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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/443,426	05/18/2015	Doreen Eckhardt	71049US008	2280
32692	7590	04/15/2021	EXAMINER	
3M INNOVATIVE PROPERTIES COMPANY			CHANG, VICTOR S	
PO BOX 33427			ART UNIT	PAPER NUMBER
ST. PAUL, MN 55133-3427			1788	
			NOTIFICATION DATE	DELIVERY MODE
			04/15/2021	ELECTRONIC

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte DOREEN ECKHARDT, REGINA SIKORA,
JAN U. WIENEKE, JAN D. FORSTER,
KERSTIN UNVERHAU, and FRANK KUESTER

Appeal 2020-003463
Application 14/443,426
Technology Center 1700

Before LINDA M. GAUDETTE, KAREN M. HASTINGS, and
LILAN REN, *Administrative Patent Judges*.

HASTINGS, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner's decision to reject claims 16–20, 24, 27, and 29–40.² *See* Non-Final Act. 1. We have jurisdiction under 35 U.S.C. § 6(b).

¹ We use the term “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as 3M Company. Appeal Br. 2.

² Claims 21–23 were inadvertently included in the Examiner's rejection, however, these claims were cancelled in the amendment filed Sept. 4, 2018.

We reverse and enter a new ground of rejection.

CLAIMED SUBJECT MATTER

The claims are directed to a multilayer pressure-sensitive adhesive (PSA) assembly. Claims 16 and 38, reproduced below, are illustrative of the claimed subject matter:

16. A multilayer PSA assembly comprising:

i. a propylheptyl acrylate adhesive copolymer layer comprising:

a) from 50 to 99.5 weight percent of 2-propylheptyl acrylate as a first monomer;

b) from 1.0 to 50 weight percent of a second non-polar monomer;

c) from 0.1 to 15 weight percent of a third polar acrylate monomer; and

d) a tackifying resin in an amount from 3 to 100 parts per 100 parts of the copolymer,

wherein the tackifying resin is selected from the group consisting of C5-based hydrocarbon resins, C9-based hydrocarbon resins, C5/C9-based hydrocarbon resins, and any combinations or mixtures thereof;

wherein the weight percentages are based on the total weight of the copolymer;

and

ii. a second acrylate pressure sensitive adhesive foam layer.

38. A multilayer PSA assembly comprising:

i. a propylheptyl acrylate adhesive copolymer layer comprising:

a) from 60 to 90 weight percent of 2-propylheptyl acrylate;

b) from 10 to 30 weight percent of isobornylacrylate;

c) from 3.0 to 6.0 weight percent of acrylic acid; and

d) 0.05 to 1 weight percent of a crosslinker,

wherein the weight percentages are based on the total weight of the copolymer;

- and
ii. a second acrylate pressure sensitive adhesive foam layer.

Independent claim 37 similarly recites a multilayer PSA assembly as in claim 38 with, for example, broader ranges of components a, b, and c set forth (Claims Appendix 13, 14).

REFERENCES

The prior art relied upon by the Examiner is:

Name	Reference	Date
Zajaczkowski	US 2010/0120931 A1	May 13, 2010
Bartholomew	US 2012/0171915 A1	July 5, 2012

REJECTION

Claims 16–20, 24, 27, and 29–40 are rejected under 35 U.S.C. § 102(a) as being anticipated by Bartholomew and Zajaczkowski (incorporated by reference in Bartholomew). Non-Final Act. 3.

OPINION

For the reasons presented by Appellant in the briefs, we REVERSE. The § 102(a) rejections of independent claims 16, 37, and 38 on appeal rely upon picking and choosing from various lists in Bartholomew. A preponderance of the evidence supports Appellant's position that Bartholomew's disclosure is insufficient to establish anticipation of the compositional components of independent claims 16, 37, and 38 (Appeal Br. 7–9; Reply Br. 2). Additionally, the ranges for the amounts of the 2-propylheptyl acrylate, second non-polar monomer, and third polar acrylate

monomer components taught by Bartholomew overlap the recited ranges of the relevant components of claims 16, 37, and 38 and therefore the Examiner has not adequately explained how Bartholomew anticipates the claims for this reason as well (Bartholomew ¶ 34).

“[A]nticipation under § 102 can be found only when the reference discloses exactly what is claimed and that where there are differences between the reference disclosure and the claim, the rejection must be based on § 103 which takes differences into account.” *Titanium Metals Corp. v. Banner*, 778 F.2d 775 (Fed. Cir. 1985) (Claims to titanium (Ti) alloy with 0.8% nickel (Ni) and 0.3% molybdenum (Mo) were not anticipated by, although they were held obvious over, a graph in a Russian article on Ti-Mo-Ni alloys in which the graph contained an actual data point corresponding to a Ti alloy containing 0.25% Mo and 0.75% Ni.).

New Ground of Rejection of claims 16–20, 24, 27, and 29–40 under 35 USC § 103(a) as unpatentable over Bartholomew

Although we are in agreement with Appellant that the teachings of Bartholomew do not anticipate the pending claims (*generally* Appeal Br.; Reply Br. 2), given that the teachings of Bartholomew disclose and suggest the use of the claimed 2-propylheptyl acrylate, the second non-polar monomer, and the third polar acrylate monomer components, as well as the claimed crosslinking agents and tackifying agents for a PSA (Ans. 3–4), we enter a new ground of rejection for claims 16–20, 24, 27 and 29–40 under 35 USC § 103(a) over Bartholomew.³

³ Bartholomew also has an equivalent WO document, WO 2011/038202 A1,

It is well established that when claimed ranges overlap or lie inside ranges disclosed by the prior art, a *prima facie* case of obviousness is established. *In re Harris*, 409 F.3d 1339, 1341 (Fed. Cir. 2005); *In re Peterson*, 315 F.3d 1325, 1330 (Fed. Cir. 2003); *see also In re Geisler*, 116 F.3d 1465, 1469–71 (Fed. Cir. 1997) (Claim reciting thickness of a protective layer as falling within a range of “50 to 100 Angstroms” considered *prima facie* obvious in view of prior art reference teaching that “for suitable protection, the thickness of the protective layer should be not less than about 10 nm [i.e., 100 Angstroms]”).

Bartholomew teaches or suggests all of the components of the claimed multilayer PSA assembly (Ans. 3–4). Bartholomew further teaches ranges for the amounts of the 2-propylheptyl acrylate, the second non-polar monomer (e.g., isobornylacrylate) and the third polar acrylate monomer (e.g., acrylic acid) that overlap the recited ranges for these components as set out in claims 16, 37 and 38 (Bartholomew ¶ 34).

Where the difference between the claimed invention and the prior art is some range or other variable within the claims, Appellant must show that the particular range is critical, generally by showing that the claimed range achieves unexpected results relative to the prior art range. *In re Woodruff*, 919 F.2d 1575, 1578 (Fed. Cir. 1990). The burden of showing unexpected results rests on Appellant by establishing that the difference between the claimed invention and the closest prior art was an unexpected difference. *See In re Klosak*, 455 F.2d 1077, 1080 (CCPA 1972) (“the

published March 31, 2011 (an earlier publication date). It is of record on the IDS filed by Appellant on July 7, 2015. In this decision, citations to Bartholomew are to its paragraphs in US 2012/0171915 A1.

burden of showing unexpected results rests on he who asserts them”). Further, a showing of unexpected results supported by factual evidence must be reasonably commensurate in scope with the degree of protection sought by the claims on appeal. *In re Grasselli*, 713 F.2d 731, 743 (Fed. Cir. 1983).

Appellant relies on the Specification at page 13 as describing “unexpected advantages of using a propylheptyl acrylate adhesive copolymer with a tackifier” (Appeal Br. 7; Reply Br. 4). However, the Specification at p. 13 ll. 19–23 states that these tackifiers are “petroleum-based resins *such as* the C5-based hydrocarbon resins, the C9-based hydrocarbon resins, the C5/C9-based hydrocarbon resins, and hydrogenated versions of any of these resins” (emphasis added). This general statement is not sufficient to establish the criticality of the tackifiers. Additionally, independent claims 37 and 38 do not require the presence of the tackifiers that provide these alleged advantages. In any event, Bartholomew teaches these same aromatic hydrocarbon resins based on C₉, and C₅ can be used in their invention (Bartholomew ¶48). Still further, Appellant has not shown how any evidence in the Specification is commensurate in scope with the claims.

Having considered the evidence and reviewed Appellant’s arguments in light of these legal standards, Appellant has not met its burden of showing unexpected results.

Therefore, we set forth a § 103(a) rejection based on Bartholomew as a NEW GROUND OF REJECTION pursuant to 37 C.F.R. § 41.50(b).

CONCLUSION

The Examiner’s § 102 rejection is REVERSED.

A new ground of rejection pursuant to 37 C.F.R. § 41.50(b) is made.

DECISION SUMMARY

Claim(s) Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed	New Ground
16–20, 24, 27, 29–40	102(a)	Bartholomew, Zajackowski		16–20, 24, 27, 29–40	
16–20, 24, 27, 29–40	103(a)	Bartholomew			16–20, 24, 27, 29–40
Overall Outcome				16–20, 24, 27, 29–40	16–20, 24, 27, 29–40

TIME PERIOD FOR RESPONSE

This decision contains a new ground of rejection pursuant to 37 C.F.R. § 41.50(b). 37 C.F.R. § 41.50(b) provides “[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review.” 37 C.F.R. § 41.50(b) also provides:

When the Board enters such a non-final decision, the appellant, within two months from the date of the decision, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:

(1) *Reopen prosecution.* Submit an appropriate amendment of the claims so rejected or new Evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the prosecution will be remanded to the examiner. The new ground of rejection is binding upon the examiner unless an amendment or new Evidence not previously of Record is made which, in the opinion of the examiner, overcomes the new ground of rejection

designated in the decision. Should the examiner reject the claims, appellant may again appeal to the Board pursuant to this subpart.

(2) *Request rehearing.* Request that the proceeding be reheard under § 41.52 by the Board upon the same Record. The request for rehearing must address any new ground of rejection and state with particularity the points believed to have been misapprehended or overlooked in entering the new ground of rejection and also state all other grounds upon which rehearing is sought.

Further guidance on responding to a new ground of rejection can be found in the Manual of Patent Examining Procedure § 1214.01.

REVERSED

NEW GROUND OF REJECTION (37 C.F.R. § 41.50(b))