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(54) Title: METHOD OF FORMING A RECONSTITUTED WOOD BLOCK



FIG. 4

(57) Abstract: A method of forming a reconstituted wood block can include providing a recovered wood having a high aspect ratio along wood grains of the recovered wood. The recovered wood can be radially crushed or obtained as strips of recovered veneer. The recovered wood can be pretreated to increase resin absorption to form a degreased wood. The degreased wood can then be dried sufficient to reduce a moisture content to produce a dried wood. The dried wood can be soaked in a resin solution to form a resin impregnated wood. The resin impregnated wood can be dried to reduce the moisture content without substantially curing the resin to form a dried resin impregnated wood. The dried resin impregnated wood can then be molded having wood fibers oriented in a non-random predetermined pattern substantially common direction and compacted to form an uncured molded wood. The pattern can be oriented along a substantially common direction or portions may be oriented transverse to others to obtain a knotted appearance. The uncured molded wood can then be cured to form the reconstituted wood block.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2009/043115**A. CLASSIFICATION OF SUBJECT MATTER****B27N 3/08(2006.01)i, B27K 5/04(2006.01)i**

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 8 : B27K 3/00~3/52; B27N 1/00~9/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean Utility models and Applications for Utility model since 1975 : IPC 8 as above

Japaneses Utility models and Applications for Utility models since 1975 : IPC 8 as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS (KIPO internal)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X/A	EP 873,829 A1 (CR&DO B.V.) 28 OCTOBER 1998. See Column 2, Line 40 - Column 3, Line 20 and Claims 1-17.	42-44/1-14, 18-41
X/A	JP 10-235620 A (JUKEN SANGYO CO., LTD.) 08 SEPTEMBER 1998. See Paragraph 0009 - Paragraph 0010, Claims 1-4 and Figure 1.	42-44/1-14, 18-41
X/A	EP 1,815,955 A1 (DECEUNINCK NV) 08 AUGUST 2007. See Paragraph 0018 - Paragraph 0023 and Claims 1-12.	42-44/1-14, 18-41
X/A	US 7,183,339 B2 (KUO C. SHEN et al) 27 FEBRUARY 2007 See Column 4, Line 26 - Column 7, Line 2 and Claims 1-14.	42-44/1-14, 18-41



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2009/043115**Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)**

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☒ Claims Nos.: 15-17, 45-47
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

Claims 15-17 are worded in reference to the chemical agent or the chemical treatment of claim 1. However, said the chemical agent and the chemical treatment have not been worded in claim 1. Claims 45-47 are worded in reference to the first portion of claim 43. However, said the first portion has not been worded in claim 43.
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2009/043115Patent document
cited in search reportPublication
datePatent family
member(s)Publication
date

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28.10.1998

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