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Barnes & Thornburg LLP (CH)			DILLON, DANIEL P	
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Please find below and/or attached an Office communication concerning this application or proceeding.

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Patent-ch@btlaw.com

DETAILED CORRESPONDENCE

Notice of Pre-AIA or AIA Status

The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

Information Disclosure Statement

The information disclosure statements (IDS) submitted on 2/8/2017 and 11/27/2017 have been considered by the examiner.

Claim Objections

Claim 16 objected to because of the following informalities:

-Line 3 of the claim reads "a first simulated" and should be corrected to "a second simulated"

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

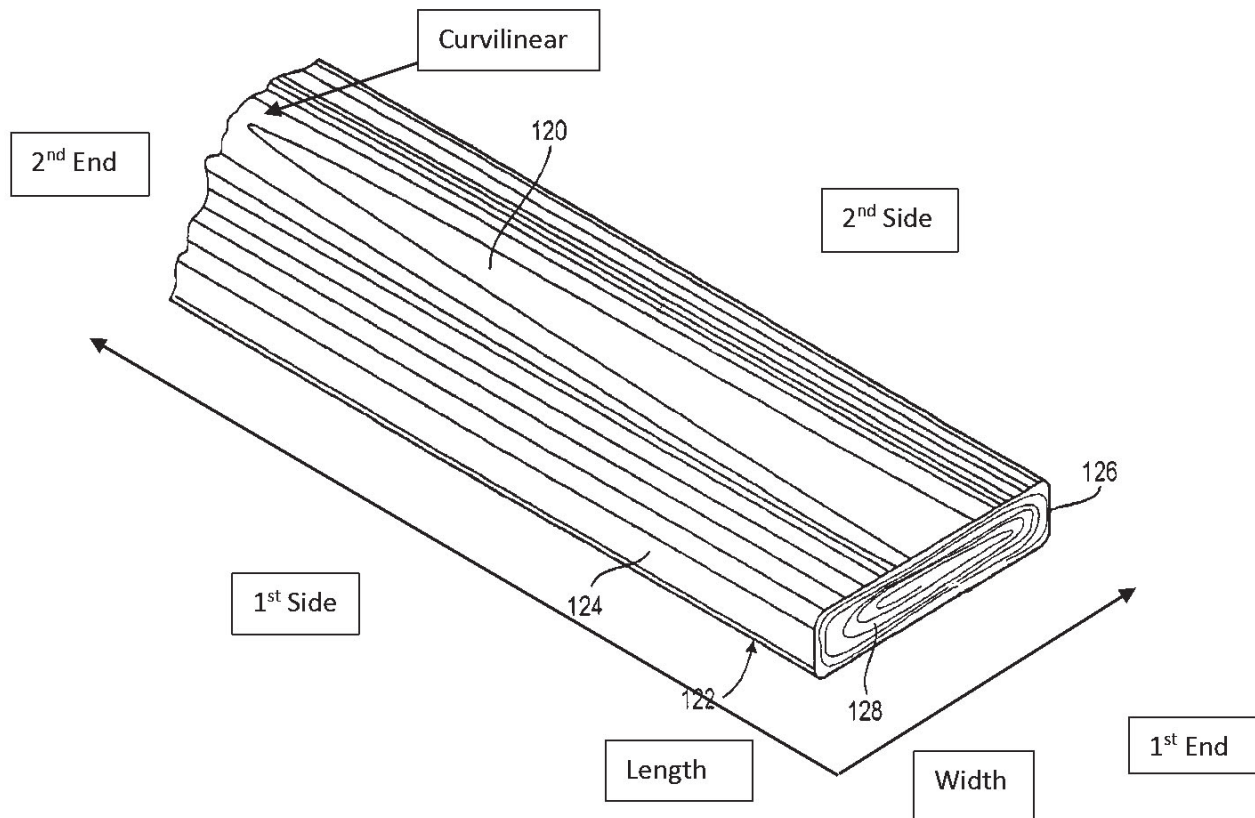
A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103 are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 3-10, and 12-16 are rejected under 35 U.S.C. 103 as being unpatentable over Rohatgi et al. (US 2003/0021915).

Regarding **claims 1, 10, and 16**, Rohatgi teaches composites of cellulosic fibers and polymers for the formation of wood-like boards (Pg. 1, Paragraph [0001]). Figure 3 shows a wood board formed from the composite shown below.



As shown, the board has a first end, a second end, a first, and a second side such that the sides, as defined by the examiner, define the width of the board and the ends define the length of the board with the core in between. The examiner defines the set of darkened lines as the first set of polymer layers and the whiter layers as the second set of polymer layers in that the darker lines have a different coloring than the whiter layers and that each of the layers extends in the length direction. Additionally, the layers alternate in the width direction of the board and the board may be imparted with curves ("curvilinear") as pointed out in the figure above along with the curve being *uninterrupted* at the curve.

Additionally, Rohatgi teaches the process of forming composites, such as the board above, by means of single extrusion or coextrusion either combining a first extruded sheet with a second or more in through a single extruder after the materials have been mixed forming the first and second extrudates (Pg. 5, Paragraph [0046]) or by means of forming a first extrudate, extruding that first extrudate, forming a second extrudate, extruding the second extrudate and combining the first and second extrudates or

groups of materials (Pg. 5, Paragraph [0047]). The methods of coextrusion would ultimately result in the formation of the two differing layers as shown in the figure above. As such, it would have been obvious that the formation of the composite as shown in the figure above would have been achieved by the methods of coextrusion as taught by Rohatgi thus resulting in two distinct colored layers as discussed above.

Additionally, regarding claim 16, Rohatgi teaches the composites may be used to make a variety of products including decking and fencing (Pg. 9, Paragraph [0078]). One of ordinary skill in the art would appreciate that decking and fencing requires the use of multiple boards coupled together to form the deck or the fencing.

Additionally, the terms *"generally" extending along the length direction* have been given the broadest reasonable interpretation such that the layers are shown as extending in the length direction of the boards.

Regarding **claims 3 and 4**, Rohatgi teaches the composites as discussed above with respect to claim 1. Additionally, the 1st end shown as #128 illustrates the two layers extending in the length direction and forming a burling grain pattern ("wood grain pattern") which may be seen wherever the board is cut ("exposed portion forms a burling grain pattern") (Pg. 6, Paragraph [0052]).

Regarding **claim 5**, Rohatgi teaches the composites as discussed above with respect to claim 1. Additionally, all sides of the decking product composite show a two-tone wood grain color ("at least one of the first and second sides of the board is embossed with a wood grain pattern") (Pg. 6, Paragraph [0052]).

Regarding **claims 6-8**, Rohatgi teaches the composites as discussed above with respect to claim 1. Additionally, the composite may include HDPE as the polymer along with foaming agents and UV inhibitors ("wherein the first and second sets of polymer layers are formed from high density

polyethylene” & “wherein the sets of polymer layers further includes one of a UV inhibitor and a foaming agent and further a foaming agent”) (Pg. 3, Paragraph [0036]).

Regarding **claim 9**, Rohatgi teaches the composites as discussed above with respect to claim 1. Additionally, one of ordinary skill would appreciate that the board as shown above would have a cross-section in the shape of a rectangle along the length direction.

Regarding **claims 12-14**, Rohatgi teaches the composites as discussed above with respect to claim 10. Additionally, the composite may include HDPE as the polymer along with foaming agents and UV inhibitors (“wherein the first and second sets of polymer layers are formed from high density polyethylene” & “wherein the sets of polymer layers further includes one of a UV inhibitor and a foaming agent and further a foaming agent”) (Pg. 3, Paragraph [0036]).

Regarding **claim 15**, Rohatgi teaches the composites as discussed above with respect to claim 10. Additionally, one of ordinary skill would appreciate that the board as shown above would have a cross-section in the shape of a rectangle along the length direction.

Claims 2 and 11 are rejected under 35 U.S.C. 103 as being unpatentable over Rohatgi et al. (US 2003/0021915) in view of Franco et al. (US 2004/0038002).

Regarding **claims 2 and 11**, Rohatgi teaches the composites as discussed above with respect to claims 1 and 10. Additionally, the board as shown above illustrates the two-tone finish and the three-dimensional embossment (Pg. 6, Paragraph [0052]; Pg. 7, Paragraph [0064]) that illustrates a wood grain-like or “streaking” appearance of the invention taught by Rohatgi (PG. 2, Paragraph [0012]).

Rohatgi is silent with respect to the darker lines in the figure above, which the examiner recognizes as the first set of polymer layers, being generally thinner than the whiter areas in the figure above, which the examiner considers as the second set of polymers

Franco teaches an extruded wood imitation component having contrasting veins throughout the core and the outer surfaces of the component (Pg. 1, Paragraph [0001]). The veins are incorporated in the component in order to further provide the simulation of natural wood (Pg. 2, Paragraph [0016]; Fig. 1). One of ordinary skill in the art would appreciate that the veins are thinner than the other portions of the component.

As such, it would have been obvious to one of ordinary skill in the art before the filing of the invention to form the composites that form decking made by means of coextrusion to form a composite similar to the one shown above with respect to claims 1 and 10 as taught by Rohatgi, such that the darker areas are formed as veins in order to further provide the simulation of natural wood as taught by Franco in that one of ordinary skill in the art would appreciate that the darker areas formed as veins would be “generally” thinner than the whiter portions of the figure discussed above with respect to claims 1 and 10.

Additionally, the terms “*generally*” *thinner* have been given the broadest reasonable interpretation such that the first set of polymer layers are thinner than the second set of polymer layers.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL P DILLON whose telephone number is (571)270-5657. The examiner can normally be reached on Mon-Fri; 8 AM to 5 PM.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at <http://www.uspto.gov/interviewpractice>.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MARIA V EWALD can be reached on 571-272-8519. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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