

The opinion in support of the decision being entered today is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte CLIFFORD A. LOWE

Appeal 2007-1946
Application 10/688,583
Technology Center 1700

Decided: August 22, 2007

Before CHUNG K. PAK, CHARLES F. WARREN, and
JEFFEREY T. SMITH, *Administrative Patent Judges*.

PAK, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on an appeal under 35 U.S.C. § 134 from the Examiner's refusal to allow claims 13, 5, 7 through 13 and 19 through 29, all of the claims pending in the above-identified application. We have jurisdiction pursuant to 35 U.S.C. § 6.

STATEMENT OF THE CASE

The subject matter on appeal is directed to a multilayer graphic article useful for, *inter alia*, communicating a message or advertisement in both indoor and outdoor environments (Specification 1). The multilayer graphic article can be adhered to a floor for the purpose of advertising consumer goods or providing directions or warnings (*id*). Further details of the appealed subject matter are recited in representative claims 19 and 25 reproduced below:

19. A multilayer graphic article comprising:

- a) a transparent outer protective layer,
- b) an outer adhesive layer, optionally protected by a release liner, and
- c) disposed between said outer layers, a fabric matrix comprising upper and lower surfaces and bearing on its upper surface a printed image,

wherein said outer protective layer is disposed on and directly contacts said printed image and wherein said outer adhesive layer is directly disposed on said lower surface of said fabric matrix.

25. A multilayer graphic article comprising:

- a) a transparent outer protective layer comprising a textured upper surface,
- b) an outer adhesive layer, optionally protected by a release liner, and
- c) disposed between said outer layers, a fabric matrix comprising upper and lower surfaces, said upper surface bearing a primer layer derived from a composition comprising an acrylic or urethane resin, said lower surface bearing a primer layer derived from a composition

comprising a latex or polyurethane, said primed upper surface of said fabric bearing a printed image,

wherein said outer protective layer is disposed on and directly contacts said printed image and wherein said outer adhesive layer is directly disposed on said primed lower surface of said fabric matrix.

According to page 3 of the Specification:

The matrices or supports in the practice of this invention are fabrics. Fabrics include those textile structures comprising mechanically interlocked fibers or filaments. These fibers or filaments can be woven or non-woven.

The Specification at pages 4 and 5 also defines the claimed primer layer as follows:

Depending on the fabric employed, it may be advantageous to prime the fabric prior to printing thereon or disposing the graphic layer thereon. It may also be advantageous to prime the fabric prior to adhering the adhesive layer thereto. In some embodiments, it may be advantageous to employ a different primer on each side of the fabric, or combination of primers. As known by those skilled in the art, there are a multitude of primer compositions that can be employed to prime fabrics. The preferred primers include those that provide a barrier that will prevent the adhesive or the materials employed in creating the graphic or adhesive from penetrating through the fabric in a deleterious manner. The preferred primers may also serve to activate the surface of the fibers so as to facilitate and improve the printing or placement of a graphic on the fabric or allow the adhesive to form a stronger bond with the fabric.

....

Useful primers are commercially available. One that has been found to be particularly useful is a self-crosslinking acrylic latex (medium hardness) that is compounded with TiO₂, white clay, and thickeners. This primer is very similar to white paint.

As evidence of unpatentability of the claimed subject matter, the Examiner has relied upon the following references:

Ho	US 5,468,532	Nov. 21, 1995
Mueller	US 6,180,228 B1	Jan. 30, 2001
Kittel	US 6,228,486 B1	May 8, 2001

The Examiner has rejected the claims on appeal as follows¹:

- 1) Claims 3, 8, 11, 12, 19, and 20 through 24 under 35 U.S.C. § 102(b) as anticipated by the disclosure of Mueller;
- 2) Claims 5, 7 through 9, 11, 12, 19, and 20 under 35 U.S.C. § 102(b) as anticipated by the disclosure of Kittel;
- 3) Claims 5, 20, and 25 through 29 under 35 U.S.C. § 103(a) as unpatentable over the disclosure of Mueller;
- 4) Claim 13 under 35 U.S.C. § 103(a) as unpatentable over the combined disclosures of Mueller and Ho; and
- 5) Claim 10 under 35 U.S.C. § 103(a) as unpatentable over the disclosure of Kittel.

The Appellant appeals from the Examiner's decision rejecting the claims on appeal under 35 U.S.C. §§ 102(b) and 103(a).

¹ According to the Examiner, “[t]he rejection of claims 13, 25 and 29 in view of Kittel et al. (US 6,228,486) have [sic, has] been withdrawn....” (Answer 2).

ISSUES

1. Has the Examiner demonstrated that the claimed fabric matrix includes a woven or nonwoven scrim layer or a layer of fibrous material of the reinforced base layer taught by Mueller within the meaning of 35 U.S.C. § 102(b)?

2. Has the Examiner demonstrated that the claimed protective layer embraces Kittel's primer and abrasion resistant layers within the meaning of 35 U.S.C. § 102(b)?

3. Has the Examiner demonstrated that Mueller would have suggested employing the claimed specific primer layers directly on the upper and lower surfaces of the fabric matrix of the multilayer graphic article recited in claim 25 within the meaning of 35 U.S.C. § 103?

4. Has the Examiner demonstrated that Mueller and Ho would have suggested an outer protective layer having the claimed thickness, i.e., about 2 mils to about 15 mils?

FACTS, PRINCIPLES OF LAW, AND ANALYSES

I. ANTICIPATION

Under 35 U.S.C. § 102, to establish anticipation, a single prior art reference must describe, either expressly or under the principles of inherency, each and every element of a claimed invention. *See, e.g., In re Spada*, 911 F.2d 705, 708, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990).

I(A). Rejection of Claims 3, 8, 11, 12, 19, and 20 through 24 Based on Mueller

There is no dispute that Mueller teaches a multilayer graphic article for an outdoor advertising or display, comprising a reinforced base layer, a printed image layer on the upper surface of the base layer, an outer adhesive layer directly on the lower surface of the base layer, and a transparent outer protective layer covering the printed image layer. (*Compare*, e.g., Answer 3-4 with Br. 11-15.)

Therefore, the dispositive question is whether the claimed fabric matrix encompasses the reinforced base layer taught by Mueller within the meaning of 35 U.S.C. § 102(b). On this record, we answer this question in the affirmative.

During prosecution of the application, the Examiner must give the verbiage of the claims the broadest reasonable interpretation in light of the Specification. *In re Morris*, 127 F.3d 1048, 1054-056, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997); *see also Philips v. AWH Corp.*, 415 F.3d 1303, 1313, 75 USPQ2d 1321, 1326-327(Fed. Cir. 1998)(*en banc*) (“[T]he person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim, but in the context of the entire patent, including the specification.... The specification is ‘the single best guide to the meaning of a disputed term,’ and that the specification ‘acts as a dictionary when it expressly defines terms used in the claims or when it defines term by implication.’”) As indicated *supra*, the Specification at page 3 states that:

The matrices or supports in the practice of this invention are fabrics. Fabrics include those textile structures comprising mechanically interlocked fibers or filaments. These fibers or filaments can be woven or non-woven.

Claim 9, which further limits the subject matter recited in claim 19, also recites that the claimed “fabric matrix includes filaments or fibers.” We find that Mueller teaches at column 5, lines 34-44:

If high traffic levels are expected, to provide more convenient removability from the substrate, or to enhance compatibility with an adhesive layer, a surface of the base layer 16, or selected portions thereof, can be reinforced. For example, a thin metal or foil layer, *a woven or nonwoven scrim layer, or a layer of fibrous material (not shown in FIG. 1) can be applied to a surface of the base layer with a suitable adhesive....*[Emphasis added.]

It follows that the claimed fabric matrix includes Mueller’s “woven or nonwoven scrim layer” or “layer of fibrous material” which is attached to the lower surface of the base layer for the purpose of improving its compatibility with the adhesive layer. It is important to note that the claims on appeal do not exclude the polymeric part of the reinforced base layer taught by Mueller. *See, e.g., In re Baxter, 656 F.2d 679, 686-87, 210 USPQ 795, 802-03 (CCPA 1981)*(“As long as one of the monomers in the reaction is propylene, any other monomer may be present, because the term ‘comprise’ permits the inclusion of other steps, elements, or materials.”)

Accordingly, we concur with the Examiner that Mueller renders the subject matter defined by claims 3, 8, 11, 12, 19, and 20 through 24 anticipated within the meaning of 35 U.S.C. § 102(b).

1(b). Rejection of Claims 5, 7 through 9, 11, 12, 19, and 20 Based on Kittel

There is no dispute that Kittel describes a thermal transfer laminate comprising a first or core layer made of the claimed fabric matrix (112 or 212), an underlying adhesive layer (118 or 230), an image printing layer (120 and/or 220) an overlying adhesive promoting or primer layer (130 and/or 135) and an abrasion resistant transparent coating layer (140) over the primer (130 and/or 135). (*Compare* Answer 5 with Br. and Reply Br. in their entirety.) Kittel does not teach placing the abrasion resistant layer directly on the image printing layer. However, the Examiner takes the position that Kittel teaches placing an outer protective layer directly on the image printing layer (Answer 5). According to the Examiner, the claimed protective layer includes both the primer layer and the abrasion resistant layer taught by Kittel (*id*).

The dispositive question is, therefore, whether the claimed transparent outer protective layer includes both the primer layer and the image resistant layer taught by Kittel. On this record, we answer this question in the negative.

The Specification distinguishes the claimed transparent outer protective layer from the claimed primer layer (Specification 4-7). The Specification also indicates that the primer layers are placed directly over the claimed fabric matrix, not over an image printing layer, to “prevent the adhesive or the materials employed in creating the graphic...from penetrating through the fabric in a deleterious manner.” (Specification 2, 4, and 5). Finally, claim 19 calls for a single outer protective layer different from a primer layer directly on an image printing layer. (*See, e.g.*, claims 19

and 20). Thus, we determine that the Examiner’s interpretation of the claimed outer protective layer as being inclusive of a primer layer is unreasonable and inconsistent with the Specification and is contrary to the plain meaning of the words in the claims on appeal.

Accordingly, we concur with the Appellant that Kittel did not render the subject matter defined by claims 5, 7 through 9, 11, 12, 19, and 20 anticipated within the meaning of 35 U.S.C. § 102(b).

2. OBVIOUSNESS

Under 35 U.S.C. § 103, the factual inquiry into obviousness requires a determination of: (1) the scope and content of the prior art; (2) the differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) secondary consideration (e.g., unexpected results). *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17-18, 148 USPQ 459, 467(1966). “[A]nalysis [of whether the subject matter of a claim would have been obvious] need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *KSR Int’l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1740-741, 82 USPQ2d 1385, 1396 (2007) quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336-337 (Fed. Cir. 2006); see also *DyStar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 464 F.3d 1356, 1361, 80 USPQ2d 1641, 1645 (Fed. Cir. 2006)(“The motivation need not be found in the references sought to be combined, but may be found in any number of sources, including common knowledge, the prior art as a whole, or the nature of the problem itself.”); *In re Bozek*, 416 F.2d 1385,

1390, 163 USPQ 545, 549 (CCPA 1969)(“Having established that this knowledge was in the art, the examiner could then properly rely, as put forth by the solicitor, on a conclusion of obviousness ‘from common knowledge and common sense of the person of ordinary skill in the art without any specific hint or suggestion in a particular reference.’”). The analysis supporting obviousness, however, should be made explicit and should “identify a reason that would have prompted a person of ordinary skill in the art to combine [known] elements” in the manner claimed. *KSR*, 127 S. Ct. at 1731, 82 USPQ2d at 1389.

2(A). Rejection of Claim 5, 20, and 25 through 29 Based on Mueller

The Examiner refers to adhesive layers taught by Mueller as being corresponded to the claimed primer layer (Answer 5-6). The dispositive question is, therefore, whether the claimed primer layers embrace the adhesive layers taught by Mueller. On this record, we answer this question in the negative.

As is apparent from pages 4-5 of the Specification, the claimed primer layers are different from adhesive layers. Indeed, both the Specification and Kittel (one of the prior art relied upon by the Examiner) distinguish primers from adhesives.

Accordingly, we concur with the Appellant that the Examiner has not demonstrated that Mueller would have rendered the subject matter of claims 5, 20, and 25 through 29 obvious to one of ordinary skill in the art within the meaning of 35 U.S.C. § 103.

2(B). Rejection of Claim 10 Based on Kittel

As indicated *supra*, Kittel does not teach placing its abrasion resistant (protective) layer directly on an image printing layer. However, on this record, we do not find any reason proffered by the Examiner, which would have prompted one of ordinary skill in the art to employ Kittel's abrasion resistant layer directly on an image printing layer.

Accordingly, we determine that the Examiner has not established that Kittel would have rendered the subject matter of claim 10 obvious to one of ordinary skill in the art within the meaning of 35 U.S.C. § 103.

2(C). Rejection of Claim 13 Based on Mueller and Ho

The Appellant has not disputed the Examiner's determination that Mueller and Ho would have suggested to one of ordinary skill in the art to employ the claimed thickness to Mueller's protective layer within the meaning of 35 U.S.C. § 103. (*Compare* Answer 6-7 with Br. and Reply Br. in their entirety.) Indeed, Ho, which teaches the claimed thickness for a protective layer as correctly found by the Examiner, is referred to at column 6, lines 55-66, of Mueller. Moreover, from our perspective, utilizing a protective coating layer having appropriate thicknesses, including those claimed, based on protective needs is well within the ambit of one of ordinary skill in the art. *See, e.g., In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980) ("[D]iscovery of an optimum value of a result effective variable in a known process is ordinarily within the skill of the art.")

Accordingly, we concur with the Examiner that Mueller and Ho would have rendered the subject matter defined by claim 13 obvious to one of ordinary skill in the art within the meaning of 35 U.S.C. § 103.²

CONCLUSION

In summary:

- 1) The rejection of claims 3, 8, 11, 12, 19, and 20 through 24 under 35 U.S.C. § 102(b) based on Mueller is affirmed;
- 2) The rejection of claims 5, 7 through 9, 11, 12, 19, and 20 under 5 U.S.C. § 102(b) based on Kittel is reversed;
- 3) The rejection of claims 5, 20, and 25 through 29 under 35 U.S.C. § 103(a) based on Mueller is reversed;
- 4) The rejection of claim 13 under 35 U.S.C. § 103(a) based on Mueller and Ho is affirmed; and
- 5) The rejection of claim 10 under 35 U.S.C. § 103(a) based on Kittel is reversed.

ORDER

The decision of the Examiner is affirmed-in-part.

² In the event of further prosecution, the Examiner is advised to determine whether Mueller alone, or with other prior art, affects the patentability of the subject matter of claim 10. In this regard, we take official notice that polyester, polyamides and polyaramids are conventional fabric materials, i.e. conventional fibrous materials.

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

AFFIRMED-IN-PART

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