

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte NATALINO ZANCHETTA
and SHAIK MOHSEEN

Appeal 2007-1382
Application 10/334,871
Technology Center 1700

Decided: May 11, 2007

Before THOMAS A. WALTZ, PETER F. KRATZ, and
LINDA M. GAUDETTE, *Administrative Patent Judges*.

WALTZ, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on an appeal from the Primary Examiner's rejection of claims 1 through 14, which are the only claims pending in this application. Although the action appealed from was a non-final rejection, we have jurisdiction pursuant to 35 U.S.C. §§ 6 and 134 since these claims have been twice presented and rejected. *See Ex parte Lemoine*, 46 USPQ2d 1420, 1423 (Bd. Pat. App. & Int. 1994).

According to Appellants, the invention is directed to a vapor retardant hybrid polyolefinic multi-laminate roof underlayment (Br. 5). Further details of the invention may be gleaned from illustrative independent claim 1 as reproduced below:

1. A vapor retardant underlayment for use in roofing applications comprising:

a laminate having at least three layers,

an upper layer of extruded film, the film being made of a material selected from the groups consisting of: high density polyethylene film and low density polyethylene film,

a middle layer of lightweight scrim,

a bottom layer of spun bonded polypropylene fabric,

the middle layer being attached to said upper layer by a first adhesive layer, and the middle layer and the bottom layer being connected by a second adhesive layer.

The Examiner has relied upon the following references as evidence of obviousness:

Wiercinski	US 5,687,517	Nov. 18, 1997
Ahluwalia	US 5,965,257	Oct. 12, 1999
Huffines	US 2002/0106959 A1	Aug. 8, 2002
Hubbard	US 2003/0219564 A1	Nov. 27, 2003
Jones	US 2004/0016502 A1	Jan. 29, 2004

ISSUES ON APPEAL

Claims 1-4, 6, 7, and 9 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Jones in view of Wiercinski (Answer 3).

Claim 8 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Jones in view of Wiercinski and Ahluwalia (Answer 5).

Claims 5 and 10-14 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Jones in view of Wiercinski and Hubbard or Huffines (*id.*).

Appellants contend that Jones is not “within the scope of the relevant prior art,” that the claimed term “vapor retardant” renders the claimed product structurally different from the product of Jones, and that the combination of Jones and the other prior art as proposed by the Examiner would render Jones’ product inoperable and unsatisfactory for its intended purpose (Br. 8-14).

Appellants also contend that the claimed term “vapor retardant” should be construed by reference to a technical dictionary, which limits the term to a vapor transmission of “roughly” 11.5 g/square meter per 24 hours while Jones discloses materials with a minimum vapor transmission of 150 g/square meter per 24 hours (Reply Br. 1-2).

The Examiner contends that Jones is directed to the field of roofing underlayment (Answer 3).

The Examiner contends that Appellants fail to “clearly and sufficiently” define “vapor retardant” in the Specification, and thus the Examiner construes this term by its common and contemporary meaning to mean that vapor is impeded in some degree (Answer 8). Therefore, the Examiner construes this claimed term as reading on the vapor transmission rates of Jones, and does not import any restrictive values from the Specification into the claims (Answer 8-9).

Accordingly, the issues presented on the record in this appeal are as follows: (1) is Jones “within the scope of the relevant art,” i.e., is Jones analogous art? ; (2) does the proper claim construction for the term “vapor retardant” read on the product disclosed by Jones?; and (3) does the combination of references as proposed by the Examiner render Jones inoperable and unsatisfactory for its intended purpose?

We determine that the Examiner has established that Jones is analogous prior art, that the term “vapor retardant” as correctly construed is at least obvious in view of the teachings of Jones, and the combination of references does not render Jones inoperable or unsatisfactory for its intended purpose. Therefore, we determine that the Examiner has established a prima facie case of obviousness in view of the reference evidence, which prima facie case has not been adequately rebutted by Appellants’ arguments. Accordingly, we AFFIRM all rejections presented in this appeal essentially for the reasons stated in the Answer, as well as those reasons set forth below.

OPINION

We determine the following factual findings from the record in this appeal:

- (1) Jones discloses a breathable material for use in various applications, including housewrap materials and roofing underlayment (¶ [0012]);
- (2) Jones teaches that housewrap materials must be permeable to water vapor to allow the vapor to escape from the wall, thus preventing water damage or growth of molds on the walls, but

must be sufficiently impermeable to air and liquids to insulate the wall against wind and rain (¶ [0003]);

- (3) Jones discloses many combinations of multi-layer laminates on the fabric layer, including various crystalline polymers, fillers, and laminate films of low density polyethylene, medium density polyethylene, linear low density polyethylene, and polypropylene (¶¶ [0014]-[0016] and [0021]; *see Example 1 in ¶ [0034]*);
- (4) Jones teaches that the crystalline polymer is rendered microporous by a relatively small amount of stretching (¶¶ [0018] and [0024]);
- (5) Jones teaches that the “breathability of the materials according to the invention may be controlled as desired for the intended application of the materials,” and when employed as housewrap materials, the materials suitably have a water vapor transmission rate greater than 150 g/square meter per 24 hours (¶ [0023]);
- (6) Wiercinski teaches that the function of the waterproofing membrane underlayment is to seal around roofing fasteners and to protect against damage from ice dams and wind-driven rain (col. 1, ll. 25-37).¹

Whether a prior art reference is “analogous” is a question of fact. *See In re Clay*, 966 F.2d 656, 658, 23 USPQ2d 1058, 1060 (Fed. Cir. 1992). Determination that a reference is “relevant prior art” or analogous prior art is

¹ We do not list here any other factual findings from the Wiercinski, Ahluwalia, Huffines, and Hubbard references since Appellants do not contest or dispute any of the Examiner’s factual findings from these references (*see* the Brief and Reply Brief in their entirety, especially Br. 7-8). Accordingly, we adopt the Examiner’s undisputed factual findings from these references as found in the record.

two-fold; first it must be determined if the reference is within the field of the inventor's endeavor; if it is not, we determine whether the reference is reasonably pertinent to the particular problem with which the inventors were involved. *See In re GPAC Inc.*, 57 F.3d 1573, 1577, 35 USPQ2d 1116, 1120 (Fed. Cir. 1995); and *In re Wood*, 599 F.2d 1032, 1036, 202 USPQ 171, 174 (CCPA 1979).

During prosecution before the Examiner, the language of the claims is given its broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account any definitions or other description contained in the specification. *See In re Morris*, 127 F.3d 1048, 1054, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997). Particular embodiments appearing in a specification will not be read into the claims when the claim language is broader than such embodiments. *See Electro Med. Sys. S.A. v. Cooper Life Sciences Inc.*, 34 F.3d 1048, 1054, 32 USPQ2d 1017, 1021 (Fed. Cir. 1994). The claim should only be limited based on an express disclaimer of a broader definition. *See In re Bigio*, 381 F.3d 1320, 1325, 72 USPQ2d 1209, 1210-11 (Fed. Cir. 2004).

Applying the preceding legal principles to the factual findings in the record of this appeal, we determine that Jones is analogous prior art. We determine that Appellants' field of endeavor is roofing underlays, which is the same field of endeavor disclosed by Jones. *See* the Specification 1:7-8, where Appellants disclose that “[m]ore particularly, the present invention is the field of ‘roofing underlays,’” and factual finding (1) listed above. We find no reason to “narrowly define the field” as urged by Appellants (Br. 9), especially when Appellants expressly define the

field as “roofing underlays” (Specification 1:7-8). Accordingly, we do not need to consider the second prong of the test for analogous prior art (relevance to the problem facing Appellants), and determine that Jones is analogous prior art.

Applying the preceding legal principles to construe the contested limitation of “vapor retardant,” we determine that Appellants have not defined this term or set forth any guidelines or interpretation of this term in the Specification (*see* the Answer 8). We agree with the Examiner that the only description of water vapor transmission rate occurs on page 11 of the Specification where Appellants state that “[p]referably, the laminate will also have the following … water vapor transmission value of no greater than 0.50 grams per square meter when tested according to ASTM E96” (*see also* Answer 8). We determine that the Specification has no express disclaimer of a higher water vapor transmission value and find no reason to limit the claimed term “vapor retardant” to the *preferred* value in the Specification. Accordingly, giving the disputed term its broadest reasonable meaning as it would ordinarily be used, we construe this term to include materials which impede the progress of water vapor through the material, and can include materials with water vapor transmission values greater than 0.50 grams per square meter when tested according to ASTM E96 (Answer 8).

We are not convinced of a different meaning from Appellants’ arguments in the Reply Brief. First, we note that the *ASHRAE Fundamentals Handbook 2001*, 23.17 (Baird, ed., American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. 2001), relied on by Appellants (Reply Br. 2), has not been made of record. Second, even if

of record, Appellants have not established that the “vapor retarder” discussed in the ASHRAE Handbook is equivalent to the “vapor retardant” roofing underlayment material of the claimed invention. Third, Appellants only state their “belief” regarding what “1 perm” is equivalent to in terms of water vapor transmission rate, with no supporting evidence.

Appellants argue that modifying Jones to be “vapor retardant” would render it unsatisfactory for its intended purpose since Jones teaches stretching the structure to make the coating microporous (Br. 8:12-14). This argument is not persuasive. We note that Jones teaches stretching of the crystalline polymer to render the material microporous or “breathable” (*see* factual finding (4) listed above). However, this degree of “breathability” is for material used as *housewrap* material, where it is necessary that the material be permeable to water vapor, and have a water vapor transmission rate of greater than 150 grams per square meter per 24 hours (*see* factual findings (2) and (5) listed above). We determine that it was known in the art that roofing underlayment material should be somewhat resistant to water vapor (*see* factual finding (6) listed above), and that Jones teaches that the “breathability of the materials according to the invention may be controlled as desired for the intended application” (*see* factual finding (5) listed above). Accordingly, we determine that it would have been well within the ordinary skill in this art to modify the water vapor transmission rate of the materials of Jones depending on the desired application, i.e., lessening the water vapor transmission for material used in roofing underlayment to help in its protective barrier function.

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For the foregoing reasons and those stated in the Answer, we determine that the Examiner has established a prima facie case of obviousness based on the reference evidence, which prima facie case has not been adequately rebutted by Appellants' arguments. Therefore, we affirm all rejections on appeal.

The decision of the Examiner is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv)(2006).

AFFIRMED

sld/ls

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