 3-5 minutes by a magnetic stirrer; (2) centrifuging the solution; (3) slowly pouring the solution into a glass mold, regenerating with ethanol, and rinsing to obtain gel; and (4) clamping the gel between stainless steel sheets, and performing hot press drying at 90-120 DEG C while setting the initial pressure to be about 0.1MPa and finishing pressure to be about 60MPa. The prepared chitosan and cellulose compound plastic material can be completely degraded with high degrading speed, and has good elasticity and toughness.

Halogen-free flame retardant modified industrial lignin of wood-plastic section as well as preparation method and application

Ссылка на эту страницу	CN105504309 (A) - Halogen-free flame retardant modified industrial lignin of wood-plastic section as well as preparation method and application	
Изобретатель(и):	LIU LINA; SONG PINGAN; FU SHENYUAN; YU YOUMING ±	
Заявитель(и):	UNIV ZHEJIANG A&F ±	
Индекс(ы) по классификации:	- международной (МПК): C08H7/00 ; C08L23/12 ; C08L97/00 - cooperative:	
Номер заявки:	CN201511030593 20151231	Global Dossier
Номера приоритетных документов:	CN201511030593 20151231	

Реферат документа CN105504309 (A)

The invention discloses halogen-free flame retardant modified industrial lignin of a wood-plastic section as well as a preparation method and application. The material comprises the following major components in parts by weight: 60-75 parts of industrial lignin, 20-28 parts of

paraformaldehyde, 5-10 parts of polyethyleneimine, 2-5 parts of diethyl phosphite and 3-5 parts of metal complex. The preparation method comprises the following steps: dissolving industrial lignin in alkali liquor, adding the paraformaldehyde and polyethyleneimine, and keeping reactions for first modification; adjusting the pH to acidity and filtering and precipitating; sequentially adding the paraformaldehyde, diethyl phosphite and a sodium hydroxide solution, and keeping reactions for second modification; adjusting the pH to acidity; adding the metal complex solution; and filtering, drying and grinding to fine powder to obtain the halogen-free flame retardant modified industrial lignin. In the invention, the lignin in industrial paper pulp wastewater is used as a raw material, and the substances are added for chemical modification to obtain the modified industrial lignin; and the modified industrial lignin integrates nitrogen, phosphorous and metal complex and can be applied to flame retardance of the wood-plastic section.

Библиографические данные: CN105452345 (A) — 2016-03-30

Novel lignin materials containing compositions

Ссылка на эту страницу [CN105452345 \(A\) - Novel lignin materials containing compositions](#)

Изобретатель(и): STREFFER FRIEDRICH ±
Заявитель(и): MAXBIOGAS GMBH ±
Индекс(ы) по классификации: - международной (МПК): [C05F5/00](#); [C08H8/00](#); [C08K3/00](#); [C08L97/00](#)
- cooperative: [C05B17/00](#); [C05C11/00](#); [C05D1/00](#); [C05D3/00](#); [C05D5/00](#); [C05D9/00](#); [C05F11/00](#); [C05F7/02](#); [C08H8/00](#); [C08L97/005](#)
Номер заявки: CN2013878826 20131210 [Global Dossier](#)
Номера приоритетных документов: [WO2013EP76056 20131210](#) ; [EP20130179394 20130806](#)
Также опубликовано, как: [EP2835392 \(A1\)](#) [US2016185675 \(A1\)](#) [WO2015018464 \(A1\)](#) [EP3030600 \(A1\)](#) [CA2918897 \(A1\)](#)

Реферат документа CN105452345 (A)

The present invention primarily relates to a preparation comprising or consisting of 40-99.9 wt.% of lignin, preferably unmodified lignin, 0.1 - 50 wt.% of minerals, preferably 0.1-30 wt.%, 0-25 wt.% of one or more mono- and oligomeric carbohydrates, preferably 0.1-20 wt.%, and 0-15 wt.% of one or more solvents, in particular water, preferably 0.1 - 4 wt.-%. Furthermore, the present invention relates to a fertilizer comprising or consisting of such a preparation and to the use of such a preparation as fertilizer, as ingredient for a fertilizer or for producing a fertilizer.

Библиографические данные: CN105440506 (A) — 2016-03-30

Method for preparing hot-pressing rubber of composite conveying belt

Ссылка на эту страницу [CN105440506 \(A\) - Method for preparing hot-pressing rubber of composite conveying belt](#)

Изобретатель(и): CAO PENGFEI; LI HONG; GUAN WENWU ±
Заявитель(и): ANHUI JIESHOU YUNLONG FOOD MACHINE ENG CO LTD ±
Индекс(ы) по классификации: - международной (МПК): [C08H7/00](#); [C08K3/22](#); [C08L11/00](#); [C08L27/12](#); [C08L7/02](#); [C08L97/00](#)
- cooperative:
Номер заявки: CN20151881694 20151130 [Global Dossier](#)
Номера приоритетных CN20151881694 20151130

документов:

Реферат документа CN105440506 (A)

Provided is a method for preparing rubber used in an interlayer of a multilayer composite conveying belt. Nanometer tin dioxide powder is taken as reinforcing and heat-resistant packing of fluororubber. With the mass of fluorine premixed rubber as 100 parts, the mass parts of nanometer tin dioxide are 3-40 parts, the fluorine premixed rubber and the nanometer tin dioxide are mixed, batched off and placed after the mixing, natural latex is selected, water is added to undergo stirring for 3-4 hours and undergo drying for 5-6 hours, neoprene, transparent zinc oxide, active magnesium oxide, an anti-aging agent and water are added to undergo stirring for 1-2 hours, alkali lignin is added to undergo heating for 30 minutes at the temperature of 70-80 DEG C and cause the mixture to be cooled to 40-45 DEG C, an enhancer is added to be heated continuously to be 60 DEG C, and the mixture is extruded by an extruding machine to achieve cooling molding. The rubber prepared by the method is placed in a middle layer, the high temperature resistance coefficient of the belt is enhanced, and the intensity of the stretch resistance is enhanced after hot pressing. In addition, the rubber is mixed with, for example, traditional Chinese medicine, odor caused by friction is mixed with the medicine, and the rubber is not toxic, is environmentally friendly and effectively protects physical and psychological health of workers.

Библиографические данные: CN105419163 (A) — 2016-03-23

Novel lignin composite material

Ссылка на эту страницу	CN105419163 (A) - Novel lignin composite material
Изобретатель(и):	YANG LEI ±
Заявитель(и):	HEFEI ZHONGNONG BIOLOGICAL TECH CO LTD ±
Индекс(ы) по классификации:	- международной (МПК): C08K13/02 ; C08K3/34 ; C08K5/053 ; C08K5/098 ; C08L27/06 ; C08L97/00 - cooperative:
Номер заявки:	CN20151968483 20151222 Global Dossier
Номера приоритетных документов:	CN20151968483 20151222

Реферат документа CN105419163 (A)

The invention discloses a novel lignin composite material. The novel lignin composite material is prepared from the following materials in weight percentage: 15 to 23 percent of calcium lignin sulfonate, 10 to 15 percent of composite calcium and zinc stabilizer, 18 to 30 percent of talc powder, 20 to 35 percent of PVC (Poly Vinyl Chloride), 14 to 22 percent of plasticizer and 16 to 32 percent of antioxidant. The novel lignin composite material disclosed by the invention has the advantages of good anti-ultraviolet capacity, high strength, high rigidity, high impact resistance, high flame retardancy, high degradability and the like, can be widely used in multiple fields of automobiles, aviation, buildings, electronics and electrical appliances and the like and has a great social benefit and a great economic benefit.

Библиографические данные: WO2016039213 (A1) — 2016-03-17

LIGNIN DERIVATIVE, LIGNIN RESIN COMPOSITION, RUBBER COMPOSITION, AND MOLDING MATERIAL

Ссылка на эту страницу [WO2016039213 \(A1\) - LIGNIN DERIVATIVE, LIGNIN RESIN COMPOSITION, RUBBER COMPOSITION, AND MOLDING MATERIAL](#)

Изобретатель(и): [JP]; MURAI TAKETOSHI [JP]; NAKAGAWA HIROSHIGE [JP] MATSUMOTO MITSUTAKA ±

Заявитель(и): [JP] SUMITOMO BAKELITE CO ±

Индекс(ы) по классификации: - международной (МПК): [C08H7/00](#); [C08L21/00](#); [C08L97/00](#)
- cooperative: [C08L21/00](#); [C08L97/00](#)

Номер заявки: WO2015JP74766 20150831 [Global Dossier](#)

Номера приоритетных документов: [JP20140186031 20140912](#) ; [JP20140186849 20140912](#)

Реферат документа WO2016039213 (A1)

Provided is a lignin derivative extracted from biomass, the lignin derivative being for reinforcing rubbers or for use in molding materials. The lignin derivative is characterized by having a number-average molecular weight of 300-2,000 and comprising components soluble in polar organic solvents, in an amount of 80 mass% or larger. Incorporation of such lignin derivative makes it possible to obtain a lignin resin composition, rubber composition, or molding material which is excellent in terms of low-hysteresis-loss characteristics, elastic modulus, or tensile property. By using heat-fusible components as the soluble components, said properties of the lignin resin composition, rubber composition, or molding material can be rendered even better.

Библиографические данные: TW201546162 (A) — 2015-12-16

Resin composition and production method thereof

Ссылка на эту страницу [TW201546162 \(A\) - Resin composition and production method thereof](#)

Изобретатель(и): [JP]; OHASHI YASUNORI ZHOU [CN]; LIN YAMAMOTO [JP]; MAIKO KIMURA [JP]; HAJIME OTSUKA [JP]; KEIKO MATSUMOTO [JP] AKIHIRO ±

Заявитель(и): [JP]; HARIMA CHEMICALS INC [JP] OSAKA MUNICIPAL TECH RES INST ±

Индекс(ы) по классификации: - международной (МПК): [C08H7/00](#); [C08J3/00](#); [C08L61/06](#); [C08L97/00](#)
- cooperative: [C08L101/00](#); [C08L61/06](#); [C08L97/00](#)

Номер заявки: TW20150113202 20150424

Номера приоритетных документов: [JP20140106660 20140523](#)

Также опубликовано, как: [WO2015178103 \(A1\)](#)

Реферат документа TW201546162 (A)

A resin composition contains a thermosetting resin and a lignin modified with a carboxylic acid.

Библиографические данные: WO2016027537 (A1) — 2016-02-25

RESIN COMPOSITION AND MOLDED OBJECT

Ссылка на эту страницу	WO2016027537 (A1) - RESIN COMPOSITION AND MOLDED OBJECT
Изобретатель(и):	[JP]; TSUDA YOSHIHIRO [JP]; NAKAMURA YUKI KOYAMA [JP]; NAOYUKI SHOJI [JP] IKUKO ±
Заявитель(и):	[JP] HITACHI CHEMICAL CO LTD ±
Индекс(ы) по классификации:	- международной (МПК): C08K7/02 ; C08L61/10 ; C08L97/00 - cooperative: C08K7/02 ; C08L97/00
Номер заявки:	WO2015JP64808 20150522 Global Dossier
Номера приоритетных документов:	JP20140166092 20140818

Реферат документа WO2016027537 (A1)

A resin composition which comprises lignin, a phenolic novolac resin, a fibrous filler, and a hardener, wherein the mass ratio of the lignin to the phenolic novolac resin is 20/80 to 52/48, and a molded object obtained by molding the resin composition.

Библиографические данные: PH12015502077 (A1) — 2016-01-18

HIGH PURITY LIGNIN, LIGNIN COMPOSITIONS, AND HIGHER STRUCTURED LIGNIN

Ссылка на эту страницу	PH12015502077 (A1) - HIGH PURITY LIGNIN, LIGNIN COMPOSITIONS, AND HIGHER STRUCTURED LIGNIN
Изобретатель(и):	[US]; CAPANEMA EWELLYN A [US] MIKHAIL BALAKSHIN ±
Заявитель(и):	[US] RENMATIX INC ±
Индекс(ы) по классификации:	- международной (МПК): C08H7/00 ; C08L97/00 - cooperative: C07G1/00
Номер заявки:	PH12015502077 20150911
Номера приоритетных документов:	US201361802087P 20130315 ; WO2014US29284 20140314
Также опубликовано, как:	US2014275501 (A1) WO2014144746 (A1) KR20150128986 (A) JP2016512285 (A) EP2970595 (A1) далее

Реферат документа PH12015502077 (A1)

Disclosed are lignins and lignin compositions having high purity. Also disclosed are lignins having unique structural characteristics, including less structural degradation than conventional lignins.

Библиографические данные: CN105295358 (A) — 2016-02-03

Ratproof and anti-termite PA-ABS environment-friendly plastic

Ссылка на эту страницу	CN105295358 (A) - Ratproof and anti-termite PA-ABS environment-friendly plastic
Изобретатель(и):	GAO ZHONGQING ±
Заявитель(и):	ZIBO KUAKE PHARMACEUTICAL TECHNOLOGY CO LTD ±
Индекс(ы) по классификации:	- международной (МПК): C08K13/04 ; C08K3/30 ; C08K3/34 ; C08K3/36 ; C08K5/098 ; C08K5/101 ; C08K5/12 ; C08K5/54 ; C08K7/14 ; C08L3/04 ;

[C08L55/02](#); [C08L67/04](#); [C08L77/00](#); [C08L9/00](#); [C08L91/00](#);
[C08L97/00](#)

- cooperative:

Номер заявки: CN20151879380 20151205 [Global Dossier](#)
Номера приоритетных документов: CN20151879380 20151205

Реферат документа CN105295358 (A)

The invention discloses ratproof and anti-termite PA-ABS environment-friendly plastic. The ratproof and anti-termite PA-ABS environment-friendly plastic is prepared from the following raw materials in parts by weight: 70-80 parts of polyamide, 30-40 parts of acrylonitrile-butadiene-styrene, 18-22 parts of polycaprolactone, 25-30 parts of modified poly-beta-hydroxybutyric acid, 13-18 parts of crosslinked starch, 1.5-1.8 parts of glass fiber, 3-4 parts of lignin, 1.1-1.3 parts of a silane coupling agent, 2-3 parts of methyl parahydroxybenzoate, 1.1-1.6 parts of potassium sorbate, 2-2.2 parts of diisononyl phthalate, 5-7 parts of epoxidized soybean oil butyl ester, 6-8 parts of precipitated barium sulphate, 3-5 parts of zeolite powder, 23-26 parts of nano white carbon black and 1-1.4 parts of antioxidant. The ratproof and anti-termite PA-ABS environment-friendly plastic is good in mechanical properties, excellent in tensile strength and elongation at break and high in impact strength, has excellent heat ageing property, is suitable for use in an extremely high temperature environment and can not produce irreversible harm to the environment.

Библиографические данные: CN105295213 (A) — 2016-02-03

Anti-abrasion nano composite rubber for vehicle and preparation method of anti-abrasion nano composite rubber

Ссылка на эту страницу [CN105295213 \(A\) - Anti-abrasion nano composite rubber for vehicle and preparation method of anti-abrasion nano composite rubber](#)

Изобретатель(и): ZHOU BO ±

Заявитель(и): SUZHOU GOODTIME TECHNOLOGY DEV CO LTD ±

Индекс(ы) по классификации: - международной (МПК): [C08K13/02](#); [C08K3/22](#); [C08K3/26](#); [C08K3/36](#); [C08K5/09](#); [C08K5/18](#); [C08L23/16](#); [C08L23/34](#); [C08L97/00](#)

- cooperative:

Номер заявки: CN20151575089 20150911 [Global Dossier](#)

Номера приоритетных документов: CN20151575089 20150911

Реферат документа CN105295213 (A)

The invention discloses anti-abrasion nano composite rubber for a vehicle and a preparation method of the anti-abrasion nano composite rubber. The anti-abrasion nano composite rubber is prepared from the following components: 12 to 25 parts of chlorosulfonated polyethylene rubber, 10 to 15 parts of ethylene propylene terpolymer, 10 to 26 parts of lignin, 12 to 20 parts of nano calcium carbonate, 10 to 20 parts of nano white carbon black, 5 to 8 parts of an anti-aging agent 4020, 6 to 10 parts of an accelerant NS, 1 to 5 parts of stearic acid and 3 to 6 parts of zinc oxide. Compared with the prior art, the anti-abrasion nano composite rubber disclosed by the invention has the advantages that by mixing of lignin with chlorosulfonated polyethylene rubber and

ethylene propylene terpolymer, the mechanical properties such as the friction resistance performance and the tearing strength of rubber are improved; meanwhile, in the mixing method, due to lignin, the vulcanization time is shortened, and the Mooney viscosity is improved.

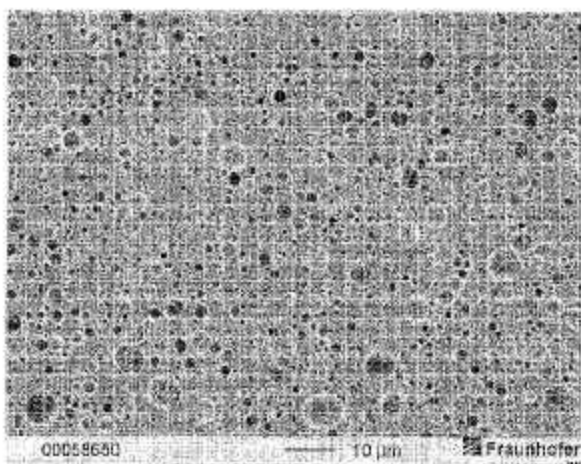
Библиографические данные: US2016002466 (A1) — 2016-01-07

MICROSTRUCTURED COMPOSITE MATERIAL, METHOD FOR THE PRODUCTION THEREOF, MOULDED ARTICLES MADE THEREOF AND ALSO PURPOSES OF USE

Ссылка на эту страницу	US2016002466 (A1) - MICROSTRUCTURED COMPOSITE MATERIAL, METHOD FOR THE PRODUCTION THEREOF, MOULDED ARTICLES MADE THEREOF AND ALSO PURPOSES OF USE
Изобретатель(и):	[DE]; ERDMANN JENS ENGELMANN [DE]; GUNNAR GANSTER [DE] JOHANNES ±
Заявитель(и):	[DE] FRAUNHOFER GES ZUR FÖRDERUNG DER ANGEWANDTEN FORSCHUNG E V ±
Индекс(ы) по классификации:	- международной (МПК): B29C43/00 ; B29C43/24 ; B29C45/00 ; B29C47/00 ; B29C47/06 ; B29C49/00 ; B29C51/00 ; C08L23/06 ; C08L97/00 B29C43/003 ; B29C43/24 ; B29C45/0001 ; B29C45/0013 ; B29C47/0004 ; B29C47/0059 ; B29C47/06 ; B29C49/0005 ; B29C49/0015 ; B29C51/002 ; B29C70/58 ; C08G18/6492 ; C08J5/045 ; - cooperative: C08L23/06 ; C08L97/005 ; B29K2023/04 ; B29K2105/16 ; B29K2511/00 ; B29L2031/30 ; B29L2031/3055 ; B29L2031/34 ; B29L2031/712 ; B29L2031/762 ; C08J2323/06 ; C08L2205/03 ; C08L2205/22
Номер заявки:	US201414766942 20140109 Global Dossier
Номера приоритетных документов:	DE20131002574 20130211 ; WO2014EP50256 20140109
Также опубликовано, как:	WO2014121967 (A1) EP2953997 (A1) DE102013002574 (A1) CA2900596 (A1)

Реферат документа US2016002466 (A1)

Figur 2a



Microstructured composite material, comprising a matrix, comprising at least one sort of a thermoplastic plastic material and, distributed homogenously in the matrix, at least one sort of

lignin and/or at least one lignin derivative, characterised in that the at least one sort of lignin and/or at least one lignin derivative is present in particulate form and the cross-sectional area of the particles has a round, approximately round, circular, approximately circular, elliptical or approximately elliptical geometry.

Библиографические данные: CN105219102 (A) — 2016-01-06

Production process for environment-friendly plastic bags

Ссылка на эту страницу	CN105219102 (A) - Production process for environment-friendly plastic bags
Изобретатель(и):	HE JINBAO; CHU CHENGYOU ±
Заявитель(и):	HUAINING BAOYOU INDUSTRY AND TRADE CO LTD ±
Индекс(ы) по классификации:	- международной (МПК): C08G81/02 ; C08L23/00 ; C08L61/06 ; C08L87/00 ; C08L97/00 - cooperative:
Номер заявки:	CN20141256032 20140611 Global Dossier
Номера приоритетных документов:	CN20141256032 20140611

Реферат документа CN105219102 (A)

The invention discloses a production process for environment-friendly plastic bags. The production process comprises the following steps: (1) heating water, adding starch into the heated water, carrying out fully-stirring dissolving so as to obtain a colloidal solution, adjusting the pH of the colloidal solution to be 5-6, adding polyethylene into the colloidal solution, carrying out fully-stirring reaction, so as to obtain polyethylene grafted starch; (2) putting the polyethylene grafted starch, phenol-formaldehyde resin, polyolefin resin, lignin and azodiisobutyronitrile in a stirrer, and carrying out fully-stirring mixing; and (3) putting the obtained mixture in a film blowing machine, carrying out film blowing and carrying out bag making, thereby obtaining the environment-friendly plastic bags. According to the production process, the polypropylene grafted starch serves as a main raw material, and raw materials, liable to photolysis, such as polyolefin resin are added in a coordination manner, so that the plastic bags are environment-friendly and degradable, and environmental hazards are reduced; lignin and phenol-formaldehyde resin are added, so that the produced plastic bags are relatively high in strength and can be reused repeatedly, discarding is reduced, and meanwhile, the environmental hazards are reduced; and the preparation method is simple and easy in operation and relatively low in production cost.

Библиографические данные: CN105218914 (A) — 2016-01-06

Anti-aging long-life plastic woven bag and preparation method thereof

Ссылка на эту страницу	CN105218914 (A) - Anti-aging long-life plastic woven bag and preparation method thereof
Изобретатель(и):	WANG MIN ±
Заявитель(и):	JIESHOU SHENGCHANG PLASTIC CO LTD ±
Индекс(ы) по классификации:	- международной (МПК): C08K13/04 ; C08K3/22 ; C08K3/26 ; C08K5/098 ; C08K5/11 ; C08K7/06 ; C08L23/00 ; C08L23/28 ; C08L75/04 ; C08L97/00 - cooperative:
Номер заявки:	CN20151601000 20150918 Global Dossier
Номера приоритетных документов:	CN20151601000 20150918

документов:

Реферат документа CN105218914 (A)

An anti-aging long-life plastic woven bag is characterized by including: by weight, waste polyolefin plastic 40%, waste polyurethane 40%, nano-silica 2%, plasticizer 5%, chlorinated PVC resin 5%, anti-oxidant 0.5%, antiager 0.5%, proanthocyanidins 0.5%, stabilizer 0.5%, tributyl citrate 0.5%, sun-screening agent 0.5%, vital gluten 0.5%, tert-butyl mercaptan 1%, ash calcium powder 1%, lignin 1%, barium stearate 1% and carbon fiber 0.5%. According to the invention, the deficiencies in the prior art are overcome, and the finished product prepared from waste polyolefin plastic, waste polyurethane, nano-silica, ash calcium powder, lignin and the like has good anti-aging performance and long service life.

Библиографические данные: CN105199382 (A) — 2015-12-30

Polyaniline-based composite material and preparation method thereof

Ссылка на эту страницу [CN105199382 \(A\) - Polyaniline-based composite material and preparation method thereof](#)

Изобретатель(и): WENG YUFEI; LI LI NAN ±

Заявитель(и): SUZHOU KUANWEN ELECTRONIC SCIENCE & TECHNOLOGY CO LTD ±

Индекс(ы) по классификации: - международной (МПК): [C08G73/02](#); [C08K13/02](#); [C08K3/04](#); [C08K3/08](#); [C08K3/22](#); [C08K3/34](#); [C08K5/42](#); [C08L39/06](#); [C08L75/04](#); [C08L79/02](#); [C08L97/00](#)

- cooperative:

Номер заявки: CN20151654965 20151012 [Global Dossier](#)

Номера приоритетных документов: CN20151654965 20151012

Реферат документа CN105199382 (A)

The invention discloses a polyaniline-based composite material. The polyaniline-based composite material comprises the raw materials in parts by weight: 30-50 parts of aniline monomers, 8-15 parts of polyurethane resin, 100-200 parts of hydrochloric acid, 3-9 parts of carbon black, 1-6 parts of zinc oxide powder, 0.5-4 parts of polyvinylpyrrolidone, 10-30 parts of petroleum sodium sulfonate, 5-15 parts of antimony fluoride sulfonate, 4-16 parts of dioctyl sulfosuccinate, 10-20 parts of hydrogen peroxide, 1-6 parts of iron powder, 4-17 parts of kaolin and 1-8 parts of lignin. The invention further discloses a preparation method of the polyaniline-based composite material. The polyaniline-based composite material prepared by virtue of the preparation method has good conductivity and bending strength, so that the application range of the composite material can be broadened; besides, the adopted process is simple and is relatively applicable to process production application.

Библиографические данные: CN105176056 (A) — 2015-12-23

Corrosion-resistant fracture-prevention plastic woven bag and preparation method thereof

Ссылка на эту страницу [CN105176056 \(A\) - Corrosion-resistant fracture-prevention plastic woven bag and preparation method thereof](#)

Изобретатель(и): WANG MIN ±

Заявитель(и): JIESHOU SHENGCHANG PLASTIC CO LTD ±

Индекс(ы) по классификации: - международной (МПК): [C08K13/04](#); [C08K3/14](#); [C08K3/34](#); [C08K5/098](#); [C08K5/11](#); [C08K5/37](#); [C08K7/06](#); [C08L23/00](#); [C08L23/06](#); [C08L23/08](#); [C08L75/04](#); [C08L97/00](#); [D01F1/10](#); [D01F8/06](#); [D01F8/16](#)

- cooperative:

Номер заявки: CN20151601036 20150918 [Global Dossier](#)

Номера приоритетных документов: CN20151601036 20150918

Реферат документа CN105176056 (A)

A corrosion-resistant fracture-prevention plastic woven bag is characterized by being prepared from, by weight, 40% of waste polyolefin plastic, 40% of polyurethane waste materials, 2% of nano silicon carbide, 5% of metallocene polyethylene, 5% of linear low-density polyethylene, 0.5% of antioxidants, 0.5% of hindered amine light stabilizers, 0.5% of nano titanium carbide, 0.5% of fire retardants, 0.5% of lubricating agents, 1% of calcium stearate, 0.5% of tributyl citrate, 0.5% of vital gluten, 1% of tert-butyl mercaptan, 1% of ash calcium powder, 1% of lignin, and 0.5% of carbon fibers. According to the corrosion-resistant fracture-prevention plastic woven bag, the formula is simple, the cost is low, the made plastic woven bag has good corrosion resistance, breakage of silk threads can be effectively prevented, and the problem that in the prior art, the working life of a packing bag is short is solved.

Библиографические данные: JP2015224288 (A) — 2015-12-14

CURABLE LIGNIN RESIN COMPOSITION, CURED PRODUCT AND MOLDING

Ссылка на эту страницу [JP2015224288 \(A\) - CURABLE LIGNIN RESIN COMPOSITION, CURED PRODUCT AND MOLDING](#)

Изобретатель(и): NAKAGAWA HIROSHIGE; NAKAMURA KATSUTOSHI; MURAI TAKETOSHI ±

Заявитель(и): SUMITOMO BAKELITE CO ±

Индекс(ы) по классификации: - международной (МПК): [C08K5/01](#); [C08K5/06](#); [C08K5/42](#); [C08L97/00](#)

- cooperative:

Номер заявки: JP20140109686 20140528 [Global Dossier](#)

Номера приоритетных документов: JP20140109686 20140528

Реферат документа JP2015224288 (A)

PROBLEM TO BE SOLVED: To provide a method which enables acquisition of a lignin resin composition obtained from a biomass-extracted lignin derivative as a plant-originated resin and has good moldability and resin characteristics.SOLUTION: A curable lignin resin composition contains a lignin derivative, an acidic curing catalyst and an aromatic compound, and the aromatic compound includes two or more benzyl positions having a proton group. The curable lignin resin composition is excellent in characteristics, including excellent moldability and a low melt viscosity, provides a molding having a high bending strength, and is usable as a substitute for phenol resins.

COMPOSITIONS OF BIOMASS MATERIALS FOR REFINING

Ссылка на эту страницу	US2015361266 (A1) - COMPOSITIONS OF BIOMASS MATERIALS FOR REFINING
Изобретатель(и):	[SE]; SAMEC JOSEPH [SE]; DAHLSTRAND CHRISTIAN [SE] LÖFSTEDT JOAKIM ±
Заявитель(и):	[SE] REN FUEL K2B AB ±
Индекс(ы) по классификации:	- международной (МПК): C08L97/00 ; C09D197/00 ; C10L1/02 ; C10L1/04 - cooperative: C07G1/00 ; C08L97/005 ; C09D197/005 ; C10L1/02 ; C10L1/04 ; C10L2200/0469 ; C10L2200/0476 ; C10L2270/023 ; C10L2270/026 ; Y02E50/13
Номер заявки:	US201414763255 20140124 Global Dossier
Номера приоритетных документов:	US201414763255 20140124 ; SE2013000069 20130125 ; SE20130050240 20130228 ; SE20130050341 20130319 ; SE20130050777 20130626 ; US201361770494P 20130228 ; WO2014SE50090 20140124
Также опубликовано, как:	WO2014116173 (A1) WO2014116173 (A9) SE1650066 (A1) SE1650065 (A1) SE1650064 (A1) далее

Реферат документа US2015361266 (A1)

The present invention relates to a composition and a method for preparing said composition where the composition comprises lignin or lignin derivatives, solvent and a carrier liquid. The composition is suitable for refinery processes.

LIGNIN COMPOSITIONS

Ссылка на эту страницу	WO2016077315 (A1) - LIGNIN COMPOSITIONS
Изобретатель(и):	[US]; COBB MICHAEL W SUNKARA [US]; HARI BABU WILLIAMS [US] SHARLENE RENEE ±
Заявитель(и):	[US] DU PONT ±
Индекс(ы) по классификации:	- международной (МПК): C08G14/04 ; C08J5/18 ; C08J9/00 ; C08L61/00 ; C08L97/00 - cooperative: B32B13/045 ; B32B15/046 ; B32B15/18 ; B32B15/20 ; B32B21/047 ; B32B27/065 ; B32B27/32 ; B32B27/34 ; B32B27/36 ; B32B29/007 ; B32B5/022 ; B32B5/18 ; B32B7/08 ; B32B7/12 ; C08J5/18 ; C08J9/0061 ; C08J9/141 ; C08J9/142 ; C08J9/145 ; C08J9/146 ; C08J9/147 ; C08J9/149 ; C08L61/06 ; C08L97/005 ; B32B2262/02 ; B32B2262/101 ; B32B2266/0214 ; B32B2307/304 ; B32B2307/3065 ; B32B2307/714 ; B32B2419/00 ; B32B2419/06 ; B32B2607/00 ; C08J2203/12 ; C08J2203/14 ; C08J2203/142 ; C08J2203/144 ; C08J2203/162 ; C08J2203/182 ; C08J2205/10 ; C08J2361/06 ; C08J2397/00 ; C08J2461/06 ; C08J2497/00 далее
Номер заявки:	WO2015US59905 20151110 Global Dossier
Номера приоритетных документов:	US201462078498P 20141112

Реферат документа WO2016077315 (A1)

Disclosed herein are lignin-furfuryl alcohol compositions, lignin-furfuryl alcohol-resole (LFR) compositions comprising lignin-furfuryl alcohol composition and phenolic resoles and LFR foams derived from such LFR compositions. Disclosed herein are LFR foams comprising a polymeric phase defining a plurality of open cells and a plurality of closed cells, and a gas phase comprising one or more blowing agents disposed in at least a portion of the plurality of closed cells, wherein the polymeric phase is derived from LFR compositions.

Библиографические данные: CN105038225 (A) — 2015-11-11

Preparation method of high-hardness composite board

Ссылка на эту страницу	CN105038225 (A) - Preparation method of high-hardness composite board	
Изобретатель(и):	DANG BIN ±	
Заявитель(и):	SUZHOU KEMIAO NEW MATERIAL CO LTD ±	
Индекс(ы) по классификации:	- международной (МПК):	C08J3/24 ; C08K3/16 ; C08K3/36 ; C08L5/04 ; C08L5/08 ; C08L79/04 ; C08L91/00 ; C08L97/00
	- cooperative:	
Номер заявки:	CN20151448044 20150728	Global Dossier
Номера приоритетных документов:	CN20151448044 20150728	

Реферат документа CN105038225 (A)

The invention relates to a preparation method of a high-hardness composite board. The preparation method comprises the following steps: uniformly mixing ethoxylated trimethylol propane triacylate, EuCl₃, water with silica sol, stirring for 2 hours at the temperature of 95 DEG C, and carrying out vacuum dehydration to obtain a mixture; sequentially adding tetrazole, cyanate ester resin prepolymer and lignin into the mixture, and stirring for 4 hours at the temperature of 120 DEG C; adding cyano chitosan, linseed oil and sodium alginate, and stirring for 1 hour at the temperature of 110 DEG C; finally, adding an isocyanate curing agent, stirring for 2 hours at the temperature of 130 DEG C, and cooling to obtain a mould pressing material; placing the mould pressing material into a mould, and carrying out hot pressing to obtain the high-hardness composite board. The high-hardness composite board is excellent in mechanical property and high in hardness, and meets the development and application demands of high-hardness composite boards.

Библиографические данные: US2015315439 (A1) — 2015-11-05

BINDER COMPOSITIONS COMPRISING LIGNIN DERIVATIVES

Ссылка на эту страницу	US2015315439 (A1) - BINDER COMPOSITIONS COMPRISING LIGNIN DERIVATIVES	
Изобретатель(и):	[CA] BERLIN ALEX ±	
Заявитель(и):	[CA] FIBRIA INNOVATIONS INC ±	
Индекс(ы) по классификации:	- международной (МПК):	C09J161/06 ; C09J197/00 ; D21J1/04
	- cooperative:	B29C70/12 ; B29C70/34 ; C08G18/4081 ; C08G18/7671 ; C08L97/00 ; C09J161/06 ; C09J175/04 ; C09J197/005 ; D21J1/04 ; B29K2075/00 ; B29K2105/12 ; B29K2311/14 далее

Номер заявки: US201514798396 20150713 [Global Dossier](#)
Номера приоритетных документов: US201514798396 20150713 ; [WO2010CA00800 20100527](#) ; [US201213584651 20120813](#) ; [WO2011CA00182 20110215](#) ; [US20100304745P 20100215](#) ; [US20100304742P 20100215](#)
Также опубликовано, как: [US9505964 \(B2\)](#) [WO2011097719 \(A1\)](#) [US2017044409 \(A1\)](#) [US2013213550 \(A1\)](#) [EP2536798 \(A1\)](#) [далее](#)

Реферат документа US2015315439 (A1)

The present disclosure provides an adhesive composition comprising derivatives of native lignin and an isocyanate-based binder such as methylene diphenyl diisocyanate. The present compositions may further comprise formaldehyde-based resins such as PF, UF, and MF. While not wishing to be bound by theory, it is believed that incorporating derivatives of native lignin in isocyanate compositions will reduce incidence of pre-curing.

Библиографические данные: WO2016042474 (A1) — 2016-03-24

COMPOSITION AND MATERIAL COMPRISING CHITIN NANOFIBRILS, LIGNIN AND A CO-POLYMER AND THEIR USES

Ссылка на эту страницу [WO2016042474 \(A1\) - COMPOSITION AND MATERIAL COMPRISING CHITIN NANOFIBRILS, LIGNIN AND A CO-POLYMER AND THEIR USES](#)

Изобретатель(и): [IT] MORGANTI PIERFRANCESCO ±

Заявитель(и): [IT] MAVI SUD S R L ±

- международной (МПК): [A61K31/722](#); [A61L15/00](#); [A61L26/00](#); [A61P17/02](#); [A61Q19/00](#); [C08L97/00](#)

Индекс(ы) по классификации: [A61K31/715](#); [A61K31/722](#); [A61K8/72](#); [A61K8/736](#); [A61K8/96](#); [A61K8/97](#); [A61L15/225](#); [A61Q19/00](#); [A61Q19/007](#); [A61Q19/02](#); [A61Q5/02](#); [A61Q5/12](#); [C08L5/08](#); [C08L97/005](#); [C11D11/0017](#); [C11D17/049](#); [C11D3/222](#); [C11D3/227](#); [C11D3/37](#); [C11D3/38](#); [C11D3/382](#); [A61L2400/12](#); [C08L2205/16](#) [далее](#)

Номер заявки: WO2015IB57080 20150915 [Global Dossier](#)

Номера приоритетных документов: [IT2014RM00523 20140915](#)

Также опубликовано, как: [EP2995321 \(A1\)](#) [US2016074311 \(A1\)](#) [WO2016042483 \(A1\)](#) [WO2016042471 \(A1\)](#)

Реферат документа WO2016042474 (A1)

The present invention relates to a material comprising or consisting in chitin nanofibrils, lignin and at least a co-polymer, as well as to a process for the preparation thereof. Furthermore, the present invention relates to biomedical articles based upon said material and uses thereof.

Библиографические данные: TW201525052 (A) — 2015-07-01

Solder mask composition, and cured product thereof

Ссылка на эту страницу [TW201525052 \(A\) - Solder mask composition, and cured product thereof](#)

Изобретатель(и): [TW]; JENG JHY-LONG TSAI [TW]; JENG-YU YANG [TW] WEI-TA ±

Заявитель(и): [TW] IND TECH RES INST ±

Индекс(ы) по классификации: - международной (МПК): [C08L63/00](#); [C08L97/00](#); [H05K3/28](#)
- cooperative:
Номер заявки: TW20130148618 20131227
Номера приоритетных документов: TW20130148618 20131227
Также опубликовано, как: [TWI499634 \(B\)](#)

Реферат документа TW201525052 (A)

A disclosure provides a solder mask composition, and a cured product thereof. In an embodiment, the solder mask composition includes 10-50 parts by weight of an aliphatic polyester modified epoxy resin; and 50-90 parts by weight of a modified lignin with epoxy groups, wherein the solder mask composition has a bio-content of between 35wt% and 90wt%, based on the weight of the solder mask composition.

Библиографические данные: CN104945823 (A) — 2015-09-30

Micro-foamed multiphase fiber-reinforced polypropylene composite material and preparation method thereof

Ссылка на эту страницу [CN104945823 \(A\) - Micro-foamed multiphase fiber-reinforced polypropylene composite material and preparation method thereof](#)
Изобретатель(и): ZHENG YUNLONG; HUANG ZHIJIE; YANG CANGXIAN ±
Заявитель(и): SHANGHAI JUNER NEW MATERIALS ±
Индекс(ы) по классификации: - международной (МПК): [C08J9/30](#); [C08K7/14](#); [C08L23/08](#); [C08L23/16](#); [C08L51/06](#); [C08L53/00](#); [C08L97/00](#); [C08L97/02](#)
- cooperative:
Номер заявки: CN20151379292 20150627 [Global Dossier](#)
Номера приоритетных документов: CN20151379292 20150627

Реферат документа CN104945823 (A)

The invention relates to a high-degradability micro-foamed multiphase fiber-reinforced polypropylene composite material which is composed of the following raw materials in percentage by weight: 30-70% of propylene copolymer, 2-8% of graft compatilizer, 5-15% of lignin, 3-20% of natural bamboo fiber, 5-20% of glass fiber chopped felt and 2-10% of elastomer toughener. The micro-foamed multiphase fiber-reinforced polypropylene composite material obtained according to the technical scheme has the advantages of low density, favorable foaming property, favorable mechanical properties, high degradability and the like. The lignin and natural fibrilia endow the reinforced polypropylene composite material with degradability. After the micro-foaming technique treatment, the composite material has lower density and higher degradability. Compared with the common talcum powder filled polypropylene composite material, on the premise of equivalent mechanical properties, the density of the reinforced polypropylene composite material is lowered by 15-25%, and the degradability can be obviously improved. The degradation rate of higher than 50% can be implemented by a simple landfilling-biodegradation process. The composite material has excellent characteristics of greenness and environment friendliness.

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Natural cellulose extract flame-retardant polyformaldehyde composite material and preparation method thereof

Ссылка на эту страницу	CN104910578 (A) - Natural cellulose extract flame-retardant polyformaldehyde composite material and preparation method thereof
Изобретатель(и):	CHEN YIZHONG; SHENG YANHUA ±
Заявитель(и):	UNIV CHANGZHOU ±
Индекс(ы) по классификации:	- международной (МПК): C08K5/07 ; C08L59/00 ; C08L69/00 ; C08L97/00 - cooperative:
Номер заявки:	CN20151325398 20150612 Global Dossier
Номера приоритетных документов:	CN20151325398 20150612

Реферат документа CN104910578 (A)

The invention discloses a natural cellulose extract flame-retardant polyformaldehyde composite material and a preparation method thereof, belonging to the field of preparation of a flame-retardant composite material. The preparation method comprises the following specific steps: mashing radix puerariae stem, adding water and filtering to obtain slurry; performing ethanol Soxhlet extraction; stirring and uniformly mixing the condensed extract with polyformaldehyde resin, polycarbonate and 2-bromobenzaldehyde ethylene acetal while dropwise adding a dimethylamine solution until no heat is emitted in the reaction; finally, heating and adding potassium persulfate for a polymerization reaction; and condensing to obtain a polymer. The invention has the following beneficial effects: the lignin extracted with ethanol contains hydroxyl and can be copolymerized with aldehydes after amination; meanwhile, through the introduction of polycarbonate, the emitted carbon dioxide can effectively absorb the formaldehyde gas volatilized by POM decomposition, and oxygen is isolated; and therefore, the stability of POM is improved, the flame retardance of POM is enhanced and reaches the level UL94-V0, and the limit oxygen index reaches 70.

METHOD FOR MODIFYING LIGNIN AND MODIFIED LIGNIN USING THE METHOD AND COMPOSITION MATERIAL CONTAINING THE MODIFIED LIGNIN

Ссылка на эту страницу	KR101548466 (B1) - METHOD FOR MODIFYING LIGNIN AND MODIFIED LIGNIN USING THE METHOD AND COMPOSITION MATERIAL CONTAINING
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[THE MODIFIED LIGNIN](#)

Изобретатель(и): [KR]; HWANG SEOK HO YEO JUN [KR] SEOK ±
Заявитель(и): [KR] UNIV DANKOOK IACF ±
Индекс(ы) по классификации: - международной (МПК): [C08H7/00](#); [C08K5/541](#); [C08L51/08](#); [C08L97/00](#)
- cooperative: [C08H6/00](#); [C08K5/541](#); [C08L51/08](#); [C08L97/00](#) далее
Номер заявки: KR20140135908 20141008 [Global Dossier](#)
Номера приоритетных документов: KR20140135908 20141008

Реферат документа KR101548466 (B1)

Provided are a method for modifying lignin, lignin modified thereby, and a lignin-olefin resin composite material comprising the same. Mechanical properties such as fracture toughness or the like of modified lignin using the same and a lignin-olefin resin composite material with the improved affinity to a resin due to high dispersibility inside a mixture can be improved by providing a modification method, which comprises: providing a first modifier for lignin; and providing a maleic anhydride-graft-olefin resin for the firstly modified lignin and obtaining the secondly modified lignin through a bond between a terminal reactor of the first modifier and the maleic anhydride.

Библиографические данные: CN104877200 (A) — 2015-09-02

Lignin-starch composite styrene-butadiene rubber material and preparation method thereof

Ссылка на эту страницу [CN104877200 \(A\) - Lignin-starch composite styrene-butadiene rubber material and preparation method thereof](#)

Изобретатель(и): YANG HU; LI HAIJIANG; LI AIMIN ±
Заявитель(и): UNIV NANJING ±
Индекс(ы) по классификации: - международной (МПК): [C08K13/02](#); [C08K3/22](#); [C08K3/36](#); [C08K5/09](#); [C08K5/31](#); [C08K5/47](#); [C08L3/02](#); [C08L3/08](#); [C08L9/00](#); [C08L9/06](#); [C08L91/06](#); [C08L97/00](#)
- cooperative:
Номер заявки: CN20151216524 20150430 [Global Dossier](#)
Номера приоритетных документов: CN20151216524 20150430

Реферат документа CN104877200 (A)

The invention discloses a lignin-starch composite styrene-butadiene rubber material and a preparation method thereof. The composite styrene-butadiene rubber material is prepared from the following raw materials in parts by weight: 30.00 parts of BR (butadiene rubber) 9000, 96.00 parts of SBR (styrene butadiene rubber) 1712, 70.00 parts of silica white 1165MP, 25.3 parts of assistant and 1.0-80.00 parts of lignin-starch composite reinforcer. The lignin-starch composite reinforcer is prepared by the following steps: mixing and dispersing lignin and a starch-modifying agent in an alkaline solution at 50-80 DEG C, adding a natural latex, mixing, precipitating with a dilute hydrochloric acid solution, filtering while the solution is hot, and drying the filter cake to constant weight, thereby obtaining the lignin-starch composite natural rubber reinforcer. The starch used as the modifier has favorable compatibility with the lignin and styrene-butadiene rubber, thereby greatly improving the compatibility between the lignin and

styrene-butadiene rubber and further enhancing the mechanical properties of the composite material.

Библиографические данные: CN104837897 (A) — 2015-08-12

Use of low molecular weight lignin together with lignin for production of phenol-formaldehyde binder composition

Ссылка на эту страницу [CN104837897 \(A\) - Use of low molecular weight lignin together with lignin for production of phenol-formaldehyde binder composition](#)

Изобретатель(и): VALKONEN SANNA; PIETARINEN SUVI; RINGENA OKKO; ESKELINEN KATI ±

Заявитель(и): UPM KYMMENE CORP ±

Индекс(ы) по классификации: - международной (МПК): [B27N3/00](#); [C08G8/20](#); [C08H7/00](#); [C08L97/00](#); [C08L97/02](#); [C09J161/12](#); [C09J197/00](#)

- cooperative: [B27D1/04](#); [C08G8/20](#); [C08G8/24](#); [C08H6/00](#); [C08L61/06](#); [C08L97/005](#); [C08L97/02](#); [C09J161/06](#); [C09J161/12](#); [C09J197/005](#); [C09J5/00](#); [C08L2201/54](#); [C09J2461/00](#); [C09J2497/00](#)

Номер заявки: CN2013818154 20130328 [Global Dossier](#)

Номера приоритетных документов: [WO2013FI50352 20130328](#) ; [FI20120005357 20120329](#)

Также опубликовано, как: [WO2013144453 \(A1\)](#) [US2016376434 \(A1\)](#) [US2015087781 \(A1\)](#) [US9469795 \(B2\)](#) [FI20125357 \(A\)](#) [далее](#)

Реферат документа CN104837897 (A)

The present invention relates to a method for producing a binder composition, wherein the method comprises the following steps: (i) forming an aqueous composition comprising reactant components including lignin molecules of 11 -60 lignin units, lignin molecules of 1-10 lignin units, polymerizable substance and crosslinking agent in the presence of a catalyst; and(ii) cooking the com- position at a temperature of 60-95 DEG C for polymerizing the reactant components until a binder composition with a predetermined viscosity value is formed.

Библиографические данные: CN104744958 (A) — 2015-07-01

Biodegradable plastic taking tea leaf residues as raw material and preparation method of biodegradable plastic

Ссылка на эту страницу [CN104744958 \(A\) - Biodegradable plastic taking tea leaf residues as raw material and preparation method of biodegradable plastic](#)

Изобретатель(и): WANG GUIDONG; SONG RUI ±

Заявитель(и): HEFEI ALL ROUND POLYMER MATERIAL FACTORY ±

Индекс(ы) по классификации: - международной (МПК): [C08K13/06](#); [C08K3/34](#); [C08K5/101](#); [C08K5/103](#); [C08K5/1515](#); [C08K5/20](#); [C08K9/06](#); [C08L23/06](#); [C08L91/06](#); [C08L97/00](#); [C08L97/02](#)

- cooperative:

Номер заявки: CN20151168924 20150410 [Global Dossier](#)

Номера приоритетных документов: CN20151168924 20150410

Реферат документа CN104744958 (A)

The invention discloses biodegradable plastic taking tea leaf residues as a raw material. The biodegradable plastic is characterized by being prepared from the following raw materials in parts by weight: 20-30 parts of the tea leaf residues, 5-10 parts of vermiculite powder, 10-15 parts of polyethylene, 5-10 parts of pumpkin powder, 3-5 parts bamboo shoot shells, 0.5-1 part of lignin sodium sulfonate, 1-2 parts of xylitol, 1-2 parts of a silane coupling agent KH-550, 3-5 parts of peanut oil, 1-2 parts of soybean oil and 10-15 parts of a compound auxiliary agent. The biodegradable plastic disclosed by the invention is high in degradation rate and high in degradation velocity, and has good flexibility and strength meeting use requirements; the main raw materials are rich in source, low in cost and good in economical efficiency; and the biodegradable plastic realizes energy conservation and waste utilization, can effectively reduce white pollution and has relatively high environmental and economic benefits.

Библиографические данные: CN104744659 (A) — 2015-07-01

Bio-polyol composition and bio-polyurethane foam material

Ссылка на эту страницу [CN104744659 \(A\) - Bio-polyol composition and bio-polyurethane foam material](#)

Изобретатель(и): CHUANG WEN-PIN; SHEEN YUUNG-CHING; HUANG YUN-YA; SU YI-CHE ±

Заявитель(и): IND TECH RES INST ±

- международной (МПК): [C08G18/64](#); [C08L97/00](#); [C08G101/00](#)

Индекс(ы) по классификации: [C07G1/00](#); [C08G18/3206](#); [C08G18/4825](#); [C08G18/6492](#); [C08G18/7664](#); [C08H6/00](#); [C08J9/0061](#); [C08J9/04](#); [C08L71/02](#); [C08L97/005](#); [C08G2101/00](#); [C08G2101/0083](#); [C08J2375/08](#); [C08J2497/00](#); далее

Номер заявки: CN2014145316 20140208 [Global Dossier](#)

Номера приоритетных документов: [TW20130148808](#) [20131227](#)

Также опубликовано, как: [EP2889319 \(A1\)](#) [US2015183948 \(A1\)](#) [TW201525028 \(A\)](#) [TWI500662 \(B\)](#)

Реферат документа CN104744659 (A)

A bio-polyol composition and a bio-polyurethane foam material are provided. By using the modifier and applying the dispersing and grinding process, the modified lignin is uniformly dispersed in the polyol solution and a bio-polyol composition is obtained. The obtained bio-polyol composition may be used to prepare the bio-polyurethane foam material with a high lignin content, a high compression strength and superior flame-resistance.

Библиографические данные: CN104725707 (A) — 2015-06-24

Waste mulching film composite material and preparation method thereof

Ссылка на эту страницу [CN104725707 \(A\) - Waste mulching film composite material and preparation method thereof](#)

Изобретатель(и): XU KAIQIANG ±

Заявитель(и): MINQIN COUNTY JIAXING ENERGY SAVING SERVICES CO LTD ±

Индекс(ы) по классификации:	- международной (МПК):	C08K13/04 ; C08K3/04 ; C08K3/22 ; C08K3/26 ; C08K5/09 ; C08K5/098 ; C08K7/14 ; C08L23/06 ; C08L33/26 ; C08L71/02 ; C08L97/00
	- cooperative:	C08L23/06 ; C08L2201/02 ; C08L2201/08 ; C08L2205/035 ; C08L2207/20 далее
Номер заявки:	CN20151169486 20150410	Global Dossier
Номера приоритетных документов:	CN20151169486 20150410	

Реферат документа CN104725707 (A)

The invention discloses a waste mulching film composite material and a preparation method thereof and belongs to the technical field of preparation of composite materials. The waste mulching film composite material is made of raw materials comprising, by weight, 14-28 parts of modified polyethylene waste mulching film particles, 12-15 parts of lignin, 1-3 parts of grapheme, 70-85 parts of artificial stone powder, 2-5 parts of water magnesium powder, 5-10 parts of aluminum oxide, 1-2 parts of titanium dioxide, 0-2.5 parts of polyacrylamide, 7-10 parts of glass fibers, 0.5-1 part of aluminic acid ester, 0.5-1.5 parts of stearic acid, 0.5-1 part of PE-wax, 0.5-1 part of azobisisovaleronitrile, 0.2-0.5 part of manganese isooctoate, 0.1-0.3 part of poly-oxypopylene and 0.05-0.1 part of tri methylol propane tri methacrylate. Recovered waste mulching films are taken as the composite material, waste agricultural films are effectively utilized and turned into wealth, an effective method of waste mulching film recovery is achieved, and the waste mulching film composite material has the advantages of good mechanical capacity, easy cleaning, dirt resistance, impact resistance, heat resistance, good fire resistance and environment friendliness and sanitation.

Библиографические данные: CN104710768 (A) — 2015-06-17

Plastic synthetic composite material

Ссылка на эту страницу	CN104710768 (A) - Plastic synthetic composite material
Изобретатель(и):	ZHANG GUOHUA ±
Заявитель(и):	ZHANG GUOHUA ±
Индекс(ы) по классификации:	- международной (МПК): C08K13/04 ; C08K3/04 ; C08K3/22 ; C08K3/26 ; C08K3/34 ; C08K3/36 ; C08K5/07 ; C08K7/06 ; C08L61/06 ; C08L63/00 ; C08L67/00 ; C08L75/04 ; C08L83/04 ; C08L9/06 ; C08L97/00
	- cooperative:
Номер заявки:	CN20131665758 20131211 Global Dossier
Номера приоритетных документов:	CN20131665758 20131211

Реферат документа CN104710768 (A)

The invention discloses a plastic synthetic composite material, which comprises the following components, by mass, 100-150 parts of an epoxy resin, 50-80 parts of ferrocene powder, 200-300 parts of polyurethane, 20-30 parts of potassium carbonate, 10-15 parts of magnesium hydroxide, 50-80 parts of calcium oxide, 10-25 parts of nanometer silica, 5-15 parts of talcum powder, 10-20 parts of nanometer zinc oxide, 25-50 parts of carbon fiber, 10-20 parts of polyurethane fiber, 25-30 parts of lignin fiber, 30-50 parts of polyester fiber, 10-30 parts of glycerin, 20-50 parts of an organic silicon resin, 10-15 parts of ethyl acetate, 5-10 parts of a coupling agent, 5-8 parts of cinnamaldehyde, 1-5 parts of ursolic acid, 2-8 parts of piperonal, 10-25 parts of a

phenolic resin, and 15-30 parts of butadiene styrene rubber. The plastic synthetic composite material has advantages of light weight, insulation, corrosion resistance, wear resistance, easy processing, and beauty.

Библиографические данные: WO2015080483 (A1) — 2015-06-04

LIGNIN POLYMER NANO-MATRIX COMPOSITE AND PREPARATION METHOD THEREFOR

Ссылка на эту страницу [WO2015080483 \(A1\) - LIGNIN POLYMER NANO-MATRIX COMPOSITE AND PREPARATION METHOD THEREFOR](#)

Изобретатель(и): [KR]; NAM JAE-DO KIM DONG [KR] KWAN ±
Заявитель(и): [KR]; NAM JAE-DO KIM DONG [KR] KWAN ±

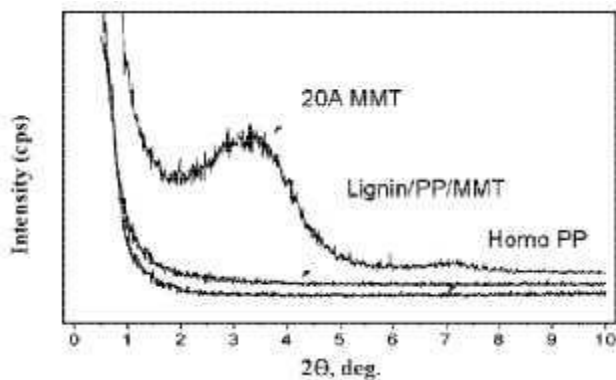
Индекс(ы) по классификации: - международной (МПК): [C08K3/04](#); [C08K3/08](#); [C08K3/34](#); [C08L97/00](#)
- cooperative: [C08G18/246](#); [C08G18/6492](#); [C08K3/346](#); [C08L67/04](#); [C08G18/4277](#); [C08K2201/001](#) далее

Номер заявки: WO2014KR11468 20141127 [Global Dossier](#)

Номера приоритетных документов: [KR20130145826](#) [20131128](#)

Также опубликовано, как: [KR20150061746 \(A\)](#) [KR101616946 \(B1\)](#)

Реферат документа WO2015080483 (A1)



The present invention relates to a lignin polymer nano-matrix composite and a preparation method therefor. The nano-matrix composite according to the present invention is characterized by comprising a lignin polymer and clay minerals. The lignin polymer nano-matrix composite according to the present invention can be prepared by melt-mixing lignin/clay-mineral composite particles with a lignin polymer or reacting lignin/clay-mineral composite particles with a lactone-based compound, and is melt-mixed with a second polymer, etc. to thereby show superior mechanical properties and thermal characteristics.

Библиографические данные: US2015135992 (A1) — 2015-05-21

RESIN COMPOSITION, MOLDED BODY AND COMPOSITE MOLDED BODY

Ссылка на эту страницу [US2015135992 \(A1\) - RESIN COMPOSITION, MOLDED BODY AND COMPOSITE MOLDED BODY](#)

Изобретатель(и): [JP]; KOBUNE MIKA KOYAMA [JP]; NAOYUKI GOTOU [JP]; AKIHITO KIKUCHI [JP]; IKUKO SUKEGAWA [JP] TOMOFUMI ±
Заявитель(и): [JP] HITACHI CHEMICAL CO LTD ±

Индекс(ы) по классификации: - международной (МПК): [C08L63/00](#); [C08L97/00](#)

- cooperative: [C08G18/6492](#); [C08G18/73](#); [C08G59/621](#); [C08H6/00](#); [C08H8/00](#); [C08L63/00](#); [C08L97/005](#) далее

Номер заявки: US201514610436 20150130 [Global Dossier](#)

Номера приоритетных документов: US201514610436 20150130 ; [JP20100027547 20100210](#) ; [US201213578325 20120810](#) ; [WO2011JP52833 20110210](#)

Также опубликовано, как: [EP2535378 \(A1\)](#) [EP2535378 \(A4\)](#) [US2012302699 \(A1\)](#) [TW201141954 \(A\)](#) [KR20120128622 \(A\)](#) далее

Реферат документа US2015135992 (A1)

In accordance with the present invention, by using a resin composition including lignin and a curing agent in which the lignin is soluble in an organic solvent and contained in the resin composition in an amount of from 10 to 90% by mass, there are provided a molded product and a composite molded product which are obtained from plant resources as a main raw material and to which a good flame retardance and a good antibacterial property are imparted.

Библиографические данные: KR20150017359 (A) — 2015-02-16

A COMPOSITION IN THE FORM OF A DISPERSION COMPRISING A LIGNIN, A METHOD FOR THE MANUFACTURING THEREOF AND USE THEREOF

Ссылка на эту страницу [KR20150017359 \(A\) - A COMPOSITION IN THE FORM OF A DISPERSION COMPRISING A LIGNIN, A METHOD FOR THE MANUFACTURING THEREOF AND USE THEREOF](#)

Изобретатель(и):

Заявитель(и):

- международной (МПК): [C08G18/22](#); [C08G18/40](#); [C08G18/48](#); [C08G18/64](#); [C08J9/04](#); [C08L97/00](#)

Индекс(ы) по классификации: [C08G18/225](#); [C08G18/4081](#); [C08G18/4833](#); [C08G18/6492](#); [C08J9/0004](#); [C08J9/0023](#); [C08J9/04](#); [C08J9/141](#); [C08L97/005](#); [C08G2101/0025](#); [C08J2201/022](#); [C08J2203/14](#); [C08J2203/16](#); [C08J2375/04](#) далее

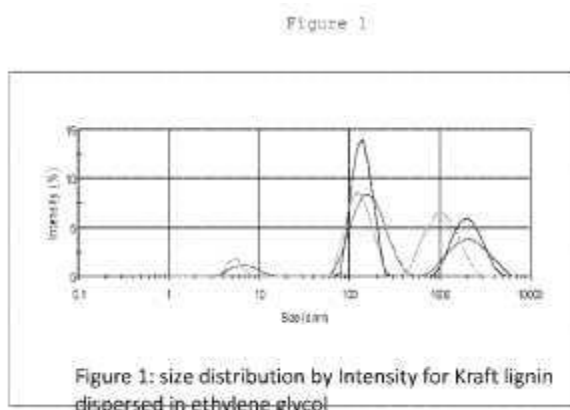
- cooperative: [C08G18/225](#); [C08G18/4081](#); [C08G18/4833](#); [C08G18/6492](#); [C08J9/0004](#); [C08J9/0023](#); [C08J9/04](#); [C08J9/141](#); [C08L97/005](#); [C08G2101/0025](#); [C08J2201/022](#); [C08J2203/14](#); [C08J2203/16](#); [C08J2375/04](#) далее

Номер заявки: KR20147035691 20130530 [Global Dossier](#)

Номера приоритетных документов: [SE20120050569 20120601](#) ; [WO2013IB54464 20130530](#)

Также опубликовано, как: [WO2013179251 \(A1\)](#) [US2015144829 \(A1\)](#) [RU2014153014 \(A\)](#) [JP2015519452 \(A\)](#) [IN2957KON2014 \(A\)](#) далее

Реферат не найден для документа KR20150017359 (A)
Реферат документа-аналога: WO2013179251 (A1)



The present invention relates to a composition in the form of a dispersion, a method for the manufacturing of said composition and uses thereof.

Библиографические данные: CN104497341 (A) — 2015-04-08

Preparation method of photo-crosslinked PVA (polyvinyl alcohol)/lignin composite membrane

Ссылка на эту страницу	CN104497341 (A) - Preparation method of photo-crosslinked PVA (polyvinyl alcohol)/lignin composite membrane
Изобретатель(и):	BAI HUIYU; LI YUFEI; CHEN ZHIPING; LIU XIAOYA ±
Заявитель(и):	UNIV JIANGNAN ±
Индекс(ы) по классификации:	- международной (МПК): C08J5/18 ; C08J7/12 ; C08L29/04 ; C08L97/00 - cooperative:
Номер заявки:	CN2015109461 20150108 Global Dossier
Номера приоритетных документов:	CN2015109461 20150108

Реферат документа CN104497341 (A)

The invention relates to a preparation method of a photo-crosslinked PVA (polyvinyl alcohol)/lignin composite membrane and belongs to the field of macromolecular and photosensitive materials. The preparation method comprises the following steps: firstly adding natural macromolecular lignin to be crosslinked with PVA by virtue of hydrogen bonds; then adding hydroxyethyl methacrylate (HEMA) molecules containing carbon-carbon double bonds and hydroxyl, wherein hydrogen bond reaction is carried out on HEMA and PVA; and meanwhile, carrying out polymerization reaction under ultraviolet irradiation to obtain the photo-crosslinked PVA/lignin composite membrane. The composite membrane has excellent water resistance, mechanical property and thermal stability, so that the application of the composite membrane in the field of biodegradable packaging materials becomes possible.

Библиографические данные: CN104448585 (A) — 2015-03-25

Technology for processing ethylene propylene diene monomer rubber/polypropylene/lignin composite material

Ссылка на эту страницу	CN104448585 (A) - Technology for processing ethylene propylene diene monomer rubber/polypropylene/lignin composite material	
Изобретатель(и):	GOU RUI ±	
Заявитель(и):	UNIV QINGDAO SCIENCE & TECH ±	
Индекс(ы) по классификации:	- международной (МПК):	B29C43/58 ; B29C47/92 ; C08K13/02 ; C08K3/06 ; C08K3/16 ; C08K3/22 ; C08K5/09 ; C08L23/12 ; C08L23/16 ; C08L61/06 ; C08L97/00 ; C08L97/02
	- cooperative:	B29C43/58 ; B29C47/92 ; C08L23/12 ; C08L23/16 ; C08L97/00 ; C08L2205/02 ; C08L2205/035 далее
Номер заявки:	CN20141725522 20141128	Global Dossier
Номера приоритетных документов:	CN20141725522 20141128	

Реферат документа CN104448585 (A)

The invention relates to a technology for processing an ethylene propylene diene monomer rubber/polypropylene/lignin composite material. According to the material, industrial lignin extracted from papermaking waste liquor serving as a main ingredient is added into a blending system of ethylene propylene diene monomer rubber and polypropylene, the application field of the industrial lignin is widened, and the mechanical property, ageing resistance and thermal stability property of the composite material are improved. The production process of the material is simple, all the raw materials are blended at normal temperature, are extruded by a twin-screw extruder and are subjected to hot press molding by virtue of a hot press, the material can be processed by adopting standard thermoplastic plastic processing equipment, the processing cost is low, the leftover materials are recycled, the production efficiency can be improved, and the process is suitable for industrial batch production. According to the process disclosed by the invention, a phenolic resin curing system is adopted, naphthenic oil is selected as a plasticizer, release of irritant gas is avoided in the processing and using process, and the composite material is a novel environment-friendly material.

Библиографические данные: EP3059274 (A1) — 2016-08-24

RESIN COMPOSITION AND RUBBER COMPOSITION

Ссылка на эту страницу	EP3059274 (A1) - RESIN COMPOSITION AND RUBBER COMPOSITION	
Изобретатель(и):	[JP] MURAI TAKETOSHI ±	
Заявитель(и):	[JP] SUMITOMO BAKELITE CO ±	
Индекс(ы) по классификации:	- международной (МПК):	C08H7/00 ; C08K3/00 ; C08L1/02 ; C08L9/00 ; C08L97/00
	- cooperative:	C08H6/00 ; C08L97/005 далее
Номер заявки:	EP20140853796 20141016	Global Dossier
Номера приоритетных документов:	JP20130215145 20131016 ; WO2014JP77608 20141016	
Также опубликовано, как:	WO2015056758 (A1)	

Реферат документа EP3059274 (A1)

One of the purposes of the present invention is to provide lignin modified with a plant-derived compound, the modified lignin exhibiting, as a result, excellent curability and a high rubber

reinforcing effect. Furthermore, the present invention provides a rubber composition that achieves improvement of molding properties or a modulus of elasticity, while maintaining a high degree of plant derivation. Provided is a modified lignin derivative obtained by modifying a lignin derivative with a plant-derived compound. In one or more embodiments, the plant-derived compound contains at least one of tung oil, linseed oil, cashew oil, and tall oil.

Библиографические данные: JP2015048361 (A) — 2015-03-16

LIGNIN RESIN COMPOSITION, RESIN MOLDED ARTICLE, PREPREG, AND MOLDING MATERIAL

Ссылка на эту страницу [JP2015048361 \(A\) - LIGNIN RESIN COMPOSITION, RESIN MOLDED ARTICLE, PREPREG, AND MOLDING MATERIAL](#)

Изобретатель(и): MURAI TAKETOSHI; NAKAGAWA HIROSHIGE; MURATA RYUICHI ±
Заявитель(и): SUMITOMO BAKELITE CO ±

Индекс(ы) по классификации: - международной (МПК): [C08H7/00](#); [C08J5/24](#); [C08L97/00](#)
- cooperative:

Номер заявки: JP20130178748 20130830 [Global Dossier](#)

Номера приоритетных документов: JP20130178748 20130830

Реферат документа JP2015048361 (A)

PROBLEM TO BE SOLVED: To provide a resin composition comprising a lignin derivative having a high hot-melt property and high reactivity with an epoxy or isocyanate, and to provide a resin molded article comprising a lignin derivative, which shows a fast molding cycle and a high glass transition temperature.SOLUTION: The resin composition comprises a lignin derivative and a crosslinking agent, and contains a lignin derivative having at least one phenolic structure in the structure thereof as the lignin derivative and a crosslinking agent having an epoxy group or an isocyanate group as the crosslinking agent. The lignin derivative is a decomposed produce of a lignin component included in biomass, to which a phenolic structure is added.

Библиографические данные: JP2015048360 (A) — 2015-03-16

LIGNIN RESIN COMPOSITION, RESIN MOLDED ARTICLE, AND MOLDING MATERIAL

Ссылка на эту страницу [JP2015048360 \(A\) - LIGNIN RESIN COMPOSITION, RESIN MOLDED ARTICLE, AND MOLDING MATERIAL](#)

Изобретатель(и): NAKAGAWA HIROSHIGE; MURAI TAKETOSHI; MURATA RYUICHI ±
Заявитель(и): SUMITOMO BAKELITE CO ±

Индекс(ы) по классификации: - международной (МПК): [C08H7/00](#); [C08K5/16](#); [C08L97/00](#)
- cooperative:

Номер заявки: JP20130178747 20130830 [Global Dossier](#)

Номера приоритетных документов: JP20130178747 20130830

Реферат документа JP2015048360 (A)

PROBLEM TO BE SOLVED: To provide a lignin derivative having high reactivity and excellent hot-melt property, and to provide a method for obtaining a lignin derivative having the above excellent characteristics in a high yield by adding a phenolic structure during a subcritical process.**SOLUTION:** A resin composition comprising a lignin derivative and a crosslinking agent is provided, which contains a lignin derivative having at least one phenolic structure in the structure thereof as the lignin derivative and a nitrogen-containing crosslinking agent as the crosslinking agent. The lignin derivative is a decomposed product of biomass, to which a phenolic structure is added.

Библиографические данные: JP2015048359 (A) — 2015-03-16

LIGNIN RESIN COMPOSITION, RESIN MOLDED ARTICLE, AND MOLDING MATERIAL

Ссылка на эту страницу	JP2015048359 (A) - LIGNIN RESIN COMPOSITION, RESIN MOLDED ARTICLE, AND MOLDING MATERIAL	
Изобретатель(и):	MURATA RYUICHI; NAKAGAWA HIROSHIGE; MURAI TAKETOSHI ±	
Заявитель(и):	SUMITOMO BAKELITE CO ±	
Индекс(ы) по классификации:	- международной (МПК): C08H7/00 ; C08K3/24 ; C08K5/13 ; C08L97/00 - cooperative:	
Номер заявки:	JP20130178746 20130830	Global Dossier
Номера приоритетных документов:	JP20130178746 20130830	

Реферат документа JP2015048359 (A)

PROBLEM TO BE SOLVED: To provide a lignin derivative having high reactivity and an excellent hot-melt property.**SOLUTION:** A resin composition comprising a lignin derivative is provided, in which a lignin derivative includes a phenolic structure in the structure thereof, and a content of sulfuric acid in the resin composition is less than 2 mass%. The lignin derivative is a lignin obtained by decomposing biomass at high temperature and high pressure in the presence of a mixture solvent comprising water and a phenolic structural material. The phenolic structure included in the lignin derivative structure is obtained by addition of a phenolic structure into the lignin derivative; and the lignin derivative has a number average molecular weight of 300 to 3000.

Библиографические данные: PH12014501323 (A1) — 2014-09-15

COMPOSITIONS COMPRISING LIGNIN

Ссылка на эту страницу	PH12014501323 (A1) - COMPOSITIONS COMPRISING LIGNIN	
Изобретатель(и):	[US]; SIMARD MICHEL A [US]; SRINIVAS KILAMBI KADAM [US] KIRAN L ±	
Заявитель(и):	[US] RENMATIX INC ±	
Индекс(ы) по классификации:	- международной (МПК): C08K3/02 ; C08K3/08 ; C08L97/00 - cooperative: C07G1/00 ; C08G16/0293 ; C08G8/20 ; C08H6/00	
Номер заявки:	PH12014501323 20140610	
Номера приоритетных документов:	US201213472798 20120516 ; US201161581865P 20111230 ; WO2012US67535	

документов: [20121203](#)
Также опубликовано, как: [US2013172540 \(A1\)](#) [US8759498 \(B2\)](#) [US2016108182 \(A1\)](#)
[US2014039144 \(A1\)](#) [US9255188 \(B2\)](#) [далее](#)

Реферат документа PH12014501323 (A1)

Compositions comprising lignin and low levels of undesirable impurities, such as compounds containing sulfur, nitrogen, or metals, are disclosed.

Библиографические данные: CN104312181 (A) — 2015-01-28

Polyhydroxy lignin/silicon dioxide composite nano particle and preparation method thereof

Ссылка на эту страницу [CN104312181 \(A\) - Polyhydroxy lignin/silicon dioxide composite nano particle and preparation method thereof](#)
Изобретатель(и): QIU XUEQING; YANG DONGJIE; XIONG WENLONG; HUANG JINHAO; LOU HONGMING; DENG YONGHONG; YI CONGHUA ±
Заявитель(и): UNIV SOUTH CHINA TECH ±
Индекс(ы) по классификации: - международной (МПК): [C08H7/00](#); [C08K3/36](#); [C08L97/00](#)
- cooperative:
Номер заявки: CN20141579129 20141024 [Global Dossier](#)
Номера приоритетных документов: CN20141579129 20141024
Также опубликовано, как: [CN104312181 \(B\)](#)

Реферат документа CN104312181 (A)

The invention discloses polyhydroxy lignin/silicon dioxide composite nano particles and a preparation method thereof. The preparation method comprises the following steps: adding industrial lignin into water, adjusting the pH value to be 8-12, adding polyhydric alcohol and a catalyst, and dropping epoxy haloalkane, thereby obtaining polyhydroxy lignin; adding water into sodium silicate to prepare a solution with the mass concentration of 1-10%, adding the prepared polyhydroxy lignin, adjusting the pH value to be 8-11 by using a weak acid adjusting agent, reacting, adjusting the pH value to be 3-5 by using a strong acid adjusting agent, reacting, aging, centrifuging, depositing, and drying, thereby obtaining a powder product, namely the polyhydroxy lignin/silicon dioxide composite nano particles. The prepared composite nano particles are low in cost, uniform in particle size, good in dispersity and greatly superior to inorganic nano particles and acid-out alkali lignin in compatibility with high molecular materials, and the mechanical property of high molecular materials such as plastic can be remarkably improved.

Библиографические данные: CN104311920 (A) — 2015-01-28

Stable heat-resistant rubber composition

Ссылка на эту страницу [CN104311920 \(A\) - Stable heat-resistant rubber composition](#)
Изобретатель(и): DONG YUNLONG ±
Заявитель(и): QINGDAO MEIJIALONG PACKAGING MACHINERY CO LTD ±

Индекс(ы) по классификации:	- международной (МПК):	C08K13/02 ; C08K3/06 ; C08K3/22 ; C08K3/36 ; C08K5/10 ; C08L9/02 ; C08L91/00 ; C08L97/00
	- cooperative:	C08L9/02 ; C08L2201/08 ; C08L2205/03 далее
Номер заявки:	CN20141497038 20140926	Global Dossier
Номера приоритетных документов:	CN20141497038 20140926	

Реферат документа CN104311920 (A)

The invention discloses a stable heat-resistant rubber composition. The stable heat-resistant rubber composition is prepared from 3-8 parts by weight of paraffin oil, 6-10 parts by weight of boron powder, 3-9 parts by weight of a titanate coupling agent, 2-7 parts by weight of magnesium oxide, 4-8 parts by weight of silica, 2-6 parts by weight of sorbitol, 8-14 parts by weight of nitrile rubber, 1-5 parts by weight of a fire retardant, 4-9 parts by weight of sulfur powder, 3-5 parts by weight of a novel binder, 2-6 parts by weight of an accelerative activator, 1-4 parts by weight of zinc oxide and 5-8 parts by weight of lignin. The stable heat-resistant rubber composition has good heat conductivity and can bear a high temperature.

Библиографические данные: CN104278834 (A) — 2015-01-14

Two-in-one plastic-wooden composite building formwork

Ссылка на эту страницу	CN104278834 (A) - Two-in-one plastic-wooden composite building formwork	
Изобретатель(и):	SUN HONGSHAN; WANG YANBIN ±	
Заявитель(и):	JILIN JIDIAN ENERGY CO LTD ±	
Индекс(ы) по классификации:	- международной (МПК):	B32B27/30 ; B32B37/15 ; C08L27/06 ; C08L97/00 ; E04G9/05
	- cooperative:	
Номер заявки:	CN20141538825 20141014	Global Dossier
Номера приоритетных документов:	CN20141538825 20141014	
Также опубликовано, как:	CN104278834 (B)	

Реферат документа CN104278834 (A)

The invention relates to two-in-one plastic-wooden composite building formwork and relates to the technical field of building formwork. The upper surface and the lower surface of a PVC (polyvinyl chloride) foamed layer are provided with PVC unfoamed layers. A production method of the building formwork includes: firstly, mixing PVC powder, calcium powder, lignin and auxiliaries via a high-speed mixer, heating up the mixture to 120 DEG C prior to cooling the mixture to 55 DEG C via a low-speed mixer and feeding the mixture to a double-screw 80 extrusion equipment mainframe to realize foaming; secondly, feeding the PVC powder into a double-screw 65 extrusion equipment mainframe without foaming; thirdly, feeding the foamed PVC powder and the unfoamed PVC powder into a distributor for mixing; fourthly, extruding the powder mixed in the third step via a mold; fifthly, subjecting the formwork extruded in the fourth step to cooling molding at the temperature of 10 DEG C via a shaping platform; sixthly, cutting the formwork shaped in the fifth step into a finished product, and packaging and warehousing the finished product. The two-in-one plastic-wooden composite building formwork

is extremely low in maintenance cost, higher in connection strength, better in strength and less prone to breakage; cost is lowered greatly.

Библиографические данные: CN104277468 (A) — 2015-01-14

Composite material of lignin/metal nanoparticles and preparation method of composite material

Ссылка на эту страницу	CN104277468 (A) - Composite material of lignin/metal nanoparticles and preparation method of composite material
Изобретатель(и):	XIAOBO LIN ±
Заявитель(и):	XIAOBO LIN; UNIV SHIJIAZHUANG TIEDAO ±
Индекс(ы) по классификации:	- международной (МПК): C08K3/08 ; C08L97/00 - cooperative:
Номер заявки:	CN20131288200 20130710 Global Dossier
Номера приоритетных документов:	CN20131288200 20130710

Реферат документа CN104277468 (A)

The invention belongs to the field of functional materials prepared from lignin-based metal nanoparticles and in particular relates to a composite material of lignin/metal nanoparticles and a preparation method of the composite material. The preparation method comprises the following steps: adding lignin into water so as to prepare suspension, reacting the suspension with a metal precursor under normal pressure, and centrifugally separating and drying the obtained product after the reaction, thereby obtaining the composite material which is uniformly loaded with the metal nanoparticles on the surface of the lignin. The lignin serves as a reducing agent and a stabilizer, and the metal precursor is reduced in an aqueous solution. The preparation method is characterized in that the metal nanoparticles are reduced and stabilized at high efficiency through a one-step process by utilizing functional groups such as phenolic hydroxyl group and thiol on the surface of the lignin. The experiment conditions are regulated, so that multiple lignin/metal nanoparticle composite materials with different particle sizes, different particle size distributions and different morphologies can be obtained. According to the method disclosed by the invention, toxic and harmful reducing agents, stabilizers and solvents for synthesis are not used, and the preparation route is simple and environmental friendly.

Библиографические данные: CN104194083 (A) — 2014-12-10

Rare-earth butadiene rubber composite cable sheath material

Ссылка на эту страницу	CN104194083 (A) - Rare-earth butadiene rubber composite cable sheath material
Изобретатель(и):	LI ZHENGXIANG; DIAO HONGMING; WANG ZHAOLAN; LIU QIN ±
Заявитель(и):	ANHUI LAND GROUP CO LTD ±
Индекс(ы) по классификации:	- международной (МПК): C08K13/06 ; C08K3/04 ; C08K3/22 ; C08K3/34 ; C08K5/01 ; C08K5/09 ; C08K5/47 ; C08K9/06 ; C08L9/00 ; C08L9/06 ; C08L97/00 ; H01B7/17 - cooperative:
Номер заявки:	CN20141424711 20140826 Global Dossier
Номера приоритетных документов:	CN20141424711 20140826

Реферат документа CN104194083 (A)

The invention discloses a rare-earth butadiene rubber composite cable sheath material, comprising the following raw materials in parts by weight: 80-100 parts of rare-earth butadiene rubber, 40-50 parts of butadiene styrene rubber, 1.8-2.3 parts of vulcanization system, 5-10 parts of organic montmorillonite, 20-30 parts of a lignin reinforcing agent, 30-40 parts of white carbon black, 20-30 parts of silane modified sepiolite, 2-3 parts of nano-zinc oxide, 1.5-1.8 parts of stearic acid, 1-2 parts of naphthenic oil, 40-50 parts of carbon black N330 and 5-6 parts of N-methylene carboxylic-2-benzothiazole sulfonamide. The rare-earth butadiene rubber composite cable sheath material has the advantages of low cost, good ageing resistance, excellent tensile strength and deflection resistance, good tear resistance, simple preparation process and convenience in practical operation.

Библиографические данные: CN104177740 (A) — 2014-12-03

High liquidity polyvinyl alcohol /lignin wood plastic composite material

Ссылка на эту страницу	CN104177740 (A) - High liquidity polyvinyl alcohol /lignin wood plastic composite material	
Изобретатель(и):	LIU SHEN; WANG ZHICHAO; YANG XIN ±	
Заявитель(и):	HEILONGJIANG XINDA ENTPR GROUP CO LTD ±	
Индекс(ы) по классификации:	- международной (МПК):	C08K3/22 ; C08K3/26 ; C08K5/053 ; C08L29/04 ; C08L97/00
	- cooperative:	
Номер заявки:	CN20131203047 20130528	Global Dossier
Номера приоритетных документов:	CN20131203047 20130528	

Реферат документа CN104177740 (A)

The invention relates to a high liquidity polyvinyl alcohol /lignin wood plastic composite material and a preparation method thereof. The material is the high liquidity polyvinyl alcohol /lignin wood plastic composite material. The innovation of the technical process for preparation of the high liquidity polyvinyl alcohol /lignin wood plastic composite material is reflected by: using magnesium hydroxide and calcium carbonate for inhibition of decomposition of polyvinyl alcohol (PVA), using polypropylene and ethylene glycol to reduce the decomposition temperature of the PVA, using the polyvinyl alcohol (PVA) as a matrix for mixing with lignin, and preparing the high strength high liquidity polyvinyl alcohol /lignin wood plastic composite material by PVA polymerization; finally, using a twin screw extruder for blending and extruding the PVA and the lignin, pulling, cooling and cutting to obtain the modified high liquidity polyvinyl alcohol /lignin wood plastic composite material. In the field of products of wood plastic composite materials, the high liquidity polyvinyl alcohol /lignin wood plastic composite material can improve the production efficiency, save the production cost, realize the injection molding of the wood plastic composite materials and preparation of various profiled bars and products of special shapes, and enrich product kinds of wood plastic composite materials, and has the characteristics of being light in weight, aging resistant, moistureproof, worm damage resistant, and the like of the wood plastic composite materials.

RUBBER COMPOSITION FOR TIRE AND PNEUMATIC TIRE USING THE SAME

Ссылка на эту страницу	JP2014185223 (A) - RUBBER COMPOSITION FOR TIRE AND PNEUMATIC TIRE USING THE SAME	
Изобретатель(и):	FURUYUKI MARIKO; MIHARA SATOSHI; OHASHI YASUNORI; OOGI TAKESHI; YAMANO KOJI ±	
Заявитель(и):	YOKOHAMA RUBBER CO LTD; HARIMA CHEMICALS INC ±	
Индекс(ы) по классификации:	- международной (МПК):	B60C1/00 ; C08L9/00 ; C08L97/00
	- cooperative:	Y02T10/862
Номер заявки:	JP20130060314 20130322	Global Dossier
Номера приоритетных документов:	JP20130060314 20130322	

Реферат документа JP2014185223 (A)

PROBLEM TO BE SOLVED: To provide a rubber composition for a tire having high compounding ratio of natural materials and improved several physical properties important for a tire use such as fracture properties, and to provide a pneumatic tire using the same. SOLUTION: The above problem is solved by a rubber composition obtained by blending 100 pts.mass of a diene rubber and 0.05 to 20 pts.mass of acetic acid lignin, and a pneumatic tire using the rubber composition.

LIQUID KRAFT LIGNIN COMPOSITIONS

Ссылка на эту страницу	CA2846002 (A1) - LIQUID KRAFT LIGNIN COMPOSITIONS	
Изобретатель(и):	[US] WINTEROWD JACK G ±	
Заявитель(и):	[US] WEYERHAEUSER NR CO ±	
Индекс(ы) по классификации:	- международной (МПК):	B27N3/04 ; B27N3/08 ; C08J3/20 ; C08K3/22 ; C08K5/21 ; C08L97/00
	- cooperative:	C08G8/24 ; C08G8/38 ; C08K5/21 ; C08L97/005 ; C09J161/06 ; C09J197/005 далее
Номер заявки:	CA20142846002 20140312	Global Dossier
Номера приоритетных документов:	US201313853938 20130329	
Также опубликовано, как:	CA2846002 (C) US2014296429 (A1) US9090731 (B2)	

Реферат документа CA2846002 (A1)

Liquid kraft lignin compositions, methods of their production, and various methods of their use, including in preparing kraft lignin-containing LPF resins, which may in turn be used in producing OSB or other wood-based composites, and methods of assaying lignin content in such compositions, are disclosed. In an illustrative and non-exclusive embodiment, a liquid kraft lignin composition includes water in the amount of about 60-95% by weight, urea about 5-30% by weight, a group 1 alkaline metal hydroxide about 0.5-3.0% by weight, and kraft about 5-25% by weight on a dry basis.

FLAME RETARDANT RESIN COMPOSITION AND MOLDED ARTICLE

Ссылка на эту страницу	JP2014169401 (A) - FLAME RETARDANT RESIN COMPOSITION AND MOLDED ARTICLE	
Изобретатель(и):	HARADA TADAKATSU; MATSUSHITA YASUYUKI; FUKUSHIMA KAZUHIKO; AOKI DAN ±	
Заявитель(и):	RICOH CO LTD ±	
Индекс(ы) по классификации:	- международной (МПК):	C08L101/00 ; C08L67/00 ; C08L69/00 ; C08L97/00
	- cooperative:	C08H6/00 ; C08K3/0058 ; C08K5/0066 ; C08K5/5205 ; C08L67/04 ; C08L69/00 ; C08L2201/02 ; C08L97/005 далее
Номер заявки:	JP20130042155 20130304	Global Dossier
Номера приоритетных документов:	JP20130042155 20130304	
Также опубликовано, как:	US2014249255 (A1) CN104031362 (A) CN104031362 (B)	

Реферат документа JP2014169401 (A)

PROBLEM TO BE SOLVED: To provide a flame retardant resin composition that has a low environment load by virtue of low petroleum dependency and a high degree of biomass, has also flame retardancy.SOLUTION: A flame retardant resin composition includes a thermoplastic resin and a flame retardant. The flame retardant includes a phosphorylated lignin derivative having a nitrogen-containing structure introduced therein, in which the nitrogen-containing structure is introduced into the lignin derivative, obtained by subjecting a natural lignin to at least a treatment of molecular weight reduction or water solubilization, and phosphoric acid is added to the lignin derivative.

RESIN COMPOSITION AND RESIN MOLDING

Ссылка на эту страницу	JP2014152313 (A) - RESIN COMPOSITION AND RESIN MOLDING	
Изобретатель(и):	YAO KENJI ±	
Заявитель(и):	FUJI XEROX CO LTD ±	
Индекс(ы) по классификации:	- международной (МПК):	C08G59/20 ; C08L63/00 ; C08L67/00 ; C08L97/00
	- cooperative:	
Номер заявки:	JP20130025807 20130213	Global Dossier
Номера приоритетных документов:	JP20130025807 20130213	
Также опубликовано, как:	JP6036370 (B2)	

Реферат документа JP2014152313 (A)

PROBLEM TO BE SOLVED: To provide a resin composition which makes it possible to obtain a resin molding having excellent fire retardancy while satisfying mechanical strength.SOLUTION: A resin composition comprises a reaction product of a polyester resin, a polyfunctional epoxy compound and lignin.

RESIN COMPOSITION AND RESIN MOLDING

Ссылка на эту страницу	JP2014152260 (A) - RESIN COMPOSITION AND RESIN MOLDING	
Изобретатель(и):	YAO KENJI ±	
Заявитель(и):	FUJI XEROX CO LTD ±	
Индекс(ы) по классификации:	- международной (МПК): C08L23/26 ; C08L97/00 - cooperative:	
Номер заявки:	JP20130023494 20130208	Global Dossier
Номера приоритетных документов:	JP20130023494 20130208	

Реферат документа JP2014152260 (A)

PROBLEM TO BE SOLVED: To provide a resin composition having excellent heat resistance.SOLUTION: A resin composition comprises a conjugate of a polyolefin cross-linked and radically activated by a peroxide and a lignin.

Environment-friendly halogen-free intumescent flame retardant polypropylene-based lignin composite material

Ссылка на эту страницу	CN104031315 (A) - Environment-friendly halogen-free intumescent flame retardant polypropylene-based lignin composite material	
Изобретатель(и):	SONG PING AN; YU YOUMING; LIU LI NA; FU SHENYUAN ±	
Заявитель(и):	UNIV ZHEJIANG A & F ±	
Индекс(ы) по классификации:	- международной (МПК): C08K13/02 ; C08K3/32 ; C08K5/00 ; C08K5/06 ; C08K5/07 ; C08K5/09 ; C08K5/098 ; C08K5/20 ; C08K5/3492 ; C08L23/12 ; C08L23/16 ; C08L51/06 ; C08L97/00 - cooperative: C08L23/12 ; C08L2201/02 ; C08L2201/22 ; C08L2205/035 далее	
Номер заявки:	CN20141249834 20140606	Global Dossier
Номера приоритетных документов:	CN20141249834 20140606	
Также опубликовано, как:	CN104031315 (B)	

Реферат документа CN104031315 (A)

The invention discloses an environment-friendly halogen-free intumescent flame retardant polypropylene-based lignin composite material. The lignin composite material comprises the following components in parts by mass: 50-70 parts of polypropylene, 10-25 parts of phosphorus-nitrogen compound intumescent flame retardant, 20-30 parts of lignin, 3-10 parts of interface compatibilizer and 0.5-3.0 parts of lubricants. According to the lignin composite material, the addition of the conventional flame retardant is reduced, and the lignin composite material is free of halogen-free, green and environmentally friendly; and the polypropylene-based lignin composite material disclosed by the invention enables industrial alkali lignin to be comprehensively utilized and has excellent flame retardant properties and mechanical properties and is expected to be widely used in electronic, electrical and construction fields.

RESIN COMPOSITION

Ссылка на эту страницу [JP2014133835 \(A\) - RESIN COMPOSITION](#)

Изобретатель(и):	TANAKA TATSUYA; ARAO YOSHIHIKO; NAKAMURA SAKAE; TOMITA YUTA; UMEMURA TOSHIKAZU; NAKAMURA HIDEO; TAKAKUWA KYOHEI ±	
Заявитель(и):	DOSHISHA; MITSUBISHI GAS CHEMICAL CO; HISHIE KAGAKU KK ±	
Индекс(ы) по классификации:	- международной (МПК):	C08K3/22 ; C08K3/32 ; C08K5/3477 ; C08L101/00 ; C08L23/26 ; C08L97/00
	- cooperative:	
Номер заявки:	JP20130003073 20130111	Global Dossier
Номера приоритетных документов:	JP20130003073 20130111	

Реферат документа JP2014133835 (A)

PROBLEM TO BE SOLVED: To provide a resin composition capable of using, without adversely affecting physical properties of a molding obtained therefrom such as strengths, moldability, etc., the largest possible quantity of a wood flour or processed ligneous powder as an extender, of promoting an effective use of a heretofore-unused material (ligneous biomass), and of securing flame retardancy.SOLUTION: The provided resin composition including a thermoplastic resin and a ligneous material powder not only includes a compatibilizer having affinity with the thermoplastic resin and cellulose within the ligneous material powder but also uses, as the ligneous material powder, either a processed ligneous powder from which at least an essential oil component has been removed in a state where lignin remains or a fermentation residue from which an alcohol component has been removed by saccharifying and fermenting a first processed ligneous powder obtained via an oil component removal step of steam-extracting and removing at least an essential oil component from a wood flour.

RESIN COMPOSITION, AND MOLDED PRODUCT THEREOF

Ссылка на эту страницу	JP2014125595 (A) - RESIN COMPOSITION, AND MOLDED PRODUCT THEREOF	
Изобретатель(и):	KIKUCHI IKUKO; KOYAMA NAOYUKI; GOTO AKIHITO; KOFUNE MIKA ±	
Заявитель(и):	HITACHI CHEMICAL CO LTD ±	
Индекс(ы) по классификации:	- международной (МПК):	C08K5/13 ; C08L97/00
	- cooperative:	
Номер заявки:	JP20120284808 20121227	Global Dossier
Номера приоритетных документов:	JP20120284808 20121227	

Реферат документа JP2014125595 (A)

PROBLEM TO BE SOLVED: To provide a resin composition derived from a plant using a wood-based material derived from a plant, and in particular, to provide a resin composition which contains lignin derived from a plant as a main raw material, and is excellent in workability with high plant-containing ratio and is applied with impact resistance by applying plasticity thereto with cardanol, and a molded product. **SOLUTION:** In a resin composition containing lignin, cardanol, a curing agent and a curing accelerator, the resin composition contains 20-90 mass% of organic solvent soluble lignin, and 0.1-50 mass% of cardanol. A molded product is formed by using the resin composition.

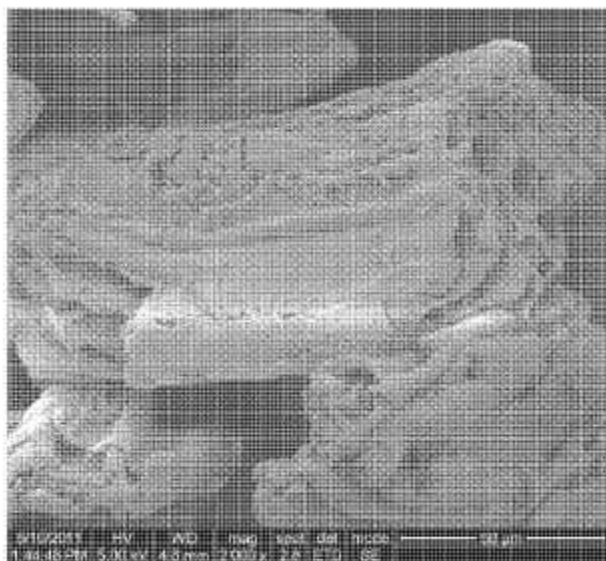
Библиографические данные: US2014242867 (A1) — 2014-08-28

LIGNIN COMPOSITIONS, METHODS OF PRODUCING THE COMPOSITIONS, METHODS OF USING LIGNIN COMPOSITIONS, AND PRODUCTS PRODUCED THEREBY

Ссылка на эту страницу	US2014242867 (A1) - LIGNIN COMPOSITIONS, METHODS OF PRODUCING THE COMPOSITIONS, METHODS OF USING LIGNIN COMPOSITIONS, AND PRODUCTS PRODUCED THEREBY
Изобретатель(и):	[US]; JANSEN ROBERT EYAL [IL]; AHARON LAPIDOT [IL]; NOA HALLAC [IL]; BASSEM BELMAN [IL]; ZIV-VLADIMIR KENIG [IL] SHMUEL ±
Заявитель(и):	[US]; JANSEN ROBERT EYAL [IL]; AHARON LAPIDOT [IL]; NOA HALLAC [IL]; BASSEM BELMAN [IL]; ZIV-VLADIMIR KENIG [IL] SHMUEL ±
Индекс(ы) по классификации:	- международной (МПК): C01B3/02 ; C08J3/20 ; C08L23/12 ; C08L55/02 ; C08L97/00 ; D01F9/00 ; D01F9/17 - cooperative: C01B3/02 ; C07G1/00 ; C08H6/00 ; C08J3/20 ; C08K13/02 ; C08L23/12 ; C08L55/02 ; C08L97/005 ; D01F9/00 ; D01F9/17 ; C08J2497/00 ; Y10T442/30 ; Y10T442/60
Номер заявки:	US201214009867 20120404 Global Dossier
Номера приоритетных документов:	US201214009867 20120404 ; WO2011IL00424 20110601 ; US201161473134P 20110407 ; US201161483663P 20110507 ; US201161491243P 20110530 ; US201161626307P 20110922 ; US201161552402P 20111027 ; US201161559529P 20111114 ; US201261602514P 20120223 ; US201261620186P 20120404 ; US201261620195P 20120404 ; WO2012US32227 20120404
Также опубликовано, как:	WO2012138802 (A1) US2014171379 (A1) WO2012138801 (A2) WO2012138801 (A3) EP2697289 (A1) далее

Реферат документа US2014242867 (A1)

Fig. 5



Lignin compositions, products produced from them or containing them, methods to produce them, spinning methods, methods to convert lignin to a conversion product and conversion products produced by the methods are described.

Библиографические данные: CN103951858 (A) — 2014-07-30

Silane coupling agent modified hydroxymethyl lignin filled rubber composition and preparation method thereof

Ссылка на эту страницу	CN103951858 (A) - Silane coupling agent modified hydroxymethyl lignin filled rubber composition and preparation method thereof	
Изобретатель(и):	CHEN CHAOHUI; YIN YUMING; ZHANG ZHONGLUN; ZHANG XIAODONG; DONG XUETENG; ZENG YUHUA ±	
Заявитель(и):	UNIV SOUTH CHINA TECH; GUANGZHOU GELIN HIGH POLYMER MATERIAL CO LTD ±	
Индекс(ы) по классификации:	- международной (МПК):	C08H7/00 ; C08K13/02 ; C08K5/548 ; C08L9/00 ; C08L9/06 ; C08L97/00
	- cooperative:	
Номер заявки:	CN20141164186 20140422	Global Dossier
Номера приоритетных документов:	CN20141164186 20140422	

Реферат документа CN103951858 (A)

The invention relates to a silane coupling agent modified hydroxymethyl lignin filled rubber composition and a preparation method thereof. The composition comprises the following components in parts by mass: 100 parts of rubber, 10-100 parts of hydroxymethyl lignin, 1-10 parts of silane coupling agent, 5-8 parts of activating agent, 1-3 parts of anti-aging agent, 1-3 parts of promotor and 1-3 parts of vulcanizing agent. According to the rubber composition disclosed by the invention, polar groups (hydroxymethyl and phenolic hydroxyl groups) of

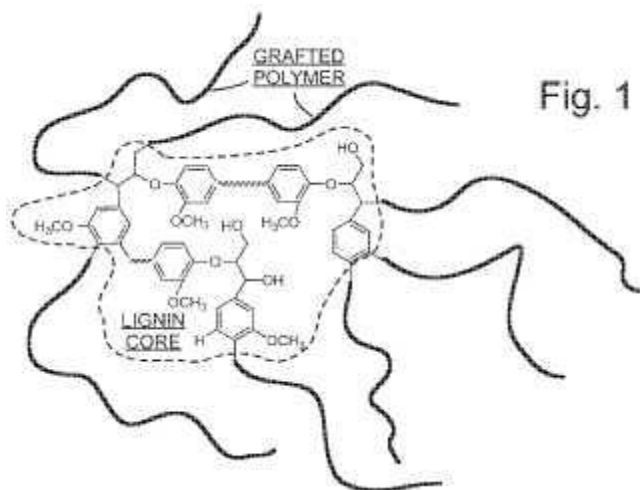
hydroxymethyl lignin and non-polar long chains of the rubber are combined together in a chemical reaction manner by using the silane coupling agent, and a high and low temperature combined multistage mixing technical process is adopted, so that the reinforcement effect of lignin to non-polar rubber can be improved from two aspects namely modification and process; the rubber composition is the silane coupling agent modified hydroxymethyl lignin filled rubber composition with uniform lignin dispersion, good processing property, high bound rubber content and better reinforcement effect.

Библиографические данные: WO2014116672 (A1) — 2014-07-31

LIGNIN-CONTAINING POLYMERS AND COMPOSITIONS INCLUDING LIGNIN-CONTAINING POLYMERS

Ссылка на эту страницу	WO2014116672 (A1) - LIGNIN-CONTAINING POLYMERS AND COMPOSITIONS INCLUDING LIGNIN-CONTAINING POLYMERS	
Изобретатель(и):	[US]; WASHBURN NEWELL R [US] CHUNG HOYONG ±	
Заявитель(и):	[US] UNIV CARNEGIE MELLON ±	
Индекс(ы) по классификации:	- международной (МПК):	C08H7/00 ; C08K3/04 ; C08L101/00 ; C08L97/00
	- cooperative:	C08F251/02 ; C08F291/04 ; C08F293/005 ; C08G81/02 ; C08H6/00 ; C08K3/04 ; C09K8/588 ; C08F2438/01 далее
Номер заявки:	WO2014US12505 20140122	Global Dossier
Номера приоритетных документов:	US201361849233P 20130122 ; US201361962059P 20131030	
Также опубликовано, как:	US2015368546 (A1)	

Реферат документа WO2014116672 (A1)



A composition includes an agent formed by grafting at least a first polymer with lignin and a component other than the agent, lignin or the at least a first polymer, wherein lignin has an affinity for the component. A method of dispersing a component in a matrix includes adding an agent to the matrix. The agent is formed by grafting at least a first polymer with lignin. The first polymer has an affinity for the matrix. Lignin has an affinity for the component. The component is other than the agent, lignin or the at least a first polymer. The method for includes contacting the matrix with the component.

METHOD OF OBTAINING COMPOSITE FIBRE BASED ON HYDROLYTIC LIGNIN WITH POLYACRYLONITRILE

Ссылка на эту страницу	RU2012153414 (A) - METHOD OF OBTAINING COMPOSITE FIBRE BASED ON HYDROLYTIC LIGNIN WITH POLYACRYLONITRILE
Изобретатель(и):	SAZANOV JURIJ NIKOLAEVICH, ; DOBROVOL'SKAJA IRINA PETROVNA, ; SPIRINA TAMARA NIKITICHNA, ; POPRJADUKHIN PAVEL VASIL'EVICH, ; JUDIN VLADIMIR EVGEN'EVICH, ; SAPRYKINA NATAL'JA NIKOLAEVNA, ; POPOVA ELENA NIKOLAEVNA, ; FEDOROVA GALINA NIKOLAEVNA, ; KULIKOVA EVGENIJA MIKHAJLOVNA, ; SUMERSKIJ IVAN VIKTOROVICH, ; KRUTOV STEPAN MINAEVICH, ; NOVOSELOVA ANNA VALENTINOVNA
Заявитель(и):	FEDERAL'NOE GOSUDARSTVENNOE BJDZHETNOE UCHREZHDENIE NAUKI INSTITUT VYSOKOMOLEKULJARNYKH SOEDINENIJROSSIJSKOJ AKADEMII NAUK
Индекс(ы) по классификации:	- международной (МПК): C08L97/00 ; D01F6/54 ; D01F8/00 - cooperative:
Номер заявки:	RU20120153414 20121212
Номера приоритетных документов:	RU20120153414 20121212
Также опубликовано, как:	RU2526380 (C2)

Реферат документа RU2526380 (C2)

FIELD: chemistry.SUBSTANCE: invention relates to the field of obtaining a composite fibre based on hydrolytic lignin with polyacrylonitrile and can be used for the formation of pre-cursor composite fibres as an initial material for the formation of carbon fibres of increased strength and heat resistance. Finely disperse hydrolytic lignin is dissolved in dimethylsulphoxide until complete swelling at room temperature for 10-20 h and mixed with a solution of polyacrylonitrile in dimethylsulphoxide until a homogenous and moulding solution, containing 70-80 wt % of hydrolytic lignin, is formed. The solution is filtered, degassed, charged into the draw plate tank and supplied into the spinning bath of an installation for the preparation of composite fibres.EFFECT: application of the invention ensures an increased value of utilised hydrolytic lignin, increased strength of the pre-cursor fibre to 50 MPa, increase of heat resistance to 30-40% at 800°C in comparison with 20% for pure hydrolytic lignin, improvement of production ecology.1 ex

Biomass PVC (Polyvinyl Chloride) composite material and preparation method thereof

Ссылка на эту страницу	CN103897295 (A) - Biomass PVC (Polyvinyl Chloride) composite material and preparation method thereof
Изобретатель(и):	CHANG JIE; MA AILI; LI CHENGQIAN; FU YAN ±
Заявитель(и):	UNIV SOUTH CHINA TECH ±
Индекс(ы) по классификации:	- международной (МПК): B29B7/56 ; B29C43/02 ; C08K13/02 ; C08K3/26 ; C08L27/06 ; C08L97/00 - cooperative:
Номер заявки:	CN2014181325 20140306 Global Dossier

Номера приоритетных документов: CN2014181325 20140306
Также опубликовано, как: [CN103897295 \(B\)](#)

Реферат документа CN103897295 (A)

The invention relates to a biomass PVC (Polyvinyl Chloride) composite material and a preparation method thereof. Lignin is used as a reinforcing packing, and the composite material comprises the following components in parts by mass: 100 parts of polyvinyl chloride, 1-10 parts of stabilizing agent, 1-8 parts of lubricant, 1-7 parts of plasticizer, 10-40 parts of calcium carbonate packing and 10-60 parts of lignin. The biomass PVC composite material provided by the invention has the characteristics of light weight, high mechanical strength, good insulation property, easiness in high temperature degradation, good biologic degradation property, low formula cost, energy conservation and environmental friendliness, and can be widely applied to various hard PVC boards.

Библиографические данные: US2014163142 (A1) — 2014-06-12

PROCESS FOR FUNGAL MODIFICATION OF LIGNIN AND PREPARING WOOD ADHESIVES WITH THE MODIFIED LIGNIN AND WOOD COMPOSITES MADE FROM SUCH ADHESIVES

Ссылка на эту страницу: [US2014163142 \(A1\) - PROCESS FOR FUNGAL MODIFICATION OF LIGNIN AND PREPARING WOOD ADHESIVES WITH THE MODIFIED LIGNIN AND WOOD COMPOSITES MADE FROM SUCH ADHESIVES](#)

Изобретатель(и): [CA]; ZHANG YAOLIN WANG [CA]; DIAN-QING WANG [CA]; XIANG-MING FENG [CA]; MARTIN BRUNETTE [CA] GILLES ±

Заявитель(и): [CA]; ZHANG YAOLIN WANG [CA]; DIAN-QING WANG [CA]; XIANG-MING FENG [CA]; MARTIN BRUNETTE [CA]; GILLES [CA] FPINNOVATIONS ±

Индекс(ы) по классификации: - международной (МПК): [C09J161/06](#); [C09J197/02](#); [C12P7/22](#)
- cooperative: [C08G8/20](#); [C08G8/24](#); [C08H6/00](#); [C08L97/005](#); [C09J161/06](#); [C09J161/12](#); [C09J197/02](#); [C12N1/14](#); [C12P1/02](#); [C12P7/22](#); [C12R1/645](#)

Номер заявки: US201214001089 20120217 [Global Dossier](#)

Номера приоритетных документов: US201214001089 20120217; [US201161445725P 20110223](#); [WO2012CA00153 20120217](#)

Также опубликовано, как: [US9273238 \(B2\)](#) [WO2012113058 \(A1\)](#) [CA2826354 \(A1\)](#)

Реферат документа US2014163142 (A1)

Disclosed herein are method to modify the lignin with particular fungal species, and procedure to synthesize phenolic adhesives with the modified lignin as raw materials, and the adhesives compositions and methods for making adhesive compositions, and methods for making lingo-cellulosic composites from renewable materials. Four fungi in examples are *Lenzites elegans* (Spreng.) Pat. (FTK 329A), *Phanerochaete crenea* (Bres.) Parmasto (FTK 332A), *Pycnoporellus alboluteus* (Ellis & Everh.) Kotl. & Pouz. (FTK 76A) and *Meruliopsis taxicola* (Pers.) Bondartsev (FTK 122B). Lignin used in examples are organosolv lignin, Kraft lignin, and ammonium liginosulfonate. The present invention includes methods to (1) modify of lignin with

fungi; (2) in-situ polymerize modified lignin-phenol-formaldehyde to generate bio-modified lignin-phenol-formaldehyde adhesive in liquid form, and (3) manufacture composite panels with bio-modified lignin-phenol-formaldehyde resins.

Библиографические данные: CN103834107 (A) — 2014-06-04

Modified lignin intumescent flame retardant TPO composite material as well as preparation method and application of composite material

Ссылка на эту страницу	CN103834107 (A) - Modified lignin intumescent flame retardant TPO composite material as well as preparation method and application of composite material	
Изобретатель(и):	FENG RUI; ZHANG HONG; WANG XINHONG; GU YU; LIU GUOFENG; WANG AISHUANG ±	
Заявитель(и):	UNIV DALIAN POLYTECHNIC ±	
Индекс(ы) по классификации:	- международной (МПК):	C08K13/02 ; C08K3/32 ; C08K5/01 ; C08K5/10 ; C08K5/3492 ; C08L23/12 ; C08L23/16 ; C08L97/00
	- cooperative:	C08L23/12 ; C08L23/16 ; C08L2201/02 ; C08L2201/08 ; C08L2207/04 далее
Номер заявки:	CN2014187681 20140311	Global Dossier
Номера приоритетных документов:	CN2014187681 20140311	
Также опубликовано, как:	CN103834107 (B)	

Реферат документа CN103834107 (A)

The invention relates to a modified lignin intumescent flame retardant thermoplastic polyolefin (TPO) composite material as well as a preparation method and an application of the composite material. The composite material contains modified lignin, wherein the modified lignin consists of the following components in percentage by mass: 94-96% of lignin, 2-4% of white oil and 1-2% of titanate; and the modified lignin accounts for 3-8% in terms of total mass of the composite material. The prepared modified lignin intumescent flame retardant TPO composite material disclosed by the invention has the beneficial effects of being high in tensile strength at break, high in elongation at break, low in heating expansion amount, good in low temperature flexibility, good in penetration resistance and strong in chemical corrosion resistance; and the composite material is excellent in weather aging resistance, applicable to damp, hot and cold natural environments in a long term, and low in performance change.

Библиографические данные: JP2014077107 (A) — 2014-05-01

RESIN COMPOSITION AND RESIN MOLDED ARTICLE

Ссылка на эту страницу	JP2014077107 (A) - RESIN COMPOSITION AND RESIN MOLDED ARTICLE	
Изобретатель(и):	KAWASHIMA MANABU; YAO KENJI ±	
Заявитель(и):	FUJI XEROX CO LTD ±	
Индекс(ы) по классификации:	- международной (МПК):	C08K5/521 ; C08L1/00 ; C08L67/04 ; C08L97/00
	- cooperative:	C08K5/521 ; C08L1/02 ; C08L1/14 ; C08L67/04 далее
Номер заявки:	JP20130009441 20130122	Global Dossier
Номера приоритетных	JP20120205881 20120919 ; JP20130009441 20130122	

документов:

Также опубликовано, как: [US2014076196 \(A1\)](#) [US9334390 \(B2\)](#) [CN103665801 \(A\)](#)
[CN103665801 \(B\)](#)

Реферат документа JP2014077107 (A)

PROBLEM TO BE SOLVED: To provide a resin composition with which a resin molded article with improved flexibility can be obtained.SOLUTION: A resin composition includes a polylactic acid resin or cellulose resin, 0.1 phr or more and 5 phr or less of lignin, and 5 phr or more and 20 phr or less of an aromatic condensed phosphoric acid ester.

Библиографические данные: JP2014065808 (A) — 2014-04-17

RESIN COMPOSITION AND RESIN MOLDING

Ссылка на эту страницу [JP2014065808 \(A\) - RESIN COMPOSITION AND RESIN MOLDING](#)

Изобретатель(и): MURAI TAKETOSHI ±

Заявитель(и): SUMITOMO BAKELITE CO ±

Индекс(ы) по классификации: - международной (МПК): [C08K5/29](#); [C08K5/3437](#); [C08K5/3467](#); [C08K5/3492](#); [C08K5/35](#); [C08L63/00](#); [C08L97/00](#)
- cooperative:

Номер заявки: JP20120211575 20120925 [Global Dossier](#)

Номера приоритетных документов: JP20120211575 20120925

Реферат документа JP2014065808 (A)

PROBLEM TO BE SOLVED: To provide a resin composition containing a plant-derived component as a main component and having excellent moldability and heat resistance such as glass-transition temperature without impairing solvent resistance, and to provide a resin molding.SOLUTION: The resin composition includes a lignin derivative (A), at least one crosslinking agent (B) selected from epoxy compounds and isocyanate compounds, and a crosslinking agent (C) whose crosslinking point and kind are different from those of the crosslinking agent (B). Preferably, the crosslinking agent (C) contains at least one selected from quinuclidine, pyridine and hexamethylene tetramine. As the lignin derivative (A), a compound obtained by subjecting biomass to a subcritical treatment is preferably used.

Библиографические данные: JP2014065779 (A) — 2014-04-17

THERMOSETTING RESIN COMPOSITION USING LIGNIN

Ссылка на эту страницу [JP2014065779 \(A\) - THERMOSETTING RESIN COMPOSITION USING LIGNIN](#)

Изобретатель(и): KOYAMA NAOYUKI; GOTO AKIHITO; KIKUCHI IKUKO; KOFUNE MIKA ±

Заявитель(и): HITACHI CHEMICAL CO LTD ±

Индекс(ы) по классификации: - международной (МПК): [C08K5/353](#); [C08L97/00](#)
- cooperative:

Номер заявки: JP20120210750 20120925 [Global Dossier](#)

Номера приоритетных документов: JP20120210750 20120925

документов:

Реферат документа JP2014065779 (A)

PROBLEM TO BE SOLVED: To provide a thermosetting resin composition which contains a vegetable resource as a main raw material and to which heat resistance, high strength, flame retardancy, and antibacterial properties have been imparted. **SOLUTION:** The thermosetting resin composition contains a compound containing a plurality of oxazoline rings, and lignin. Preferably, the compound containing the plurality of oxazoline rings is 2,2'(1,3-phenylene)bis-2-oxazoline, the weight-average molecular weight of the lignin is 100-7000, and the content of sulfur atoms in the lignin is 2 mass% or less. Also, the lignin is preferably one obtained by separating a lignin from a cellulose component and a hemicellulose component by a treatment method using only water and by dissolving the separated lignin in an organic solvent.

Библиографические данные: CN103788485 (A) — 2014-05-14

Method for improving heat stability of polypropylene plastic

Ссылка на эту страницу	CN103788485 (A) - Method for improving heat stability of polypropylene plastic
Изобретатель(и):	YU MUHUO; CHEN LEI; LIU SHUPING; ZHANG WENHUI; ZHANG JINGJIE; WANG HAIFENG; HAN KEQING; RONG HUAIPING; TAN HUILIN; YAN BIN; WANG DAN; JING PENGZHAN; ZHANG JIANJUN; KE SHENGBAO; LI SHUANGJIANG; WANG HUIFENG; WU YUXIA ±
Заявитель(и):	UNIV DONGHUA ±
Индекс(ы) по классификации:	- международной (МПК): B29C45/78 ; C08L23/12 ; C08L97/00 - cooperative: B29C45/78 ; C08L23/12 ; C08L97/02 ; B29C2945/76531 ; C08L2201/08 ; C08L2205/24 далее
Номер заявки:	CN2014114562 20140113 Global Dossier
Номера приоритетных документов:	CN2014114562 20140113

Реферат документа CN103788485 (A)

The invention relates to a method for improving the heat stability of polypropylene plastic. The method comprises the steps of (1) uniformly mixing lignin and polypropylene according to a mass ratio of (5:95)-(20:80), and performing melt blending on a mixture under the temperature of 150-250 DEG C to obtain a uniformly mixed blend; and (2) adding the blend into a material feeding hopper of a micro injection molding machine for melting under the temperature of 170-240 DEG C, injecting a mixture melt into a mold, and cooling to obtain a blended sample. The technology of the method disclosed by the invention is simple; an operating method is simple, and the cost is low; the lignin can realize a certain heterogeneous nucleation function in a polypropylene crystallization process, so that the crystallinity and the crystallization property of polypropylene can be improved; meanwhile, due to the influence of a three-dimensional meshed structure of the lignin, the heat resistance of a composite material can be improved; and the method can be popularized industrially and has a good application prospect.

LIGNIN COMPOSITE MATERIAL

Ссылка на эту страницу	WO2014070036 (A1) - LIGNIN COMPOSITE MATERIAL
Изобретатель(и):	[RU] GRIDNEV ALEXEI ALEXEEVICH ±
Заявитель(и):	[RU] GRIDNEV ALEXEI ALEXEEVICH ±
Индекс(ы) по классификации:	- международной (МПК): C08H7/00 ; C08L97/00 ; C09J197/00 - cooperative: C08H6/00 ; C08L97/005 далее
Номер заявки:	WO2012RU00901 20121102 Global Dossier
Номера приоритетных документов:	WO2012RU00901 20121102

Реферат документа WO2014070036 (A1)

The present invention provides a composite material comprising lignin, carboxylic anhydride binder and cross-linking agent (hardener). Carboxylic anhydride binder is a polymeric material with amount of carboxylic anhydride 2 or more carboxylic anhydride fragments per molecule of the binder. The binder can be synthesized by copolymerization of different anhydrides with ethylenically unsaturated monomers in the presence of lignin. The hardener comprises chemical groups that are capable to react with carboxylic anhydride moieties, like polyols, polyepoxides or polyamines with amount of such groups 2 or more. Neither the binder, not the hardener contains solvents or water. The composite is obtained by cure of all ingredients together on heating and, optionally, pressing, and with optional catalyst. Catalysts can be applied to reduce process temperature or to improve properties of the composite material. Fillers can be introduced into the lignin composite to improve mechanical strength.

RUBBER COMPOSITION, CURED MATERIAL AND TIRE

Ссылка на эту страницу	JP2014051573 (A) - RUBBER COMPOSITION, CURED MATERIAL AND TIRE
Изобретатель(и):	MATSUMOTO MITSUTAKA; NAKAGAWA HIROSHIGE; GO YOSHIYUKI ±
Заявитель(и):	SUMITOMO BAKELITE CO ±
Индекс(ы) по классификации:	- международной (МПК): B60C1/00 ; C08K3/04 ; C08K3/22 ; C08K3/36 ; C08L7/00 ; C08L9/00 ; C08L97/00 - cooperative: Y02T10/862
Номер заявки:	JP20120196095 20120906 Global Dossier
Номера приоритетных документов:	JP20120196095 20120906

Реферат документа JP2014051573 (A)

PROBLEM TO BE SOLVED: To provide a rubber composition containing a lignin derivative and at least one of a natural rubber compound or a diene-based synthetic rubber compound, and excellent in elastic modulus, stress at break, further elongation at break, and to provide a cured material of the rubber composition, and to provide a tire manufactured by the rubber composition. SOLUTION: A rubber composition containing a lignin derivative having a carbon

content measured by an elemental analysis method of 40 wt.% or more and a natural rubber compound or a diene-based synthetic rubber compound is used.

Библиографические данные: JP2014047257 (A) — 2014-03-17

THERMOSETTING LIGNIN COMPOSITION AND METHOD OF PRODUCING THE SAME

Ссылка на эту страницу	JP2014047257 (A) - THERMOSETTING LIGNIN COMPOSITION AND METHOD OF PRODUCING THE SAME
Изобретатель(и):	YOSHIMURA KOICHI ±
Заявитель(и):	ASAHI ORGANIC CHEM IND ±
Индекс(ы) по классификации:	- международной (МПК): C08L97/00 - cooperative:
Номер заявки:	JP20120189830 20120830 Global Dossier
Номера приоритетных документов:	JP20120189830 20120830

Реферат документа JP2014047257 (A)

PROBLEM TO BE SOLVED: To provide a thermosetting lignin composition hardenable by heating at relatively low temperatures and a production method enabling easy acquisition of such a lignin composition.**SOLUTION:** The thermosetting lignin composition is obtained by adding at least one additive selected from oxides, acids and salts to a lignin-containing solution produced in alkali digestion and has a pH of 10 or lower and a non-volatile content of 70 mass% or lower. The pH of the thermosetting lignin composition is preferably 4 or higher. The additive is preferably a mononuclear oxoacid, a mononuclear oxoacid salt or a compound forming a mononuclear oxoacid or a mononuclear oxoacid salt in aqueous solution.

Библиографические данные: CN103756060 (A) — 2014-04-30

Rubber composite material filled by cardanol modified lignin and preparation method thereof

Ссылка на эту страницу	CN103756060 (A) - Rubber composite material filled by cardanol modified lignin and preparation method thereof
Изобретатель(и):	CHEN ZHAOHUI; MO YEZHI; ZHANG ZHONGLUN ±
Заявитель(и):	UNIV SOUTH CHINA TECH; GUANGZHOU GREEN POLYMER MATERIAL TECHNOLOGY CO LTD ±
Индекс(ы) по классификации:	- международной (МПК): C08H7/00 ; C08K13/02 ; C08K3/06 ; C08K3/22 ; C08K5/09 ; C08L9/06 ; C08L97/00 - cooperative:
Номер заявки:	CN20131695385 20131216 Global Dossier
Номера приоритетных документов:	CN20131695385 20131216

Реферат документа CN103756060 (A)

The invention relates to a rubber composite material filled by cardanol modified lignin and a preparation method thereof. The rubber composite material is characterized by being made of

100 parts by weight of rubber and 10-200 parts by weight of cardanol modified lignin. The rubber is natural rubber, polyisoprene rubber, styrene butadiene rubber, butadiene rubber, 1, 2 polybutadiene, an ethylene propylene diene monomer, butyl rubber, nitrile rubber or neoprene, or a combination of two or more of natural rubber, polyisoprene rubber, styrene butadiene rubber, butadiene rubber, 1, 2 polybutadiene, an ethylene propylene diene monomer, butyl rubber, nitrile rubber and neoprene. The cardanol modified lignin contains hydroxymethyl and unsaturated alkyl long chain functional groups. The cardanol modified lignin is obtained by employing formaldehyde and cardanol as modifiers to modify a black liquor or pure lignin. According to the invention, environment friendly and renewable lignin and cardanol are taken as the main raw materials, which can improve the mechanical properties of the rubber products and lower the rubber product cost. Thus, the rubber composite material filled by cardanol modified lignin has economic value and social significance.

Библиографические данные: CN103642132 (A) — 2014-03-19

Ethylene-propylene-diene rubber composition

Ссылка на эту страницу	CN103642132 (A) - Ethylene-propylene-diene rubber composition	
Изобретатель(и):	CHE CHUNLING ±	
Заявитель(и):	JINAN DEV ZONE XINGHUO SCIENCE & TECHNOLOGY RES INST ±	
Индекс(ы) по классификации:	- международной (МПК):	C08K13/02 ; C08K3/22 ; C08K3/34 ; C08K3/36 ; C08K5/01 ; C08K5/09 ; C08L23/16 ; C08L71/08 ; C08L97/00
	- cooperative:	C08L23/16 ; C08L2205/035 далее
	Номер заявки:	CN20131585864 20131120 Global Dossier
Номера приоритетных документов:	CN20131585864 20131120	
Также опубликовано, как:	CN103642132 (B)	

Реферат документа CN103642132 (A)

The invention relates to the field of rubber compositions, and concretely relates to an ethylene-propylene-diene rubber composition. The composition comprises, by weight, 60-80 parts of ethylene-propylene-diene rubber, 0.5-1.5 parts of stearic acid, 1-2 parts of magnesium oxide, 1-3 parts of polyethylene glycol, 20-30 parts of a biomass/clay composite filler, 30-40 parts of silica, 10-15 parts of paraffin oil, 2-4 parts of a crosslinking agent, 0.2-2.5 parts of a crosslinking aid and 0.5-2.5 parts of an antioxidant. Biomass-clay composed of 25mass% of lignin, 55mass% of silicate clay and 20mass% of water substitutes carbon black, so the problems of high pollution, high consumption and the like in the production process are solved; and lignin contains active groups comprising an aromatic group, a phenolic hydroxyl group, an alcoholic hydroxyl group, a carbon-based conjugated double bond and the like, so lignin can be well dispersed in the ethylene-propylene-diene rubber, thereby an enhancement effect is realized, and the effect is better than the effect of the carbon black.

Библиографические данные: JP2014015579 (A) — 2014-01-30

THERMOPLASTIC RESIN COMPOSITION

Ссылка на эту страницу	JP2014015579 (A) - THERMOPLASTIC RESIN COMPOSITION	
Изобретатель(и):	MASUDA TAKAO; TAKO TERUFUSA; RYUMON HISANORI; NODERA AKIO; KOYAMA HIROTO; TORII TAKAHIRO; SHIBATA MASAYUKI ±	
Заявитель(и):	IDEMITSU KOSAN CO; UNIV HOKKAIDO ±	

Индекс(ы) по классификации: - международной (МПК): [C08K5/521](#); [C08L101/00](#); [C08L69/00](#); [C08L97/00](#)
 - cooperative:
 Номер заявки: JP20120155664 20120711 [Global Dossier](#)
 Номера приоритетных документов: JP20120155664 20120711

Реферат документа JP2014015579 (A)

PROBLEM TO BE SOLVED: To provide a thermoplastic resin composition with high fluidity, high fire retardancy and excellent environmental friendliness.
SOLUTION: There is provided a thermoplastic resin composition including: (A) 99.9 to 30 mass% of a thermoplastic resin; and (B) 0.1 to 70 mass% of lignin degradation products obtained by treating a lignin-containing material in a mixed solvent containing an alcohol having 4 or more carbon atoms under following conditions (1) to (4): (1) a lignin content of 1 to 50 mass% based on the mixed solvent; (2) a molar ratio of water to alcohol (water/alcohol) of 1/10 to 50/1; (3) a temperature range of 180 to 350°C; and (4) a time range of 1 minute to 10 hours.

Библиографические данные: CN103597036 (A) — 2014-02-19

A method for producing a binder composition, a layered composite structure, a binder composition, an adhesive composition, and uses of the binder composition and the adhesive composition

Ссылка на эту страницу: [CN103597036 \(A\) - A method for producing a binder composition, a layered composite structure, a binder composition, an adhesive composition, and uses of the binder composition and the adhesive composition](#)
 Изобретатель(и): VALKONEN SANNA ±
 Заявитель(и): UPM KYMMENE CORP ±
 Индекс(ы) по классификации: - международной (МПК): [C08L61/06](#); [C08L97/00](#); [C09J161/06](#); [C09J197/00](#)
 - cooperative: [B32B7/12](#); [C08G8/24](#); [C08G8/38](#); [C08L61/06](#); [C08L61/12](#); [C08L97/00](#); [C08L97/005](#); [C09J161/06](#); [C09J161/12](#); [C09J197/00](#); [C09J197/005](#); [Y10T428/31982](#) далее
 Номер заявки: CN2012827678 20120405 [Global Dossier](#)
 Номера приоритетных документов: [WO2012FI50345 20120405](#) ; [FI20110005340 20110408](#)
 Также опубликовано, как: [WO2012136894 \(A1\)](#) [US2014030540 \(A1\)](#) [US9109148 \(B2\)](#) [JP2014516370 \(A\)](#) [JP5922222 \(B2\)](#) далее

Реферат документа CN103597036 (A)

The invention relates to a method for producing a binder composition, wherein the method comprises the following steps: (i) forming an aqueous composition comprising reactant components including lignin, a polymerizable substance and a crosslinking agent in the presence of a catalyst; (ii) cooking the formed composition until the composition has a viscosity, which corresponds to 45-95% of a predetermined viscosity value of the final binder composition; (iii) adding tannin as a reactant component to the composition; and (iv) cooking the composition at a temperature of 60-95 DEG C for polymerizing the reactant components until a binder composition with a predetermined viscosity value is formed.

Method for preparing environment-friendly energy-saving rubber conveying belt by using biomass composite material

Ссылка на эту страницу	CN103554585 (A) - Method for preparing environment-friendly energy-saving rubber conveying belt by using biomass composite material	
Изобретатель(и):	TONG CHANGXING; TONG CHANGFENG ±	
Заявитель(и):	KUNMING SHUANGCHANG RUBBER TUBE AND BELT MFG CO LTD ±	
Индекс(ы) по классификации:	- международной (МПК): B29C35/02 ; C08K13/02 ; C08K3/06 ; C08K3/22 ; C08K5/09 ; C08L17/00 ; C08L7/00 ; C08L93/04 ; C08L97/00 ; C08L97/02 - cooperative:	
Номер заявки:	CN20131561495 20131113	Global Dossier
Номера приоритетных документов:	CN20131561495 20131113	
Также опубликовано, как:	CN103554585 (B)	

Реферат документа CN103554585 (A)

The invention relates to a method for preparing an environment-friendly energy-saving rubber conveying belt by using a biomass composite material. The belt is prepared from the following materials: natural rubber, environment-friendly regenerated rubber, zinc oxide, an environment-friendly accelerant, stearic acid, sulphur, a biomass modification reinforcing agent, lignin, an antiager, an anti-reversion agent, rubber seed softening oil, natural rosin and environment-friendly operating oil. The preparation method comprises the following steps: preparing the biomass modification reinforcing agent, namely mixing and stirring walnut shell flour, rubber seed shell flour, an activating agent and a composite modifier to obtain the modification reinforcing agent; mixing, rolling, gluing, forming and vulcanizing the raw materials, and naturally cooling to room temperature, thereby obtaining the environment-friendly energy-saving rubber conveying belt, wherein the vulcanizing temperature is 150-170 DEG C; the vulcanizing time is 30-50 minutes; the vulcanizing pressure is 15-20MPa.; The environment-friendly energy-saving rubber conveying belt prepared by adopting the method disclosed by the invention has the advantages of low production cost, short process flow, no pollution in production and using processes, high product quality, excellent comprehensive performance and long using period and can be widely applied to material conveying of metallurgy, coal, chemical industry, building materials, mines and ports.

Manufacturing method of environment-friendly composite material with good interface compatibility

Ссылка на эту страницу	CN103540149 (A) - Manufacturing method of environment-friendly composite material with good interface compatibility	
Изобретатель(и):	HU JIANPENG; GUO MINGHUI ±	
Заявитель(и):	UNIV NORTHEAST FORESTRY ±	
Индекс(ы) по классификации:	- международной (МПК): B29C43/58 ; C08H7/00 ; C08L67/04 ; C08L97/00 ; C08L97/02 - cooperative:	
Номер заявки:	CN20131476535 20131014	Global Dossier

Реферат документа CN103540149 (A)

The invention relates to a manufacturing method of an environment-friendly composite material with good interface compatibility. The invention mainly aims at solving problems of poor interface compatibility between wood fiber and biodegradable plastic, and complicated process, high cost, and difficulty in large-scale popularization of traditional methods. According to the invention, wood fiber and polylactic acid are adopted as raw materials. Through adding chemically modified ammonium lignosulfonate, interface compatibility of the composite material is improved. With a forming manner comprising high-speed mixing, normal-temperature pre-pressing, and flat plate hot-pressing, the environment-friendly wood composite material with good interface compatibility is manufactured. The product can be applied in the fields of architectural decoration, decoration materials, disposable packaging materials, and the like. With the manufacturing method, industrial lignin resource can be highly efficiently utilized. More importantly, the method has the advantages of simple operation and low cost, and is suitable for industrial popularization. With the method, application field of wood composite materials can be expanded, and product added value can be improved. The method is a green and environment-friendly wood composite material manufacturing technology.

Библиографические данные: CN103450636 (A) — 2013-12-18

Flame-retardant epoxy resin/lignin/organosilicone composite material and preparation method thereof

Ссылка на эту страницу	CN103450636 (A) - Flame-retardant epoxy resin/lignin/organosilicone composite material and preparation method thereof	
Изобретатель(и):	MA SONGQI; FAN LIBO; LIU XIAOQING; ZHU JIN ±	
Заявитель(и):	NINGBO INST MATERIALS TECHNOLOGY & ENG CAS ±	
Индекс(ы) по классификации:	- международной (МПК):	C08G77/14 ; C08G77/16 ; C08L63/00 ; C08L63/02 ; C08L63/04 ; C08L83/06 ; C08L97/00
	- cooperative:	
Номер заявки:	CN20131362875 20130820	Global Dossier
Номера приоритетных документов:	CN20131362875 20130820	
Также опубликовано, как:	CN103450636 (B)	

Реферат документа CN103450636 (A)

The invention belongs to the field of high polymer materials, and discloses a flame-retardant epoxy resin/lignin/organosilicone composite material and a preparation method thereof. The composite material is prepared by mixing and curing the following active ingredients in parts by mass: 100 parts of epoxy resin, 5-100 parts of lignin, 1-100 parts of epoxy-group organosilicone hybrid, 5-150 parts of curing agent, and 0-6 parts of curing accelerator. Compared with the traditional epoxy resin/lignin composite material, the flame-retardant epoxy resin/lignin/organosilicone composite material disclosed by the invention is more excellent in mechanical property, and has excellent flame retardance property.

METHOD FOR PRODUCING LIGNIN RESIN COMPOSITION

Ссылка на эту страницу	JP2013227585 (A) - METHOD FOR PRODUCING LIGNIN RESIN COMPOSITION
Изобретатель(и):	TABEI JUNICHI ±
Заявитель(и):	SUMITOMO BAKELITE CO ±
Индекс(ы) по классификации:	- международной (МПК): C08H7/00 ; C08K5/17 ; C08L97/00 - cooperative:
Номер заявки:	JP20130134059 20130626 Global Dossier
Номера приоритетных документов:	JP20130134059 20130626
Также опубликовано, как:	JP5641101 (B2)

Реферат документа JP2013227585 (A)

PROBLEM TO BE SOLVED: To provide a method for reliably producing a lignin resin composition having an excellent curability. SOLUTION: A method for producing a lignin resin composition including a lignin compound obtained by decomposing biomass and a crosslinking agent as essential components includes: a decomposition step of placing the biomass under existence of water, placing it under high temperature and high pressure of 150-400 DEG C processing temperature and 1.0-40 MPa processing pressure, and decomposing it for a processing time of 480 minutes or shorter; an immersion step of immersing a soluble of a processed material obtained by the decomposition step in a solvent soluble with lignin; a distillation step of distilling the solvent soluble with lignin away from the soluble of the processed material obtained by the immersion step;; and a crosslinking agent mixing step of mixing the processed material obtained by the distillation step with a crosslinking agent, wherein the lignin compound includes a phenolic hydroxy group and an alcoholic hydroxy group at a molar ratio of 9:1 to 8:2, and the lignin resin composition can be molded at a molding temperature of 150-220 DEG C for a molding time of 1-5 minutes.

LIGNIN RESIN COMPOSITION AND LIGNIN RESIN MOLDING MATERIAL

Ссылка на эту страницу	JP2013227470 (A) - LIGNIN RESIN COMPOSITION AND LIGNIN RESIN MOLDING MATERIAL
Изобретатель(и):	NAKAGAWA HIROSHIGE; GO YOSHIYUKI ±
Заявитель(и):	SUMITOMO BAKELITE CO ±
Индекс(ы) по классификации:	- международной (МПК): C08H7/00 ; C08K5/3492 ; C08L97/00 - cooperative:
Номер заявки:	JP20120154093 20120709 Global Dossier
Номера приоритетных документов:	JP20120083139 20120330 ; JP20120154093 20120709
Также опубликовано, как:	JP5920069 (B2)

Реферат документа JP2013227470 (A)

PROBLEM TO BE SOLVED: To provide a lignin resin composition containing a component originated from plants as a main material, and excellent in flowability and mechanical

characteristics after cured, and to provide a lignin resin molding material excellent in moldability and mechanical characteristics after cured. SOLUTION: A lignin resin composition comprises a lignin derivative obtained by degrading biomass, and a cross-linking agent containing a compound represented by formula (1) below. The lignin resin composition is preferably a resin composition obtained by degrading biomass in semicritical water, and more preferably a resin composition containing a latent catalyst differentiating the presence or absence of the cross-linking reaction of the cross-linking agent or the rate of the cross-linking reaction in response to temperature. Formula (1): Z-(CHOR)_m, (wherein, Z is one of a melamine residue, urea residue, glycolyl residue, imidazolidinone residue and aromatic ring residue; m is an integer of 2-14; and Rs are each independently 1-4C alkyl or H)

Библиографические данные: JP2013227469 (A) — 2013-11-07

LIGNIN RESIN COMPOSITION, LIGNIN RESIN MOLDING MATERIAL AND METHOD FOR PRODUCING LIGNIN DERIVATIVE

Ссылка на эту страницу [JP2013227469 \(A\) - LIGNIN RESIN COMPOSITION, LIGNIN RESIN MOLDING MATERIAL AND METHOD FOR PRODUCING LIGNIN DERIVATIVE](#)

Изобретатель(и): NAKAGAWA HIROSHIGE; MATSUMOTO MITSUTAKA ±

Заявитель(и): SUMITOMO BAKELITE CO ±

Индекс(ы) по классификации: - международной (МПК): [C08H7/00](#); [C08K5/21](#); [C08K5/3445](#); [C08K5/3492](#); [C08L97/00](#)
- cooperative:

Номер заявки: JP20120154092 20120709 [Global Dossier](#)

Номера приоритетных документов: [JP20120083138 20120330](#) ; JP20120154092 20120709

Реферат документа JP2013227469 (A)

PROBLEM TO BE SOLVED: To provide a lignin resin composition containing a component originated from plants as a main material, and excellent in flowability and mechanical characteristics after cured; to provide a lignin resin molding material excellent in moldability and mechanical characteristics after cured; and to provide a method for producing a lignin derivative, by which the lignin derivative used for the lignin resin composition can efficiently be produced. SOLUTION: A lignin resin composition comprises a lignin derivative obtained by degrading biomass, and a cross-linking agent. Among them, the lignin derivative comprises a first lignin derivative soluble in polar solvents and a second lignin derivative insoluble in polar solvents. In the first lignin derivative and the second lignin derivative, at least part of materials soluble in polar solvents are preferably the first lignin derivative, when biomass or its treated product is treated with a polar solvent, and part of materials insoluble in polar solvents are preferably the second lignin derivative.

Библиографические данные: KR20130116481 (A) — 2013-10-24

LIQUID FILM-FORMING COMPOSITIONS FOR MULCHING VINYL AND MANUFACTURING METHOD THEREOF

Ссылка на эту страницу [KR20130116481 \(A\) - LIQUID FILM-FORMING COMPOSITIONS FOR MULCHING VINYL AND MANUFACTURING METHOD THEREOF](#)

Изобретатель(и): [KR] KIM KI JEONG ±

Заявитель(и): [KR] SUNGLIM ECO IND CO LTD ±

Индекс(ы) по классификации: - международной (МПК): [A01G13/00](#); [C08J5/18](#); [C08L29/04](#); [C08L97/00](#)
 - cooperative:
 Номер заявки: KR20120034867 20120404 [Global Dossier](#)
 Номера приоритетных документов: KR20120034867 20120404
 Также опубликовано, как: [KR101378577 \(B1\)](#)

Реферат документа KR20130116481 (A)

PURPOSE: A liquid film forming composition for mulching vinyl is provided to be biodegradable after set time and control soil moisture, thereby proving moisture necessary for plant growth. CONSTITUTION: A liquid film forming composition for mulching vinyl comprises: 8-15 wt% of lignin, 7-15 wt% of humic acid, 25-43 wt% of water, 2-7 wt% of surfactant, 8-15 wt% of stabilizer, 3-8 wt% of film former, 8-13 wt% of soil protection agent, 10-15 wt% of collagen, and 8-12 wt% of powder activated carbon. The soil protection agent is selected from the group of propenamide propenoate copolymer, cross-linked polyacrylamide, polyacrylonitrile polymer, cross-linked sulfonated polystyrene, and alginate hydrogel. [Reference numerals] (AA) Firstly stirring (heat and stir lignin/water); (BB) Secondly stirring (heat and stir first mixture solution/ humic acid/ soil protection agent/collagen/active carbon powder); (CC) Thirdly stirring (heat and stir second mixture solution/film former); (DD) Fourthly stirring (heat and stir third mixture solution/surfactant/ stabilizer); (EE) Natural cooling

Библиографические данные: KR20130107722 (A) — 2013-10-02

THERMOPLASTIC HALOGEN-FREE FLAME RETARDANT ABS RESIN COMPOSITION

Ссылка на эту страницу [KR20130107722 \(A\) - THERMOPLASTIC HALOGEN-FREE FLAME RETARDANT ABS RESIN COMPOSITION](#)
 Изобретатель(и): [KR]; CHOI JONG KUK HAN [KR]; SEUNG HUN KIM SEONG [KR] LYONG ±
 Заявитель(и): [KR] LG CHEMICAL LTD ±
 Индекс(ы) по классификации: - международной (МПК): [C08K5/521](#); [C08L55/02](#); [C08L97/00](#); [C09K21/12](#)
 - cooperative: [C08K5/521](#); [C08L55/02](#); [C08L97/00](#); [C09K21/12](#) далее
 Номер заявки: KR20120029719 20120323 [Global Dossier](#)
 Номера приоритетных документов: KR20120029719 20120323
 Также опубликовано, как: [KR101540503 \(B1\)](#)

Реферат документа KR20130107722 (A)

PURPOSE: A halogen-free-thermoplastic ABS flame retardant resin composition is provided to have excellent flame retardancy, impact performance, and flexibility by adding a halogen-free flame retardant into a resin blend which has excellent compatibility with an ABS resin and can form char at combustion. CONSTITUTION: A halogen-free-thermoplastic ABS flame retardant resin composition comprises 100.0 parts by weight of an acrylonitrile-butadiene-styrene base resin including 15-35 wt% of a lignin resin and 5-15 parts by weight of a phosphate flame

retardant. The acrylonitrile-butadiene-styrene base resin includes 15-35 wt% of a lignin resin, 10-40 wt% of an ABS graft copolymer in which an aromatic vinyl compound and a vinylcyan compound are grafted to a conjugated diene rubber polymer and 10-65 wt% of a compound of an aromatic vinyl compound and a vinylcyan compound.

Библиографические данные: CN103415573 (A) — 2013-11-27

Flame retardant resin composition and molded product

Ссылка на эту страницу	CN103415573 (A) - Flame retardant resin composition and molded product
Изобретатель(и):	HARADA TADAKATSU; YAMANAKA YASUO; MATSUSHITA YASUYUKI; FUKUSHIMA KAZUHIKO ±
Заявитель(и):	RICOH CO LTD ±
Индекс(ы) по классификации:	- международной (МПК): C08L101/00 ; C08L67/00 ; C08L69/00 ; C08L97/00 - cooperative: C08H6/00 ; C08L67/04 ; C08L69/00 ; C08L97/005 ; C08L2201/02 далее
Номер заявки:	CN2012811201 20120224 Global Dossier
Номера приоритетных документов:	WO2012JP55288 20120224 ; JP20110043788 20110301 ; JP20110043787 20110301 ; JP20110225820 20111013
Также опубликовано, как:	CN103415573 (B) WO2012118165 (A1) US2013317138 (A1) US8796363 (B2) KR20130130850 (A) далее

Реферат документа CN103415573 (A)

A flame retardant resin composition including: a thermoplastic resin; and a flame retardant, wherein the flame retardant includes a phosphorylated lignin derivative, and wherein the phosphorylated lignin derivative is produced by adding phosphoric acid to a lignin derivative obtained by subjecting a naturally occurring lignin to a predetermined treatment.

Библиографические данные: CN103408932 (A) — 2013-11-27

Water-soluble conductive polyaniline nano-fiber/lignin composite material and preparation method thereof

Ссылка на эту страницу	CN103408932 (A) - Water-soluble conductive polyaniline nano-fiber/lignin composite material and preparation method thereof
Изобретатель(и):	ZHANG ZHENJIU; LIU CHUANG; JIANG JIAN; ZHANG XU; ZHANG ENQI; LIU KAI ±
Заявитель(и):	CHANGCHUN SANHUA INDUSTRY CO LTD ±
Индекс(ы) по классификации:	- международной (МПК): C08G73/02 ; C08L79/02 ; C08L97/00 - cooperative:
Номер заявки:	CN20131295554 20130715 Global Dossier
Номера приоритетных документов:	CN20131295554 20130715
Также опубликовано, как:	CN103408932 (B)

Реферат документа CN103408932 (A)

The invention provides a water-soluble conductive polyaniline nano-fiber/lignin composite material and a preparation method thereof and belongs to the field of preparation methods of

conductive polymer nano-materials. The problems of an existing water-soluble conductive polyaniline/lignin composite material, such as bad conductivity and poor water dispersion stability, are solved. The method comprises the following steps: firstly, dissolving sulfonic aniline in a hydrochloric acid solution to obtain a functional sulfonic aniline salt solution A, and then, dissolving ferric chloride in a lignin sulfonate aqueous solution to form a solution B, reacting the functional sulfonic aniline salt solution A with the solution B at 10 DEG C below zero to 5 DEG C, and centrifuging and drying to obtain the water-soluble conductive polyaniline nano-fiber/lignin composite material.; The invention provides a water-soluble conductive polyaniline nano-fiber/lignin composite material. The conductivity of the water-soluble conductive polyaniline nano-fiber/lignin composite material provided by the invention can reach 5-18S/cm.

Библиографические данные: JP2013221113 (A) — 2013-10-28

LIGNIN-DERIVED EPOXY RESIN COMPOSITION AND APPLICATION THEREOF

Ссылка на эту страницу [JP2013221113 \(A\) - LIGNIN-DERIVED EPOXY RESIN COMPOSITION AND APPLICATION THEREOF](#)

Изобретатель(и): OKABE YOSHIAKI; KAGAWA HIROYUKI ±

Заявитель(и): HITACHI LTD ±

Индекс(ы) по классификации: - международной (МПК): [C08G59/62](#); [C08L63/00](#); [C08L97/00](#); [H05K1/03](#)

- cooperative: [C08G59/686](#); [C08H6/00](#); [C08H8/00](#); [C08L63/00](#); [C08L97/005](#); [H05K1/0326](#); [H05K2203/178](#) далее

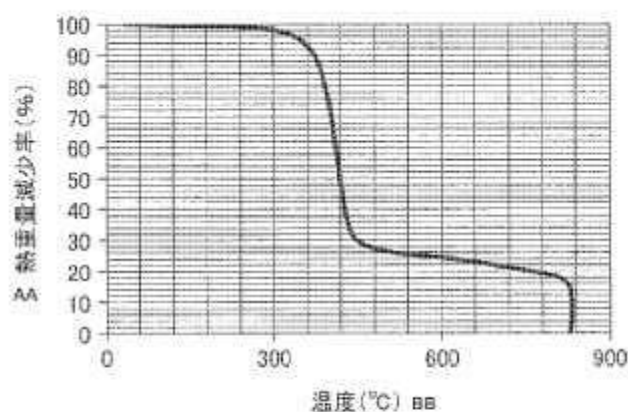
Номер заявки: JP20120094602 20120418 [Global Dossier](#)

Номера приоритетных документов: JP20120094602 20120418

Также опубликовано, как: [WO2013157424 \(A1\)](#)

Реферат документа JP2013221113 (A)

図 2



リグニン由来エポキシ樹脂硬化物の
Td5 (5.0wt%熱重量減少温度(°C)) CC

AA Thermogravimetric mass loss (%)
BB Temperature (°C)
CC Td5 (5.0 wt% thermogravimetric mass loss temperature (°C))
of cured product of lignin-derived epoxy resin

PROBLEM TO BE SOLVED: To provide a lignin-derived epoxy resin capable of forming a cured product having a high glass transition point and a high thermal decomposition temperature without raising the cost of lignin raw material.**SOLUTION:** A lignin-derived epoxy resin composition contains unmodified lignin by steam blasting, a bi- or higher functional epoxy resin, and a catalyst for self-polymerization of the epoxy resin, wherein the compounding ratio of the lignin to the epoxy resin is 0.5 to <1.4 in terms of the ratio of the number of hydroxyl groups in the lignin to the number of epoxy groups in the epoxy resin. The present invention discloses a cured product of the composition, a prepreg, a varnish, electronic equipment and electrical equipment.

Библиографические данные: CN103396674 (A) — 2013-11-20

Preparation method of alkali lignin/corn starch/flax fiber thermoplastic composite material

Ссылка на эту страницу	CN103396674 (A) - Preparation method of alkali lignin/corn starch/flax fiber thermoplastic composite material
Изобретатель(и):	SHI RUIXIN ±
Заявитель(и):	UNIV NORTHEAST FORESTRY ±
Индекс(ы) по классификации:	- международной (МПК): C08K5/053 ; C08L3/02 ; C08L97/00 ; C08L97/02 - cooperative:
Номер заявки:	CN20131344921 20130808 Global Dossier
Номера приоритетных документов:	CN20131344921 20130808

Реферат документа CN103396674 (A)

The invention relates to a preparation method of a thermoplastic composite material, and particularly relates to a preparation method of an alkali lignin/corn starch/flax fiber thermoplastic composite material. The invention is used for solving the technical problems that lignin melt has poor liquidity, cooled melt becomes brittle, and mechanical properties are poor existing in a process of preparing a lignin-based thermoplastic composite material by a conventional method. The preparation method comprises the steps: one, premixing alkali lignin, corn starch and an auxiliary agent, sending to a double-roll mixing mill for mixing, after mixing uniformly, adding a flax fiber, and mixing uniformly to obtain a comixed material; and two, putting the comixed material onto a thin film, placing in a tablet machine to pressing into a thin slice, taking off, then cooling to the room temperature, and then tearing the thin slice from the thin film to obtain the alkali lignin/corn starch/flax fiber thermoplastic composite material. The prepared thermoplastic composite material has homogeneous texture, and the alkali lignin and the corn starch are mixed uniformly in the auxiliary agent and have good compatibility. The preparation method of the invention is applied to the thermoplastic composite material field.

Библиографические данные: CN103351491 (A) — 2013-10-16

Polymer composite material filled with industrial lignin as well as preparation method and application thereof

Ссылка на эту страницу	CN103351491 (A) - Polymer composite material filled with industrial lignin as well as preparation method and application thereof
Изобретатель(и):	ZHANG ZHONGLUN ±
Заявитель(и):	ZHANG ZHONGLUN ±

Индекс(ы) по классификации:	- международной (МПК): - cooperative:	C08L27/06 ; C08L7/00 ; C08L9/02 ; C08L9/06 ; C08L97/00
Номер заявки:	CN20131261451 20130626	Global Dossier
Номера приоритетных документов:	CN20131261451 20130626	

Реферат документа CN103351491 (A)

The invention relates to a polymer composite material filled with industrial lignin as well as a preparation method and an application thereof. The polymer composite material is characterized in that substances forming the polymer composite material comprise rubber A, lignin and a third constituent, wherein the ratio of the oven dry parts by weight of the substances in the polymer composite material is 100:(10-300):(0-100); the rubber A is natural rubber or synthetic rubber produced by an emulsion polymerization method; the lignin is hydroxymethylation modified lignin produced from alkali lignin or black liquor; in a technical scheme in which the oven dry part by weight of the third constituent is greater than 0, the third constituent is one or the combination of more than two of other rubbers or plastics except the rubber A, or a plasticizer or operating oil, or argil, montmorillonoid, kaolin, kieselguhr or calcium carbonate, or papermaking pulp taking calcium carbonate as a main ingredient, or alkali-preparing waste, namely, white clay; the polymer composite material filled with the industrial lignin is of a block form or a powder form. According to the polymer composite material filled with the industrial lignin as well as the preparation method and the application thereof disclosed by the invention, the manufacturing cost is further decreased, and wastewater generated during the production process is further reduced.

Библиографические данные: JP2013155303 (A) — 2013-08-15

RUBBER COMPOSITION FOR TIRE, METHOD OF PREPARING THE SAME, AND PNEUMATIC TIRE

Ссылка на эту страницу	JP2013155303 (A) - RUBBER COMPOSITION FOR TIRE, METHOD OF PREPARING THE SAME, AND PNEUMATIC TIRE	
Изобретатель(и):	FUJIKURA KEITARO ±	
Заявитель(и):	SUMITOMO RUBBER IND ±	
Индекс(ы) по классификации:	- международной (МПК): - cooperative:	B60C1/00 ; C08K7/02 ; C08L1/02 ; C08L21/00 ; C08L7/00 ; C08L97/00 B60C1/0016 ; B60C1/0025 ; C08K5/13 ; C08L1/02 ; C08L21/00 ; C08L7/00 ; C08L97/005 ; C08L97/02 ; C08L2205/16 ; Y02T10/862 далее
Номер заявки:	JP20120017253 20120130	Global Dossier
Номера приоритетных документов:	JP20120017253 20120130	
Также опубликовано, как:	JP5616372 (B2) EP2620296 (A1) EP2620296 (B1) US2013197132 (A1)	

Реферат документа JP2013155303 (A)

PROBLEM TO BE SOLVED: To provide: a rubber composition for a tire, in which while the use of petroleum resources is reduced as much as possible, the compatibility of microfibrillated

plant fibers with the rubber component is enhanced by a simple method, which can lead to a balanced improvement in fracture characteristics, handling stability, and fuel economy; a method of preparing the rubber composition; and a pneumatic tire formed from the rubber composition. SOLUTION: The present invention relates to a rubber composition for a tire, containing a rubber component, microfibrillated plant fibers, and an industrial lignin.; It is preferable that the rubber component contains at least one selected from the group consisting of natural rubber, modified natural rubber, synthetic rubber, and modified synthetic rubber, and it is preferable that the microfibrillated plant fibers are cellulose microfibrils.

Библиографические данные: US2013211056 (A1) — 2013-08-15

CARBON FIBRE COMPOSITIONS COMPRISING LIGNIN DERIVATIVES

Ссылка на эту страницу	US2013211056 (A1) - CARBON FIBRE COMPOSITIONS COMPRISING LIGNIN DERIVATIVES	
Изобретатель(и):	[US] BERLIN ALEX ±	
Заявитель(и):	[US] BERLIN ALEX ±	
Индекс(ы) по классификации:	- международной (МПК):	C08H7/00
	- cooperative:	C07G1/00 ; C08H6/00 ; C08H8/00 ; C08L97/005 ; D01F9/17
Номер заявки:	US201213584616 20120813	Global Dossier
Номера приоритетных документов:	US201213584616 20120813 ; WO2011CA00184 20110215 ; US20100304752P 20100215	
Также опубликовано, как:	US9376536 (B2) WO2011097721 (A1) US2016280730 (A1) JP2013519691 (A) JP5909840 (B2) далее	

Реферат документа US2013211056 (A1)

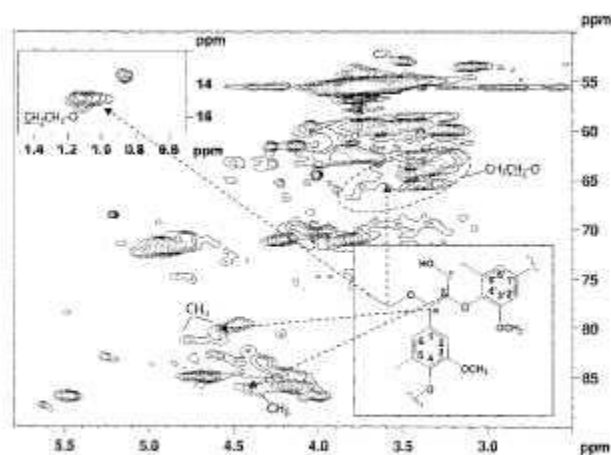


Figure 1

The present disclosure provides derivatives of native lignin suitable for production of carbon fibres wherein the derivatives of native lignin have a certain alkoxy content and/or a certain carbon content. The present lignin derivatives can have acceptable spinnability performance characteristics for producing carbon fibres having acceptable tensile strengths and acceptable modulus of elasticity.

AQUEOUS BINDER COMPOSITION

Ссылка на эту страницу	US2013210967 (A1) - AQUEOUS BINDER COMPOSITION
Изобретатель(и):	[DE]; KRUEGER CHRISTIAN [DE]; SCHUETZE ULRICH MICHL [DE]; KATHRIN KALBE [DE]; MICHAEL PFAU [DE]; ANDREAS SCHILLING [DE]; HOLGER BRAND [DE]; CHRISTIAN SEIBERT [DE] MARCUS ±
Заявитель(и):	[DE]; KRUEGER CHRISTIAN [DE]; SCHUETZE ULRICH MICHL [DE]; KATHRIN KALBE [DE]; MICHAEL PFAU [DE]; ANDREAS SCHILLING [DE]; HOLGER BRAND [DE]; CHRISTIAN SEIBERT [DE] MARCUS ±
Индекс(ы) по классификации:	- международной (МПК): C08L97/00 - cooperative: C08L33/02 ; C08L97/005 ; C09J197/005 далее
Номер заявки:	US201313765037 20130212 Global Dossier
Номера приоритетных документов:	US201313765037 20130212 ; US201261598375P 20120214
Также опубликовано, как:	US9023919 (B2)

Реферат документа US2013210967 (A1)

Aqueous binder composition for granular and/or fibrous substrates

Delignification of biomass containing lignin and production of adhesive compositions and methods of making lignin cellulose compositions

Ссылка на эту страницу	US2013202905 (A1) - Delignification of biomass containing lignin and production of adhesive compositions and methods of making lignin cellulose compositions
Изобретатель(и):	[US] BLOUNT DAVID H ±
Заявитель(и):	[US] BLOUNT DAVID H ±
Индекс(ы) по классификации:	- международной (МПК): B32B23/04 ; B32B37/12 ; C09J197/02 - cooperative: B32B21/02 ; B32B21/042 ; B32B21/14 ; B32B7/12 ; C08B37/0057 ; C08H6/00 ; C08H8/00 ; C08L97/005 ; C08L97/02 ; C09J189/00 ; C09J189/005 ; C09J189/04 ; C09J189/06 ; C09J197/005 ; B32B2307/54 ; Y10T428/31975 далее
Номер заявки:	US201213385150 20120206 Global Dossier
Номера приоритетных документов:	US201213385150 20120206 ; US20100658429 20100212 ; US20090589399 20091023
Также опубликовано, как:	US8986437 (B2)

Реферат документа US2013202905 (A1)

Delignification of biomass consisting of plants containing lignin is done by utilizing an amino compound in an aqueous solution or emulsion to produce water soluble amino lignin and non-

soluble amino lignin cellulose which are utilized to produce adhesives and resins for use to produce wood composites and carbohydrate production.

Библиографические данные: CN103224661 (A) — 2013-07-31

Polyolefin/enzymatic-hydrolyzed lignin composite material and preparation method thereof

Ссылка на эту страницу	CN103224661 (A) - Polyolefin/enzymatic-hydrolyzed lignin composite material and preparation method thereof
Изобретатель(и):	QIU XUEQING; ZHOU MINGSONG; YANG DONGJIE; HUANG JINHAO; LOU HONGMING; PANG YUXIA; SUN ZHANGJIAN ±
Заявитель(и):	UNIV SOUTH CHINA TECH ±
Индекс(ы) по классификации:	- международной (МПК): C08H7/00 ; C08L23/06 ; C08L23/12 ; C08L97/00 - cooperative:
Номер заявки:	CN20131150272 20130426 Global Dossier
Номера приоритетных документов:	CN20131150272 20130426

Реферат документа CN103224661 (A)

The invention discloses a polyolefin/enzymatic-hydrolyzed lignin composite material and a preparation method thereof. According to the method, a dried raw material enzymatic-hydrolyzed lignin is crushed, such that enzymatic-hydrolyzed lignin powder is obtained; a plasticizer is added, and the mixture is well mixed; the mixture is processed for 12-24h under a temperature of 60-90 DEG C in a baking oven; the obtained enzymatic-hydrolyzed lignin pretreated powder is mixed with polyolefin particles; physical blending is carried out under a temperature of 120-160 DEG C; and a lubricant is added, and blending is carried out. According to the mass, the application amounts of the enzymatic-hydrolyzed lignin, polyolefin plastic, the plasticizer, and the lubricant are respectively 100 parts, 100-400 parts, 5-20 parts, and 40-100 parts. According to the invention, enzymatic-hydrolyzed lignin with wide source and low cost is adopted as the raw material. The prepared polyolefin/enzymatic-hydrolyzed lignin composite material has good comprehensive mechanical properties such as tensile strength, elongation at break, and the like. Also, the material has low density, and is antioxidant and degradable.

Библиографические данные: JP2013127078 (A) — 2013-06-27

LIGNIN RESIN COMPOSITION AND MOLDING MATERIAL

Ссылка на эту страницу	JP2013127078 (A) - LIGNIN RESIN COMPOSITION AND MOLDING MATERIAL
Изобретатель(и):	TABEI JUNICHI ±
Заявитель(и):	SUMITOMO BAKELITE CO ±
Индекс(ы) по классификации:	- международной (МПК): C08K3/00 ; C08K5/00 ; C08L63/00 ; C08L97/00 - cooperative:
Номер заявки:	JP20130031962 20130221 Global Dossier
Номера приоритетных документов:	JP20130031962 20130221
Также опубликовано, как:	JP5534059 (B2)

Реферат документа JP2013127078 (A)

PROBLEM TO BE SOLVED: To provide a lignin resin composition excellent in curability, and to provide a molding material using the same. ;SOLUTION: This lignin resin composition essentially includes a lignin compound and a cross-linking agent, where the lignin compound is one or two selected from: the lignin compound having phenolic hydroxy group and alcoholic hydroxy group in a mole ratio of 9:1 to 8:2, both hydroxy group being obtained by decomposing biomass, and a lignin derivative in which a reactive group is introduced in the lignin compound. There are disclosed a lignin resin composition where the reactive group in the lignin derivative has an epoxy group, and a molding material including the lignin resin composition and a filler. ;COPYRIGHT: (C)2013,JPO&INPIT;PROBLEM TO BE SOLVED: To provide a lignin resin composition excellent in curability, and to provide a molding material using the same.SOLUTION: This lignin resin composition essentially includes a lignin compound and a cross-linking agent, where the lignin compound is one or two selected from: the lignin compound having phenolic hydroxy group and alcoholic hydroxy group in a mole ratio of 9:1 to 8:2, both hydroxy group being obtained by decomposing biomass, and a lignin derivative in which a reactive group is introduced in the lignin compound. There are disclosed a lignin resin composition where the reactive group in the lignin derivative has an epoxy group, and a molding material including the lignin resin composition and a filler.

Библиографические данные: WO2013181580 (A1) — 2013-12-05

BIO-DERIVED POLYESTER FOR USE IN COMPOSITE PANELS, COMPOSITE ARTICLES AND METHODS OF PRODUCING SUCH ARTICLES

Ссылка на эту страницу	WO2013181580 (A1) - BIO-DERIVED POLYESTER FOR USE IN COMPOSITE PANELS. COMPOSITE ARTICLES AND METHODS OF PRODUCING SUCH ARTICLES
Изобретатель(и):	[US] BATCHELOR LOUISE ±
Заявитель(и):	[US] BIOAMBER INC ±
Индекс(ы) по классификации:	- международной (МПК): C08L97/00 - cooperative: C08L97/005 ; C08L97/02 ; G06F13/107 ; C08L2205/16 ; C08L2205/18 ; Y02B60/50 далее
Номер заявки:	WO2013US43680 20130531 Global Dossier
Номера приоритетных документов:	US201261653619P 20120531
Также опубликовано, как:	US2013324644 (A1)

Реферат документа WO2013181580 (A1)

A synthetic article comprising at least one polyester resin adhesive and at least one lignin-based material and a method of preparing a synthetic article comprising mixing at least one polyester resin adhesive and at least one lignin-based material to obtain a blended material and forming a synthetic article from the blended material.

CURABLE LIGNIN RESIN COMPOSITION AND METHOD OF MANUFACTURING THE SAME

Ссылка на эту страницу	JP2013064103 (A) - CURABLE LIGNIN RESIN COMPOSITION AND METHOD OF MANUFACTURING THE SAME
Изобретатель(и):	NAKAGAWA HIROSHIGE ±
Заявитель(и):	SUMITOMO BAKELITE CO ±
Индекс(ы) по классификации:	- международной (МПК): B32B23/14 ; C08L71/14 ; C08L97/00 - cooperative:
Номер заявки:	JP20120125860 20120601 Global Dossier
Номера приоритетных документов:	JP20110184244 20110826 ; JP20120125860 20120601
Также опубликовано, как:	JP6089453 (B2)

Реферат документа JP2013064103 (A)

PROBLEM TO BE SOLVED: To provide a method that can obtain a lignin resin composition excellent in moldability and properties from lignin extracted from biomass as a resin of a plant origin. ;SOLUTION: In the lignin resin composition that is obtained by adding a nitrogen-containing crosslinkable cyclic compound like hexamethylenetetramine to lignin and curing, lignin, the nitrogen-containing crosslinkable cyclic compound, and a furan resin are mixed and cured, thereby the lignin resin composition excellent in moldability can be obtained, and can be used as a thermosetting resin for a phenol resin alternative. ;COPYRIGHT: (C)2013,JPO&INPIT;PROBLEM TO BE SOLVED: To provide a method that can obtain a lignin resin composition excellent in moldability and properties from lignin extracted from biomass as a resin of a plant origin.SOLUTION: In the lignin resin composition that is obtained by adding a nitrogen-containing crosslinkable cyclic compound like hexamethylenetetramine to lignin and curing, lignin, the nitrogen-containing crosslinkable cyclic compound, and a furan resin are mixed and cured, thereby the lignin resin composition excellent in moldability can be obtained, and can be used as a thermosetting resin for a phenol resin alternative.

Electronic element, conductive polymer composition, and method for fabricating the same

Ссылка на эту страницу	TW201302840 (A) - Electronic element, conductive polymer composition, and method for fabricating the same
Изобретатель(и):	[TW]; YEH KUO-LIANG JANG [TW]; SHYUE-MING HUANG [TW] KUNG-HSUN ±
Заявитель(и):	[TW] IND TECH RES INST ±
Индекс(ы) по классификации:	- международной (МПК): C08G61/12 ; C08L25/18 ; C08L65/00 ; C08L97/00 - cooperative: H01G11/48 ; Y02E60/13
Номер заявки:	TW20110124398 20110711
Номера приоритетных документов:	TW20110124398 20110711
Также опубликовано, как:	TWI511999 (B) JP2013020943 (A) JP5432319 (B2) CN102876201 (A) CN102876201 (B)

Реферат документа TW201302840 (A)

The invention provides an electronic element, conductive polymer composition, and method for fabricating the same. The electronic element includes a substrate; and a conductive layer formed on the substrate, wherein the conductive layer is formed by coating a conductive polymer composition on the substrate. The conductive polymer composition includes an organic polymer, a poly (styrene sulfonate), and a lignin, wherein the organic polymer includes a repeat unit represented by Formula (I) wherein X1, and X2 are independent O, or S; Y is C1-4 alkylene group, or C2-4 alkylidene group; R1 is H or C1-18 alkyl group, C5-12 cycloalkyl group, or aryl group.

Библиографические данные: CN103059499 (A) — 2013-04-24

Novel inflaming retarding acrylonitrile butadiene styrene copolymer (ABS) composite and preparation method thereof

Ссылка на эту страницу	CN103059499 (A) - Novel inflaming retarding acrylonitrile butadiene styrene copolymer (ABS) composite and preparation method thereof	
Изобретатель(и):	QI XIANGZHI; ZHANG YING; ZHANG XIANGFU; ZHOU WEN ±	
Заявитель(и):	SHANGHAI PRET COMPOSITES CO ±	
Индекс(ы) по классификации:	- международной (МПК):	B29B9/06 ; B29C47/92 ; C08L51/00 ; C08L55/02 ; C08L97/00
	- cooperative:	B29C47/92
Номер заявки:	CN20121568666 20121224	Global Dossier
Номера приоритетных документов:	CN20121568666 20121224	
Также опубликовано, как:	CN103059499 (B)	

Реферат документа CN103059499 (A)

The invention discloses a novel inflaming retarding acrylonitrile butadiene styrene copolymer (ABS) composite and a preparation method thereof. The novel inflaming retarding ABS composite is composed of the following raw materials according to percentage by weight, 68-84% of ABS resin, 10-20% fire retardant, 5-10% of ABS-g-MAH, 0.1-1% of antioxidant, and 0-2% other annexing agent. The novel inflaming retarding ABS composite has the advantages that lignin contained in the novel inflaming retarding ABS composite exists widely and can be easily obtained and be biodegradable. The prepared composite is simple in production process, low in cost and easy to industrialize. On the basic of keeping original mechanical properties of materials, the ABS composite has good inflaming retarding performance.

Библиографические данные: JP2013040221 (A) — 2013-02-28

POLYACETAL RESIN COMPOSITION AND METHOD FOR PRODUCING THE SAME

Ссылка на эту страницу	JP2013040221 (A) - POLYACETAL RESIN COMPOSITION AND METHOD FOR PRODUCING THE SAME	
Изобретатель(и):	KAWAGUCHI KUNIAKI ±	
Заявитель(и):	POLYPLASTICS CO ±	

Индекс(ы) по классификации: - международной (МПК): [C08K5/00](#); [C08K5/13](#); [C08L59/00](#); [C08L97/00](#)
 - cooperative:
 Номер заявки: JP20110175833 20110811 [Global Dossier](#)
 Номера приоритетных документов: JP20110175833 20110811
 Также опубликовано, как: [JP5825922 \(B2\)](#)

Реферат документа JP2013040221 (A)

PROBLEM TO BE SOLVED: To provide a polyacetal resin composition which exhibits excellent rigidity (mechanical property) and appearance when formed into a molded article and produces less formaldehyde, and a method for producing the same. ;SOLUTION: The polyacetal resin composition contains, per 100 pts.wt. of (a) a polyacetal resin, 10-150 pts.wt. of (b) a woody fine powder containing 5-35 wt.% of lignin and having ≤ 3 wt.% of sieve residue remaining on the sieve when sieved by a sieve with an opening of 250 [μ]m, 0.01-3 pts.wt. of (c) a hindered phenol antioxidant, 0.01-3 pts.wt. of (d) at least one nitrogen-containing compound that is selected from among aminotriazine compounds, guanamine compounds, hydrazide compounds and polyamides, and 0.01-3 pts.wt. of (e) at least one processing aid that is selected from among long-chain fatty acids, long-chain fatty acid derivatives, polyoxyalkylene glycols and silicone compounds. ;COPYRIGHT: (C)2013,JPO&INPIT;PROBLEM TO BE SOLVED: To provide a polyacetal resin composition which exhibits excellent rigidity (mechanical property) and appearance when formed into a molded article and produces less formaldehyde, and a method for producing the same.SOLUTION: The polyacetal resin composition contains, per 100 pts.wt. of (a) a polyacetal resin, 10-150 pts.wt. of (b) a woody fine powder containing 5-35 wt.% of lignin and having ≤ 3 wt.% of sieve residue remaining on the sieve when sieved by a sieve with an opening of 250 [μ]m, 0.01-3 pts.wt. of (c) a hindered phenol antioxidant, 0.01-3 pts.wt. of (d) at least one nitrogen-containing compound that is selected from among aminotriazine compounds, guanamine compounds, hydrazide compounds and polyamides, and 0.01-3 pts.wt.; of (e) at least one processing aid that is selected from among long-chain fatty acids, long-chain fatty acid derivatives, polyoxyalkylene glycols and silicone compounds.

Библиографические данные: JP2013035970 (A) — 2013-02-21

LIGNIN RESIN COMPOSITION, PREPREG, AND COMPOSITE STRUCTURE

Ссылка на эту страницу [JP2013035970 \(A\) - LIGNIN RESIN COMPOSITION, PREPREG, AND COMPOSITE STRUCTURE](#)
 Изобретатель(и): MAE KAZUHIRO; HASEGAWA ISAO; NAKAGAWA HIROSHIGE; NAKAMURA KATSUTOSHI ±
 Заявитель(и): UNIV KYOTO; SUMITOMO BAKELITE CO ±
 Индекс(ы) по классификации: - международной (МПК): [C08G59/40](#); [C08H7/00](#); [C08J5/24](#); [C08K5/17](#); [C08L97/00](#)
 - cooperative:
 Номер заявки: JP20110174274 20110809 [Global Dossier](#)
 Номера приоритетных документов: JP20110174274 20110809
 Также опубликовано, как: [JP5750336 \(B2\)](#)

Реферат документа JP2013035970 (A)

PROBLEM TO BE SOLVED: To provide a lignin resin composition excellent in impregnation ability into a base material and excellent in mechanical properties after curing, a prepreg capable of producing a composite structure excellent in mechanical properties (particularly, elongation at bending rupture), and a composite structure excellent in mechanical properties. ;**SOLUTION:** The lignin resin composition comprises a lignin derivative having a number average molecular weight of <1,000 obtained by decomposing biomass and a crosslinking agent. When the lignin resin composition is molded in a desired shape and cured, a resin product or the like can be produced. The lignin derivative may be a secondary derivative obtained by introducing a reactive group. The ratio of B/(A+B) is preferably <20 mass%, wherein A is a mass proportion of a lignin derivative part having a molecular weight of <1,000 in the total amount of the lignin derivative, and B is a mass proportion of a lignin derivative part having a molecular weight of $\geq 1,000$. ;**COPYRIGHT:** (C)2013,JPO&INPIT;**PROBLEM TO BE SOLVED:** To provide a lignin resin composition excellent in impregnation ability into a base material and excellent in mechanical properties after curing, a prepreg capable of producing a composite structure excellent in mechanical properties (particularly, elongation at bending rupture), and a composite structure excellent in mechanical properties.**SOLUTION:** The lignin resin composition comprises a lignin derivative having a number average molecular weight of <1,000 obtained by decomposing biomass and a crosslinking agent. When the lignin resin composition is molded in a desired shape and cured, a resin product or the like can be produced. The lignin derivative may be a secondary derivative obtained by introducing a reactive group.; The ratio of B/(A+B) is preferably <20 mass%, wherein A is a mass proportion of a lignin derivative part having a molecular weight of <1,000 in the total amount of the lignin derivative, and B is a mass proportion of a lignin derivative part having a molecular weight of $\geq 1,000$.

Библиографические данные: JP2013035886 (A) — 2013-02-21

LIGNIN, COMPOSITION CONTAINING THE LIGNIN AND METHOD FOR PRODUCING THE LIGNIN

Ссылка на эту страницу	JP2013035886 (A) - LIGNIN, COMPOSITION CONTAINING THE LIGNIN AND METHOD FOR PRODUCING THE LIGNIN
Изобретатель(и):	YOSHIMURA KOICHI ±
Заявитель(и):	ASAHI ORGANIC CHEM IND ±
Индекс(ы) по классификации:	- международной (МПК): C08H7/00 ; C08L97/00 - cooperative:
Номер заявки:	JP20110170249 20110803 Global Dossier
Номера приоритетных документов:	JP20110170249 20110803

Реферат документа JP2013035886 (A)

PROBLEM TO BE SOLVED: To provide low odor lignin using soda lignin as a raw material, to provide a composition containing the lignin, and to provide a method for producing such lignin. ;**SOLUTION:** The lignin is obtained as insoluble components of a mixture, obtained by mixing soda lignin with alcohol and/or alkanon. It is preferable that the soda lignin is herbaceous soda lignin. The alcohol is preferably a 1-3C monoalcohol. The composition contains the lignin. The method for producing the lignin includes a step comprising mixing soda lignin with alcohol

and/or alkanone and obtaining insoluble components from the resulting mixture. ;COPYRIGHT: (C)2013,JPO&INPIT;PROBLEM TO BE SOLVED: To provide low odor lignin using soda lignin as a raw material, to provide a composition containing the lignin, and to provide a method for producing such lignin.SOLUTION: The lignin is obtained as insoluble components of a mixture, obtained by mixing soda lignin with alcohol and/or alkanon. It is preferable that the soda lignin is herbaceous soda lignin. The alcohol is preferably a 1-3C monoalcohol. The composition contains the lignin. The method for producing the lignin includes a step comprising mixing soda lignin with alcohol and/or alkanone and obtaining insoluble components from the resulting mixture.

Библиографические данные: JP2013035885 (A) — 2013-02-21

LIGNIN, COMPOSITION CONTAINING LIGNIN AND METHOD FOR PRODUCING THE LIGNIN

Ссылка на эту страницу	JP2013035885 (A) - LIGNIN, COMPOSITION CONTAINING LIGNIN AND METHOD FOR PRODUCING THE LIGNIN
Изобретатель(и):	YOSHIMURA KOICHI ±
Заявитель(и):	ASAHI ORGANIC CHEM IND ±
Индекс(ы) по классификации:	- международной (МПК): C08H7/00 ; C08L97/00 - cooperative:
Номер заявки:	JP20110170229 20110803 Global Dossier
Номера приоритетных документов:	JP20110170229 20110803

Реферат документа JP2013035885 (A)

PROBLEM TO BE SOLVED: To provide lignin using soda lignin as a raw material and excellent in industrial usability, to provide a composition containing the lignin, and to provide a method for producing such lignin. ;SOLUTION: The lignin is obtained by mixing soda lignin with a 1-5C aliphatic monoalcohol and extracting soluble components. It is preferable that the soda lignin is herbaceous soda lignin. The composition contains the lignin. The method for producing the lignin includes a step comprising mixing soda lignin with a 1-5C aliphatic monoalcohol and extracting soluble components. ;COPYRIGHT: (C)2013,JPO&INPIT;PROBLEM TO BE SOLVED: To provide lignin using soda lignin as a raw material and excellent in industrial usability, to provide a composition containing the lignin, and to provide a method for producing such lignin.SOLUTION: The lignin is obtained by mixing soda lignin with a 1-5C aliphatic monoalcohol and extracting soluble components. It is preferable that the soda lignin is herbaceous soda lignin. The composition contains the lignin. The method for producing the lignin includes a step comprising mixing soda lignin with a 1-5C aliphatic monoalcohol and extracting soluble components.

Библиографические данные: JP2012241158 (A) — 2012-12-10

RUBBER COMPOSITION FOR TIRE TREAD AND PNEUMATIC TIRE

Ссылка на эту страницу	JP2012241158 (A) - RUBBER COMPOSITION FOR TIRE TREAD AND PNEUMATIC TIRE
Изобретатель(и):	KAMATA SHINSAKU ±
Заявитель(и):	TOYO TIRE & RUBBER CO ±
Индекс(ы) по классификации:	- международной B60C1/00 ; C08K3/04 ; C08K3/36 ; C08K5/54 ; C08L15/00 ;

(МПК): [C08L9/06](#); [C08L97/00](#)

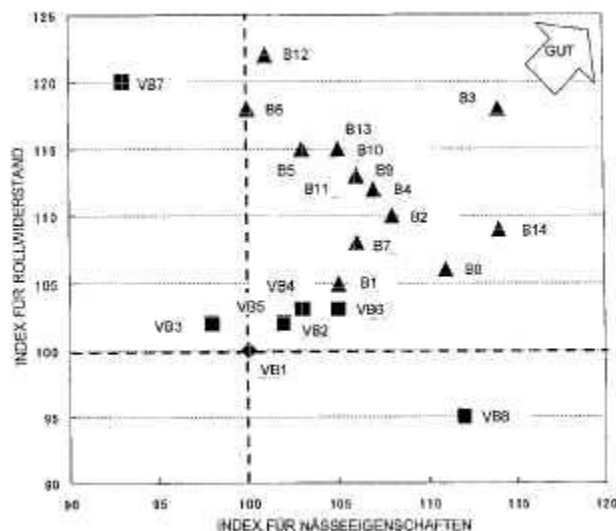
- cooperative: [B60C1/0016](#); [C08K3/04](#); [C08K5/548](#); [C08L15/00](#);
[C08L9/06](#); [C08L97/005](#); [C08L7/00](#) далее

Номер заявки: JP20110114984 20110523 [Global Dossier](#)

Номера приоритетных документов: JP20110114984 20110523

Также опубликовано, как: [JP5740207 \(B2\)](#) [DE102012010112 \(A1\)](#) [US2012302664 \(A1\)](#) [US9012540 \(B2\)](#)
[CN102796295 \(A\)](#) далее

Реферат документа JP2012241158 (A)



PROBLEM TO BE SOLVED: To provide a rubber composition for a tire tread that improves the balance between the rolling resistance performance and the wet performance. ;**SOLUTION:** This rubber composition is obtained by mixing silica, a silane coupling agent, a lignin derivative, and a carbon masterbatch into a modified styrene butadiene rubber having a functional group such as an amino group or a hydroxyl group. The carbon masterbatch is obtained by mixing a carbon black having an iodine adsorption of 60-130 g/kg into a styrene butadiene rubber. The ratio of the amount (B) of a rubber in the carbon masterbatch to the amount (A) of the modified diene rubber is $B/A=0.25-1$. The total amount of the carbon black and the silica is 40-100 pts.mass based on 100 pts.mass of a rubber component, the ratio of the silica to a filler is 25-80 mass%, and the amount of the lignin derivative is 0.1-10 pts.mass. ;**COPYRIGHT:**

(C)2013,JPO&INPIT;**PROBLEM TO BE SOLVED:** To provide a rubber composition for a tire tread that improves the balance between the rolling resistance performance and the wet performance.**SOLUTION:** This rubber composition is obtained by mixing silica, a silane coupling agent, a lignin derivative, and a carbon masterbatch into a modified styrene butadiene rubber having a functional group such as an amino group or a hydroxyl group. The carbon masterbatch is obtained by mixing a carbon black having an iodine adsorption of 60-130 g/kg into a styrene butadiene rubber. The ratio of the amount (B) of a rubber in the carbon masterbatch to the amount (A) of the modified diene rubber is $B/A=0.25-1$. The total amount of the carbon black and the silica is 40-100 pts.mass based on 100 pts.mass of a rubber component, the ratio of the silica to a filler is 25-80 mass%, and the amount of the lignin derivative is 0.1-10 pts.mass.

THERMOSETTING RESIN COMPOSITION, AND MOLD COIL, SWITCH GEAR, PRINTED-CIRCUIT BOARD, AND ROTARY ELECTRIC MACHINE USING THE THERMOSETTING RESIN COMPOSITION

Ссылка на эту страницу	JP2012233130 (A) - THERMOSETTING RESIN COMPOSITION, AND MOLD COIL, SWITCH GEAR, PRINTED-CIRCUIT BOARD, AND ROTARY ELECTRIC MACHINE USING THE THERMOSETTING RESIN COMPOSITION	
Изобретатель(и):	KOMIYA GEN; TAKEUCHI YOSHIKAZU; YAMAZAKI KENICHI; IMAI TAKAHIRO; FUKUMOTO GOJI ±	
Заявитель(и):	TOSHIBA CORP ±	
Индекс(ы) по классификации:	- международной (МПК): C08K3/00 ; C08L63/00 ; C08L67/06 ; C08L97/00 - cooperative:	
Номер заявки:	JP20110104284 20110509	Global Dossier
Номера приоритетных документов:	JP20110104284 20110509	

Реферат документа JP2012233130 (A)

PROBLEM TO BE SOLVED: To provide a thermosetting resin composition that reduces the occurrence of stress caused with change of temperature. ;SOLUTION: The thermosetting resin composition comprises as essential component, a thermosetting resin, a lignin derivative, and an inorganic filler. The mass ratio of the lignin derivative to the thermosetting resin falls in the range of 61 to 110 mass%. ;COPYRIGHT: (C)2013,JPO&INPIT;PROBLEM TO BE SOLVED: To provide a thermosetting resin composition that reduces the occurrence of stress caused with change of temperature.SOLUTION: The thermosetting resin composition comprises as essential component, a thermosetting resin, a lignin derivative, and an inorganic filler. The mass ratio of the lignin derivative to the thermosetting resin falls in the range of 61 to 110 mass%.

DERIVATIVES OF NATIVE LIGNIN, LIGNIN-WAX COMPOSITIONS, THEIR PREPARATION, AND USES THEREOF

Ссылка на эту страницу	CA2798196 (A1) - DERIVATIVES OF NATIVE LIGNIN, LIGNIN-WAX COMPOSITIONS, THEIR PREPARATION, AND USES THEREOF	
Изобретатель(и):	[CA]; BERLIN ALEX MULYK [CA] PAUL ±	
Заявитель(и):	[CA] LIGNOL INNOVATIONS LTD ±	
Индекс(ы) по классификации:	- международной (МПК): C07G1/00 ; C08L91/06 ; C08L97/00 ; C08L97/02 - cooperative: A23K10/32 ; A23L33/105 ; A61K36/15 ; A61K36/48 ; A61K36/54 ; A61K36/76 ; C07G1/00 ; C08H6/00 ; C08J3/00 ; C08K5/13 ; C08L23/02 ; C08L57/00 ; C08L97/005 ; C09K15/06 ; D21C11/0007 ; D21H11/00 ; C08J2397/00 ; C08L2207/04 ; Y02P20/582 ; Y02P60/877	
Номер заявки:	CA20102798196 20100527	Global Dossier
Номера приоритетных документов:	US20090182044P 20090528 ; US20090233345P 20090812 ; WO2010CA00801 20100527	
Также опубликовано, как:	US2010305241 (A1) US8445562 (B2) US2016145399 (A1) US2015345078 (A1) US9347177 (B2) далее	

Реферат документа CA2798196 (A1)

A wax composition comprising a lignin derivative wherein the derivative has a total hydroxyl content of from about 0.1 mmol/g to about 7 mmol/g.

Библиографические данные: JP2012224787 (A) — 2012-11-15

EPOXY RESIN COMPOSITION AND EPOXY RESIN CURING AGENT, AND RESPECTIVE PRODUCTS USING THEM

Ссылка на эту страницу	JP2012224787 (A) - EPOXY RESIN COMPOSITION AND EPOXY RESIN CURING AGENT, AND RESPECTIVE PRODUCTS USING THEM	
Изобретатель(и):	NAKAZAWA YURI; HOJO FUSAO; OKABE YOSHIAKI ±	
Заявитель(и):	HITACHI LTD ±	
Индекс(ы) по классификации:	- международной (МПК): C08G59/56 ; C08J5/24 ; C08L63/00 ; C08L97/00 ; H01L23/29 ; H01L23/31 ; H05K1/03 - cooperative:	
Номер заявки:	JP20110095173 20110421	Global Dossier
Номера приоритетных документов:	JP20110095173 20110421	

Реферат документа JP2012224787 (A)

PROBLEM TO BE SOLVED: To provide an epoxy resin composition and an epoxy resin curing agent, and to provide respective products using them. ;SOLUTION: The epoxy resin composition is used which comprises an epoxy resin and the epoxy resin curing agent, wherein lignin having an amino group or lignophenol having the amino group is used as the epoxy resin curing agent, thereby providing the epoxy resin composition, the epoxy resin curing agent, and respective products using them. ;COPYRIGHT: (C)2013,JPO&INPIT;PROBLEM TO BE SOLVED: To provide an epoxy resin composition and an epoxy resin curing agent, and to provide respective products using them.SOLUTION: The epoxy resin composition is used which comprises an epoxy resin and the epoxy resin curing agent, wherein lignin having an amino group or lignophenol having the amino group is used as the epoxy resin curing agent, thereby providing the epoxy resin composition, the epoxy resin curing agent, and respective products using them.

Библиографические данные: JP2012219241 (A) — 2012-11-12

RUBBER COMPOSITION FOR TIRE TREAD AND PNEUMATIC TIRE

Ссылка на эту страницу	JP2012219241 (A) - RUBBER COMPOSITION FOR TIRE TREAD AND PNEUMATIC TIRE	
Изобретатель(и):	KAMATA SHINSAKU ±	
Заявитель(и):	TOYO TIRE & RUBBER CO ±	
Индекс(ы) по классификации:	- международной (МПК): C08L9/00 ; C08L97/00 - cooperative:	
Номер заявки:	JP20110089408 20110413	Global Dossier
Номера приоритетных документов:	JP20110089408 20110413	

Реферат документа JP2012219241 (A)

PROBLEM TO BE SOLVED: To provide a rubber composition for tire tread improving low-temperature motion performance such as on-snow performance or on-ice performance by further improving adhesive frictional force on ice and snow road surfaces. ;SOLUTION: The rubber composition for tire tread includes, to 100 pts.mass of diene-based rubber, 1-50 pts.mass of polymer gel that is a crosslinked diene-based polymer particle having a glass transition point of -90 to -30°C, and 0.1-10 pts.mass of a lignin derivative (lignin sulphonate). A pneumatic tire provided with tread using the rubber composition is also provided. ;COPYRIGHT: (C)2013,JPO&INPIT;PROBLEM TO BE SOLVED: To provide a rubber composition for tire tread improving low-temperature motion performance such as on-snow performance or on-ice performance by further improving adhesive frictional force on ice and snow road surfaces.SOLUTION: The rubber composition for tire tread includes, to 100 pts.mass of diene-based rubber, 1-50 pts.mass of polymer gel that is a crosslinked diene-based polymer particle having a glass transition point of -90 to -30°C, and 0.1-10 pts.mass of a lignin derivative (lignin sulphonate). A pneumatic tire provided with tread using the rubber composition is also provided.

Библиографические данные: JP2012177035 (A) — 2012-09-13

LIGNIN DERIVATIVE, LIGNIN SECOND DERIVATIVE, LIGNIN RESIN COMPOSITION, PREPREG, AND COMPOSITE STRUCTURE

Ссылка на эту страницу [JP2012177035 \(A\) - LIGNIN DERIVATIVE, LIGNIN SECOND DERIVATIVE, LIGNIN RESIN COMPOSITION, PREPREG, AND COMPOSITE STRUCTURE](#)

Изобретатель(и): NAKAGAWA HIROSHIGE; MATSUMOTO MITSUTAKA; NAKAMURA KATSUTOSHI ±

Заявитель(и): SUMITOMO BAKELITE CO ±

Индекс(ы) по классификации: - международной (МПК): [C08H7/00](#); [C08J5/24](#); [C08L97/00](#)
- cooperative:

Номер заявки: JP20110040688 20110225 [Global Dossier](#)

Номера приоритетных документов: JP20110040688 20110225

Также опубликовано, как: [JP5754169 \(B2\)](#)

Реферат документа JP2012177035 (A)

PROBLEM TO BE SOLVED: To provide: a lignin derivative and a lignin second derivative that excel in reactivity and excel in meltability or solvent solubility; a lignin resin composition including the same and excellent in curability; a prepreg capable of producing a composite structure excellent in heat resistance or mechanical properties; and the composite structure comprising curing the prepreg. ;SOLUTION: The lignin derivative is obtained by decomposing biomass, and when the lignin derivative is subjected to<SP POS="POST">1</SP>H-NMR analysis, in the spectrum of the obtained chemical shift, the integration value of the peak belonging to an aromatic proton is 15-50% of the integration of the peak belonging to an aliphatic proton. Moreover, the lignin second derivative comprises introducing a reactive group like an epoxy group into the lignin derivative. ;COPYRIGHT: (C)2012,JPO&INPITPROBLEM TO BE SOLVED: To provide: a lignin derivative and a lignin second derivative that excel in reactivity and excel in meltability or solvent solubility; a lignin resin composition including the same and excellent in curability; a prepreg capable of producing a composite structure excellent

in heat resistance or mechanical properties; and the composite structure comprising curing the prepreg. SOLUTION: The lignin derivative is obtained by decomposing biomass, and when the lignin derivative is subjected to H-NMR analysis, in the spectrum of the obtained chemical shift, the integration value of the peak belonging to an aromatic proton is 15-50% of the integration of the peak belonging to an aliphatic proton. Moreover, the lignin second derivative comprises introducing a reactive group like an epoxy group into the lignin derivative.

Библиографические данные: CN102719013 (A) — 2012-10-10

Method for modifying Lignin/PP (Propene Polymer) wood-plastic composite material by flexible-chain-contained reactive solubilizer

Ссылка на эту страницу [CN102719013 \(A\) - Method for modifying Lignin/PP \(Propene Polymer\) wood-plastic composite material by flexible-chain-contained reactive solubilizer](#)

Изобретатель(и): XU XU; SHANRONG LI ±
Заявитель(и): UNIV GUILIN TECH GUT ±

Индекс(ы) по классификации: - международной (МПК): [B29C43/58](#); [C08G65/48](#); [C08K3/26](#); [C08L23/12](#); [C08L71/08](#); [C08L97/00](#)
- cooperative:

Номер заявки: CN20121221852 20120701 [Global Dossier](#)

Номера приоритетных документов: CN20121221852 20120701

Также опубликовано, как: [CN102719013 \(B\)](#)

Реферат документа CN102719013 (A)

The invention discloses a method for modifying a Lignin/PP (Propene Polymer) wood-plastic composite material by flexible-chain-contained reactive solubilizer. The method comprises the following steps of: uniformly mixing the independently-prepared flexible-chain-contained reactive solubilizer and fillers of CaCO₃, Lignin and PP in certain mass percentage; plasticating the mixture on an open type plasticator for 5 to 10 minutes at 180 to 190 DEG C to obtain a moulding compound; and thermally pressing the moulding compound at a moulding temperature of 180 to 190 DEG C and at pressure of 17 to 17MPa to form the Lignin/PP wood-plastic composite material modified through the flexible-chain-contained reactive solubilizer, wherein Lignin is at an industrial grade, and the purities of other chemical agents are beyond chemical pure. The method has the advantages of simplicity in technology and easiness in operation, and is beneficial to mass production; the flexible-chain-contained reactive solubilizer can improve the interfacial compatibility of the wood-plastic composite material, and thus the comprehensive performance of the composite material is improved; and the Lignin/PP wood-plastic composite material is prepared with the waste residues Lignin in paper industries serving as the raw material, therefore, the utilization of the waste materials is achieved.

Библиографические данные: JP2012158707 (A) — 2012-08-23

RESIN COMPOSITION AND SHEET

Ссылка на эту страницу [JP2012158707 \(A\) - RESIN COMPOSITION AND SHEET](#)

Изобретатель(и): GOTO AKIHITO; KOYAMA NAOYUKI; KOFUNE MIKA; KIKUCHI IKUKO; SUKEGAWA TOMOJI ±
Заявитель(и): HITACHI CHEMICAL CO LTD ±
Индекс(ы) по - международной (МПК): [C08J5/18](#); [C08L101/00](#); [C08L97/00](#); [C08L101/16](#)

классификации: - cooperative:
Номер заявки: JP20110020615 20110202 [Global Dossier](#)
Номера приоритетных документов: JP20110020615 20110202
Также опубликовано, как: [JP5618153 \(B2\)](#)

Реферат документа JP2012158707 (A)

PROBLEM TO BE SOLVED: To provide a resin composition and a sheet, which can reduce oil-originated materials from the viewpoint of reduction of environmental load and can control the biodegradation rate according to applications. ;**SOLUTION:** The resin composition contains lignin and a resin component, wherein the content of the lignin is 1 to 50 mass% as a nonvolatile content, and the lignin is soluble in an organic solvent. The lignin has a weight-average molecular weight of 100 to 7,000. The lignin is separated from cellulose components and hemicellulose components by a treatment method using water only and is obtained by being dissolved in an organic solvent. ;**COPYRIGHT:** (C)2012,JPO&INPIT;**PROBLEM TO BE SOLVED:** To provide a resin composition and a sheet, which can reduce oil-originated materials from the viewpoint of reduction of environmental load and can control the biodegradation rate according to applications.**SOLUTION:** The resin composition contains lignin and a resin component, wherein the content of the lignin is 1 to 50 mass% as a nonvolatile content, and the lignin is soluble in an organic solvent. The lignin has a weight-average molecular weight of 100 to 7,000. The lignin is separated from cellulose components and hemicellulose components by a treatment method using water only and is obtained by being dissolved in an organic solvent.

Библиографические данные: DE102011012869 (A1) — 2012-09-06

Plasticizable plastic material useful in a polymer-molded part, comprises natural polymer including polylactide and/or lignin mixture and/or its derivatives, and polyamide based on dimer fatty acid

Ссылка на эту страницу [DE102011012869 \(A1\) - Plasticizable plastic material useful in a polymer-molded part, comprises natural polymer including polylactide and/or lignin mixture and/or its derivatives, and polyamide based on dimer fatty acid](#)
Изобретатель(и): [DE]; NAEGELE HELMUT PFITZER [DE]; JUERGEN ZIEGLER [DE]; LARS PORTER [DE]; BENJAMIN ULMER [DE] BERNHARD DR ±
Заявитель(и): [DE]; SKZ KFE GGMBH KUNSTSTOFF FORSCHUNG UND ENTWICKLUNG TECNARO GES ZUR IND ANWENDUNG [DE] NACHWACHSENDER ROHSTOFFE MBH ±
Индекс(ы) по классификации: - международной (МПК): [C08J3/24](#); [C08K5/14](#); [C08L23/26](#); [C08L3/00](#); [C08L67/02](#); [C08L7/00](#); [C08L77/00](#); [C08L97/00](#)
 - cooperative: [C08J3/24](#); [C08L1/10](#); [C08L23/26](#); [C08L3/02](#); [C08L67/04](#); [C08L7/00](#); [C08L77/08](#); [C08L97/005](#); [C08J2307/00](#); [C08J2423/26](#); [C08J2467/04](#); [C08J2477/08](#); [C08J2497/00](#); [C08K5/0016](#); [C08K5/0025](#); [C08K5/09](#) далее
Номер заявки: DE20111012869 20110302
Номера приоритетных документов: DE20111012869 20110302

Реферат документа DE102011012869 (A1)

Plasticizable plastic material comprises at least one natural polymer including polylactide and lignin mixture and/or its derivatives and at least one polyamide based on dimer fatty acid. Independent claims are also included for: (1) a polymer-molded part comprising the plastic material, preferably in the form of constructive- and technical parts, or in consumer goods including toys, packaging materials and -films; and (2) producing the plastic material comprising plasticizing and homogenizing optionally by adding at least one additional component of fine particulate solid including natural reinforcing fibers (preferred), plasticizers, and other additives to the natural polymer including the polylactide and lignin mixture and/or its derivatives and polyamide based on dimer fatty acid, cooling, and granulating.

Библиографические данные: CN102585531 (A) — 2012-07-18

Lignin-epoxy resin composite material and preparation method thereof

Ссылка на эту страницу	CN102585531 (A) - Lignin-epoxy resin composite material and preparation method thereof
Изобретатель(и):	MINGWEI DI; QUANFU YIN ±
Заявитель(и):	UNIV NORTHEAST FORESTRY ±
Индекс(ы) по классификации:	- международной (МПК): B29C43/58 ; C08L63/00 ; C08L77/00 ; C08L97/00
	- cooperative:
Номер заявки:	CN20111417428 20111214 Global Dossier
Номера приоритетных документов:	CN20111417428 20111214

Реферат документа CN102585531 (A)

The invention discloses a lignin-epoxy resin composite material and a preparation method thereof, relates to a lignin-polymer composite material and a preparation method thereof, and aims to solve the conventional problem of low effective utilization rate of lignin. The lignin-epoxy resin composite material uses the lignin as a substrate; epoxy resin, a curing agent, a toughening agent, and the like are evenly blended with the lignin; and through the processes of pre-pressing, hot-pressing and curing molding, the lignin-based composite material is obtained. The lignin-epoxy resin composite material disclosed by the invention has the advantages of little water absorption, good mechanical performance, degradability, and the like, is suitable for manufacturing floor boards, wall protection boards, construction formworks, door-window profiles, fences, guardrails, louvers, roof boards, and the like in the construction industry, can be used for manufacturing inner decorative boards of automobile doors, seat backing boards, automobile roof lining, and the like in the automobile industry, and can also be used in the fields of the packaging and transportation industry, the furniture industry, office articles, sports facilities, and the like.

Библиографические данные: JP2012092282 (A) — 2012-05-17

RESIN COMPOSITION, AND MOLDED BODY

Ссылка на эту страницу	JP2012092282 (A) - RESIN COMPOSITION, AND MOLDED BODY
Изобретатель(и):	KIKUCHI IKUKO; KOYAMA NAOYUKI; KOFUNE MIKA; GOTO AKIHITO;

Заявитель(и): SUKEGAWA TOMOJI ±
 HITACHI CHEMICAL CO LTD ±
Индекс(ы) по классификации: - международной (МПК): [C08G59/40](#); [C08K7/02](#); [C08L63/00](#); [C08L97/00](#)
 - cooperative:
Номер заявки: JP20110001931 20110107 [Global Dossier](#)
Номера приоритетных документов: [JP20100221192 20100930](#) ; JP20110001931 20110107

Реферат документа JP2012092282 (A)

PROBLEM TO BE SOLVED: To provide a resin composition and a molded body containing lignin originated from plants as a main raw material, and imparted with flame retardancy.
;SOLUTION: The resin composition contains an organic solvent-soluble lignin, a curing agent, and a curing accelerator. The resin composition further contains a flame retardant aid. The organic solvent-soluble lignin is prepared by separating it from cellulose components and hemicellulose components by a processing method using water only, and dissolving it in an organic solvent. **;COPYRIGHT:** (C)2012,JPO&INPIT;
PROBLEM TO BE SOLVED: To provide a resin composition and a molded body containing lignin originated from plants as a main raw material, and imparted with flame retardancy.
SOLUTION: The resin composition contains an organic solvent-soluble lignin, a curing agent, and a curing accelerator. The resin composition further contains a flame retardant aid. The organic solvent-soluble lignin is prepared by separating it from cellulose components and hemicellulose components by a processing method using water only, and dissolving it in an organic solvent.

Библиографические данные: CN102504289 (A) — 2012-06-20

Preparation method of quaternary ammonium type lignin/poval composite material for adsorbing TNT (2,4,6-trinitrotoluene)

Ссылка на эту страницу [CN102504289 \(A\) - Preparation method of quaternary ammonium type lignin/poval composite material for adsorbing TNT \(2,4,6-trinitrotoluene\)](#)
Изобретатель(и): XIAOYAN LIN; XIURONG ZHUO; YING LI; XUEGANG LUO ±
Заявитель(и): UNIV SW SCI & TECH SWUST ±
Индекс(ы) по классификации: - международной (МПК): [B01J20/26](#); [B01J20/30](#); [C02F1/28](#); [C08H7/00](#); [C08J3/24](#); [C08K5/07](#); [C08K5/1515](#); [C08L29/04](#); [C08L97/00](#); [C02F101/38](#)
 - cooperative:
Номер заявки: CN20111318618 20111019 [Global Dossier](#)
Номера приоритетных документов: CN20111318618 20111019

Реферат документа CN102504289 (A)

The invention discloses a preparation method of a quaternary ammonium type lignin/poval composite material for adsorbing TNT (2,4,6-trinitrotoluene). The preparation method is characterized by comprising the following steps of: weighing the following raw material components in parts by weight: 10-80 parts of quaternary ammonium type lignin, 20-90 parts of poval, 100-200 parts of distilled water and 0.05-50 parts of crosslinking agent; adding the raw material components in a reactor to carry out stirring reaction for 1-8 hours at the temperature of 40-150 DEG C and at the pH value of 1-6; filtering, washing solid materials with distilled water,

drying, and screening with a 60-100 meshed sieve, so as to obtain the oversize product, namely the quaternary ammonium type lignin/poval composite material. The preparation method has the characteristics of simple process, low cost and the like, and is environment-friendly; the prepared composite material has high selective adsorption capacity on nitrogen-containing compounds such as TNT and a nitrocompound, and can be widely used for the adsorption separation of a nitrogen-containing compound and treatment of wastewater in the fields of chemical industry, food, medicine, agriculture, environment conservation and the like.

Библиографические данные: CN102492188 (A) — 2012-06-13

Preparation method of composite material of eucommia ulmoides rubber and lignin

Ссылка на эту страницу	CN102492188 (A) - Preparation method of composite material of eucommia ulmoides rubber and lignin	
Изобретатель(и):	QINGHONG FANG; TIANQI LIU; NA WANG; FENG YANG; WENCHI HAN; ZHONG WANG; XIUBIN ZHANG ±	
Заявитель(и):	UNIV SHENYANG CHEMICAL TECH ±	
Индекс(ы) по классификации:	- международной (МПК):	C08J3/24 ; C08K13/02 ; C08K3/06 ; C08K3/22 ; C08K5/09 ; C08L7/00 ; C08L97/00
	- cooperative:	
Номер заявки:	CN20111413962 20111213	Global Dossier
Номера приоритетных документов:	CN20111413962 20111213	
Также опубликовано, как:	CN102492188 (B)	

Реферат документа CN102492188 (A)

A preparation method of a composite material of eucommia ulmoides rubber and lignin relates to a preparation method of a composite material and adopts coarse extraction of natural eucommia ulmoides plant tissue containing the lignin and the eucommia ulmoides rubber to prepare a novel composite material of the lignin/eucommia ulmoides rubber directly. Due to rubber and plastic duality of the eucommia ulmoides rubber at the normal temperature, the prepared composite material has certain hardness, tensile strength and toughness and has certain elongation at break.; End products prepared through smashing, plastication and vulcanization of eucommia ulmoides coarse glue containing the lignin has part of characteristics of traditional wood-plastic composite materials in appearance structure and functions, can partially replace traditional wood-plastic composite materials to be used as an external wall hanging board, decorating materials of non-bearing structures, artificial leather materials and the like.

Библиографические данные: US2012136097 (A1) — 2012-05-31

RESIN COMPOSITIONS COMPRISING LIGNIN DERIVATIVES

Ссылка на эту страницу	US2012136097 (A1) - RESIN COMPOSITIONS COMPRISING LIGNIN DERIVATIVES	
Изобретатель(и):	[US] BERLIN ALEX ±	
Заявитель(и):	[US] BERLIN ALEX ±	
Индекс(ы) по классификации:	- международной (МПК):	C07G1/00 ; C08H7/00 ; C08L97/00
	- cooperative:	C07G1/00 ; C08H6/00 ; C08H8/00 ; C08K5/13 ; C08L1/10 ; C08L61/06 ; C08L61/12 ; C08L97/02 ; D21C3/20 далее

Номер заявки: US201013322890 20100527 [Global Dossier](#)
Номера приоритетных документов: US201013322890 20100527 ; [US20090182044P 20090528](#) ; [US20090233345P 20090812](#) ; [US20100304745P 20100215](#) ; [WO2010CA00800 20100527](#)
Также опубликовано, как: [US9267027 \(B2\)](#) [WO2010135832 \(A1\)](#) [US2016185810 \(A1\)](#) [EP2435457 \(A1\)](#) [EP2435457 \(A4\)](#) [далее](#)

Реферат документа US2012136097 (A1)

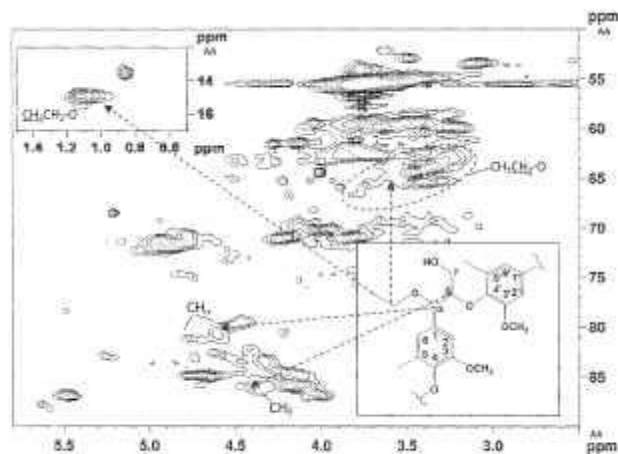


Figure 1

The present invention provides derivatives of native lignin having an ethoxy content of 0.45 mmol/g or greater. Surprisingly, it has been found that phenolic resins comprising derivatives of native lignin having ethoxy contents have acceptable performance characteristics such as bondstrength.

Библиографические данные: US2012073720 (A1) — 2012-03-29

WIRE COAT COMPOSITIONS FOR RUBBER ARTICLES

Ссылка на эту страницу: [US2012073720 \(A1\) - WIRE COAT COMPOSITIONS FOR RUBBER ARTICLES](#)

Изобретатель(и): [US]; HALASA ADEL FARHAN [US]; VERTHE JOHN JOSEPH ANDRE [LU] LECHTENBOEHMER ANNETTE ±

Заявитель(и): [US]; HALASA ADEL FARHAN [US]; VERTHE JOHN JOSEPH ANDRE [LU]; LECHTENBOEHMER ANNETTE GOODYEAR TIRE & [US] RUBBER ±

Индекс(ы) по классификации: - международной (МПК): [B60C15/00](#); [B60C9/18](#); [C08L97/00](#)
- cooperative: [B60C1/0008](#); [C08K3/04](#); [C08L21/00](#); [D07B1/0666](#); [B60C2009/0021](#); [C08L7/00](#); [C08L9/00](#); [C08L91/08](#); [C08L97/005](#); [Y02T10/862](#) [далее](#)

Номер заявки: US20100892204 20100928 [Global Dossier](#)

Номера приоритетных документов: US20100892204 20100928

Также опубликовано, как: [EP2433813 \(A1\)](#) [EP2433813 \(B1\)](#) [BRPI1105014 \(A2\)](#)

Реферат документа US2012073720 (A1)

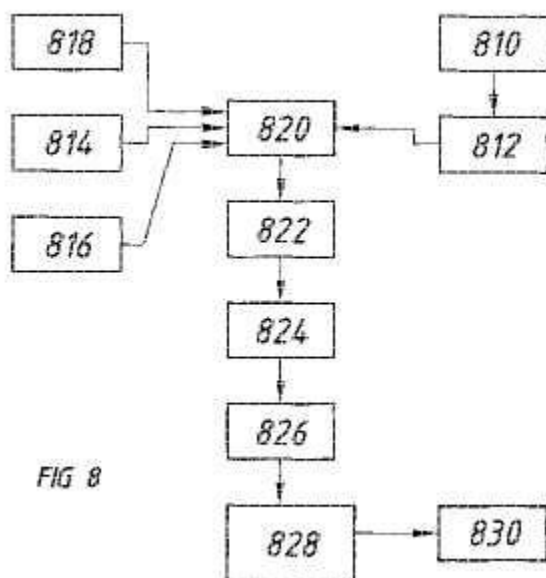
The present invention is based upon the unexpected finding that lignin can be incorporated into wire coat stock composition to improve metal to rubber adhesion. It has been further found that lignin can be used as a replacement in whole or in part for conventional rubber-to-metal adhesion promoters, such as cobalt materials which are conventionally used in wire coat stocks to attain and maintain needed rubber-to-wire adhesion properties. In fact, wire coat stocks that contain lignin provide more than adequate rubber-to-metal adhesion characteristics for typical applications, such as in tires, and maintain needed levels of adhesion over long periods of product service. For instance, high levels of rubber-to-metal adhesion are maintained under harsh conditions, such as exposure to elevated temperatures and high levels of humidity. The utilization of lignin in wire coat stock formulations in accordance with this invention is also economically advantageous since lignin is a low cost alternative to most conventional adhesion promoting agents. Lignin is also environmentally friendly and does not present any known health hazards. Lignin is derived from wood and constitutes about 25 percent to 33 percent of the dry mass of wood. Accordingly, lignin is an abundant naturally occurring organic polymer which is a renewable resource since it is derived from trees. Accordingly, lignin represents a low cost, abundant, environmentally friendly, and highly effective alternative to conventional rubber-to-metal adhesion promoters. The present invention more specifically discloses a wire coat stock composition which is comprised of (1) a rubbery polymer, (2) about 40 phr to about 80 phr of carbon black, and (3) about 2 phr to about 30 phr of lignin.

Библиографические данные: AU2010262764 (A1) — 2012-02-09

Production of perlite and fiber based composite panel board

Ссылка на эту страницу	AU2010262764 (A1) - Production of perlite and fiber based composite panel board
Изобретатель(и):	PRASETYA BAMBANG; ASIKIN ZAENAL ±
Заявитель(и):	EZE BOARD AUSTRALIA PTY LTD ±
Индекс(ы) по классификации:	- международной (МПК): B27N3/00 ; B27N3/12 ; C08L97/00 ; C09J197/00 ; D01B1/14 ; E04C2/16 - cooperative: B27N3/12 ; C08L97/005 ; C08L97/02 ; C09J161/00 ; C09J161/06 ; C09J161/12 ; C09J161/24 ; C09J161/28 ; E04C2/16 ; C08K7/24 ; C08L2205/02 ; C08L2205/16 ; C08L61/06 далее
Номер заявки:	AU20100262764 20100618
Номера приоритетных документов:	AU20090902857 20090619 ; WO2010AU00761 20100618 ; AU20100262764 20100618
Также опубликовано, как:	WO2010144969 (A1)

Реферат документа AU2010262764 (A1)



A lignin based modifier is described that may be added to formaldehyde based binder systems such as phenol formaldehyde (PF), urea-formaldehyde (UF), melamine formaldehyde (MF), resorcinol formaldehyde (RF) and/or tannin formaldehyde resins. The lignin based modifier may be included in such binder systems used in the manufacture of composite panel boards such as plywood, hard board, medium density fibreboard (MDF) or particle boards in general. The lignin based modifier may be used to improve the performance of the binder system, the performance of the resultant composite panel board and reduce the formaldehyde emissions of the board. The lignin modifier may contain: an acid, a gum rosin, a lignin and either a phenol or a polyethylene glycol. The lignin may be derived from lignocellulose powder.

Библиографические данные: JP2011246630 (A) — 2011-12-08

PARTIALLY ACYLATED LIGNIN, EPOXY RESIN COMPOSITION USING THE SAME, AND METHOD FOR PRODUCING THE SAME

Ссылка на эту страницу [JP2011246630 \(A\) - PARTIALLY ACYLATED LIGNIN, EPOXY RESIN COMPOSITION USING THE SAME, AND METHOD FOR PRODUCING THE SAME](#)

Изобретатель(и): HIROSE SHIGEO; TAGUCHI KAZUHIRO; KUNIOKA MASAO ±

Заявитель(и): AIST ±

Индекс(ы) по классификации: - международной (МПК): [C08G59/62](#); [C08L63/00](#); [C08L97/00](#)
- cooperative:

Номер заявки: JP20100122183 20100528 [Global Dossier](#)

Номера приоритетных документов: JP20100122183 20100528

Также опубликовано, как: [JP5582528 \(B2\)](#)

Реферат документа JP2011246630 (A)

PROBLEM TO BE SOLVED: To provide an epoxy resin composition including lignin as a curing agent, which can be cured under mild conditions by enhancing solvent solubility of the used lignin while keeping reactivity of the lignin to the epoxy resin. ;**SOLUTION:** This solvent-soluble lignin derivative is obtained by acylating only alcoholic hydroxy group among the alcoholic hydroxy group and a phenolic hydroxy group existing in the lignin molecule. The lignin derivative increases solvent-solubility because of selective acylation of alcoholic hydroxy groups, and can be used as raw materials to produce various useful resins by reacting with reactive components of the epoxy resin or the like under relatively mild conditions in a solvent because of the presence of free phenolic hydroxy groups. Further, it can be expected that the obtained resin improves heat resistance because the alcoholic hydroxy groups in lignin molecule in the produced resin are protected by ester groups. ;**COPYRIGHT:**

(C)2012,JPO&INPIT;**PROBLEM TO BE SOLVED:** To provide an epoxy resin composition including lignin as a curing agent, which can be cured under mild conditions by enhancing solvent solubility of the used lignin while keeping reactivity of the lignin to the epoxy resin.**SOLUTION:** This solvent-soluble lignin derivative is obtained by acylating only alcoholic hydroxy group among the alcoholic hydroxy group and a phenolic hydroxy group existing in the lignin molecule. The lignin derivative increases solvent-solubility because of selective acylation of alcoholic hydroxy groups, and can be used as raw materials to produce various useful resins by reacting with reactive components of the epoxy resin or the like under relatively mild conditions in a solvent because of the presence of free phenolic hydroxy groups. Further, it can be expected that the obtained resin improves heat resistance because the alcoholic hydroxy groups in lignin molecule in the produced resin are protected by ester groups.

Библиографические данные: JP2011219716 (A) — 2011-11-04

ANTIBACTERIAL RESIN COMPOSITION

Ссылка на эту страницу [JP2011219716 \(A\) - ANTIBACTERIAL RESIN COMPOSITION](#)

Изобретатель(и): KIKUCHI IKUKO; KOYAMA NAOYUKI; KOFUNE MIKA; GOTO AKIHITO; SUKEGAWA TOMOJI ±

Заявитель(и): HITACHI CHEMICAL CO LTD ±

Индекс(ы) по классификации: - международной (МПК): [C08H7/00](#); [C08L101/00](#); [C08L97/00](#); [A61K36/00](#); [A61K8/97](#)
- cooperative:

Номер заявки: JP20100170394 20100729 [Global Dossier](#)

Номера приоритетных документов: [JP20100027547 20100210](#) ; [JP20100065953 20100323](#) ; JP20100170394 20100729

Также опубликовано, как: [JP5641302 \(B2\)](#) [JP2011219734 \(A\)](#) [JP5741904 \(B2\)](#) [JP2011219728 \(A\)](#) [JP2011219725 \(A\)](#) [далее](#)

Реферат документа JP2011219716 (A)

PROBLEM TO BE SOLVED: To provide an antibacterial resin composition using lignin which is a plant-derived component, high in safety to a human body and superior in heat resistance. ;**SOLUTION:** In the antibacterial resin composition containing lignin and a thermoplastic resin, the lignin is soluble in an organic solvent and contained therein in an amount of 0.01 to 50 mass% as a nonvolatile component. In the antibacterial resin composition containing lignin and a thermosetting resin, the lignin is soluble in the organic solvent and contained therein in an

amount of 0.01 to 50 mass% as a nonvolatile component. ;COPYRIGHT:
(C)2012,JPO&INPIT;PROBLEM TO BE SOLVED: To provide an antibacterial resin composition using lignin which is a plant-derived component, high in safety to a human body and superior in heat resistance.SOLUTION: In the antibacterial resin composition containing lignin and a thermoplastic resin, the lignin is soluble in an organic solvent and contained therein in an amount of 0.01 to 50 mass% as a nonvolatile component. In the antibacterial resin composition containing lignin and a thermosetting resin, the lignin is soluble in the organic solvent and contained therein in an amount of 0.01 to 50 mass% as a nonvolatile component.

РЕФЕРАТЫ ИЗОБРЕТЕНИЙ ИНОСТРАННЫЕ
(МПК С 08L 97/02)

Библиографические данные: US2017022178 (A1) — 2017-01-26

MODIFIED POLYPHENOL BINDER COMPOSITIONS AND METHODS FOR MAKING AND USING SAME

Ссылка на эту страницу	US2017022178 (A1) - MODIFIED POLYPHENOL BINDER COMPOSITIONS AND METHODS FOR MAKING AND USING SAME
Изобретатель(и):	[US]; HAGIOPOL CORNEL [US] ATKINSON DEREK L ±
Заявитель(и):	[US] GEORGIA-PACIFIC CHEMICALS LLC ±
	- международной (МПК): C07D311/54 ; C08L97/02
Индекс(ы) по классификации:	C07D311/54 ; C08G61/12 ; C08G65/002 ; C08G8/28 ; C08L33/00 ; C08L65/00 ; C08L97/02 ; C09J161/06 ; C09J161/14 ; C09J163/00 ; C09J167/02 ; C09J171/08 ; C09J197/005 далее
	- cooperative:
Номер заявки:	US201615289521 20161010 Global Dossier
Номера приоритетных документов:	US201615289521 20161010 ; US201514880726 20151012 ; US201314040796 20130930 ; US201261708388P 20121001
Также опубликовано, как:	US2014094562 (A1) US9157016 (B2) US2016032104 (A1) US9464193 (B2) WO2014055463 (A1) далее

Реферат документа US2017022178 (A1)

Modified polyphenol binder compositions and methods for making and using same are provided. In at least one specific embodiment, the binder composition can include at least one unsaturated monomer and at least one polyphenolic compound. The polyphenolic compound can include a lignin, a tannin, a novolac resin, a modified phenol formaldehyde resin, bis-phenol A, humic acid, or any mixture thereof.

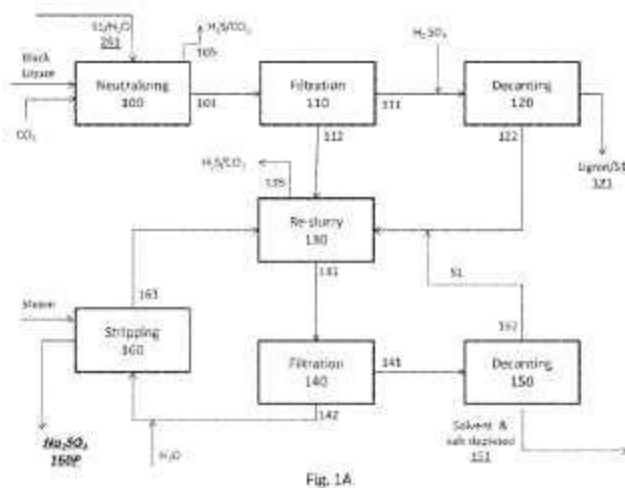
Библиографические данные: CA2954274 (A1) — 2016-01-14

METHODS FOR SEPARATING AND REFINING LIGNIN FROM BLACK LIQUOR AND COMPOSITIONS THEREOF

Ссылка на эту [CA2954274 \(A1\) - METHODS FOR SEPARATING AND](#)

страницу [REFINING LIGNIN FROM BLACK LIQUOR AND COMPOSITIONS THEREOF](#)
 Изобретатель(и): [US]; JANSEN ROBERT LAWSON [US]; JAMES ALAN LAPIDOT [IL] NOA ±
 Заявитель(и): [US] VIRIDIA INC ±
 Индекс(ы) по классификации: - международной (МПК): [C07G1/00](#); [C08L97/02](#); [D21C11/00](#)
 - cooperative: [C07G1/00](#); [C08H6/00](#); [D21C11/0007](#); [D21C11/0085](#); [Y02P20/582](#)
 Номер заявки: CA20152954274 20150707 [Global Dossier](#)
 Номера приоритетных документов: [US201462022644P](#) 20140709 ; [WO2015US39438](#) 20150707
 Также опубликовано, как: [WO2016007550 \(A1\)](#) [UY36206 \(A\)](#)

Реферат документа



The invention relates methods and processes for the separation and refining of lignin from spent cooking liquor, called black liquor, present in industrial chemical plants, and compositions thereof. A process is provided for separating black liquor into at least two, three, or four streams selected from: (i) a gaseous stream comprising volatile sulfur compounds; (ii) a lignin-comprising stream produced by extracting lignin into a limited solubility solvent S1; (iii) a salt stream, comprising solid sodium and sulfate salts; and (iv) a salt-depleted and lignin-depleted aqueous stream comprising hydrocarbons.

Библиографические данные:

US2016333146 (A1) — 2016-11-17

METHOD AND APPARATUS FOR SEPARATING LIGNOCELLULOSE PARTICLE FRACTION AND LIGNIN PARTICLE FRACTION, LIGNIN PARTICLE COMPOSITION, LIGNOCELLULOSE PARTICLE COMPOSITION AND THEIR USE

Ссылка на эту
страницу

[US2016333146 \(A1\) - METHOD AND APPARATUS FOR SEPARATING LIGNOCELLULOSE PARTICLE FRACTION AND LIGNIN PARTICLE FRACTION, LIGNIN PARTICLE COMPOSITION, LIGNOCELLULOSE PARTICLE COMPOSITION AND THEIR USE](#)

Изобретатель(и): [FI] MIETTINEN MAUNO ±

Заявитель(и): [FI] UPM-KYMMENE CORP ±

- международной (МПК): [B01J20/24](#); [B01J20/28](#); [B01J20/30](#); [B03D1/02](#); [B03D3/06](#); [C08H7/00](#); [C08H8/00](#); [C08L97/00](#); [C08L97/02](#)

Индекс(ы) по
классификации:

- cooperative: [B01J20/24](#); [B01J20/28016](#); [B01J20/3085](#); [B03D1/02](#); [B03D3/06](#); [C08H6/00](#); [C08H8/00](#); [C08L97/005](#); [C08L97/02](#); [B01D21/00](#); [B03D2203/001](#); [C08L2205/02](#); [D21H17/23](#)

Номер заявки: US201515110784 20150109 [Global Dossier](#)

Номера
приоритетных
документов: [FI20140005020](#) 20140113 ; [WO2015FI50010](#) 20150109

Также
опубликовано, как: [WO2015104459 \(A1\)](#) [UY35950 \(A\)](#) [FI20145020 \(A\)](#)
[EP3094667 \(A1\)](#) [CA2933763 \(A1\)](#)

Реферат документа US2016333146 (A1)

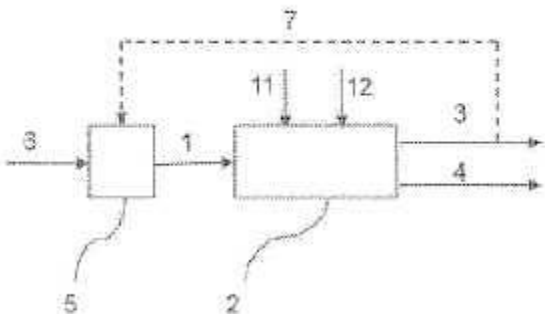


Fig. 1

The invention relates to a method and an apparatus for separating lignocellulose particle fraction (3) and lignin particle fraction (4), in which crude lignin (1) formed from starting material (6) comprises lignocellulose particles and lignin particles. According to the invention, the method comprises adding stabilizing chemical (11) and/or hydrophobic chemical (12) into the crude lignin (1) in at least one step, and treating the crude lignin by separating the lignin particle fraction (4) and lignocellulose particle fraction (3) from each other in at least one separation step (2,8,9,10). Further, the invention relates to a lignocellulose particle fraction and a lignin particle fraction and their uses.

Библиографические данные: CN106046830 (A) — 2016-10-26

Preparation method of natural Eucommia wood-plastic composite material

Ссылка на эту страницу	CN106046830 (A) - Preparation method of natural Eucommia wood-plastic composite material	
Изобретатель(и):	FANG QINGHONG; MOU RUIXING; YANG FENG; KANG HAILAN \pm	
Заявитель(и):	SHENYANG UNIV OF CHEMICAL TECH \pm	
Индекс(ы) по классификации:	- международной (МПК):	C08K3/34 ; C08L23/12 ; C08L51/06 ; C08L97/02
	- cooperative:	
Номер заявки:	CN20161515501 20160704	Global Dossier
Номера приоритетных документов:	CN20161515501 20160704	

Реферат документа CN106046830 (A)

The invention relates to a preparation method of a composite material, in particular to a preparation method of a natural Eucommia wood-plastic composite material. Protein contained in Eucommia wood is similar to that contained in most food, and various amino acids and mineral elements necessary for human body are found in the Eucommia wood. The Eucommia wood contains a lot of lignin, and the composite material is prepared by filling thermoplastic resin like polypropylene with Eucommia wood powder and adding an auxiliary, thereby having certain hardness, tensile strength, Vicat softening temperature, density and certain elongation at break. Compared with conventional materials, the wood-plastic material has unique advantages of being capable of releasing some beneficial elements to human body and free of defects (wood knur, diagonal and rotting) that wooden products have and having appearance similar to wood, higher hardness than plastic and excellent forming processibility and weatherability. The wood-plastic composite material has wide application range like wall protection board decoration, floors, guardrails, indoor tables and chairs and automobile interiors.

Библиографические данные: JP2016169382 (A) — 2016-09-23

LIGNIN-CONSTITUTING PHENYL PROPANE UNIT α POSITION CHEMICALLY MODIFIED LIGNOCELLULOSE DERIVATIVE, FIBER OR FIBER ASSEMBLY COMPRISING THE SAME, AND COMPOSITION OR FORMED PRODUCT CONTAINING THE SAME

Ссылка на эту страницу	JP2016169382 (A) - LIGNIN-CONSTITUTING PHENYL PROPANE UNIT α POSITION CHEMICALLY MODIFIED LIGNOCELLULOSE DERIVATIVE, FIBER OR FIBER ASSEMBLY COMPRISING THE
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SAME, AND COMPOSITION OR FORMED PRODUCT
CONTAINING THE SAME

Изобретатель(и): YAMADA SHUHEI; ANDO MASAHIRO; NAKATSUBO FUMIAKI;
YANO HIROYUKI ±

Заявитель(и): UNIV KYOTO; SEIKO PMC CORP; JUJO PAPER CO LTD; OJI
HOLDINGS CORP ±

**Индекс(ы) по
классификации:** - международной C08H8/00; C08J5/04; C08K7/02;
(МПК): C08L101/00; C08L97/02
- cooperative:

Номер заявки: JP20160047572 20160310 [Global Dossier](#)

**Номера
приоритетных
документов:** [JP20150050351 20150313](#)

Реферат документа JP2016169382 (A)

PROBLEM TO BE SOLVED: To provide: a chemically modified lignocellulose derivative (α position modified lignocellulose derivatives, lignocellulose with double modifications) that is light weight, has a high strength, has a low linear thermal expansion coefficient, as well as that can exhibit thermoplasticity; a fiber or fiber assembly comprising chemically modified lignocellulose derivative; and a composition as well as a formed product comprising the same. SOLUTION: Provided is a lignocellulose derivative in which α position of a phenyl propane unit constituting lignin is modified with at least one characteristic group selected from the group consisting of an acyloxy group, an oxy group, and a thio group. SELECTED DRAWING: None

Библиографические данные: CN105860561 (A) — 2016-08-17

High-quality luminescent wood-plastic photo frame and preparation method

**Ссылка на эту
страницу** [CN105860561 \(A\) - High-quality luminescent wood-plastic photo
frame and preparation method](#)

Изобретатель(и): CHEN KAI ±

Заявитель(и): NINGGUO DINGXUAN CULTURAL CREATIVE CO LTD ±

**Индекс(ы) по
классификации:** - международной C08K5/09; C08K5/101; C08K5/54;
(МПК): C08L23/06; C08L23/12; C08L27/06;
C08L33/12; C08L55/02; C08L91/06;
C08L97/02
- cooperative:

Номер заявки: CN20161268415 20160425 [Global Dossier](#)

**Номера приоритетных
документов:** CN20161268415 20160425

Реферат документа CN105860561 (A)

The invention discloses a high-quality luminescent wood-plastic photo frame and a preparation method. The high-quality luminescent wood-plastic photo frame consists of the following materials in percentage by weight: 30-60% of plastic, 20-50% of wood powder, 5-10% of a silane coupling agent, 3-5% of a lubricant, 2-4% of a luminous material, 4-7% of an antioxidant, 1-4% of a preservative and 2-5% of an impact-resistant modifier M-61. According to the high-quality luminescent wood-plastic photo frame, the impact-resistant modifier is added into the formula, so that the processing performance of wood plastic is improved, and the impact resistance can be improved; the added long-afterglow energy storage and luminescent material enables people to pay attention to the photo frame in a dark environment, so that loss due to failure of seeing is avoided, and therefore, the life of people is convenient; a sodium hydroxide solution is used for soaking, so that low-molecule impurities such as part of pectin, lignin and hemicelluloses in plant fibers can be dissolved, and holes are formed in the surface; and impurities on the surfaces of the fibers are removed, and the surfaces of the fibers are rough, so that bonding capacity between the fibers and the resin interface is strengthened, and therefore, the obtained photo frame material is relatively good in mechanical property, and has tensile strength up to 28Mpa.

Библиографические данные: SG11201604775T (A) — 2016-07-28

COMPOSITION COMPRISING ESTERS OF LIGNIN AND OIL OR FATTY ACIDS

Ссылка на эту страницу	SG11201604775T (A) - COMPOSITION COMPRISING ESTERS OF LIGNIN AND OIL OR FATTY ACIDS
Изобретатель(и):	[SE]; SAMEC JOSEPH LÖFSTEDT [SE]; JOAKIM DAHLSTRAND [SE]; CHRISTIAN OREBOM [SE]; ALEXANDER SAWADJOON [SE] SUPAPORN ±
Заявитель(и):	[SE] REN FUEL K2B AB ±
Индекс(ы) по классификации:	- международной (МПК): C07G1/00 ; C08H7/00 ; C08L97/02 ; C11C3/00 - cooperative: C07G1/00 ; C08H6/00 ; C08L97/005 ; C10L1/026 ; C10M107/20 ; C11C3/00 ; C10L2200/0469 ; C10M2209/003
Номер заявки:	SGT11201604775 20141216
Номера приоритетных документов:	SE20130051508 20131216 ; SE20140050764 20140619 ; SE20140051310 20141103 ; WO2014SE51507 20141216
Также опубликовано, как:	WO2015094098 (A1) US2016312030 (A1) US2016312029 (A1) WO2015094099 (A1) JP2017503065 (A) далее

Реферат не найден для документа SG11201604775T (A)

Реферат документа-аналога: WO2015094098 (A1)

The present invention relates to a composition comprising an organic solvent and lignin or lignin derivatives; wherein at least one of the hydroxyl groups of the lignin or lignin derivatives have been substituted with ester groups forming esterified lignin or lignin derivatives. The composition may be used for preparing fuels.

Библиографические данные: CN105778284 (A) — 2016-07-20

Plant-fiber reinforced plastic material and preparing method thereof

Ссылка на эту страницу	CN105778284 (A) - Plant-fiber reinforced plastic material and preparing method thereof	
Изобретатель(и):	SHI MINXIN ±	
Заявитель(и):	SUZHOU FUZHONG PLASTIC CO LTD ±	
Индекс(ы) по классификации:	- международной (МПК): C08J5/04 ; C08K13/02 ; C08K3/26 ; C08K3/34 ; C08K5/09 ; C08K5/098 ; C08L23/08 ; C08L23/12 ; C08L25/06 ; C08L97/00 ; C08L97/02	
	- cooperative:	
Номер заявки:	CN20161222640 20160412	Global Dossier
Номера приоритетных документов:	CN20161222640 20160412	

Реферат документа CN105778284 (A)

The invention provides a plant-fiber reinforced plastic material and a preparing method thereof. The plant-fiber reinforced plastic material is prepared from polypropylene, polystyrene, ethylene-vinyl acetate resin, lignin fibers, bamboo powder, calcium carbonate, talcum powder, gamma-aminopropyltriethoxysilane, polypropylene grafted maleic anhydride, p-aminophenol, polyethylene wax, zinc stearate, stearic acid, paraffin oil and isopropyl alcohol. The preparing method includes the following steps that 1, lignin fibers and bamboo powder are mixed, put into a drying oven and dried for 24 hours-26 hours at the temperature of 100 DEG C-110 DEG C; 2, the mixture is poured into a double-roller open mill and fully mixed at the temperature of 165 DEG C-170 DEG C; 3, the mixture is poured into a mold and subjected to hot press molding at the temperature of 170 DEG C-175 DEG C and the pressure of 10 MPa-20 MPa, and the plant-fiber reinforced plastic material is obtained; The plant-fiber reinforced plastic material has the good mechanical performance and the good toughness, and meanwhile impact resistance is high.

Библиографические данные: CN105778269 (A) — 2016-07-20

Fiber reinforced lignin/polypropylene composite material

Ссылка на эту страницу [CN105778269 \(A\) - Fiber reinforced lignin/polypropylene composite material](#)

Изобретатель(и): LIU YANSHENG; ZHANG BAOJUN ±
Заявитель(и): TIANJIN BINPU PRODUCTIVITY PROMOTION CO LTD ±

Индекс(ы) по классификации: - международной (МПК): [C08K13/04](#); [C08K3/26](#); [C08K3/34](#); [C08K7/06](#); [C08K7/14](#); [C08L23/12](#); [C08L51/06](#); [C08L97/02](#)

- cooperative:

Номер заявки: CN20141793018 20141220 [Global Dossier](#)

Номера приоритетных документов: CN20141793018 20141220

Реферат документа CN105778269 (A)

The invention relates to a fiber reinforced lignin/polypropylene composite material. The fiber reinforced lignin/polypropylene composite material comprises 100 parts of polypropylene, 10-50 parts of lignin, 10-40 parts of fibers, 1-10 parts of a compatibilizer and 0-50 parts of a filler, wherein the fibers are chopped glass fibers or chopped carbon fibers or a mixture of the chopped glass fibers and the chopped carbon fibers. The fiber reinforced lignin/polypropylene composite material has obviously improved comprehensive mechanical performances.

Библиографические данные: CN105754058 (A) — 2016-07-13

Preparation method of lignin and boron dual-modified phenolic resin and phenolic moulding plastic

Ссылка на эту страницу [CN105754058 \(A\) - Preparation method of lignin and boron dual-modified phenolic resin and phenolic moulding plastic](#)

Изобретатель(и): HUANG SHIJUN; LUO JIANFENG; ZHAI SUYU; AI SHENGER; WANG TANGMING; ZHU GUANGMING; LE XIAOYING ±

Заявитель(и): SHAXIAN HONGSHENG PLASTIC CO LTD ±

Индекс(ы) по классификации: - международной (МПК): [C08G8/28](#); [C08K13/04](#); [C08K3/26](#); [C08K3/34](#); [C08K5/42](#); [C08K7/10](#); [C08K7/14](#); [C08L61/14](#); [C08L97/02](#)

- cooperative:

Номер заявки: CN20161124004 20160304 [Global Dossier](#)

Номера приоритетных документов: CN20161124004 20160304

Реферат документа CN105754058 (A)

The invention relates to a preparation method of lignin and boron dual-modified phenolic resin and phenolic moulding plastic. The preparation method of the phenolic resin includes: adding lignin, an acidic catalyst and phenol into a reaction kettle, performing heating to boiling, and carrying out reflux reaction for 1-5h; adding an organic boron compound and aldehyde into the reaction solution, carrying out reaction at 90-110DEG C for 1-5h, and then performing dehydration to obtain the lignin and boron dual-modified phenolic resin. The preparation method of the phenolic molding plastic comprises the steps of: mixing the lignin and boron dual-modified phenolic resin with other raw materials evenly, and then carrying out plastication, tableting, cooling and crushing to obtain the phenolic moulding plastic. The lignin and boron dual-modified phenolic resin and the phenolic moulding plastic prepared by the method provided by the invention have more excellent mechanical properties, better heat resistance and flame retardant performance, and better dimensional stability and electrical insulation properties.

Библиографические данные: CN105670075 (A) — 2016-06-15

Method for preparing polyolefin wood-plastic composite material from pretreated crop straws

Ссылка на эту страницу	CN105670075 (A) - Method for preparing polyolefin wood-plastic composite material from pretreated crop straws	
Изобретатель(и):	HE HUI; CHEN ZHIYING ±	
Заявитель(и):	SOUTH CHINA UNIV OF TECHNOLOGY(SCUT) ±	
Индекс(ы) по классификации:	- международной (МПК):	C08H8/00 ; C08K3/26 ; C08K3/34 ; C08K3/36 ; C08L23/06 ; C08L23/12 ; C08L97/02
	- cooperative:	
Номер заявки:	CN2016135389 20160119	Global Dossier
Номера приоритетных документов:	CN2016135389 20160119	

Реферат документа CN105670075 (A)

The invention discloses a method for preparing a polyolefin wood-plastic composite material from pretreated crop straws. The method includes: putting the crop straws in an alkaline hydrogen peroxide solution containing a chelating agent and a stabilizing agent, soaking at the temperature of 50-90 DEG C, washing, drying, grinding, sieving and drying in a drying oven; mixing, by weight, 50-80 parts of polyolefin plastic, 20-50 parts of crop straw powder, 1-10 parts of a compatibilizer, 2-10 parts of nanofiller and 1-5 parts of a lubricating agent in a high-speed mixer, and performing melting extrusion and pelletizing to obtain products. Chromophoric groups of lignin in the pretreated straws are oxidized, impurities are removed, and whiteness of straw fibers is improved; fiber surfaces of the pretreated crop straws are rough, so that mixing with polymers is benefited; by synergetic cooperation with the nanofiller, a hybrid network

structure of the nanofiller and structural fibers is formed, and accordingly various performances of the wood-plastic composite material are improved.

Библиографические данные: CN105713353 (A) — 2016-06-29

Novel composite aging-resistant textile material and preparing method thereof

Ссылка на эту страницу	CN105713353 (A) - Novel composite aging-resistant textile material and preparing method thereof
Изобретатель(и):	SHEN XUELONG ±
Заявитель(и):	WUJIANG ZE WANG TEXTILE CO LTD ±
Индекс(ы) по классификации:	- международной (МПК): C08K13/04 ; C08K3/04 ; C08K3/36 ; C08K5/1545 ; C08K7/12 ; C08L1/28 ; C08L33/20 ; C08L5/08 ; C08L67/00 ; C08L67/02 ; C08L67/04 ; C08L77/00 ; C08L89/04 ; C08L97/00 ; C08L97/02 - cooperative:
Номер заявки:	CN20161246542 20160420 Global Dossier
Номера приоритетных документов:	CN20161246542 20160420

Реферат документа CN105713353 (A)

The invention discloses a novel composite aging-resistant textile material. The novel composite aging-resistant textile material comprises, by weight, 20-45 parts of polyester fibers, 20-45 parts of nylon fibers, 20-45 parts of hollow fibers, 10-25 parts of hydroxypropyl methyl cellulose, 20-45 parts of dacron, 20-45 parts of acrylon, 5-15 parts of sisal hemp, 15-25 parts of flax, 5-10 parts of lignin fibers, 15-25 parts of chitin fibers, 5-10 parts of wool, 5-10 parts of asbestos fibers, 2-5 parts of nanometer ceramic powder, 2-5 parts of nanometer graphite powder, 2-5 parts of nanometer silicon powder, 5-15 parts of tannic acid, 2-10 parts of poly-beta-hydroxybutyrate, 5-10 parts of poly-epsilon-caprolactone, 5-10 parts of stabilizer and 5-10 parts of adhesive. The prepared textile material has the good aging resistance. Meanwhile, the invention discloses a corresponding preparing method.

Библиографические данные: JP2016094538 (A) — 2016-05-26

THERMOPLASTIC RESIN COMPOSITION

Ссылка на эту страницу	JP2016094538 (A) - THERMOPLASTIC RESIN COMPOSITION
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Изобретатель(и):	ENDO TAKASHI; IWAMOTO SHINICHIRO; IMAI TAKAAKI ±	
Заявитель(и):	NAT INST ADVANCED IND SCIENCE & TECH; DAIO SEISHI KK ±	
Индекс(ы) по классификации:	- международной (МПК): C08L101/00 ; C08L97/02 - cooperative:	
Номер заявки:	JP20140231402 20141114	Global Dossier
Номера приоритетных документов:	JP20140231402 20141114	

Реферат документа JP2016094538 (A)

PROBLEM TO BE SOLVED: To provide a thermoplastic resin composition that is relatively inexpensive, does not cause problems such as thermal recycling and solvent treatment, and has high strength.SOLUTION: The present invention provides a thermoplastic resin composition (S) comprising thermoplastic resin and plant fiber. The plant fiber is cellulose nanofiber obtained by atomizing (20) pulp fiber (P) comprising lignin, with its average fiber diameter of 20-500 μm.SELECTED DRAWING: Figure 1

Библиографические данные: JP2016094541 (A) — 2016-05-26

METHOD FOR PRODUCING THERMOPLASTIC RESIN COMPOSITION

Ссылка на эту страницу	JP2016094541 (A) - METHOD FOR PRODUCING THERMOPLASTIC RESIN COMPOSITION	
Изобретатель(и):	ENDO TAKASHI; IWAMOTO SHINICHIRO; IMAI TAKAAKI ±	
Заявитель(и):	NAT INST ADVANCED IND SCIENCE & TECH; DAIO SEISHI KK ±	
Индекс(ы) по классификации:	- международной (МПК):	C08J3/20 ; C08L101/00 ; C08L97/02
	- cooperative:	
Номер заявки:	JP20140231405 20141114	Global Dossier
Номера приоритетных документов:	JP20140231405 20141114	

Реферат документа JP2016094541 (A)

PROBLEM TO BE SOLVED: To provide a method for producing a thermoplastic resin composition that is relatively inexpensive, does not cause problems such as thermal recycling and solvent treatment, and has high strength.SOLUTION: The present invention provides a method for producing a thermoplastic resin composition (S), in which: pulp fiber comprising

lignin is atomized (20) to obtain cellulose nanofiber; and the cellulose nanofiber and thermoplastic resin (Ry) are dried (30y) at a temperature lower than the temperature for melting the thermoplastic resin (Ry), subjected to solid phase shearing (40y) for scattering the cellulose nanofiber in the thermoplastic resin (Ry), added with compatibilizer (Rz), and kneaded (50y) to make the thermoplastic resin composition (S).SELECTED DRAWING: Figure 1

Библиографические данные: JP2016094539 (A) — 2016-05-26

THERMOPLASTIC RESIN COMPOSITION

Ссылка на эту страницу	JP2016094539 (A) - THERMOPLASTIC RESIN COMPOSITION
Изобретатель(и):	ENDO TAKASHI; IWAMOTO SHINICHIRO; IMAI TAKAAKI ±
Заявитель(и):	NAT INST ADVANCED IND SCIENCE & TECH; DAIKO SEISHI KK ±
Индекс(ы) по классификации:	- международной (МПК): C08L101/08 ; C08L23/10 ; C08L67/00 ; C08L97/02 - cooperative:
Номер заявки:	JP20140231403 20141114 Global Dossier
Номера приоритетных документов:	JP20140231403 20141114

Реферат документа JP2016094539 (A)

PROBLEM TO BE SOLVED: To provide a thermoplastic resin composition that is relatively inexpensive, does not cause problems such as thermal recycling and solvent treatment, and has high strength.SOLUTION: The present invention provides a thermoplastic resin composition (S) comprising thermoplastic resin and plant fiber. The plant fiber is cellulose nanofiber obtained by atomizing (20) pulp fiber comprising lignin, with its water retention of 350% or less.SELECTED DRAWING: Figure 1

Библиографические данные: US2016137832 (A1) — 2016-05-19

FIBER REINFORCED COMPOSITE

Ссылка на эту страницу	US2016137832 (A1) - FIBER REINFORCED COMPOSITE
Изобретатель(и):	[FI]; VALKONEN SANNA BAASKE [DE]; MATTHIAS MEHLHASE [DE]; SABRINA KLEIN [DE]; ROLAND BIESALSKI [DE]; MARKUS REHAHN [DE]; MATTHIAS DUETSCH [DE]; MICHAEL RINGENA [DE] OKKO ±

Заявитель(и): [FI] UPM KYMMENE CORP ±

Индекс(ы) по классификации: - международной (МПК): [C08K7/14](#); [C08L63/00](#); [C08L97/02](#)

- cooperative: [C08H6/00](#); [C08K7/14](#); [C08L63/00](#); [C08L97/005](#); [C08L97/02](#); [C08L2205/02](#) далее

Номер заявки: US201414890068 20140515 [Global Dossier](#)

Номера приоритетных документов: [FI20130005528](#) 20130517 ; [WO2014FI50369](#) 20140515

Также опубликовано, как: [US9580593 \(B2\)](#) [WO2014184444 \(A1\)](#) [UY35569 \(A\)](#) [JP2016517913 \(A\)](#) [JP6010256 \(B2\)](#) далее

Реферат документа **US2016137832 (A1)**

The present invention relates to a fiber reinforced composite comprising a reinforcing constituent of fibers embedded in a resin matrix, wherein the resin matrix comprises epoxy resin crosslinked with aminated lignin. The invention further relates to a method for the production of a fiber reinforced composite.

Библиографические данные: **KR101604435 (B1) — 2016-03-17**

METHODS OF PRODUCING INSOLUBILIZED PVA-LIGNIN COMPOSITE MATERIALS USING PLASMA/HEAT TREATMENTS AND PVA-LIGNIN COMPOSITE PRODUCED THEREBY

Ссылка на эту страницу: [KR101604435 \(B1\) - METHODS OF PRODUCING INSOLUBILIZED PVA-LIGNIN COMPOSITE MATERIALS USING PLASMA/HEAT TREATMENTS AND PVA-LIGNIN COMPOSITE PRODUCED THEREBY](#)

Изобретатель(и): [KR]; LEE HUN SU JUNG YONG [KR]; CHAE [KR]; LEE EUN SIL [KR]; KIM WOO YOUNG [KR]; HWANG JUN YEON [KR]; YANG CHEOL MIN [KR]; YU JAE SANG [KR] KIM SEONG YUN ±

Заявитель(и): KOREA INST SCI & [KR] TECH ±

Индекс(ы) по классификации: - международной (МПК): [B01J19/08](#); [C08J7/18](#); [C08L29/04](#); [C08L97/02](#); [D06M10/00](#); [D06M14/18](#)

- cooperative:

Номер заявки: KR20150093631 20150630 [Global Dossier](#)

Номера приоритетных документов: KR20150093631 20150630

Реферат документа KR101604435 (B1)

The present invention relates to a method of insolubilizing a polyvinyl alcohol (PVA)-lignin composite material using plasma and heat treatment, and an insolubilized PVA-lignin composite material prepared thereby and, more particularly, to a method of insolubilizing a PVA-lignin composite material, including: a composite material preparing step of preparing a PVA-lignin composite material; a composite material disposing step of disposing the prepared composite material in an insolubilization apparatus including a plasma generating part and a heat supplying part; and a composite material insolubilizing step of insolubilizing the disposed composite material by plasma and heat using the insolubilization apparatus. The present invention also relates to a PVA-lignin composite material which is prepared by such a method, and is insolubilized by plasma and simultaneous heat treatment or sequential heat treatment. The method of insolubilizing a PVA-lignin composite material according to the present invention is efficient and economical by enabling simplified process conditions and short process time due to a single or two-step process compared to conventional technologies causing increase in preparation costs by requiring high costs in the industrialization aspect by process complexity and long process time due to multistep processes in which existing water vapor treatment, photo-crosslinking, and heat treatment are combined.

Библиографические данные: CN105400007 (A) — 2016-03-16

Oil-resistance anti-static composite rubber material

Ссылка на эту страницу	CN105400007 (A) - Oil-resistance anti-static composite rubber material
Изобретатель(и):	ZHANG QING ±
Заявитель(и):	ANHUI CHUANGQILE INTELLIGENT AMUSEMENT EQUIPMENT CO LTD ±
Индекс(ы) по классификации:	- международной (МПК): C08K13/06 ; C08K3/04 ; C08K3/38 ; C08K5/41 ; C08K7/18 ; C08K9/04 ; C08L33/20 ; C08L9/02 ; C08L9/06 ; C08L97/02 ; D01F1/10 ; D01F6/54 - cooperative:
Номер заявки:	CN20151889009 20151202 Global Dossier
Номера приоритетных документов:	CN20151889009 20151202

Реферат документа CN105400007 (A)

The invention discloses an oil-resistance anti-static composite rubber material, which is made from raw materials with parts by weight: acetylene black 18-20, vanadium tetrachloride 4-5, conductive fibers 5-6, soluble powder 2-3, tertiary butyl peroxide ketal 1-2, calcium/ zinc (Ca/Zn) compound stabilizers 4-5, molybdenum boride 5-6, accelerants CZ 0.4-0.6, lignin fibres 16-18, polyacrylonitrile 24-27, graphite 12-13, flyash microspheres 3-4, lauryl sodium sulfate 0.7-1,

liquid acrylonitrile butadiene rubbers 42-55, methacrylic acids 0.6-1, nitrile rubbers 52-60, butadiene styrene rubbers 20-25, aromatic hydrocarbon oil 3-4 and plasticizer di 2-ethyl hexyl phthalate (DEHP) 1-2. The oil-resistance anti-static composite rubber material has excellent oil-resistance, anti-static and anti-cracking performance, can be used for long time in bad conditions, and is long in service life and excellent in application prospect.

Библиографические данные: CN105330949 (A) — 2016-02-17

Black functional master batch for synthesizing plastic mulch film and preparation method of black functional master batch

Ссылка на эту страницу	CN105330949 (A) - Black functional master batch for synthesizing plastic mulch film and preparation method of black functional master batch
Изобретатель(и):	LI YUDE; WANG XIAOLING ±
Заявитель(и):	MINQIN COUNTY BANGDE TRADE CO LTD ±
Индекс(ы) по классификации:	- международной (МПК): C08K13/02 ; C08K13/06 ; C08K3/04 ; C08K3/36 ; C08K9/06 ; C08L1/28 ; C08L23/06 ; C08L23/08 ; C08L97/02 - cooperative:
Номер заявки:	CN20151922654 20151214 Global Dossier
Номера приоритетных документов:	CN20151922654 20151214

Реферат документа CN105330949 (A)

The invention relates to the field of mulch film materials and discloses a black functional master batch for synthesizing a plastic mulch film and a preparation method of the black functional master batch. The master batch is prepared from, by weight, 40-70.7 parts of carbon black, 1-2 parts of antioxidant, 0.5-1 part of light stabilizer, 0.8-1.5 parts of ultraviolet light absorber, 2.5-6 parts of linear low density polyethylene powder, 15-30 parts of low density polyethylene powder, 5-10 parts of high density polyethylene powder, 1.5-3 parts of polyethylene wax, 2-4 parts of lignin fibers and 2-4 parts of sodium carboxymethylcellulose. The black functional master batch for synthesizing the plastic mulch film has excellent mechanical properties and weatherability and also has the weed removal function.

Библиографические данные: IN2957KON2014 (A) — 2015-05-08

A COMPOSITION IN THE FORM OF A DISPERSION COMPRISING A LIGNIN, A METHOD FOR THE MANUFACTURING THEREOF AND USE THEREOF

Ссылка на эту страницу [IN2957KON2014 \(A\) - A COMPOSITION IN THE FORM OF A DISPERSION COMPRISING A LIGNIN, A METHOD FOR THE MANUFACTURING THEREOF AND USE THEREOF](#)

Изобретатель(и): [NL] GRÜNBAUER DR HENRI J M [±](#)

Заявитель(и): [FI] STORA ENSO OYJ [±](#)

- международной (МПК): [C08G18/00](#); [C08G18/40](#); [C08L97/02](#)

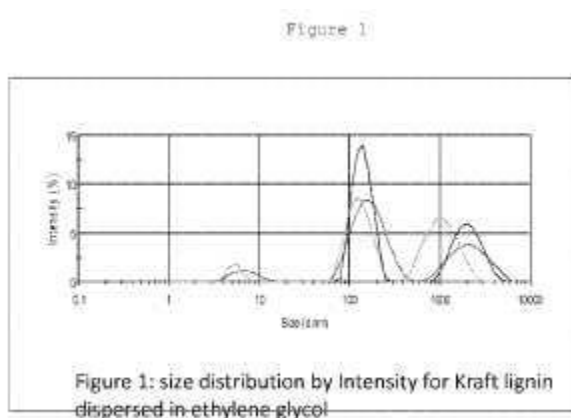
Индекс(ы) по классификации: [C08G18/225](#); [C08G18/4081](#); [C08G18/4833](#); [C08G18/6492](#); [C08J9/0004](#); [C08J9/0023](#);
- cooperative: [C08J9/141](#); [C08L97/005](#); [C08G2101/0025](#); [C08J2201/022](#); [C08J2203/14](#); [C08J2203/16](#); [C08J2375/04](#)

Номер заявки: IN2014KOLNP2957 20141216

Номера приоритетных документов: [SE20120050569 20120601](#) ; [WO2013IB54464 20130530](#)

Также опубликовано, как: [WO2013179251 \(A1\)](#) [US2015144829 \(A1\)](#) [RU2014153014 \(A\)](#) [KR20150017359 \(A\)](#) [JP2015519452 \(A\)](#) [далее](#)

Реферат документа IN2957KON2014 (A)



The present invention relates to a composition in the form of a dispersion, a method for the manufacturing of said composition and uses thereof.

Библиографические данные: JP2015174894 (A) — 2015-10-05

THERMOSETTING RESIN COMPOSITION AND METHOD OF MANUFACTURING THE SAME

Ссылка на эту страницу [JP2015174894 \(A\) - THERMOSETTING RESIN COMPOSITION AND METHOD OF MANUFACTURING THE SAME](#)

Изобретатель(и): MATSUMOTO MITSUTAKA ±
Заявитель(и): SUMITOMO BAKELITE CO ±
Индекс(ы) по классификации: - международной (МПК): [C08J3/20](#); [C08K5/3467](#); [C08L61/10](#); [C08L97/02](#)
 - cooperative:
Номер заявки: JP20140051030 20140314 [Global Dossier](#)
Номера приоритетных документов: JP20140051030 20140314

Реферат документа JP2015174894 (A)

PROBLEM TO BE SOLVED: To provide a thermosetting resin composition containing a lignin resin, capable of shortening a reaction time during thermal curing, suppressing production of gas during curing, not producing swelling on a molded article, and being almost free from reduction of strength and poor appearance of the molded article, and a method of manufacturing the thermosetting resin composition. **SOLUTION:** There is provided a thermosetting resin composition which can be obtained by melt-blending a lignin resin, a novolak type phenol resin and an amine-based curing agent and thereafter, thermally curing the melt-blended product. There is provided a method of manufacturing the thermosetting resin composition including: a process 1 of melt-blending a part or all of the lignin resin and the novolak type phenol resin; and further, a process 2 of melt-blending a part or all of the amine-based curing agent and a curing assistant. There is also provided a thermosetting resin composition having 5 to 20 pts.wt. of an amine-based cured product based on 100 pts.wt. of a resin composition and containing hexamethylene tetramine.

Библиографические данные: TW201525028 (A) — 2015-07-01

Bio-polyol composition and bio-polyurethane foam material

Ссылка на эту страницу [TW201525028 \(A\) - Bio-polyol composition and bio-polyurethane foam material](#)
Изобретатель(и): [TW]; CHUANG WEN-PIN SHEEN [TW]; YUUNG-CHING HUANG [TW]; YUN-YA [TW] SU YI-CHE ±
Заявитель(и): [TW] IND TECH RES INST ±
 - международной (МПК): [C08H7/00](#); [C08K5/053](#); [C08L75/04](#); [C08L97/02](#); [C08G101/00](#); [C08G18/28](#)
Индекс(ы) по классификации: [C07G1/00](#); [C08G18/3206](#); [C08G18/4825](#); [C08G18/6492](#); [C08G18/7664](#); [C08H6/00](#); - cooperative: [C08J9/0061](#); [C08J9/04](#); [C08L71/02](#); [C08L97/005](#); [C08G2101/00](#); [C08G2101/0083](#); [C08J2375/08](#); [C08J2497/00](#)
Номер заявки: TW20130148808 20131227
Номера приоритетных документов: TW20130148808 20131227

документов:

Также [TWI500662 \(B\)](#) [EP2889319 \(A1\)](#) [US2015183948 \(A1\)](#)
опубликовано, как: [CN104744659 \(A\)](#)

Реферат документа TW201525028 (A)

A bio-polyol composition and a bio-polyurethane foam are provided. By using the modifier and applying the grinding process, the modified lignin is uniformly dispersed in the polyol solution and a bio-polyol composition is obtained. The obtained bio-polyol composition may be used to prepare the bio-polyurethane foam with high lignin content, high compression strength and superior flame-resistance.

Библиографические данные: CN104945823 (A) — 2015-09-30

Micro-foamed multiphase fiber-reinforced polypropylene composite material and preparation method thereof

Ссылка на эту страницу [CN104945823 \(A\) - Micro-foamed multiphase fiber-reinforced polypropylene composite material and preparation method thereof](#)

Изобретатель(и): ZHENG YUNLONG; HUANG ZHIJIE; YANG CANGXIAN ±

Заявитель(и): SHANGHAI JUNER NEW MATERIALS ±

Индекс(ы) по классификации: - международной (МПК): [C08J9/30](#); [C08K7/14](#); [C08L23/08](#); [C08L23/16](#); [C08L51/06](#); [C08L53/00](#); [C08L97/00](#); [C08L97/02](#)

- cooperative:

Номер заявки: CN20151379292 20150627 [Global Dossier](#)

Номера приоритетных документов: CN20151379292 20150627

Реферат документа CN104945823 (A)

The invention relates to a high-degradability micro-foamed multiphase fiber-reinforced polypropylene composite material which is composed of the following raw materials in percentage by weight: 30-70% of propylene copolymer, 2-8% of graft compatilizer, 5-15% of lignin, 3-20% of natural bamboo fiber, 5-20% of glass fiber chopped felt and 2-10% of elastomer toughener. The micro-foamed multiphase fiber-reinforced polypropylene composite material obtained according to the technical scheme has the advantages of low density, favorable foaming property, favorable mechanical properties, high degradability and the like. The lignin and natural fibrilia endow the reinforced polypropylene composite material with degradability. After the micro-foaming technique treatment, the composite material has lower density and higher degradability. Compared with the common talcum powder filled polypropylene composite material, on the premise of equivalent mechanical properties, the density of the reinforced

polypropylene composite material is lowered by 15-25%, and the degradability can be obviously improved. The degradation rate of higher than 50% can be implemented by a simple landfilling-biodegradation process. The composite material has excellent characteristics of greenness and environment friendliness.

Библиографические данные: CN104837897 (A) — 2015-08-12

Use of low molecular weight lignin together with lignin for production of phenol-formaldehyde binder composition

Ссылка на эту страницу	CN104837897 (A) - Use of low molecular weight lignin together with lignin for production of phenol-formaldehyde binder composition
Изобретатель(и):	VALKONEN SANNA; PIETARINEN SUVI; RINGENA OKKO; ESKELINEN KATI ±
Заявитель(и):	UPM KYMMENE CORP ± - международной (МПК): B27N3/00 ; C08G8/20 ; C08H7/00 ; C08L97/00 ; C08L97/02 ; C09J161/12 ; C09J197/00
Индекс(ы) по классификации:	B27D1/04 ; C08G8/20 ; C08G8/24 ; C08H6/00 ; C08L61/06 ; C08L97/005 ; C08L97/02 ; C09J161/06 ; C09J161/12 ; C09J197/005 ; C09J5/00 ; C08L2201/54 ; C09J2461/00 ; C09J2497/00 - cooperative:
Номер заявки:	CN2013818154 20130328 Global Dossier
Номера приоритетных документов:	WO2013FI50352 20130328 ; FI20120005357 20120329
Также опубликовано, как:	WO2013144453 (A1) US2016376434 (A1) US2015087781 (A1) US9469795 (B2) FI20125357 (A) далее

Реферат документа CN104837897 (A)

The present invention relates to a method for producing a binder composition, wherein the method comprises the following steps: (i) forming an aqueous composition comprising reactant components including lignin molecules of 11 -60 lignin units, lignin molecules of 1-10 lignin units, polymerizable substance and crosslinking agent in the presence of a catalyst; and(ii) cooking the com- position at a temperature of 60-95 DEG C for polymerizing the reactant components until a binder composition with a predetermined viscosity value is formed.

Библиографические данные: CN104744958 (A) — 2015-07-01

Biodegradable plastic taking tea leaf residues as raw material and preparation method of biodegradable plastic

Ссылка на эту страницу	CN104744958 (A) - Biodegradable plastic taking tea leaf residues as raw material and preparation method of biodegradable plastic	
Изобретатель(и):	WANG GUIDONG; SONG RUI ±	
Заявитель(и):	HEFEI ALL ROUND POLYMER MATERIAL FACTORY ±	
Индекс(ы) по классификации:	- международной (МПК):	C08K13/06 ; C08K3/34 ; C08K5/101 ; C08K5/103 ; C08K5/1515 ; C08K5/20 ; C08K9/06 ; C08L23/06 ; C08L91/06 ; C08L97/00 ; C08L97/02
	- cooperative:	
Номер заявки:	CN20151168924 20150410	Global Dossier
Номера приоритетных документов:	CN20151168924 20150410	

Реферат документа CN104744958 (A)

The invention discloses biodegradable plastic taking tea leaf residues as a raw material. The biodegradable plastic is characterized by being prepared from the following raw materials in parts by weight: 20-30 parts of the tea leaf residues, 5-10 parts of vermiculite powder, 10-15 parts of polyethylene, 5-10 parts of pumpkin powder, 3-5 parts bamboo shoot shells, 0.5-1 part of lignin sodium sulfonate, 1-2 parts of xylitol, 1-2 parts of a silane coupling agent KH-550, 3-5 parts of peanut oil, 1-2 parts of soybean oil and 10-15 parts of a compound auxiliary agent. The biodegradable plastic disclosed by the invention is high in degradation rate and high in degradation velocity, and has good flexibility and strength meeting use requirements; the main raw materials are rich in source, low in cost and good in economical efficiency; and the biodegradable plastic realizes energy conservation and waste utilization, can effectively reduce white pollution and has relatively high environmental and economic benefits.

Библиографические данные: CN104693464 (A) — 2015-06-10

Preparation method of lignin-nanocellulose reinforced polylactic acid composite film

Ссылка на эту страницу	CN104693464 (A) - Preparation method of lignin-nanocellulose reinforced polylactic acid composite film	
Изобретатель(и):	ZHANG LIPING ±	
Заявитель(и):	UNIV BEIJING FORESTRY ±	
Индекс(ы) по классификации:	- международной (МПК):	C08J5/18 ; C08L67/04 ; C08L97/02
	- cooperative:	
Номер заявки:	CN2015170556 20150210	Global Dossier

Номера приоритетных документов: CN2015170556 20150210

Реферат документа CN104693464 (A)

The invention provides a preparation method of a lignin-nanocellulose reinforced polylactic acid composite film. The preparation method comprises the following steps: 1) preparation of lignin-nanocellulose by adopting an acid hydrolysis-high-pressure homogeneity method, namely hydrolyzing raw materials with sulfuric acid, and then performing high-pressure homogeneity to obtain lignin-nanocellulose; and 2) preparation of the lignin-nanocellulose reinforced polylactic acid composite film by adopting a solution casting-solvent evaporation method, namely taking 8-10 parts by weight of polylactic acid and 0.08-0.5 part by weight of lignin-nanocellulose, mixing with an organic solvent to obtain a film casting stock solution, performing vacuum defoamation treatment on the film casting stock solution, and preparing the thin film from the film casting stock solution. According to the preparation method, the lignin-containing nanocellulose and the polylactic acid are compounded for the first time, the polylactic acid is reinforced with nanomaterials, the problem that the compatibility of the nanocellulose and the polylactic acid matrix is bad to cause low mechanical performance can be solved by virtue of the adopted lignin, and the adhesion action of a phase interface can be improved.

Библиографические данные: US2015119502 (A1) — 2015-04-30

WOOD PLASTIC COMPOSITES AND MANUFACTURING METHOD THEREOF

Ссылка на эту страницу [US2015119502 \(A1\) - WOOD PLASTIC COMPOSITES AND MANUFACTURING METHOD THEREOF](#)

Изобретатель(и): [KR]; NAM KYUNG GU SON JONG [KR] IL ±

Заявитель(и): [KR] LG HAUSYS LTD ±

- международной (МПК): [B29C43/00](#); [B29C45/00](#); [B29C47/00](#); [C08L23/06](#); [C08L23/12](#); [C08L25/06](#); [C08L27/06](#); [C08L33/12](#); [C08L55/02](#); [C08L69/00](#); [C08L97/02](#)

Индекс(ы) по классификации: [B29C43/003](#); [B29C45/0001](#); [B29C47/0004](#); [B29C47/0007](#); [C08L23/06](#); [C08L23/10](#); - cooperative: [C08L23/12](#); [C08L25/06](#); [C08L27/06](#); [C08L33/12](#); [C08L55/02](#); [C08L69/00](#); [C08L97/02](#); [B29K2001/00](#); [B29K2101/12](#) далее

Номер заявки: US201314389623 20130401 [Global Dossier](#)

Номера приоритетных документов: [KR20120034463 20120403](#) ; [WO2013KR02676 20130401](#)

Также опубликовано, как: [WO2013151287 \(A1\)](#) [KR20130112234 \(A\)](#) [JP2015512348 \(A\)](#) [EP2834053 \(A1\)](#) [EP2834053 \(A4\)](#)

Реферат документа US2015119502 (A1)

Disclosed therein are wood plastic composites and a manufacturing method thereof, which can provide a high discoloration resistance by removing lignin from wood flour which is a main material of the wood plastic composites. The method of manufacturing wood plastic composites includes the steps of: removing lignin contained in wood chips through a cooking process of high temperature and pressure; crushing the wood chip from which lignin was removed in order to produce wood flour; putting and mixing polymer resins and additives into the wood flour so as to manufacture mixture of a gel phase; and extrusion-molding, injection-molding or compression-molding the mixture to manufacture wood plastic composites. The wood plastic composites and the manufacturing method thereof can prevent decoloration and after-yellowing even though the wood plastic composites are exposed to UV or moisture for a long time to thereby enhance long-term weather resistance.

Библиографические данные: CN104448585 (A) — 2015-03-25

Technology for processing ethylene propylene diene monomer rubber/polypropylene/lignin composite material

Ссылка на эту страницу	CN104448585 (A) - Technology for processing ethylene propylene diene monomer rubber/polypropylene/lignin composite material
Изобретатель(и):	GOU RUI ±
Заявитель(и):	UNIV QINGDAO SCIENCE & TECH ±
Индекс(ы) по классификации:	B29C43/58 ; B29C47/92 ; C08K13/02 ; - международной (МПК): C08K3/06 ; C08K3/16 ; C08K3/22 ; C08K5/09 ; C08L23/12 ; C08L23/16 ; C08L61/06 ; C08L97/00 ; C08L97/02 - cooperative: B29C43/58 ; B29C47/92 ; C08L23/12 ; C08L23/16 ; C08L97/00 ; C08L2205/02 ; C08L2205/035 далее
Номер заявки: Номера приоритетных документов:	CN20141725522 20141128 Global Dossier CN20141725522 20141128

Реферат документа CN104448585 (A)

The invention relates to a technology for processing an ethylene propylene diene monomer rubber/polypropylene/lignin composite material. According to the material, industrial lignin extracted from papermaking waste liquor serving as a main ingredient is added into a blending system of ethylene propylene diene monomer rubber and polypropylene, the application field of the industrial lignin is widened, and the mechanical property, ageing resistance and thermal stability property of the composite material are improved. The production process of the material is simple, all the raw materials are blended at normal temperature, are extruded by a twin-screw

extruder and are subjected to hot press molding by virtue of a hot press, the material can be processed by adopting standard thermoplastic plastic processing equipment, the processing cost is low, the leftover materials are recycled, the production efficiency can be improved, and the process is suitable for industrial batch production. According to the process disclosed by the invention, a phenolic resin curing system is adopted, naphthenic oil is selected as a plasticizer, release of irritant gas is avoided in the processing and using process, and the composite material is a novel environment-friendly material.

Библиографические данные: CN104530639 (A) — 2015-04-22

Lignin-modified phenolic molding plastic and preparation method thereof

Ссылка на эту страницу	CN104530639 (A) - Lignin-modified phenolic molding plastic and preparation method thereof
Изобретатель(и):	ZHOU YONGHONG; JIA PUYOU; HU LIHONG; ZHOU JING; BO CAIYING ±
Заявитель(и):	INST CHEM IND FOREST PROD CAS ±
Индекс(ы) по классификации:	- международной (МПК): C08G8/28 ; C08K13/02 ; C08K3/22 ; C08K3/34 ; C08L61/06 ; C08L61/14 ; C08L97/02 - cooperative:
Номер заявки:	CN20141818075 20141224 Global Dossier
Номера приоритетных документов:	CN20141551247 20141016 ; CN20141818075 20141224
Также опубликовано, как:	CN104530639 (B)

Реферат документа CN104530639 (A)

The invention discloses lignin-modified phenolic molding plastic and a preparation method thereof. The preparation method comprises the following steps: uniformly mixing lignin-modified thermoplastic phenolic resin with a curing agent, a filler, a demolding agent, pigments and other aids, and performing semi-curing treatment on an open type plastic mixing mill, thereby obtaining a flaky brittle product with good glossiness; and grinding, and screening by virtue of a 200mesh sieve, thereby obtaining the molding plastic. According to the lignin-based phenolic molding plastic product, the bending strength is more than or equal to 70MPa, the notch impact strength is more than or equal to 1.3kJ/m², the non-notched impact strength is more than or equal to 4kJ/m², and the heat deflection temperature is more than or equal to 140 DEG C.

Библиографические данные: CN104356671 (A) — 2015-02-18

Carbon fiber composite and preparation method thereof

Ссылка на эту страницу	CN104356671 (A) - Carbon fiber composite and preparation method thereof
Изобретатель(и):	LIU LI; WANG SHUANG; LIU XIAODONG ±
Заявитель(и):	SUZHOU NETSHAPE COMPOSITE MATERIALS CO LTD ±
Индекс(ы) по классификации:	- международной (МПК): C08K13/04 ; C08K5/03 ; C08K5/13 ; C08K7/06 ; C08L101/00 ; C08L97/02 - cooperative:
Номер заявки:	CN20141580303 20141027 Global Dossier
Номера приоритетных документов:	CN20141580303 20141027

Реферат документа CN104356671 (A)

The invention discloses a carbon fiber composite and a preparation method thereof. The composite comprises the following materials: lignin-based carbon fiber, a lubricant, a lemongrass extracting solution, decabromodiphenyl ethane, ceramic powder, wood flour, 10-20 parts of molding powder, an adhesive, and 2,5-ditert-butylhydroquinone. The preparation method comprises the following steps: step 1, uniformly stirring the lignin-based carbon fiber, the ceramic powder, the wood flour and the molding powder at the rotating speed of 200-400 rpm to obtain a mixture 1; step 2, adding and blending the lubricant, the lemongrass extracting solution, the decabromodiphenyl ethane and the 2,5-ditert-butylhydroquinone, stirring, heating to be 80-100 DEG C, then adding the adhesive, continuing to heat to be 100-120 DEG C, and thermally insulating for 15-30 minutes to obtain a semi-product; step 3, pouring the semi-product into a mold after vacuum defoamation of the semi-product, and solidifying in an oven to obtain the carbon fiber composite. The composite is excellent in stretching capability and the bending capability and is low in cost.

Библиографические данные: TW200530359 (A) — 2005-09-16

Formaldehyde-free adhesives and lignocellulosic composites made from the adhesives

Ссылка на эту страницу	TW200530359 (A) - Formaldehyde-free adhesives and lignocellulosic composites made from the adhesives
Изобретатель(и):	[CN] LI KAI-CHANG ±
Заявитель(и):	[US] OREGON STATE ±
Индекс(ы) по классификации:	- международной (МПК): B32B21/14 ; C08L97/02 ; C09J189/00 ; C09J197/00 ; C09J197/02 - cooperative: B32B21/14 ; C08L97/02 ; C09J189/00 ; C09J197/005 ; Y10T428/31515 ;

Номер заявки: TW20050101412 20050118
Номера приоритетных документов: [US20040538932P 20040122](#)
Также опубликовано, как: [WO2005072260 \(A2\)](#) [WO2005072260 \(A3\)](#) [ZA200606682 \(B\)](#)
[US2008213597 \(A1\)](#) [US7722712 \(B2\)](#) далее

Реферат документа TW200530359 (A)

A first variant of an adhesive composition for making a lignocellulosic composite includes soy protein and/or lignin; at least one substantially formaldehyde-free curing agent that includes at least one amine, amide, imine, imide, or nitrogen-containing heterocyclic functional group that can react with at least one functional group of the soy protein; and at least one compound selected from a boron compound, a group IA oxide or hydroxide, or a group IIA oxide or hydroxide. A second variant of an adhesive composition includes a first component selected from soy protein and/or lignin; and at least one substantially formaldehyde-free curing agent selected from a reaction product of epichlorohydrin with ethylenediamine, a reaction product of epichlorohydrin with bis-hexamethylenetriamine, or a reaction product of epichlorohydrin with hexamethylenediamine.

Библиографические данные: TW200404657 (A) — 2004-04-01

Method for making dimensionally stable composite products from lignocelluloses

Ссылка на эту страницу [TW200404657 \(A\) - Method for making dimensionally stable composite products from lignocelluloses](#)

Изобретатель(и): [CA]; SHEN KUO-CHENG SHEN [CA] KENNETH C ±

Заявитель(и): K [BB]; C SHEN INTERNAT LTD [CY] KRONOSPAN TECH CO LTD ±

Индекс(ы) по классификации: - международной (МПК): [B27N1/00](#); [B27N3/00](#); [B27N3/20](#); [C08H8/00](#); [C08L97/02](#)
- cooperative: [B27N1/00](#); [B27N3/002](#); [B27N3/20](#); [C08H8/00](#); [C08L97/02](#) далее

Номер заявки: TW20030112131 20030502

Номера приоритетных документов: [GB20020010215 20020503](#)

Также опубликовано, как: [WO03092972 \(A1\)](#) [NO20040017 \(A\)](#) [CN1649706 \(A\)](#)
[CN100519116 \(C\)](#) [CA2497565 \(A1\)](#) далее

Реферат документа TW200404657 (A)

This invention relates to a process for making dimensionally stable reconstituted composite products from lignocellulosic material. By treating lignocellulose with high pressure steam to decompose and hydrolyse the hemicellulose, cellulose and lignin fractions of the lignocellulose and using those decomposition products as both a bonding and hulking agent, it converts, under heat and pressure in a moulding operation, the treated lignocellulose into moulded composite products such as panel boards and moulded articles. The composite products thus produced possess good physical and mechanical properties. Specifically, the dimensional stability in terms of the thickness swelling and linear expansion of panel boards such as fibreboards and particleboard can be minimized to very low levels when the panel boards are made in high density. The adhesive bond developed from thermosetting of the decomposition products of hemicellulose, cellulose and lignin is strong and stable, and resistant to boiling water and acid hydrolysis, and is free of formaldehyde emissions. Thus, the reconstituted panel boards and moulded products are suitable for exterior and particularly for indoor applications. The absence of free formaldehyde emissions makes the product very suitable for interior applications. The manufacturing cost for the reconstituted products is significantly lower in comparison to the conventional process because expensive synthetic resin is not used.

Библиографические данные: CN104194371 (A) — 2014-12-10

High-lignin-content flame-retardant polyolefin composite material and preparation method thereof

Ссылка на эту страницу	CN104194371 (A) - High-lignin-content flame-retardant polyolefin composite material and preparation method thereof	
Изобретатель(и):	YE GENLIN ±	
Заявитель(и):	STARWAY INT HOME LIVING CO LTD ±	
Индекс(ы) по классификации:	- международной (МПК):	C08H7/00 ; C08K5/02 ; C08L23/06 ; C08L23/12 ; C08L97/02
	- cooperative:	
Номер заявки:	CN20141439649 20140901	Global Dossier
Номера приоритетных документов:	CN20141439649 20140901	

Реферат документа CN104194371 (A)

The invention relates to a high-lignin-content flame-retardant polyolefin composite material and a preparation method thereof. The high-lignin-content flame-retardant polyolefin composite material is composed of the following components in percentage by weight: 30-75% of lignin fiber, 10-45% of polyolefin, 12-23% of lignin modifier and 1-5% of micromolecule solubilizer. The composite material preparation process also comprises concentrated hydrochloric acid, isopropanol and distilled water. The lignin used as the substrate is modified to lower the polarity of the lignin and improve the compatibility with general-purpose plastic polyolefin, and does not need to fill any flame retardant, plasticizer, antioxidant or any other assistant; and the maximum filling content of the modified lignin can reach higher than 80%. Meanwhile, the composite

material has favorable flame retardancy and mechanical properties, and can be used for furniture, architectural outer walls, office supplies and other products.

Библиографические данные: CN104163977 (A) — 2014-11-26

Red lignin/polyolefin composite material and preparation method thereof

Ссылка на эту страницу	CN104163977 (A) - Red lignin/polyolefin composite material and preparation method thereof
Изобретатель(и):	QIU XUEQING; ZHOU MINGSONG; CAI ZHENHE; YANG DONGJIE; HUANG JINHAO; SUN ZHANGJIAN ±
Заявитель(и):	UNIV SOUTH CHINA TECH ±
Индекс(ы) по классификации:	- международной (МПК): C08J3/20 ; C08K13/02 ; C08K3/26 ; C08K3/34 ; C08K3/36 ; C08K5/09 ; C08K5/098 ; C08L23/08 ; C08L23/12 ; C08L97/02 - cooperative: C08L23/06 ; C08L23/12 ; C08K2201/011 ; C08L2201/06 ; C08L2201/08 ; C08L2205/03 ; C08L2205/035 ; C08L2205/08 ; C08L2207/062 ; C08L2207/066 далее
Номер заявки:	CN20141326623 20140709 Global Dossier
Номера приоритетных документов:	CN20141326623 20140709

Реферат документа CN104163977 (A)

The invention discloses a red lignin/polyolefin composite material and a preparation method. The red lignin/polyolefin composite material comprises the following raw materials by mass part: 100 parts of alkali lignin in the composite material, 100-400 parts of polyolefin, 2-20 parts of colouring agent, 5-20 parts of plasticizer, and 40-100 parts of lubricant. The preparation method comprises the following steps: adding a colouring agent and a plasticizer in dried alkali lignin powder, uniformly mixing, and drying to obtain the dried alkali lignin pretreated powder; placing the polyolefin material granules under temperature of 120-170 DEG C for melting and milling, physically blending the alkali lignin pretreated powder and molten polyolefin, adding the lubricant, blending and processing to obtain the composite material. The prepared red lignin/polyolefin composite material has the advantages of brilliant appearance color and uniform quality, has comprehensive mechanical properties such as good tensile strength and stretching toughness, has characteristics of no odour, antioxidation and degradable performance, and can be used as the green environmental protection composite material for the package, building material and entertainment fields.

Библиографические данные: JP2014193977 (A) — 2014-10-09

RESIN COMPOSITION, PREPREG INCLUDING THE RESIN COMPOSITION, LAMINATE SHEET, AND MOLDING MATERIAL

Ссылка на эту страницу [JP2014193977 \(A\) - RESIN COMPOSITION, PREPREG INCLUDING THE RESIN COMPOSITION, LAMINATE SHEET, AND MOLDING MATERIAL](#)

Изобретатель(и): MURATA RYUICHI; MURAI TAKETOSHI ±

Заявитель(и): SUMITOMO BAKELITE CO ±

Индекс(ы) по классификации: - международной (МПК): [C08L97/02](#)
- cooperative:

Номер заявки: JP20130071097 20130329 [Global Dossier](#)

Номера приоритетных документов: JP20130071097 20130329

Реферат документа JP2014193977 (A)

PROBLEM TO BE SOLVED: To provide a lignin derivative excellent in terms not only of reactivity but also of molding workability and to provide a laminate sheet and a molding each including the same and having favorable appearances.SOLUTION: The provided resin composition is a resin composition including a lignin derivative obtained by decomposing biomass where 0.1-3.5 wt.% of a volatile component is additionally included, together with the lignin derivative, within the resin composition; a laminate sheet and a molding each including the resin composition and having favorable appearances can also be provided.

Библиографические данные: CN104109397 (A) — 2014-10-22

Preparation for fiber composite powder and new technology of fiber composite powder as addition composition of modified asphalt

Ссылка на эту страницу [CN104109397 \(A\) - Preparation for fiber composite powder and new technology of fiber composite powder as addition composition of modified asphalt](#)

Изобретатель(и): GAO SHANGCAN; YIN YINGWU; ZHU ZICHEN; WAN PENGFEI ±

Заявитель(и): UNIV XIAMEN ±

Индекс(ы) по классификации: - международной (МПК): [C08K3/22](#); [C08K3/26](#); [C08K3/30](#); [C08K3/38](#); [C08L95/00](#); [C08L97/02](#)
- cooperative:

Номер заявки: CN20131137051 20130419 [Global Dossier](#)

Номера приоритетных документов: CN20131137051 20130419

Реферат документа CN104109397 (A)

The invention relates to a fiber composite powder and a new technology of the fiber composite powder as an addition composition of modified asphalt. The fiber composite powder is a composite powder of unseparated fiber, lignin and inorganic salts and is prepared from plant straws and other plant raw materials by using chemical and physical methods. The fiber composite powder is directly added into asphalt and forms a uniformly-dispersed modified asphalt addition composition, fiber and lignin in the addition composition are capable of improving the toughness of the matrix asphalt, and the inorganic salts are capable of substantially reinforcing and improving the wear resistance. The asphalt composition modified by employing the fiber composite powder is substantially improved in softening point, has excellent high-temperature performance, is not reduced or tinely reduced in low-temperature performance, and accords with standards correlated to modified asphalt. By using straws, agricultural and forest processing by-products and other plant raw materials for preparing the fiber composite powder, waste resource is fully utilized, asphalt consumption is reduced, the production cost is substantially reduced, environmental pollution caused by straw burning is avoided, and the fiber composite powder has economic, social and ecological benefit and accords with sustainable development requirements.

Библиографические данные: CN103773054 (A) — 2014-05-07

Preparation method of wood fiber bio-based plastic

Ссылка на эту страницу	CN103773054 (A) - Preparation method of wood fiber bio-based plastic
Изобретатель(и):	HONG JIANGUO; CHEN XIAO; YANG RUI; YE JUDI; LI XIAOBAO; CHEN JIANQIANG; GAO QINWEI +
Заявитель(и):	UNIV NANJING FORESTRY +
Индекс(ы) по классификации:	- международной (МПК): C08H7/00 ; C08L97/02 - cooperative:
Номер заявки:	CN20131727553 20131226 Global Dossier
Номера приоритетных документов:	CN20131727553 20131226
Также опубликовано, как:	CN103773054 (B)

Реферат документа CN103773054 (A)

The invention discloses a preparation method of wood fiber bio-based plastic. The preparation method comprises the steps: firstly, carrying out drying and crushing pretreatment on a wood fiber biomass; then, carrying out ball milling pretreatment; next, mixing the ball milled wood fiber raw material and an ionic liquid/dimethyl sulfoxide or quaternary ammonium salt/dimethyl sulfoxide solution; then, placing the mixture into a kneading machine for kneading; recovering dimethyl sulfoxide in the kneading process, and obtaining the wood fiber bio-based plastic after the kneading is ended. The method is wide in raw material source, low in raw material cost and

high in resource utilization ratio; a three-dimensional meshy structure of lignin is damaged through ball milling in advance, so that the attainability of a reagent is greatly increased, and a great number of highly-corrosive reagents and solvents are avoided; the quaternary ammonium salt or ionic liquid can be penetrated among molecular chains of cellulose by means of the powerful shearing force of the kneading machine, little ionic liquid is used, and the wood fiber bio-based plastic can be extruded to be granulated and also be subjected to injection molding; the preparation method is environment-friendly, simple in process and easy to operate.

Библиографические данные: CA2818658 (A1) — 2014-04-10

PLANT FIBER-REINFORCED THERMOPLASTIC RESIN COMPOSITION

Ссылка на эту страницу [CA2818658 \(A1\) - PLANT FIBER-REINFORCED THERMOPLASTIC RESIN COMPOSITION](#)

Изобретатель(и): [CA]; PANIGRAHI SATYANARAYAN [CA]; KUSHWAHA RADHEY LAL [CA] HENRY JAMES ±

Заявитель(и): [CA] CNH CANADA LTD ±

- международной (МПК): [B29C70/18](#); [C08J5/06](#); [C08L23/12](#); [C08L55/02](#); [C08L97/02](#)

Индекс(ы) по классификации: [C08B15/00](#); [C08H8/00](#); [C08J5/045](#); [C08J5/06](#); [C08K7/02](#); [C08L1/02](#); [C08L23/06](#); [C08L33/20](#); [C08L55/02](#); [C08L67/00](#); [C08L77/00](#); [C08L97/02](#); [C08J2323/06](#); [C08J2323/08](#); [C08J2401/02](#); [C08L2205/16](#); [C08L2207/04](#); [C08L2207/062](#) далее

Номер заявки: CA20132818658 20130612 [Global Dossier](#)

Номера приоритетных документов: [US201213648738](#) 20121010

Также опубликовано, как: [US2014100332 \(A1\)](#) [US9562152 \(B2\)](#) [US2015225556 \(A1\)](#) [WO2014057320 \(A1\)](#) [AU2013328401 \(A1\)](#)

Реферат документа CA2818658 (A1)

The present invention is directed to plant fiber-reinforced thermoplastic compositions and a method for reinforcing thermoplastic resins. The present invention provides a use for the cellulose portion of a plant material, which is the portion left over after processing the selected plant materials to separate the hemi-cellulose and lignin from the cellulose.

Библиографические данные: US2014046041 (A1) — 2014-02-13

COMPOSITIONS COMPRISING LIGNOCELLULOSIC BIOMASS AND ORGANIC SOLVENT

Ссылка на эту страницу [US2014046041 \(A1\) - COMPOSITIONS COMPRISING LIGNOCELLULOSIC BIOMASS AND ORGANIC SOLVENT](#)

Изобретатель(и): [US]; SOUTH COLIN ROBERT [CA]; BALAKSHIN MIKHAIL YUREVICH [CA] CAPANEMA EWELLYN ±

Заявитель(и): [CA] LIGNOL INNOVATIONS LTD ±

Индекс(ы) по классификации: - международной (МПК): [C08H8/00](#); [C08L97/02](#)
- cooperative: [C07G1/00](#); [C08H8/00](#); [C08K5/05](#); [C08L97/005](#); [C08L97/02](#); [D21C1/04](#) далее

Номер заявки: US201314028333 20130916 [Global Dossier](#)

Номера приоритетных документов: US201314028333 20130916 ; [WO2012CA00265 20120323](#) ; [US201161467319P 20110324](#)

Также опубликовано, как: [WO2012126099 \(A1\)](#) [EP2688959 \(A1\)](#) [EP2688959 \(A4\)](#) [CN103459511 \(A\)](#) [CA2829413 \(A1\)](#)

Реферат документа **US2014046041 (A1)**

The present disclosure relates, at least in part, to compositions comprising lignocellulosic biomass and an organic solvent wherein the lignocellulosic biomass comprises 35% or greater of lignin material. The present disclosure relates, at least in part, to compositions comprising lignocellulosic biomass and an organic solvent wherein the lignocellulosic biomass comprises 50% or less of carbohydrate. In certain embodiments the present compositions may have a viscosity of 5000 cps or less.

Библиографические данные: **CN103554585 (A) — 2014-02-05**

Method for preparing environment-friendly energy-saving rubber conveying belt by using biomass composite material

Ссылка на эту страницу [CN103554585 \(A\) - Method for preparing environment-friendly energy-saving rubber conveying belt by using biomass composite material](#)

Изобретатель(и): TONG CHANGXING; TONG CHANGFENG ±

Заявитель(и): KUNMING SHUANGCHANG RUBBER TUBE AND BELT MFG CO LTD ±

Индекс(ы) по классификации: - международной (МПК): [B29C35/02](#); [C08K13/02](#); [C08K3/06](#); [C08K3/22](#); [C08K5/09](#); [C08L17/00](#); [C08L7/00](#); [C08L93/04](#); [C08L97/00](#); [C08L97/02](#)
- cooperative:

Номер заявки: CN20131561495 20131113 [Global Dossier](#)

Номера приоритетных документов: CN20131561495 20131113

Также опубликовано, [CN103554585 \(B\)](#)
как:

Реферат документа CN103554585 (A)

The invention relates to a method for preparing an environment-friendly energy-saving rubber conveying belt by using a biomass composite material. The belt is prepared from the following materials: natural rubber, environment-friendly regenerated rubber, zinc oxide, an environment-friendly accelerant, stearic acid, sulphur, a biomass modification reinforcing agent, lignin, an antiager, an anti-reversion agent, rubber seed softening oil, natural rosin and environment-friendly operating oil. The preparation method comprises the following steps: preparing the biomass modification reinforcing agent, namely mixing and stirring walnut shell flour, rubber seed shell flour, an activating agent and a composite modifier to obtain the modification reinforcing agent; mixing, rolling, gluing, forming and vulcanizing the raw materials, and naturally cooling to room temperature, thereby obtaining the environment-friendly energy-saving rubber conveying belt, wherein the vulcanizing temperature is 150-170 DEG C; the vulcanizing time is 30-50 minutes; the vulcanizing pressure is 15-20MPa.; The environment-friendly energy-saving rubber conveying belt prepared by adopting the method disclosed by the invention has the advantages of low production cost, short process flow, no pollution in production and using processes, high product quality, excellent comprehensive performance and long using period and can be widely applied to material conveying of metallurgy, coal, chemical industry, building materials, mines and ports.

Библиографические данные: CN103540149 (A) — 2014-01-29

Manufacturing method of environment-friendly composite material with good interface compatibility

Ссылка на эту страницу [CN103540149 \(A\) - Manufacturing method of environment-friendly composite material with good interface compatibility](#)

Изобретатель(и): HU JIANPENG; GUO MINGHUI ±

Заявитель(и): UNIV NORTHEAST FORESTRY ±

Индекс(ы) по классификации: - международной (МПК): [B29C43/58](#); [C08H7/00](#); [C08L67/04](#); [C08L97/00](#); [C08L97/02](#)
- cooperative:

Номер заявки: CN20131476535 20131014 [Global Dossier](#)

Номера приоритетных документов: CN20131476535 20131014

Реферат документа CN103540149 (A)

The invention relates to a manufacturing method of an environment-friendly composite material with good interface compatibility. The invention mainly aims at solving problems of poor interface compatibility between wood fiber and biodegradable plastic, and complicated process, high cost, and difficulty in large-scale popularization of traditional methods. According to the invention, wood fiber and polylactic acid are adopted as raw materials. Through adding chemically modified ammonium lignosulfonate, interface compatibility of the composite material is improved. With a forming manner comprising high-speed mixing, normal-temperature pre-pressing, and flat plate hot-pressing, the environment-friendly wood composite material with good interface compatibility is manufactured. The product can be applied in the fields of architectural decoration, decoration materials, disposable packaging materials, and the like. With the manufacturing method, industrial lignin resource can be highly efficiently utilized. More importantly, the method has the advantages of simple operation and low cost, and is suitable for industrial popularization. With the method, application field of wood composite materials can be expanded, and product added value can be improved. The method is a green and environment-friendly wood composite material manufacturing technology.

Библиографические данные: CN103483806 (A) — 2014-01-01

Grape vine-polyurethane composite foam materiel

Ссылка на эту страницу	CN103483806 (A) - Grape vine-polyurethane composite foam materiel	
Изобретатель(и):	REN YOUWEI ±	
Заявитель(и):	ANHUI JIFENG ENERGY SAVING MATERIAL CO LTD ±	
Индекс(ы) по классификации:	- международной (МПК):	C08G18/48 ; C08G18/66 ; C08K13/06 ; C08K3/34 ; C08L75/08 ; C08L97/02 ; C08G101/00
	- cooperative:	
Номер заявки:	CN20131432783 20130923	Global Dossier
Номера приоритетных документов:	CN20131432783 20130923	

Реферат документа CN103483806 (A)

The invention discloses a grape vine-polyurethane composite foam materiel which is characterized by being prepared by mixing, pouring, reacting and curing the following materials A and B in parts by weight: the materials A: 10-12 parts of grape vine powder, 100 parts of polyether polyol, 2-3 parts of phenyl hydroxide, 1-2 parts of ethylene imine, 4-5 parts of urea, 2-3 parts of magnesium chloride, 3-4 parts of water, 6-8 parts of zirconia, 1-2 parts of urotropine, 8-10 parts of sodium lignin sulfonate, 2-3 parts of sorbitol, 12-14 parts of ethyl methacrylate, 2-3 parts of sodium carboxymethyl cellulose, 2-3 parts of aluminium dihydric phosphate, 6-8 parts of modified attapulgite; the material B: 30-35 parts of polyisocyanate. Modified attapulgite is added, so that the grape vine-polyurethane composite foam materiel not only has an adsorption effect, but also is an excellent physical flame retardant and has an excellent fire retarding effect;

grape vine powder is added so as to achieve the effect of changing waste into valuable, and with high plant fiber content, the composite material can be biologically degraded, is environmental-friendly, nontoxic and harmless and has excellent sound insulation and heat insulation effects.

Библиографические данные: US2013324644 (A1) — 2013-12-05

BIO-DERIVED POLYESTER FOR USE IN COMPOSITE PANELS, COMPOSITE ARTICLES AND METHODS OF PRODUCING SUCH ARTICLES

Ссылка на эту страницу	US2013324644 (A1) - BIO-DERIVED POLYESTER FOR USE IN COMPOSITE PANELS, COMPOSITE ARTICLES AND METHODS OF PRODUCING SUCH ARTICLES
Изобретатель(и):	[US] BATCHELOR LOUISE ±
Заявитель(и):	[US] BIOAMBER INC ±
Индекс(ы) по классификации:	- международной (МПК): C08L97/02 - cooperative: C08L97/005 ; C08L97/02 ; G06F13/107 ; C08L2205/16 ; C08L2205/18 ; Y02B60/50 далее
Номер заявки:	US201313907207 20130531 Global Dossier
Номера приоритетных документов:	US201313907207 20130531 ; US201261653619P 20120531
Также опубликовано, как:	WO2013181580 (A1)

Реферат документа US2013324644 (A1)

A synthetic article comprising at least one polyester resin adhesive and at least one lignin-based material and a method of preparing a synthetic article comprising mixing at least one polyester resin adhesive and at least one lignin-based material to obtain a blended material and forming a synthetic article from the blended material.

Библиографические данные: CN103396674 (A) — 2013-11-20

Preparation method of alkali lignin/corn starch/flax fiber thermoplastic composite material

Ссылка на эту страницу [CN103396674 \(A\) - Preparation method of alkali lignin/corn starch/flax fiber thermoplastic composite material](#)

Изобретатель(и): SHI RUIXIN ±
Заявитель(и): UNIV NORTHEAST FORESTRY ±
Индекс(ы) по классификации: - международной (МПК): [C08K5/053](#); [C08L3/02](#); [C08L97/00](#); [C08L97/02](#)
 - cooperative:
Номер заявки: CN20131344921 20130808 [Global Dossier](#)
Номера приоритетных документов: CN20131344921 20130808

Реферат документа CN103396674 (A)

The invention relates to a preparation method of a thermoplastic composite material, and particularly relates to a preparation method of an alkali lignin/corn starch/flax fiber thermoplastic composite material. The invention is used for solving the technical problems that lignin melt has poor liquidity, cooled melt becomes brittle, and mechanical properties are poor existing in a process of preparing a lignin-based thermoplastic composite material by a conventional method. The preparation method comprises the steps: one, premixing alkali lignin, corn starch and an auxiliary agent, sending to a double-roll mixing mill for mixing, after mixing uniformly, adding a flax fiber, and mixing uniformly to obtain a comixed material; and two, putting the comixed material onto a thin film, placing in a tablet machine to pressing into a thin slice, taking off, then cooling to the room temperature, and then tearing the thin slice from the thin film to obtain the alkali lignin/corn starch/flax fiber thermoplastic composite material. The prepared thermoplastic composite material has homogeneous texture, and the alkali lignin and the corn starch are mixed uniformly in the auxiliary agent and have good compatibility. The preparation method of the invention is applied to the thermoplastic composite material field.

Библиографические данные: US2013202905 (A1) — 2013-08-08

Delignification of biomass containing lignin and production of adhesive compositions and methods of making lignin cellulose compositions

Ссылка на эту страницу [US2013202905 \(A1\) - Delignification of biomass containing lignin and production of adhesive compositions and methods of making lignin cellulose compositions](#)
Изобретатель(и): [US] BLOUNT DAVID H ±
Заявитель(и): [US] BLOUNT DAVID H ±
 - международной (МПК): [B32B23/04](#); [B32B37/12](#); [C09J197/02](#)
Индекс(ы) по классификации: [B32B21/02](#); [B32B21/042](#); [B32B21/14](#); [B32B7/12](#); [C08B37/0057](#); [C08H6/00](#); [C08H8/00](#); [C08L97/005](#); [C08L97/02](#); [C09J189/00](#); [C09J189/005](#); [C09J189/04](#); [C09J189/06](#); [C09J197/005](#); [B32B2307/54](#); [Y10T428/31975](#)
 - cooperative:
[далее](#)

Номер заявки: US201213385150 20120206 [Global Dossier](#)
Номера приоритетных документов: US201213385150 20120206 ; [US20100658429 20100212](#) ; [US20090589399 20091023](#)
Также опубликовано, как: [US8986437 \(B2\)](#)

Реферат документа US2013202905 (A1)

Delignification of biomass consisting of plants containing lignin is done by utilizing an amino compound in an aqueous solution or emulsion to produce water soluble amino lignin and non-soluble amino lignin cellulose which are utilized to produce adhesives and resins for use to produce wood composites and carbohydrate production.

Библиографические данные: EP2602295 (A1) — 2013-06-12

A binder based on an industrial lignin for composite material comprising cellulose or lignocellulose

Ссылка на эту страницу [EP2602295 \(A1\) - A binder based on an industrial lignin for composite material comprising cellulose or lignocellulose](#)

Изобретатель(и): [DE]; EDELMANN ROLAND [DE]; STANDKE BURKHARD [DE]; JENKNER PETER [DE]; KHARAZIPOUR ALIREZA [DE]; KLOESER LARS [DE] MONKIEWICZ JAROSLAW [±]

Заявитель(и): [DE] EVONIK DEGUSSA GMBH [±]

Индекс(ы) по классификации: - международной (МПК): [B27K3/50](#); [B27N3/00](#); [B27N3/12](#); [C08J5/04](#); [C08K5/544](#); [C08L61/20](#); [C08L97/02](#); [C09J161/00](#); [C09J161/06](#); [C09J161/20](#); [C09J161/24](#); [C09J161/28](#); [C09J175/04](#); [C09J189/00](#)

- cooperative: [C08J5/045](#); [C08K5/544](#); [C08L61/20](#); [C08L97/02](#); [C09J161/00](#); [C09J161/06](#); [C09J161/24](#); [C09J161/28](#); [C09J189/00](#); [C09J193/00](#); [C08J2361/06](#); [Y10T428/31591](#); [Y10T428/31663](#); [Y10T428/31848](#) далее

Номер заявки: EP20130158023 20060614 [Global Dossier](#)
Номера приоритетных документов: [DE20051040681 20050826](#) ; [DE20061006656 20060214](#) ; [EP20060777331 20060614](#)
Также опубликовано, как: [DE102006006656 \(A1\)](#) [US2008206572 \(A1\)](#) [US9012538 \(B2\)](#) [WO2007023008 \(A1\)](#) [EP2602298 \(A1\)](#) далее

Реферат документа EP2602295 (A1)

The present invention relates to a binder for composite materials comprising cellulose- or lignocellulose-containing materials, which is based on the components (i) at least one binder from the series consisting of industrial lignins and (ii) at least one composition based on an aminoalkylsilane. The invention furthermore relates to a composite material which is at least based on a cellulose- or lignocellulose-containing material and the abovementioned binder, a process for the production of such a composite material and the use of the binder system according to the invention for the production of wood-based materials.

Библиографические данные: EP2794987 (A2) — 2014-10-29

HIGH SURFACE AREA COMPOSITION COMPRISED OF LIGNIN

Ссылка на эту страницу	EP2794987 (A2) - HIGH SURFACE AREA COMPOSITION COMPRISED OF LIGNIN
Изобретатель(и):	[US]; ELLIOTT GULIZ ARF DE [IT]; FAVERI DANILO CHERCHI [IT]; FRANCESCO FERRERO [IT]; SIMONE TORRE [IT] PAOLO ±
Заявитель(и):	[IT] BIOCHEMTEX SPA ±
Индекс(ы) по классификации:	- международной (МПК): C08H8/00 ; C08L97/02 ; C10L5/48 ; D21C1/02 ; D21C5/00 - cooperative: C08B1/003 ; C08H8/00 ; C08L97/005 ; C08L97/02 ; C12P19/02 ; C12P19/14 ; D21C1/02 ; D21C5/005 ; C12P2203/00
Номер заявки:	EP20120810276 20121220 Global Dossier
Номера приоритетных документов:	US201161578373P 20111221 ; IT2012TO00014 20120111 ; US201261736649P 20121213 ; WO2012EP76439 20121220
Также опубликовано, как:	WO2013092887 (A2) WO2013092887 (A3) US2014339467 (A1) TW201331271 (A) ITTO20120014 (A1) далее

Реферат не найден для документа EP2794987 (A2)

Реферат документа-аналога: WO2013092887 (A2)

Disclosed in this specification is a lignin composition having unique characteristics relative to its characteristics as found in its natural environment. The lignin has been modified so that more lignin decomposes at the lower lignin decomposition temperature than decomposes at the higher lignin decomposition temperature and the lignin composition has a very high surface area relative to naturally occurring lignin compositions.

Библиографические данные: CA2798196 (A1) — 2010-12-02

DERIVATIVES OF NATIVE LIGNIN, LIGNIN-WAX COMPOSITIONS, THEIR PREPARATION, AND USES THEREOF

Ссылка на эту страницу [CA2798196 \(A1\) - DERIVATIVES OF NATIVE LIGNIN, LIGNIN-WAX COMPOSITIONS, THEIR PREPARATION, AND USES THEREOF](#)

Изобретатель(и): [CA]; BERLIN ALEX MULYK [CA] PAUL ±
Заявитель(и): [CA] LIGNOL INNOVATIONS LTD ±

- международной (МПК): [C07G1/00](#); [C08L91/06](#); [C08L97/00](#); [C08L97/02](#)

Индекс(ы) по классификации: [A23K10/32](#); [A23L33/105](#); [A61K36/15](#); [A61K36/48](#); [A61K36/54](#); [A61K36/76](#); [C07G1/00](#); [C08H6/00](#); [C08J3/00](#); [C08K5/13](#); [C08L23/02](#); [C08L57/00](#); [C08L97/005](#); [C09K15/06](#); [D21C11/0007](#); [D21H11/00](#); [C08J2397/00](#); [C08L2207/04](#); [Y02P20/582](#); [Y02P60/877](#)

- cooperative:

Номер заявки: CA20102798196 20100527 [Global Dossier](#)

Номера приоритетных документов: [US20090182044P 20090528](#) ; [US20090233345P 20090812](#) ; [WO2010CA00801 20100527](#)

Также опубликовано, как: [US2010305241 \(A1\)](#) [US8445562 \(B2\)](#) [US2016145399 \(A1\)](#) [US2015345078 \(A1\)](#) [US9347177 \(B2\)](#) далее

Реферат документа CA2798196 (A1)

A wax composition comprising a lignin derivative wherein the derivative has a total hydroxyl content of from about 0.1 mmol/g to about 7 mmol/g.

Библиографические данные: EP2620296 (A1) — 2013-07-31

Rubber composition for tire, method of preparing the same, and pneumatic tire

Ссылка на эту страницу [EP2620296 \(A1\) - Rubber composition for tire, method of preparing the same, and pneumatic tire](#)

Изобретатель(и): [JP] FUJIKURA KEITAROU ±
Заявитель(и): [JP] SUMITOMO RUBBER IND ±

Индекс(ы) по классификации: - международной (МПК): [B60C1/00](#); [C08K5/13](#); [C08K7/02](#); [C08L1/02](#); [C08L21/00](#); [C08L7/00](#); [C08L97/00](#); [C08L97/02](#)

[B60C1/0016](#); [B60C1/0025](#); [C08K5/13](#);
- cooperative: [C08L1/02](#); [C08L21/00](#); [C08L7/00](#);
[C08L97/005](#); [C08L97/02](#); [C08L2205/16](#);
[Y02T10/862](#) далее

Номер заявки: EP20120193875 20121122 [Global Dossier](#)
Номера приоритетных документов: [JP20120017253](#) 20120130
Также опубликовано, как: [EP2620296 \(B1\)](#) [US2013197132 \(A1\)](#) [JP2013155303 \(A\)](#)
[JP5616372 \(B2\)](#)

Реферат документа EP2620296 (A1)

Provided are a rubber composition for a tire, in which while the use of petroleum resources is reduced as much as possible, the compatibility of microfibrillated plant fibers with the rubber component is enhanced by a simple method, which can lead to a balanced improvement in tensile properties, handling stability, and fuel economy; a method of preparing the rubber composition; and a pneumatic tire formed from the rubber composition. The present invention relates to a rubber composition for a tire, containing a rubber component, microfibrillated plant fibers, and an industrial lignin. It is preferable that the rubber component should contain at least one selected from the group consisting of natural rubber, modified natural rubber, synthetic rubber, and modified synthetic rubber, and it is preferable that the microfibrillated plant fibers should be cellulose microfibrils.

Библиографические данные: JP2012167192 (A) — 2012-09-06

METHOD OF MANUFACTURING HEAT PLASTICIZATION LIGNOCELLULOSE COMPOSITE MATERIAL

Ссылка на эту страницу: [JP2012167192 \(A\) - METHOD OF MANUFACTURING HEAT PLASTICIZATION LIGNOCELLULOSE COMPOSITE MATERIAL](#)
Изобретатель(и): RIN RENTEI; YAMAGUCHI HIDEKI; SUZUKI AYAMI ±
Заявитель(и): KRI INC ±
Индекс(ы) по классификации: - международной (МПК): [C08J3/18](#); [C08K5/3445](#); [C08L97/02](#)
- cooperative: [Y02P20/542](#)
Номер заявки: JP20110029284 20110215 [Global Dossier](#)
Номера приоритетных документов: JP20110029284 20110215

Реферат документа JP2012167192 (A)

PROBLEM TO BE SOLVED: To perform the swelling and acylation of lignocellulose, and thereby to easily and efficiently manufacture a heat plasticization lignocellulose composite material from a natural cellulosic material without requiring special pretreat. ;SOLUTION: The method of manufacturing a heat plasticization lignocellulose composite material includes: a step in which a lignocellulose material including cellulose and lignin is swollen by using a solvent containing an ionic liquid; a step in which the swollen lignocellulose material is made to react with an acylating agent; and a step in which the solvent containing the ionic liquid is removed. ;COPYRIGHT: (C)2012,JPO&INPIT;PROBLEM TO BE SOLVED: To perform the swelling and acylation of lignocellulose, and thereby to easily and efficiently manufacture a heat plasticization lignocellulose composite material from a natural cellulosic material without requiring special pretreat.SOLUTION: The method of manufacturing a heat plasticization lignocellulose composite material includes: a step in which a lignocellulose material including cellulose and lignin is swollen by using a solvent containing an ionic liquid; a step in which the swollen lignocellulose material is made to react with an acylating agent; and a step in which the solvent containing the ionic liquid is removed.

Библиографические данные: CN102617978 (A) — 2012-08-01

Preparation method of wood-plastic anti-static material

Ссылка на эту страницу	CN102617978 (A) - Preparation method of wood-plastic anti-static material
Изобретатель(и):	JIANHAO GAO ±
Заявитель(и):	JIANGSU TIANNIANG AGRICULTURE TECHNOLOGY CO LTD ±
Индекс(ы) по классификации:	- международной (МПК): B29B9/06 ; B29C47/92 ; C08G8/10 ; C08G8/28 ; C08K13/04 ; C08K7/14 ; C08L23/06 ; C08L61/14 ; C08L61/28 ; C08L77/02 ; C08L97/02 - cooperative: B29C47/0011 ; B29C47/92 ; B29C2947/92704 ; B29C2947/92895
Номер заявки:	CN2012187137 20120329 Global Dossier
Номера приоритетных документов:	CN2012187137 20120329
Также опубликовано, как:	CN102617978 (B)

Реферат документа CN102617978 (A)

The invention relates to a preparation method of a wood-plastic anti-static material, in particular to a wood-plastic material containing a lignin material and a preparation method of the wood-plastic material. The wood-plastic composite material prepared by the invention has the advantages that plant fibers are highly dispersed and a polymer chain contains lignin structures.

Библиографические данные: US2012136097 (A1) — 2012-05-31

RESIN COMPOSITIONS COMPRISING LIGNIN DERIVATIVES

Ссылка на эту страницу	US2012136097 (A1) - RESIN COMPOSITIONS COMPRISING LIGNIN DERIVATIVES
Изобретатель(и):	[US] BERLIN ALEX ±
Заявитель(и):	[US] BERLIN ALEX ±
Индекс(ы) по классификации:	- международной (МПК): C07G1/00 ; C08H7/00 ; C08L97/00 - cooperative: C07G1/00 ; C08H6/00 ; C08H8/00 ; C08K5/13 ; C08L1/10 ; C08L61/06 ; C08L61/12 ; C08L97/02 ; D21C3/20 далее
Номер заявки:	US201013322890 20100527 Global Dossier
Номера приоритетных документов:	US201013322890 20100527 ; US20090182044P 20090528 ; US20090233345P 20090812 ; US20100304745P 20100215 ; WO2010CA00800 20100527
Также опубликовано, как:	US9267027 (B2) WO2010135832 (A1) US2016185810 (A1) EP2435457 (A1) EP2435457 (A4) далее

Реферат документа US2012136097 (A1)

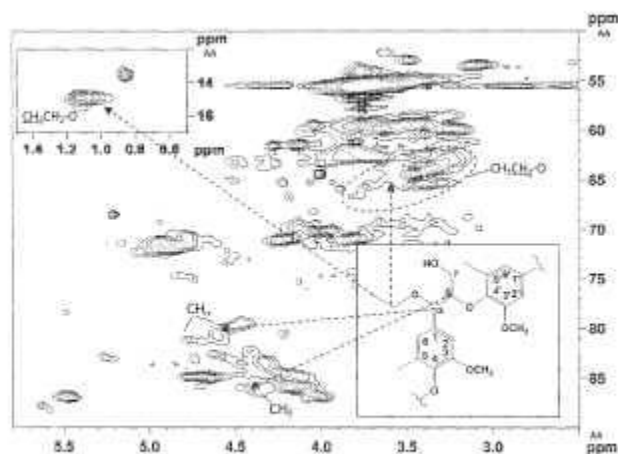


Figure 1

The present invention provides derivatives of native lignin having an ethoxy content of 0.45 mmol/g or greater. Surprisingly, it has been found that phenolic resins comprising derivatives of native lignin having ethoxy contents have acceptable performance characteristics such as bondstrength.

Библиографические данные: CN102417738 (A) — 2012-04-18

Ageing resistant wood plastic composite modified by titanium oxide fiber and lignin and preparation method thereof

Ссылка на эту страницу	CN102417738 (A) - Ageing resistant wood plastic composite modified by titanium oxide fiber and lignin and preparation method thereof
Изобретатель(и):	YIJUN SHI; CHANGSONG WANG; WENJUN YAO; LIWEN MU ±
Заявитель(и):	CHANGSHU YUTYRONE ADVANCED WEAR MATERIALS TECHNOLOGY CO LTD ±
Индекс(ы) по классификации:	- международной (МПК): B29B9/06 ; B29C47/92 ; C08K3/22 ; C08K7/08 ; C08L97/02 - cooperative: B29C47/0011
Номер заявки:	CN20111376192 20111123 Global Dossier
Номера приоритетных документов:	CN20111376192 20111123
Также опубликовано, как:	CN102417738 (B)

Реферат документа CN102417738 (A)

The invention discloses an ageing resistant wood plastic composite modified by a titanium oxide fiber and lignin and a preparation method thereof. The composite material is prepared by mixing and extruding the following raw materials, by weight, 0.5-15 parts of the titanium oxide fiber, 1-10 parts of lignin, 20-50 parts of a thermoplastic, 40-60 parts of a wood fiber raw material, 0.5-10 parts of a compatilizer, 1-10 parts of a lubricant and 5-15 parts of a filler. The composite material of the invention, which can effectively overcome disadvantages of low strength and bad ageing resistance of common wood plastic composite materials, can be widely applied to outdoor garden floors, fences, household decorations, building materials, logistics consumption materials and the like.

Библиографические данные: CN102352116 (A) — 2012-02-15

Wood-plastic composite material and preparation method thereof

Ссылка на эту страницу	CN102352116 (A) - Wood-plastic composite material and preparation method thereof
Изобретатель(и):	YONGMING FAN; JIANZHANG LI; YUYING WU; XUEMING ZHANG ±

Заявитель(и): UNIV BEIJING FORESTRY ±
Индекс(ы) по классификации: - международной (МПК): [B29B9/06](#); [B29C43/00](#); [B29C45/00](#); [B29C47/00](#); [C08L23/06](#); [C08L23/12](#); [C08L23/28](#); [C08L51/06](#); [C08L97/02](#); [D21B1/36](#)
- cooperative:
Номер заявки: CN20111209907 20110726 [Global Dossier](#)
Номера приоритетных документов: CN20111209907 20110726
Также опубликовано, как: [CN102352116 \(B\)](#)

Реферат документа CN102352116 (A)

The invention discloses a wood-plastic composite material and a preparation method thereof. The wood-plastic composite material is prepared from the following raw materials in part by weight: 30 to 80 parts of modified plant fiber, 20 to 70 parts of plastic, 2 to 10 parts of compatilizer, 2 to 10 parts of lubricant, 0.2 to 1.0 part of antioxidant, 5 to 15 parts of filler and 2 to 10 parts of flame retardant. The preparation method comprises the following steps of: preparing the modified plant fiber which is separated from each other and of which the surface is coated with lignin by using wood fiber, namely cotton stalks by a blasting treatment method, compounding the modified plant fiber and the plastic, and extruding to form a finished product material. By the method, the technical problem of low compatibility of wood fiber and thermoplastic plastic is solved, the comprehensive utilization of the wood fiber and the plastic is realized, timber can be replaced, and the added value of agricultural waste, namely the cotton stalks is increased. The prepared wood-plastic composite material has good mechanical properties, and high tensile strength, bending strength and impact strength; and the industrialized production of high-performance products such as constructional engineering materials is realized.

Библиографические данные: WO2012104041 (A1) — 2012-08-09

FIBRE-REINFORCED PLASTIC MATERIAL

Ссылка на эту страницу [WO2012104041 \(A1\) - FIBRE-REINFORCED PLASTIC MATERIAL](#)
Изобретатель(и): [CH] GASS MICHAEL LUDWIG ±
Заявитель(и): [CH]; BIEWERT AG GASS [CH] MICHAEL LUDWIG ±
Индекс(ы) по классификации: - международной (МПК): [C08J5/04](#); [C08J5/06](#); [C08L23/04](#); [C08L23/10](#); [C08L97/02](#); [D01B1/48](#); [D01C1/02](#); [D06M15/227](#)
- cooperative: [C08J5/045](#); [C08J5/06](#); [C08L23/02](#); [C08L97/02](#); [D01B1/48](#); [D01C1/00](#); [D06M15/227](#); [C08J2323/02](#); [C08J2323/12](#)

[далее](#)

Номер заявки: WO2012EP00354 20120126 [Global Dossier](#)
Номера приоритетных документов: [DE20111010193](#) [20110202](#)
Также опубликовано, как: [DE102011010193 \(A1\)](#) [EP2670792 \(A1\)](#)

Реферат документа WO2012104041 (A1)



The invention relates to fibre-reinforced plastic material comprising natural fibres that are prepared from biomass and that are embedded in the plastic material, said natural fibres being produced from a fibrous biomass with a low lignin content and being embedded in the plastic material and bonded thereto. The invention is characterised in that the fibre-reinforced plastic material has a higher tensile elastic modulus than the plastic material without natural fibres.

Библиографические данные: CN102304291 (A) — 2012-01-04

Bamboo and plastic composite material and preparation method thereof

Ссылка на эту страницу [CN102304291 \(A\) - Bamboo and plastic composite material and preparation method thereof](#)
Изобретатель(и): YONGMING FAN; JIANZHANG LI; YUYING WU; XUEMING ZHANG ±
Заявитель(и): UNIV BEIJING FORESTRY ±
Индекс(ы) по классификации: - международной (МПК): [C08K13/02](#); [C08K3/26](#); [C08K3/32](#); [C08L23/06](#); [C08L23/12](#); [C08L23/28](#); [C08L51/06](#); [C08L97/02](#); [D21B1/36](#)
- cooperative:
Номер заявки: CN20111209909 20110726 [Global Dossier](#)

Номера приоритетных документов: CN20111209909 20110726

Также опубликовано, как: [CN102304291 \(B\)](#)

Реферат документа CN102304291 (A)

The invention discloses a bamboo and plastic composite material and a preparation method thereof. The bamboo and plastic composite material comprises the following raw materials according to parts by weight: 40-80 parts of modified bamboo fiber, 15-85 parts of plastic, 2-10 parts of compatilizer, 2-10 parts of lubricant, 0.2-1.0 part of antioxidant, 5-15 parts of filler and 2-10 parts of fire retardant. Bamboo raw materials are prepared into modified bamboo fibers with an explosion treatment method, wherein the modified bamboo fibers are mutually separated, and eh surface of the modified bamboo fibers is covered with lignin; then the modified bamboo fiber is compounded with plastic; and the product is extruded to form finished product material.; According to the bamboo and plastic composite, the technical problems of poor compatibility of wood fiber and thermoplastic plastics can be solved to realize the purpose of comprehensively utilizing the bamboo fiber and plastic, the wood can be omitted, and the additional value of the forest residue is increased. The bamboo and plastic composite material manufactured with the preparation method has the advantages of high mechanical property, and strong tensile strength, bending strength and impact strength of composite material, and the industrial production of high-performance products, such as building engineering materials can be realized.

Библиографические данные: CN102304290 (A) — 2012-01-04

Wood plastic composite and preparation method thereof

Ссылка на эту страницу	CN102304290 (A) - Wood plastic composite and preparation method thereof
Изобретатель(и):	YONGMING FAN; JIANZHANG LI; YUYING WU; XUEMING ZHANG; QIAN ZHANG ±
Заявитель(и):	UNIV BEIJING FORESTRY ±
Индекс(ы) по классификации:	- международной (МПК): C08K13/02 ; C08K3/26 ; C08K3/34 ; C08K5/09 ; C08L23/06 ; C08L23/12 ; C08L23/28 ; C08L51/06 ; C08L97/02 ; D21B1/36 - cooperative:
Номер заявки:	CN20111209890 20110726 Global Dossier
Номера приоритетных документов:	CN20111209890 20110726

Реферат документа CN102304290 (A)

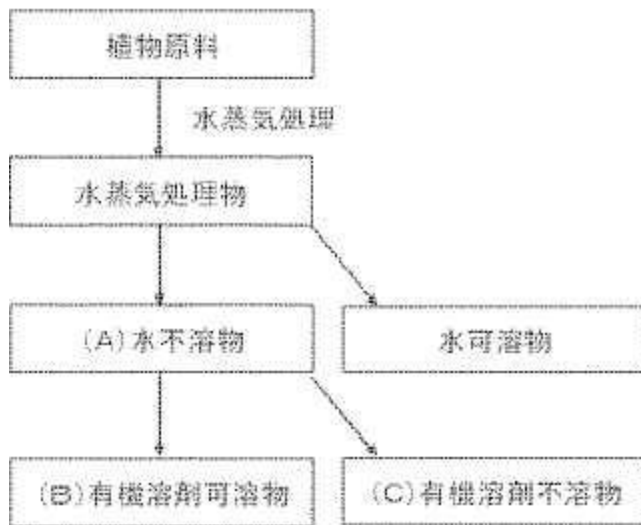
The invention discloses a wood plastic composite and a preparation method thereof. The wood plastic composite comprises the following raw materials according to parts by weight: 30-80 parts of modified wood fiber, 20-70 parts of plastic, 2-10 parts of compatilizer, 2-10 parts of lubricant, 0.2-1.0 part of antioxidant, 5-15 parts of filler and 2-10 parts of fire retardant. 'forestry three waste' wood wastes are prepared onto modified wood fibers with an explosion treatment method, wherein the modified wood fibers are mutually separated, and eh surface of the modified wood fibers is covered with lignin; then the modified wood fiber is compounded with plastic; and the product is extruded to form finished product material. According to the wood plastic composite, the technical problems of poor compatibility of wood fiber and thermoplastic plastics can be solved to realize the purpose of comprehensively utilizing the 'forestry three waste' wood and plastic, the wood can be omitted, and the additional value of the forest residue is increased. The wood plastic composite manufactured with the preparation method has high mechanical property, and strong tensile strength, bending strength and impact strength of composite material, and the industrial production of high-performance products, such as building engineering materials, can be realized.

Библиографические данные: JP2011219722 (A) — 2011-11-04

RESIN COMPOSITION AND MOLDED BODY

Ссылка на эту страницу	JP2011219722 (A) - RESIN COMPOSITION AND MOLDED BODY
Изобретатель(и):	KOFUNE MIKA; KOYAMA NAOYUKI; GOTO AKIHITO; KIKUCHI IKUKO; SUKEGAWA TOMOJI ±
Заявитель(и):	HITACHI CHEMICAL CO LTD ±
Индекс(ы) по классификации:	- международной (МПК): C08H7/00 ; C08L97/02 ; C08B37/00 - cooperative:
Номер заявки:	JP20100192127 20100830 Global Dossier
Номера приоритетных документов:	JP20100027547 20100210 ; JP20100065953 20100323 ; JP20100192127 20100830
Также опубликовано, как:	JP5618136 (B2) JP2011219734 (A) JP5741904 (B2) JP2011219728 (A) JP2011219725 (A) далее

Реферат документа JP2011219722 (A)



PROBLEM TO BE SOLVED: To provide a resin composition and a molded body using a vegetable resource as a main raw material and provided with flame retardancy and antibacterial properties. ;SOLUTION: The resin composition contains (A) a water-insoluble material and a curing agent, wherein a content of the water-insoluble material (A) is 30-95 mass% and the water-insoluble material (A) is mainly composed of lignin-containing cellulose fibers obtained by steam-treating a vegetable raw material and removing a water-soluble material formed by the steam treatment from the steam-treated material. ;COPYRIGHT:

(C)2012,JPO&INPIT;PROBLEM TO BE SOLVED: To provide a resin composition and a molded body using a vegetable resource as a main raw material and provided with flame retardancy and antibacterial properties.SOLUTION: The resin composition contains (A) a water-insoluble material and a curing agent, wherein a content of the water-insoluble material (A) is 30-95 mass% and the water-insoluble material (A) is mainly composed of lignin-containing cellulose fibers obtained by steam-treating a vegetable raw material and removing a water-soluble material formed by the steam treatment from the steam-treated material.

Библиографические данные:

WO2012013735 (A1) — 2012-02-02

COMPOSITION COMPRISING CATALYST AND LIGNIN AND ITS USE FOR PRODUCING AN AROMATIC COMPOSITION

Ссылка на эту
страницу

[WO2012013735 \(A1\) - COMPOSITION COMPRISING CATALYST AND LIGNIN AND ITS USE FOR PRODUCING AN AROMATIC COMPOSITION](#)

Изобретатель(и): [DE]; PANTOUFLAS EMMANOUIL [DE]; PROCHAZKA ROMAN SCHUNK [DE] STEPHAN ±

Заявитель(и): [DE]; BASF SE PANTOUFLAS [DE]; EMMANOUIL PROCHAZKA [DE]; ROMAN SCHUNK [DE] STEPHAN ±

международной (МПК): - [B01J21/18](#); [B01J29/40](#); [B01J31/06](#); [B01J37/00](#); [B01J37/04](#); [B01J37/08](#); [C08H8/00](#); [C08L97/00](#); [C08L97/02](#); [C10B47/24](#); [C10B53/02](#); [C10B57/06](#); [C10C5/00](#); [C10G1/00](#); [C10L5/44](#)

Индекс(ы) по классификации: [B01J21/02](#); [B01J21/18](#); [B01J29/06](#); [C08H6/00](#); [C08H8/00](#); [C08L97/005](#); [C08L97/02](#); [C10B47/24](#); [C10B53/02](#); [C10B57/06](#); [C10C5/00](#); [C10L5/44](#);
- cooperative: [B01J29/40](#); [C08K3/32](#); [C08K3/34](#); [C08K3/38](#); [C10G2300/1014](#); [C10G2300/308](#); [C10G2300/807](#); [C10G2400/30](#); [Y02E50/10](#); [Y02E50/14](#); [Y02E50/30](#); [Y02P30/20](#)

Номер заявки: WO2011EP62962 20110728 [Global Dossier](#)

Номера приоритетных документов: [EP20100171278](#) [20100729](#)

Реферат документа WO2012013735 (A1)

The present invention relates to a composition ("composite") which comprises lignin and at least one catalyst dispersed in the composition. The invention further relates to a process for producing this type of composition comprising catalyst and lignin and its use for producing an aromatic composition.

Библиографические данные: CN102051002 (A) — 2011-05-11

Zymolytic lignin-wood fiber-polyolefin hybrid composite material and preparation method thereof

Ссылка на эту страницу [CN102051002 \(A\) - Zymolytic lignin-wood fiber-polyolefin hybrid composite material and preparation method thereof](#)

Изобретатель(и): QINGWEN WANG; TIAN LIU; HAIGANG WANG; YONGMING SONG; HUI ZHAO ±

Заявитель(и): UNIV NORTHEAST FORESTRY ±

Индекс(ы) по классификации: - международной (МПК): [B29C47/92](#); [C08K13/02](#); [C08K3/26](#); [C08K3/34](#); [C08L23/06](#); [C08L23/12](#); [C08L25/06](#); [C08L97/00](#); [C08L97/02](#)

- cooperative: [B29C47/92](#); [B29C2947/92704](#); [B29C2947/92895](#)

Номер заявки: CN20101569712 20101202 [Global Dossier](#)

Номера приоритетных документов: CN20101569712 20101202

документов:

Также опубликовано, [CN102051002 \(B\)](#)
как:

Реферат документа CN102051002 (A)

The invention provides a zymolytic lignin-wood fiber-polyolefin hybrid composite material and a preparation method thereof, relating to a composite material and a preparation method thereof. The invention solves the problems of poor toughness and low-efficiency utilization of zymolytic lignin of a traditional wood-plastic composite material. The composite material provided by the invention is prepared from thermoplastic plastics, zymolytic lignin, a wood fiber material, filling and a processing aid. The preparation method comprises the following steps of: mixing, extruding and forming the thermoplastic plastics, the zymolytic lignin, the wood fiber material, the filling and the processing aid to obtain the zymolytic lignin-wood fiber-polyolefin hybrid composite material.; According to the invention, the composite material can convert waste resources into biomass raw materials in the processing process, greatly decreases the production cost and solves the problem of great product brittleness of a traditional wood-plastic composite material technology.

Библиографические данные: JP2010254952 (A) — 2010-11-11

RESIN COMPOSITION FOR FOAMING AND LIGNIN-CONTAINING POLYMER FOAM

Ссылка на эту страницу [JP2010254952 \(A\) - RESIN COMPOSITION FOR FOAMING AND LIGNIN-CONTAINING POLYMER FOAM](#)

Изобретатель(и): UMEMURA TOSHIKAZU; NISHIMOTO TETSUO; FUJIMURA NAOTO; YOSHIKAWA AKIHIRO ±

Заявитель(и): HISHIE KAGAKU KK; JUON KK; EIWA CHEM IND ±

Индекс(ы) по классификации: - международной (МПК): [C08J3/00](#); [C08J9/06](#); [C08L101/00](#); [C08L23/00](#); [C08L27/06](#); [C08L51/06](#); [C08L97/02](#)

- cooperative:

Номер заявки: JP20090265437 20091120 [Global Dossier](#)

Номера приоритетных документов: [JP20090087352 20090331](#) ; JP20090265437 20091120

Реферат документа JP2010254952 (A)

PROBLEM TO BE SOLVED: To provide a lignin-containing polymer foam, wherein uniform bubbles exist inside and an unpleasant odor is suppressed, and also an amount of carbon dioxide generated when incineration process is performed is considered to be reduced, and in addition, the lignin-containing polymer foam has a potential to be well evaluated in the future because carbon is stored inside, and a resin composition for foaming to obtain the lignin-containing

polymer foam. ;SOLUTION: The resin composition for foaming contains a polymer material, 5-100 pts.mass of lignin, and 1-30 pts.mass of a foaming agent based on 100 pts.mass of the polymer material. ;COPYRIGHT: (C)2011,JPO&INPIT

Библиографические данные: CN101805461 (A) — 2010-08-18

Bio-based composite material and preparation method and application thereof

Ссылка на эту страницу	CN101805461 (A) - Bio-based composite material and preparation method and application thereof
Изобретатель(и):	YONGSHAN DING; ZHENJIANG LI; PINGKAI OUYANG; ZHIQIANG TAO; HAIDONG XIA; YUCHENG ZHANG ±
Заявитель(и):	UNIV NANJING ±
Индекс(ы) по классификации:	- международной (МПК): C08K3/08 ; C08L1/02 ; C08L1/12 ; C08L23/06 ; C08L27/06 ; C08L5/08 ; C08L5/14 ; C08L61/06 ; C08L67/04 ; C08L97/02 - cooperative:
Номер заявки:	CN20101123678 20100315 Global Dossier
Номера приоритетных документов:	CN20101123678 20100315

Реферат документа CN101805461 (A)

The invention discloses a bio-based composite material and a preparation method and application thereof. The bio-based composite material comprises the following components in part by weight: 25 to 60 parts of cellulose, 5 to 40 parts of lignin, 0 to 8 parts of hemicellulose, 10 to 50 parts of binder and the balance of impurities. The preparation method for the bio-based composite material comprises the following steps: removing the hemicellulose; adding the binder; and forming. The bio-based composite material is applied to fields of construction, transportation, home and public accommodation. The bio-based composite material which is provided by the invention and does not comprise or comprises little hemicellulose not only easily improves the toughness of the material, but also strengthens the bending strength, the hardness and the wearing resistance, uses the crop by-product as the raw material and is environment-friendly. The adopted binder can be waste plastic, resin, metal and the like. The material is regenerative.

Библиографические данные: CN101747651 (A) — 2010-06-23

Preparation method of composite material of high polymer material and cellulose or/and lignin

Ссылка на эту	CN101747651 (A) - Preparation method of composite material of
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страницу [high polymer material and cellulose or/and lignin](#)
 Изобретатель(и): GUANGLIN HE; ZONGQIN JIN ±
 Заявитель(и): GUANGLIN HE; ZONGQIN JIN ±
 Индекс(ы) по классификации: - международной (МПК): [C08L1/02](#); [C08L101/00](#); [C08L23/06](#); [C08L23/12](#); [C08L25/06](#); [C08L27/06](#); [C08L61/06](#); [C08L67/02](#); [C08L69/00](#); [C08L97/02](#)
 - cooperative:
 Номер заявки: CN20091312004 20091222
 Номера приоритетных документов: CN20091312004 20091222

Реферат документа CN101747651 (A)

The invention discloses a preparation method of a composite material of a high polymer material and cellulose or/ and lignin, aiming to provide the preparation method of the composite material which does not contain a coupling agent and other compatilizers, has low production cost and has no pollution. The preparation method comprises the following steps: preparing a raw material containing the cellulose or/and the lignin into raw material powder of which the particle diameter is 60-260 mu m, and drying the powder until moisture content is less than or equal to 1%; and fully stirring, mixing and flashing high polymer true solution and the dried raw material powder at the flashing temperature of 60-300 DEG C, flashing pressure of 400-7000 Pa and flashing speed of 60-560 kg/h, and then extruding and shaping the obtained mixture by a twin screw extruder into the composite material. The method of the invention does not use the coupling agent or other compatilizers, the high polymer true solution is subject to unstable phase separation by flashing so as to form very fine nanoparticles; the nanoparticles and the cellulose or/and the lignin are firmly combined because of micromolecule effect and surface effect, thus greatly lowering production cost; and the product has low cost and no pollution.

Библиографические данные: KR20100030723 (A) — 2010-03-19

PLASTIC RESIN CONTAINING CARBONIZED CHAFF POWDER AND PRODUCING METHOD

Ссылка на эту страницу [KR20100030723 \(A\) - PLASTIC RESIN CONTAINING CARBONIZED CHAFF POWDER AND PRODUCING METHOD](#)
 Изобретатель(и): [KR] LEE JONG MYEON ±
 Заявитель(и): [KR] YOUANDI CO LTD ±
 Индекс(ы) по классификации: - международной (МПК): [C08J5/00](#); [C08K3/04](#); [C08L101/00](#); [C08L97/02](#)
 - cooperative:
 Номер заявки: KR20080089574 20080911 [Global Dossier](#)
 Номера приоритетных документов: KR20080089574 20080911

Реферат документа KR20100030723 (A)

PURPOSE: A plastic resin including carbonized chaff powder is provided to increase compatibility with plastic, heat resistance, fire retardant characteristic, conductivity and rub resistance by removing components including lignin and the moisture included in rice hulls.

CONSTITUTION: A method for manufacturing a plastic resin including carbonized chaff powder comprises the steps of: (S10) making carbonized material by burning rice hulls, pulverizing the rice hull carbonized material in 200~500 mesh to prepare rice hulls carbonized material powder; (S20) mixing 1~100.0 parts by weight of the rice hulls carbonized material powder with 1~50 parts by weight impact reinforcing agent and 1~100.0 parts by weight of rice hulls carbonized material; (S30) heating a mixture at 170~250 [deg.]C; and (S40) solidifying the mixture by cooling to make the solid in a chip form.

Библиографические данные: CN101698749 (A) — 2010-04-28

Wood-plastic composite material and prepration method thereof

Ссылка на эту страницу	CN101698749 (A) - Wood-plastic composite material and prepration method thereof
Изобретатель(и):	YONGMING FAN; JIANZHANG LI; CHAOQUN MEI ±
Заявитель(и):	UNIV BEIJING FORESTRY ±
Индекс(ы) по классификации:	- международной (МПК): C08K3/22 ; C08K3/26 ; C08K3/32 ; C08L23/06 ; C08L23/12 ; C08L27/06 ; C08L51/06 ; C08L55/02 ; C08L93/04 ; C08L97/02
	- cooperative:
Номер заявки:	CN20091237059 20091103
Номера приоритетных документов:	CN20091237059 20091103
Также опубликовано, как:	CN101698749 (B)

Реферат документа CN101698749 (A)

The invention discloses a wood-plastic composite material and a preparation method thereof, and the wood-plastic composite material comprises the following raw materials according to the mixing ratio by parts by weight: 30-80 parts of modified fiber powder; 15-80 parts of plastics; 2-10 parts of phase solvent; 2-10 parts of lubricant; 0-10 parts of stabilizer; 0.2-1.0 part of antioxidant; 5-15 parts of filler; and 2-20 parts of flame retardant. Lignin is utilized for modifying fiber powder, then composition with the plastics is carried out, and a finished-product material is formed by extrusion.; The preparation method can solve the problems of the compatibility of wood fibers with the thermoplastic plastics, the surface treatment technology of the raw materials by utilizing the lignin and the like, realize the comprehensive utilization of the lignin and the waste plastics, be capable of replacing wood, increase the additional value of the lignin and solve the utilization problem of the lignin wastes. The manufactured wood-plastic

composite material can significantly improve the mechanical performance, the tensile strength, the flexural strength and the impact resistance, and realize the industrial production of high-performance products, such as construction materials.

Библиографические данные: RU2008120446 (A) — 2009-11-27

METHOD OF PRODUCING PLATE COMPOSITE MATERIAL FROM LIGNOCELLULOSES

Ссылка на эту страницу	RU2008120446 (A) - METHOD OF PRODUCING PLATE COMPOSITE MATERIAL FROM LIGNOCELLULOSES
Изобретатель(и):	ANIKEENKO GEORGIJ NIKOLAEVICH, ; BENJUKH DMITRIJ NIKOLAEVICH
Заявитель(и):	ANIKEENKO GEORGIJ NIKOLAEVICH, ; BENJUKH DMITRIJ NIKOLAEVICH
Индекс(ы) по классификации:	- международной (МПК): B27K9/00 - cooperative:
Номер заявки:	RU20080120446 20080522
Номера приоритетных документов:	RU20080120446 20080522
Также опубликовано, как:	RU2404048 (C2)

Реферат документа RU2404048 (C2)

FIELD: process engineering. ^ SUBSTANCE: invention relates to treatment of vegetable lignocelluloses raw material to produce plate construction materials to be used in construction and furniture production. Vegetable lignocelluloses raw material with high content of lignin and hemicelluloses is treated for 15 s - 10 min by water steam at not over 1 MPa and 150-250C. Treatment by water steam is instantly terminated. Said vegetable lignocelluloses raw material thus treated is mixed with untreated fibrous vegetable lignocelluloses raw material. Content of vegetable lignocelluloses raw material treated by water steam in produced mix makes 2-60 wt %. Produced mix is formed into mats. Water is extracted from said mats. Vegetable lignocelluloses raw material treated by water steam can be dried to moisture content of 5-10%. Resultant matter is mixed with untreated vegetable lignocelluloses raw material. Mats are produced from obtained mix and subjected to hot pressing. To produced solid plate material. ^ EFFECT: lower production costs. ^ 5 cl, 3 ex

Библиографические данные: JP2009035582 (A) — 2009-02-19

RESIN COMPOSITION AND PREPARATION METHOD OF THE SAME

Ссылка на эту страницу [JP2009035582 \(A\) - RESIN COMPOSITION AND PREPARATION METHOD OF THE SAME](#)

Изобретатель(и): WATARIDO HIROKO; FUKAYA TARO; FUJIEDA SHINETSU; OYASATO YUMIKO ±

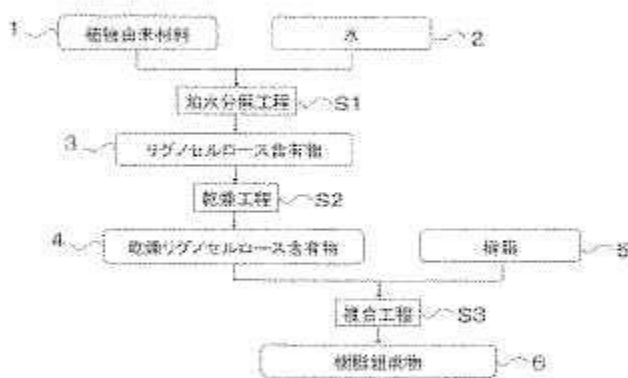
Заявитель(и): TOSHIBA CORP ±

Индекс(ы) по классификации: - международной (МПК): [B09B3/00](#); [C08L101/00](#); [C08L97/02](#); [A01N25/10](#); [A01N61/00](#); [A01P3/00](#)
- cooperative:

Номер заявки: JP20070198817 20070731 [Global Dossier](#)

Номера приоритетных документов: JP20070198817 20070731

Реферат документа JP2009035582 (A)



PROBLEM TO BE SOLVED: To provide a resin composition excellent in antibacterial property which is obtained from a plant-based material and a preparation method of the composition.

;SOLUTION: The resin composition and a preparation method of the composition are characterized in that the method includes a step of hydrolyzing a plant-based material 1 to obtain a lignocellulose-containing material 3 containing lignin and cellulose in a proportion of $1 \leq r \leq 10$ and a step of drying the lignocellulose-containing material 3 at 80[deg.]C or lower to obtain a resin composition containing a dry lignocellulose-containing material 4, wherein r is defined by $r=A/B$, and A and B represent parts by weight of lignin and cellulose, respectively.

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