

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

Paper No. 26

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte KLAUS-PETER HERZOG
and
GUNTHER BAATZ

Appeal No. 2004-0027
Application No. 09/513,089

ON BRIEF

Before KIMLIN, WALTZ, and TIMM, *Administrative Patent Judges*.

TIMM, *Administrative Patent Judge*.

DECISION ON APPEAL

This appeal involves claims 5 and 6, which are all of the claims pending in this application. We have jurisdiction over the appeal pursuant to 35 U.S.C. § 134.

INTRODUCTION

Claims 5 and 6 are directed to a process of flame laminating a textile strip to a hydrophilic polyester-polyurethane foam. The claims read as follows:

5. A continuous process for the production of a flame-laminated textile foamed material composite comprising

- (1) melting the surface of a foamed material by flaming with a gas flame burner bar,
- (2) applying a textile strip material onto the melted surface of the foamed material, and
- (3) pressing the combined textile strip material and foamed material together to form a continuous bond between the melt formed on the surface of the foamed material and the textile strip material,

wherein the foamed material comprises a hydrophilic polyester-polyurethane foam consisting of the reaction product of:

- (a) at least one polyisocyanate,
with
- (b) at least one polyester polyol containing at least two hydroxyl groups and having an average molecular weight in the range of from more than 700 to 10,000,
- (c) at least one ethoxylated polyether polyol which contains at least two hydroxyl groups, has a molecular weight of more than 700, a functionality of from 2 to 6, and which has a degree of ethoxylation greater than 30% by weight, and
- (d) optionally, at least one compound containing at least two active hydrogen atoms and having an average molecular weight within the range from 32 to 700,

and

- (e) catalysts, water and/or foaming agents,
and
- (f) optionally, adjuvant substances and additives.

6. The process of Claim 6, wherein (3) the pressing is achieved via a pair of rotating rollers.

The Examiner maintains rejections under 35 U.S.C. § 103(a) and relies upon the following prior art references as evidence of obviousness:

Dickey	3,057,766	Oct. 9, 1962
Codos	3,131,105	Apr. 28, 1964
King	3,239,399	Mar. 8, 1966
Richter et al. (Richter)	3,961,629	Jun. 8, 1976
Wilson	5,719,201	Feb. 17, 1998

Admitted Prior Art, specification, p. 2, ll. 10-31 (Admitted Prior Art).

Claim 5 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Wilson in view of Richter and either one of the Admitted Prior Art or Dickey. To reject claim 6, the Examiner adds either one of Codos or King.

We affirm and in so doing incorporate by reference the findings of fact and conclusions of law advanced by the Examiner in the Answer. We add the following primarily for emphasis.

OPINION

Claim 5 is directed to the flame-lamination of a textile strip onto a hydrophilic polyester-polyurethane foam material. There are two important aspects to this claim: (1) the composition of the hydrophilic polyester-polyurethane foam and (2) the steps of flame-laminating the foam to a textile strip material. The Examiner finds that Wilson describes a hydrophilic polyester-polyurethane foam meeting the requirements of claim 5 (Answer, p. 4). The Examiner acknowledges that Wilson does not suggest flame-laminating the foam to a textile strip, but cites

evidence that the flame-laminating technique was known in the art for adding strength (Answer, pp. 5-6 citing Richter, the Admitted Prior Art, and Dickey). Based on the evidence, the Examiner concludes that it would have been obvious to one of ordinary skill in the art to flame-laminate a textile strip to the foam of Wilson to add strength (Answer, pp. 6-7).

Appellants argue that, in order to combine the teachings of the references in the manner necessary to “arrive at” the presently claimed invention, it is required that one of ordinary skill in the art modify the hydrophilic isocyanate-based foam of Wilson by omitting the superabsorbent material Wilson describes as a component thereof from this foam (Brief, p. 4). It is Appellants’ position that the superabsorbent material is critical to the foams of Wilson (*Id.*). Appellants further argue that even when considering the Wilson reference in combination with the Richter reference, a logical basis for the modification of the Wilson reference is not found because the combination would include a thin coating of a surfactant as taught by Richter and such surfactant is not required by the presently claimed invention (Brief, pp. 6-7). Appellants further urge that it is improper for the Examiner to rely upon the disclosure of flame-lamination techniques in the specification as an “admission” and that substituting Dickey for the “admission” adds nothing to the rejection (Brief, pp. 7-8).

Appellants have not convinced us of reversible error on the part of the Examiner.

As an initial matter, Appellants’ first argument, i.e., that in order to “arrive at” the invention, the superabsorbent material described by Wilson must be omitted, assumes that the claim requires such an omission. The Examiner’s conclusion of obviousness is based on the

finding that the hydrophilic polyester-polyurethane described by Wilson meets the requirements of the claim: No omission of the superabsorbent polymer described by Wilson is necessary. This is because part (f) of claim 5, which allows the inclusion of “adjuvant substances and additives,” allows for the inclusion of the superabsorbent material described in Wilson (Answer, p. 5 and pp. 8-9). The real question is, therefore: Is the Examiner’s interpretation of the phrase “adjuvant substances and additives,” as used in the claim, reasonable? *See In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1028-29 (Fed. Cir. 1997).

We conclude that the Examiner’s interpretation is reasonable in light of the evidence. “When examining claims for patentability, claims are interpreted as broadly as is reasonable and consistent with the specification.” *In re Thrift*, 298 F.3d 1357, 1364, 63 USPQ2d 2002, 2006 (Fed. Cir. 2002). In determining that the interpretation is consistent with the specification, the Examiner points to the discussion in the specification at page 7, lines 25-27. Here the specification states that:

Other adjuvant substances and additives are optionally added in order to influence other properties. Examples thereof include flame retardents, emulsifiers, dispersing agents, adjuvant substances to improve the ease of punching out the material or antioxidants to prevent discoloration of the core.

This portion of the specification provides no express definition of “adjuvant substances and additives” nor does it expressly disclaim any ordinary and accustomed meaning of the terms. The specification merely indicates that adjuvant substances are “added to influence other properties” and provides some examples of such substances. We note that “adjuvant” is being

used in the claim and specification as an adjective. The ordinary and accustomed meaning of the adjective form of “adjuvant” is: “serving to aid or contribute: AUXILIARY.”¹ The meaning adopted by the Examiner comports with the ordinary meaning of the term and is consistent with the usage of the term in the specification. Appellants provide no convincing basis to interpret the phrase in a contrary manner.

Our reviewing court has counseled the PTO to avoid the temptation to limit broad claim terms solely on the basis of specification passages and tells us that, absent claim language carrying a narrow meaning, the PTO should only limit the claim based on an express disclaimer of the broader definition. *In re Bigio*, 381 F.3d 1320, 1325, 72 USPQ2d 1209, 1210-11 (Fed. Cir. 2004). We conclude that the Examiner has correctly interpreted the phrase “adjuvant substances and additives” and has correctly refrained from reading extraneous limitations from the specification into the claims.

Claim 5 allows for the inclusion of a superabsorbent material in the polyester-polyurethane foam as an “adjuvant substance or additive.” Therefore, the foam of Wilson meets the foam requirements of the claim. We need not consider the question of whether it would have been obvious to one of ordinary skill in the art to omit the superabsorbent material from the foam of Wilson as argued by Appellants.

¹See Merriam-Webster OnLine, entry adjuvant[1, adjective] at www.m-w.com/cgi-bin/dictionary. A copy accompanies our decision.

With regard to Appellants' argument that "it is improper for the Examiner to rely on the disclosure of 'flame-lamination' techniques in the present specification as an 'admission.'" (Brief, p. 7), we need not decide whether there was an error here. That is because the Examiner has furnished other evidence showing that the flame lamination process of claim 5 was known, namely, the disclosures of Richter and Dickey. Suffice it to say that admitted prior art in an applicant's specification may be used in determining the patentability of a claimed invention, *In re Nomiya*, 509 F.2d 566, 570-71, 184 USPQ 607, 611-12 (CCPA 1975), and the discussion in Appellants' specification at page 2, lines 10-31 appears to be a discussion of prior art.² Appellants do not provide any reason to believe otherwise.

Nor can we agree with Appellants' argument with respect to Richter (Brief, pp. 6-7). Appellants improperly straitjacket the teachings of the references and do not adequately consider the more appropriate question of what those references would have suggested to one of ordinary skill in the art. *See In re Dow Chem.*, 837 F.2d 469, 473, 5 USPQ2d 1529, 1531 (Fed. Cir. 1988) ("The consistent criterion for determination of obviousness is whether the prior art would have suggested to one of ordinary skill in the art that this process should be carried out and would have a reasonable likelihood of success, viewed in the light of the prior art."); *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981) ("The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of

²Codos and King, the references added to reject claim 6, provide further evidence that the particulars of the flame lamination process discussed in the Background of Invention were prior art to Appellants.

the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art.”); *In re Bascom*, 43 CCPA 837, 230 F.2d 612, 614, 109 USPQ 98, 100 (1956)(“[T]he proper inquiry should not be limited to the specific structure shown by the references, but should be into the concepts fairly contained therein, and the overriding question to be determined is whether those concepts would suggest to one skilled in the art the modification called for by the claims.”).

The evidence relied upon by the Examiner, as a whole, indicates that flame-laminating polyurethane foams to textile strips by the steps of melting, applying, and pressing as claimed was known in the art. Moreover, the reason or motivation for flame-laminating a textile material to a polyurethane foam is expressly stated in that art: To add strength and rigidity (see, e.g., Richter, col. 16, ll. 12-21 and Dickey, col. 1, ll.65-71 and description thereafter of the textile as a backing or reinforcing web). The Examiner has established that all aspects of the claimed process were known in the prior art and further established, through objective evidence within the prior art, that there was a reason or motivation for making the combination. That is enough to establish a *prima facie* case of obviousness. *Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc.*, 73 F.3d 1568, 1573, 37 USPQ2d 1626, 1630 (Fed. Cir. 1996).

Appellants have failed to persuade us that the Examiner’s rejection is based on an incorrect legal standard, contains an incorrect legal determination, or contains a factual error such that the Examiner’s conclusion of obviousness cannot stand. In other words, the

contentions of Appellants do not persuade us of reversible error in the Examiner's position. We conclude that the Examiner has established a *prima facie* case of obviousness with respect to the subject matter of claim 5 which has not been sufficiently rebutted by Appellants.

To reject claim 6, the Examiner adds Codos and King as evidence that it was known in the prior art to use a pair of rotating rollers to press the textile and foam together during the flame laminating process (Answer, p. 7). Appellants' arguments again do not adequately consider what the references as whole would have suggested to one of ordinary skill in the art. There can be no question that pressing is required in the flame lamination process in order to bond the two materials together. That this is the case is clearly evidenced by Dickey, Codos, and King. King and Codos provide evidence that a rotating pair of rollers was a known method for accomplishing the required pressing. The Examiner has established both that the claimed roller operation was known in the art and that there was a reason for or suggestion of using that operation to accomplish pressing (Answer, p. 7). We find no reversible error in the Examiner's fact finding nor in the application of the law to the facts.

As a final point, we note that Appellants base no arguments upon objective evidence of non-obviousness such as unexpected results. We conclude that the Examiner has established a *prima facie* case of obviousness with respect to the subject matter of claims 5 and 6 which has not been sufficiently rebutted by Appellants.

OTHER ISSUES

By way of Reply Brief, Appellants bring to our attention a Canadian patent application CA 2,247,657. This document was published September 17, 1998, more than one year before the U.S. filing date of the present application, i.e., February 25, 2000. The Canadian document is, thus, available as prior art under 35 U.S.C. § 102(b).

Upon further prosecution, the Examiner should consider rejecting claims 5 and 6 under 35 U.S.C. § 103(a) as being unpatentable over the Canadian document in combination with prior art describing the specifics of flame-lamination.

The Canadian document describes a process for producing a hydrophilic polyester-polyurethane foam which appears to meet all the requirements of the foam of claim 5 (p. 4, l. 14 to p. 5, l. 9). We are cognizant of the fact that claim 5 requires that the ethoxylated polyether polyol have a molecular weight greater than 700 and that the Canadian document does not disclose the molecular weight of the ethoxylated polyether polyol described therein. The Examiner should, therefore, determine whether there is reason to conclude that the ethoxylated polyether polyol described by the Canadian document inherently has a molecular weight within the required range. We call to the Examiner's attention Example 1 of the Canadian document which describes a hydrophilic polyester-polyurethane foam having all the same ingredients as Example 1 of the specification. The polyether polyol is VP PU 41WB01 in both cases. If it is reasonable to conclude that VP PU 41WB01 inherently has a molecular weight within the claimed range, then the burden shifts to Appellants to prove that there is, in fact, a difference.

That which is inherently possessed by the prior art composition cannot cause a claim drawn to that composition to distinguish over the prior art. *See In re Best*, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977).

If the foam composition of the Canadian document is inherently the same as the claimed composition, then the only difference between the process of the Canadian document and the claimed process is in the specific details of flame-lamination. That is because the Canadian document expressly suggests flame-laminating the foam with textiles, but does not provide the details of the process (see p. 10, ll. 9-11). We note, however, that the Examiner has established that those details were known in the art (*see, e.g., King*).

CONCLUSION

To summarize, the decision of the Examiner to reject claims 5 and 6 under 35 U.S.C. § 103 is affirmed.

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

AFFIRMED

EDWARD C. KIMLIN)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
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Administrative Patent Judge)	AND
)	INTERFERENCES
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