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3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427			VAZQUEZ, ELAINE M	
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JOAO R. TALAMONI,
SUSANA SHIMIZU, and JAYSHREE SETH

Appeal 2020-006553
Application 15/552,344
Technology Center 1700

Before GEORGE C. BEST, N. WHITNEY WILSON, and
MERRILL C. CASHION, JR., *Administrative Patent Judges*.

BEST, *Administrative Patent Judge*.

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner's decision to reject claims 1–10 and 34–43 of Application 15/552,344. Final Act. (September 19, 2019). We have jurisdiction under 35 U.S.C. § 6.

For the reasons set forth below, we *reverse*.

¹ “Appellant” refers to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies 3M Company and its affiliate 3M Innovative Properties Company as the real parties in interest. Appeal Br. 2.

I. BACKGROUND

The '344 Application describes pressure-sensitive acrylic adhesives that have sufficient shear holding characteristics but can be cleanly removed from an adherend without adversely affecting the adherend's delicate surfaces. Spec. ¶ 1.

Claim 1 is representative of the '344 Application's claims and is reproduced below from the Appeal Brief's Claims Appendix.

1. A composition comprising an acrylic adhesive derived from the reaction product of

(a) an acrylic ester of monohydric alcohol having an alkyl group of the 5 to 10 carbon atoms; and

(b) a nonpolar acrylic monomer having a solubility of less than 9.2 as measured by the Fedors method using a homopolymer of the nonpolar acrylic monomer,

wherein the reaction product has a side chain crystallinity.

Appeal Br. 5.

II. REJECTIONS

On appeal, the Examiner maintains the following rejections:

1. Claims 1–8, 10, and 34–43 are rejected under 35 U.S.C. § 102(a)(1) as anticipated by Fujita² as evidenced by Bennett³ or, in the alternative, under 35 U.S.C. § 103 as unpatentable over Fujita as evidenced by Bennett. Final Act. 3.

2. Claim 9 is rejected under 35 U.S.C. § 103 as unpatentable over the combination of Fujita and Bennett. Final Act. 4.

² US 2011/0076492 A1, published March 31, 2011.

³ US 5,683,798, issued November 4, 1997.

III. DISCUSSION

A. *Rejection of claims 1–8, 10, and 34–43 as anticipated by Fujita as evidenced by Bennett or, in the alternative, as unpatentable over Fujita as evidenced by Bennett*

Appellant argues for reversal of this rejection based upon claim 1’s limitations. *See* Appeal Br. 3–4. Thus, we select independent claim 1 as representative of the group of claims subject to this ground of rejection. 37 C.F.R. § 41.37(c)(1)(iv) (2019). We limit our discussion accordingly.

1. *Anticipation*

Claim 1 is directed to an acrylic adhesive derived from a polymerization reaction of (a) an acrylic acid ester of a monohydric alcohol having an alkyl group of 5 to 10 carbon atoms (“monomer A”) and (b) a nonpolar acrylic monomer having particular solubility properties (“monomer B”).

The Examiner rejected claim 1 as anticipated by, or, in the alternative, obvious over Fujita as evidenced by Bennett. Final Act. 3. In particular, the Examiner found that Fujita describes an acrylic adhesive derived from a reaction product that is substantially identical to that recited in claim 1. *Id.* (citing Fujita ¶¶ 24, 25, 38, 39). Based upon this finding, the Examiner found that Fujita’s acrylic adhesive composition would have the side chain crystallinity required by claim 1. *Id.* (citing *In re Spada*, 911 F.2d 705, 709 (Fed. Cir. 1990)).

Appellant argues that the Examiner has not established that the prior art and claimed compositions are substantially identical and, therefore, is not entitled to rely upon the presumption provided by *Spada*. Appeal Br. 3–4. In particular, Appellant argues that Fujita describes an acrylic adhesive derived from the product of the polymerization of a three-component mixture. *Id.* at

3. Appellant does not dispute the Examiner's finding that Fujita's three-component mixture includes monomers A and B from claim 1. *Id.* Fujita's third component ("monomer C") is a monoolefinically unsaturated ketone present in an amount between 0.5 and 5 mass %. Fujita ¶¶ 26, 30, 34. Appellant argues that inclusion of monomer C in the reaction mixture means that Fujita's adhesive is not substantially identical to that recited in claim 1. Appeal Br. 3–4.

We begin by determining the scope of claim 1. In particular, we must determine whether the phrase "an acrylic adhesive derived from the reaction product of" monomer A and monomer B reads upon an acrylic adhesive derived from the reaction product monomers A, B, and C.

We determine that it does not. A person having ordinary skill in the art would understand claim 1 to be directed to the copolymer of monomers A and B and to exclude the terpolymer produced by reacting monomers A, B, and C. The Examiner's argument, *see* Answer 6–7, that the use of the transition "comprising" open to the claimed to inclusion of other materials is misdirected. As claim 1 is written, use of the transition "comprising" opens the claimed composition to ingredients—e.g., tackifiers—beyond the recited acrylic adhesive. It, however, does not open the list of monomers recited in the claim as forming the reaction mixture.

For this reason, we reverse the rejection of claim 1 as anticipated by Fujita as evidenced by Bennett.

2. *Obviousness*

Next, we turn to the question of whether Fujita's terpolymer would have made the claimed copolymer of monomers A and B *prima facie* obvious. For either of the following reasons we determine that it does not.

First, the Examiner does not explain why a person having ordinary skill in the art would have been motivated to omit monomer C from Fujita's acrylic adhesive. *See generally* Final Act., Ans. Fujita describes the purpose for including monomer C in its acrylic adhesive. According to Fujita, "the monomer (c) can contribute to the stability of the polymer . . . and the cohesive force of the pressure-sensitive adhesive composition." Fujita ¶ 40. Fujita further teaches away from the omission of monomer C, stating that "if the amount of monomer (c) is less than 0.5 mass %, an insufficient effect is produced by the addition." *Id.* ¶ 42.

In view of Fujita's description, the Examiner must explain why a person having ordinary skill in the art would have been motivated to omit monomer C from the reaction mixture. Because the Examiner has not done so, there is no *prima facie* case of obviousness.

Second, the Examiner is not entitled to rely upon the presumption provided by *Spada* to establish that Fujita's composition would have the side chain crystallinity recited in claim 1. As discussed above, Fujita describes monomer C's structure in extremely general terms: "a monoolefinically unsaturated monomer having a ketone group." *Id.* ¶ 34. Monomer C, therefore, could be any of a great number—potentially millions—of compounds. Moreover, Fujita describes the amount of monomer C in terms of a mass percentage. *Id.* Depending upon the relative molecular weights of monomers A, B, and C, it is possible that monomer C could make up a substantial mole fraction of the reaction mixture and, thus, of the resulting polymer.

In view of the breadth of Fujita's description, the Examiner has not established that Fujita's terpolymer is substantially identical to the claimed copolymer of monomers A and B. The Examiner is not entitled to presume

that Fujita's terpolymers exhibit the side chain crystallinity required by claim 1. Thus, the Examiner has not established a prima facie case of obviousness of claim 1.

B. Rejection of claim 9 as unpatentable over the combination of Fujita and Bennett

Claim 9 depends from claim 1. Appellant did not present separate argument for reversal of this rejection. Appeal Br. 3 ("The argument of patentability provided herein rises or falls for both grounds of rejection.").

For the reasons set forth above, we have reversed the anticipation and obviousness rejections of claim 1. In rejecting claim 9 as obvious over the combination of Fujita and Bennett, the Examiner did not make any findings that fixed the defects identified above. We, therefore, also reverse the rejection of claim 9.

IV. CONCLUSION

In summary:

Claim(s) Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1-8, 10, 34-43	102(a)(1)	Fujita, Bennett		1-8, 10, 34-43
1-8, 10, 34-43	103	Fujita, Bennett		1-8, 10, 34-43
9	103	Fujita, Bennett		9
Overall Outcome				1-10, 34- 43

REVERSED