

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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 CHARLES W. PAUL, PETER A. WALTER
and CYNTHIA L. MEISNER

Appeal No. 2006-0894
Application No. 10/412,840

ON BRIEF

Before PAK, KRATZ and FRANKLIN, Administrative Patent Judges.
KRATZ, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1-6, 13-18 and 21-24.

BACKGROUND

Appellants' invention relates to a process of preparing a cured product by employing a coating and a curing step, wherein a low moisture content substrate or liner is employed as a coating base. An understanding of the invention can be derived from a reading of exemplary claims 1 and 13, which are reproduced below.

OPINION

Having carefully considered each of appellants' arguments set forth in the brief, appellants have not persuaded us of reversible error on the part of the examiner. Accordingly, we will affirm the examiner's rejections for substantially the reasons set forth by the examiner in the answer. We add the following for emphasis.

Appellants furnish seven subheadings (A1-A7) in the brief identifying either single claims or groups of claims as being separately argued. Consequently, we shall consider the claims separately to the extent that they are separately argued in the brief and select a representative claim for each of the several groups of claims that are argued together. See 37 CFR § 41.37(c)(1)(vii).

§ 102(b) Alternative of Rejection

Anticipation by a prior art reference does not require that the reference recognize either the inventive concept of the claimed subject matter or the inherent properties that may be possessed by the prior art reference. See Verdegaal Bros. Inc. v. Union Oil Co., 814 F.2d 628, 633, 2 USPQ2d 1051, 1054 (Fed. Cir.), cert. denied, 484 U.S. 827 (1987). A prior art reference anticipates the subject matter of a claim when the reference

discloses every feature of the claimed invention, either explicitly or inherently (see Hazani v. Int'l Trade Comm'n, 126 F.3d 1473, 1477, 44 USPQ2d 1358, 1361 (Fed. Cir. 1997) and RCA Corp. v. Applied Digital Data Systems, Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984)). However, the law of anticipation does not require that the reference teach what the appellants teach in their specification, but only that the claims on appeal "read on" something disclosed in the reference (see Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984)).

Anticipation under this section is a factual determination. See In re Baxter Travenol Labs., 952 F.2d 388, 390, 21 USPQ2d 1281, 1283 (Fed. Cir. 1991) (citing In re Bond, 910 F.2d 831, 833, 15 USPQ2d 1566, 1567 (Fed. Cir. 1990)).

In the case before us, the examiner has determined that Erickson discloses, expressly or inherently, a coating process that meets every limitation of the invention set forth in the appealed claims. We agree for reasons set forth in the answer and below.

Claims 1, 2, 3, 6 and 21

We select claim 1 as representative of claims 1, 2, 3, 6 and 21, which are argued as a group in the brief.

Appellants do not dispute that Erickson discloses, inter alia, a process for coating and curing an adhesive on a substrate or liner. Moreover, the examiner has found that Erickson's adhesive is both pressure sensitive and cationic curable, as required in representative claim 1. Appellants do not contest that determination by the examiner. Rather, appellants maintain that: (1) Erickson does not disclose using a backing substrate or release liner that has low moisture content, and (2) Erickson does not disclose that the adhesive coated substrate/liner is allowed to cure under low moisture conditions, as recited in claim 1. We disagree.

As generally explained by the examiner in the answer (pages 3-8), Erickson discloses using Mylar¹, an intrinsically low moisture content film material, as a substrate/liner on which the adhesive, an epoxidized block copolymer, is coated and cured. See, e.g., Examples 1-6 of Erickson and the other portions of Erickson referred to by the examiner in the answer. The representative claim 1 requirement for a low moisture content

¹ Mylar is a polyester plastic film that intrinsically possesses the property of low moisture absorption. See Kirk-Othmer, Encyclopedia of Chemical Technology (fourth edition), Volume 17, pages 1034-36, particularly Table 7 at page 1034 (copy attached).

liner/substrate reads on the Mylar substrate of Erickson for reasons related by the examiner in the answer. We note that appellants have not furnished any persuasive evidence to substantiate their argument that the Mylar film substrate of Erickson would not be read on by the low moisture content liner/substrate of appellants' claim 1. In this regard, we give the relative claim term "low" the broadest reasonable construction that the term convey and which is consistent with appellants' specification and as it would have been understood by one of ordinary skill in the art given the context in which that claim term is used. See In re Sneed, 710 F.2d 1544, 1548, 218 USPQ 385, 388 (Fed. Cir. 1983). Here, the claim term "low moisture content" has not been defined in appellants' specification in a manner so as to place any specific upper limits on the moisture content of a substrate/liner, such that the claimed liner/substrate would not be inclusive of substrates/liners having the relatively low moisture levels associated with the Mylar substrate of Erickson. This is especially so given the limited moisture absorption properties intrinsic to Mylar that is fairly asserted by the examiner (see, e.g., answer, page 6) as a characteristic of that disclosed film

material.² As noted above, appellants have not countered the examiner's factual assertion on this point with any persuasive evidence establishing that the Mylar substrate of Erickson describes a high (non-low) moisture content substrate. In this latter regard, appellants are in a better position to test Mylar samples for moisture content than the examiner.

Furthermore, appellants' reliance on Examples 5-10 of their specification at page 6 of the brief is misplaced in asserting that those examples establish that the examiner is in error as to the determination of the use of a low moisture content Mylar support in Erickson. In this regard, pre-conditioned release paper was employed as the substrate in those examples, not Mylar.

From our vantage point, appellants' opposition to the examiner's well-reasoned factual findings regarding the correspondence of the moisture content of the Mylar substrates of Erickson with the representative claim 1 requirements is lacking in substance and does not serve to establish any reversible error in the examiner's anticipation rejection.

²In the event of further prosecution of this subject matter before the examiner, the examiner should determine whether or not the use of that relative claim term, "low" results in a violation of the definiteness requirement of the second paragraph of § 112. Also, see footnote 1 above for the expected intrinsic moisture absorption characteristics of Mylar.

We reach essentially the same result with respect to appellants' contention that Erickson does not disclose the representative claim 1 limitation requiring that the cure of the coated substrate is allowed to occur under low moisture conditions. Concerning this matter, we agree with the examiner for reasons set forth in the answer that Erickson clearly describes curing the applied coating in a fashion that the claimed "low moisture" condition cure reads on. In this regard, we note, for instance, that Example 5 of Erickson (column 19, line 62 through column 20, line 21) describes coating the adhesive onto sheets of Mylar to form dry coating formulation samples that are irradiated after preheating to remove any moisture. As further described in the above referenced portion of the description of Example 5 of Erickson, a nitrogen blanket is employed during the curing. In addition, Erickson (see, e.g., table 7 and Example 5 at column 20, line 22 through column 21, line 3 of the applied patent) describes the coating and curing of adhesives, as claimed, onto a Mylar substrate/liner in a manner that results in a functional product; that is, a product that has adequate gel formation and cohesive strength and shear resistance, properties that are consistent with low moisture conditions during the curing of the adhesive, as evidenced by

Erickson's teaching that the presence of water in the adhesive composition during the curing would adversely affect the desired curing (cross-linking). See, e.g., column 9, lines 41-47 of Erickson.

In light of the above and for the reasons set forth in the answer, appellants' arguments are unpersuasive of any reversible error in the examiner's anticipation rejection of representative claim 1. It follows that we will sustain the examiner's anticipation rejection of claims 1, 2, 3, 6 and 21, which are argued as a group in the brief.

Claims 4, 5 and 18

Appellants point to the below 4 percent, below 2 percent, and below about 5 percent substrate/liner moisture limitations of dependent claims 4, 5, and 18, respectively, under separate headings in the brief arguing that Erickson does not disclose coating a substrate possessing a moisture level within any of those separately claimed ranges in separate arguments for each of those claims. We disagree.

From our perspective, the Mylar substrate of Erickson would intrinsically possess a low moisture level within each of those separately claimed ranges of those dependent claims resulting in the anticipation of each of those claims by Erickson. In this

regard, we note that the information conveyed by the disclosure of using Mylar as a substrate in Erickson includes that which would be intrinsically conveyed thereby, including the moisture holding properties of Mylar.³

Here, appellants have not argued, much less offered any evidence to establish, that Mylar does not intrinsically possess a low moisture content within any of those claimed ranges. As such, we shall also affirm the examiner's anticipation rejection of each of separately argued dependent claims 4, 5 and 18.

Claims 13, 6, 17, 22, 23 and 24

We select claim 13 as representative of this claim grouping. Concerning this claim grouping and representative claim 13, we note that appellants maintain that Erickson does not disclose the less than about 5 percent moisture content substrate and the maintaining thereof during the curing of the adhesive limitations of representative claim 13. However, as discussed above, Erickson discloses the use of a Mylar substrate, which substrate would intrinsically possess low moisture characteristics, including possessing a moisture content as low as here claimed whether before or during the curing step. This is an intrinsic

³ See footnote 1 and Table 7 of Kirk-Othmer under the caption Moisture absorption across from "polyester (Mylar).

property of Mylar, as discussed above. Appellants' arguments and cited evidence with respect to the length of time that it can take to cure an adhesive of the type claimed are not persuasive. This is because the claims are not limited to a fully cured adhesive but rather a substantially fully cured adhesive without specifying a particular adhesive or cure methodology and time. Also, the intrinsic moisture absorption properties of the Mylar substrate of Erickson would not be expected to be materially affected by the cure time of the cationic curable adhesives employed by Erickson or the conditions of cure employed by Erickson. In this regard, appellants have not substantiated that the intrinsic properties of a thin Mylar substrate as disclosed by Erickson, and referred to above, would allow for higher moisture contents of the Mylar before and during cure, than that claimed at here. This is especially so given Erickson's method of cure, including efforts to remove moisture coupled with the use of a nitrogen blanket during cure, as explained with respect to Example 5 of the applied patent, for instance. Consequently, we agree with the examiner that Erickson anticipates representative claim 13 and the claims grouped therewith.

Claims 14 and 15

Concerning separately argued dependent claims 14 and 15, and the less than 4 percent and less than 2 percent moisture content levels for the substrate recited therein, we again refer to Example 5 of Erickson and the intrinsic properties of the Mylar substrate employed in that example, as further discussed above. While appellants assert that Erickson does not disclose maintaining the claimed moisture levels of either of those dependent claims for the substrate, a reading of Example 5 of Erickson coupled with the intrinsic properties of Mylar, as discussed above, belies appellants' assertion for reasons set forth in the answer and above. It follows that we shall also affirm the examiner's anticipation rejection of dependent claims 14 and 15, on this record.

§ 103 Alternative of Rejection

In view of the above discussion, we shall likewise sustain the examiner's § 103 alternative rejection over Erickson since a disclosure that anticipates under 35 U.S.C. § 102 also renders the claim unpatentable under 35 U.S.C. § 103, for "anticipation is the epitome of obviousness." Jones v. Hardy, 727 F.2d 1524, 1529, 220 USPQ 1021, 1025 (Fed. Cir. 1984). See also In re

Fracalossi, 681 F.2d 792, 794, 215 USPQ 569, 571 (CCPA 1982); In re Pearson, 494 F.2d 1399, 1402, 181 USPQ 641, 644 (CCPA 1974).

While we find that Erickson anticipates and hence renders the claimed method prima facie obvious for the reasons outlined above, we further determine that one of ordinary skill in the art would have been led to the claimed process by simply following the teachings of Erickson by avoiding the presence of water during the radiation cross-linking of the adhesive while on a substrate, such as Mylar. In selecting appropriate conditions for avoiding water being present in the polymeric adhesive material during cure as suggested by Erickson, certainly one of ordinary skill in the art would have been led to use a substrate, which is in contact with that adhesive, that has a low moisture content, including moisture contents within the ranges claimed. Moreover, one of ordinary skill in the art would have been led by the teachings of Erickson to employ curing conditions such that moisture would remain low in the substrate onto which the adhesive is applied, as variously claimed at herein. We note that the Examples of Erickson describe the coating and curing of adhesives, as claimed, onto a Mylar substrate/liner in a manner that results in a functional product; that is, a product that has adequate gel formation and cohesive strength and shear

resistance. Such properties would suggest the substantial absence of water in the substrate during the curing for reasons as discussed above and for reasons set forth in the answer.

It is well settled that a prior art reference may be relied upon for all that it would have reasonably conveyed to one having ordinary skill in the art. See In re Beattie, 974 F.2d 1309, 1312, 24 USPQ2d 1040, 1042 (Fed. Cir. 1992); In re Young, 927 F.2d 588, 591, 18 USPQ2d 1089, 1091 (Fed. Cir. 1991); Merck & Co., Inc. v. Biocraft Laboratories, Inc., 874 F.2d 804, 807, 10 USPQ2d 1843, 1846 (Fed. Cir. 1989). Concerning this matter, it is well settled that a reference must be considered in its entirety, and it is well-established that the disclosure of a reference is not limited to preferred embodiments or specific working examples contained therein. See In re Fracalossi, 681 F.2d 792, 794 n. 1, 215 USPQ 569, 570 n.1 (CCPA 1982); In re Lamberti, 545 F.2d 747, 750, 192 USPQ 278, 280 (CCPA 1976).

For reasons set forth above and in the answer, appellants' arguments with respect to a lack of suggestion of the claimed substrate moisture limitations of the claimed process in Erickson simply miss the mark. We note that the specification evidence referred to by appellants at pages 6 and 7 of the brief does not establish quality improvements as argued, much less unexpected

quality improvements, for products derived from a process commensurate in scope with the claimed process. Indeed, the referred to specification evidence has not even been shown to compare products of the closest prior art process with products of a process commensurate in scope with the process of any of the appealed claims at issue. Concerning this matter, it is not within the Board's province to ferret out particular facts (e.g., data) from the specification which may support appellants' seeming assertion of unexpected advantages for the claimed process. See In re Borkowski, 505 F.2d 713, 719, 184 USPQ 29, 33 (CCPA 1974).

Consequently, we shall also sustain the examiner's § 103 rejection, as to all of the rejected claims, on this record.

CONCLUSION

The decision of the examiner to reject claims 1-6, 13-18 and 21-24 stand rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as being unpatentable over Erickson 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

CHUNG K. PAK)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
PETER F. KRATZ)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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