

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 15

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ROBERT J. YATKA,
DAVID G. BARKALOW and LINDELL C. RICHEY

Appeal No. 2003-1266
Application No. 09/735,054

ON BRIEF

Before GARRIS, OWENS, and KRATZ, Administrative Patent Judges.
OWENS, Administrative Patent Judge.

DECISION ON APPEAL

This appeal is from the final rejection of claims 1-5, 8-10, 13-17 and 20, which are all of the claims remaining in the application.

THE INVENTION

The appellants claim a chewing gum product and a method for making it. Claims 1, 13 and 15 are illustrative:

1. A chewing gum product comprising
a center including a water-soluble portion and a water-insoluble portion;

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the center including hydrogenated starch hydrolysate, essentially no glycerin and not including liquid sorbitol or other aqueous softeners; and

a coating that encloses the center.

13. A method of manufacturing chewing gum comprising the steps of:

producing a center having a water-soluble portion and a water-insoluble portion, and including hydrogenated starch hydrolysate and no glycerin, liquid sorbitol, or other aqueous softeners; and

coating the center with a sugarless coating.

15. The method of Claim 13 wherein the coating step includes a dry charging step.

THE REFERENCES

Hopkins et al. (Hopkins)	4,271,197	Jun. 2, 1981
Reed et al. (Reed '453)	4,792,453	Dec. 20, 1988
Reed et al. (Reed '508)	5,248,508	Sep. 28, 1993
Reed et al. (Reed '406)	5,665,406	Sep. 9, 1997
Yatka et al. (Yatka)	5,952,019	Sep. 14, 1999

THE REJECTIONS

The claims stand rejected as follows: claims 1-5 under 35 U.S.C. § 112, second paragraph, as indefinite for failing to particularly point out and distinctly claim the subject matter which the appellants regard as the invention; claims 1-5, 8-10, 13, 14, 16, 17 and 20 under 35 U.S.C. § 102(b) as anticipated by Reed '453; claim 15 under 35 U.S.C. § 103 as obvious over

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Reed '453 in view of Yatka; claims 1-5, 8-10, 13, 14, 16, 17 and 20 under 35 U.S.C. § 103 as obvious over Hopkins in view of Reed '453, Reed '508 or Reed '406; and claim 15 under 35 U.S.C. § 103 as obvious over Hopkins in view of Reed '453, Reed '508 or Reed '406, further in view of Yatka.

OPINION

We reverse the rejections under 35 U.S.C. §§ 112, second paragraph, and 102(b), and affirm the rejections under 35 U.S.C. § 103.

*Rejection of claims 1-5 under
35 U.S.C. § 112, second paragraph*

The relevant inquiry under 35 U.S.C. § 112, second paragraph, is whether the claim language, as it would have been interpreted by one of ordinary skill in the art in light of the appellants' specification and the prior art, sets out and circumscribes a particular area with a reasonable degree of precision and particularity. See *In re Moore*, 439 F.2d 1232, 1235, 169 USPQ 236, 238 (CCPA 1971).

The examiner argues that claims 1-5 "are indefinite since it is not known what is intended by 'essentially' no glycerin (claim 1, line 3)" (office action mailed August 10, 2001, paper no. 3, page 2).

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The examiner argues as though "essentially free" is *per se* indefinite, which is not correct. See *In re Marosi*, 710 F.2d 799, 802-03, 218 USPQ 289, 292 (Fed. Cir. 1983). The examiner's argument is deficient in that it does not provide the required explanation as to why the claim language, as it would have been interpreted by one of ordinary skill in the art in light of the appellants' specification and the prior art, fails to set out and circumscribe a particular area with a reasonable degree of precision and particularity.

The only appearance of "essentially no glycerin" in the appellants' originally-filed specification is in claim 1. The other portions of the originally-filed specification, including the independent claims other than claim 1 and the examples of the invention, disclose "no glycerin". The originally-filed specification states that "compared to coated gum with low levels of glycerin in the center, coated gum centers with hydrogenated starch hydrolysate and no glycerin remains [sic, remain] soft and provides [sic, provide] improved crunchiness" (page 5, lines 5-7). Thus, it would have been reasonably clear to one of ordinary skill in the art that "essentially no glycerin" in the appellants' claim 1 means that the gum center includes at most an amount of glycerin which is sufficiently small that it does not

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materially affect the softness and crunchiness of the coated gum center.

Accordingly, we reverse the rejection under 35 U.S.C. § 112, second paragraph.

Rejection of claims 1-5, 8-10, 13, 14, 16, 17 and 20 under 35 U.S.C. § 102(b) as anticipated by Reed '453

We need to address only claim 1, which is the broadest independent product claim, and independent method claim 13.

Reed '453 discloses a chewing gum product comprising a center having a water-soluble portion and a water-insoluble portion (col. 2, lines 38-48). The center can include hydrogenated starch hydrolysate (col. 3, lines 14 and 38-39) and can be free of glycerin and sorbitol solution (col. 3, lines 26-27). The center is coated with a syrup containing hydrogenated isomaltulose (col. 2, lines 18-22).

The appellants argue that "Reed's exhaustive list of ingredients fails to provide one skilled in the art with the necessary level of teaching and/or motivation to arrive at the specific features of the claimed invention" (reply brief, page 2), and that "[b]ecause Reed fails to disclose each and every element of the claimed invention, namely, the inclusion of hydrogenated starch hydrolysate and the exclusion of glycerin and

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liquid sorbitol, the claimed invention is not anticipated by Reed" (brief, page 14).

The examiner argues (office action mailed August 10, 2001, paper no. 3, page 3):

Reed et al discloses a chewing gum product having a sugarless center including hydrogenated starch hydrolysate and sorbitol, both present as sugarless sweeteners. Softeners, e.g. glycerin, and aqueous sorbitol, are optional. The gum center is coated with a sugarless hard coating, including hydrogenated isomaltulose, using a hard coating panning procedure.

For the appellants' claimed invention to be anticipated by Reed '453, the reference must lead one of ordinary skill in the art to a product or method which falls within the scope of the claim "without any need for picking, choosing, and combining various disclosures not directly related to each other by the teachings of the cited reference." *In re Arkley*, 455 F.2d 586, 587, 172 USPQ 524, 526 (CCPA 1972). To arrive at the appellants' claimed chewing gum product or method from Reed '453, however, one must select the embodiment in which there is no glycerin or sorbitol solution, and must also select hydrogenated starch hydrolysate from several sweeteners. The examiner has not established that the presence of hydrogenated starch hydrolysate and the absence of glycerin and sorbitol solution are directly related by Reed '453.

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The examiner argues: "The hydrogenated starch hydrolysate used in Reed et al is alternative to aqueous sorbitol as a sweetener. Hence, if hydrogenated starch hydrolysate is included in the chewing gum of Reed et al, aqueous sorbitol would be excluded therefrom (answer, page 4). This argument that the presence of hydrogenated starch hydrolysate indicates the absence of aqueous sorbitol is not persuasive in view of the teaching in Reed '453 that "aqueous sweetener solutions such as those containing sorbitol, hydrogenated starch hydrolysates, corn syrup and combinations thereof" may be used (col. 3, lines 13-15). Moreover, the examiner has not pointed out where Reed '453 discloses a center which not only does not contain aqueous sorbitol, but also does not contain any other aqueous softener.

For the above reasons we find that the examiner has not carried the burden of establishing a *prima facie* case of anticipation of the appellants' claimed invention by Reed '453. We therefore reverse the rejection under 35 U.S.C. § 102(b).¹

¹In the event of further prosecution, the examiner should consider making a rejection under 35 U.S.C. § 103 over Reed '453.

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*Rejection of claim 15 under 35 U.S.C. § 103
over Reed '453 in view of Yatka*

Reed '453 discloses that "aqueous sweetener solutions such as those containing sorbitol, hydrogenated starch hydrolysates, corn syrup and combinations thereof" may be included in the gum center (col. 3, lines 13-15). Reed '453 also indicates that glycerine and sorbitol solution are optional (col. 3, lines 26-27). These disclosures would have fairly suggested, to one of ordinary skill in the art, a gum center which contains hydrogenated starch hydrolysate and does not contain glycerine or sorbitol solution. As for the requirement in the appellants' claim 13 that the gum center does not contain other aqueous softeners, the teaching in Reed '453 that the water content in the gum center is to be very low, most preferably less than about 1 wt%, so that the center is not a water donor to the coating would have fairly suggested, to one of ordinary skill in the art, use of softeners which are not in aqueous form (col. 2, lines 27-37).

Reed '453 does not disclose that the coating step includes a dry charging step as required by the appellants' claim 15. Such a dry charging step is disclosed by Yatka (col. 17, lines 19-20; col. 19, lines 10-11). There is no dispute as to whether it

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would have been obvious to one of ordinary skill in the art to use Yotka's dry charging step in the Reed '453 method.

The appellants argue (brief, page 14): "Reed teaches the use of glycerin and liquid sorbitol. As a result, Reed teaches away from the claimed invention which requires exclusion of glycerin and liquid sorbitol." This argument is not well taken because Reed '453 indicates that glycerin and aqueous sorbitol are optional (col. 3, lines 26-27).

The appellants argue (brief, page 15): "Reed specifically states that at least 0.5 to 15 percent by weight of the chewing gum center will comprise softeners. The softeners are chosen from the group consisting of glycerin and other optional aqueous softeners. Indeed, according to Reed 'softeners contemplated by the present invention include glycerin..." (Reed, col. 3, lines 9-12)." Actually, Reed '453 teaches that softeners "generally constitute between about 0.5 to about 15 weight percent of the chewing gum center" (col. 3, lines 8-9). Regardless, the indication in Reed '453 that the glycerin is optional (col. 3, lines 26-27) would have fairly suggested, to one of ordinary skill in the art, use of disclosed softeners other than glycerin.

The appellants argue that "the only example *Reed* provides includes glycerin (*Reed*, col. 6, line 42 - col. 7, line 63)" (brief, page 15). This argument is not well taken because *Reed* '453 is not limited to its examples. See *In re Fracalossi*, 681 F.2d 792, 794 n.1, 215 USPQ 569, 570 n.1 (CCPA 1982); *In re Mills*, 470 F.2d 649, 651, 176 USPQ 196, 198 (CCPA 1972).

The appellants argue that "according to *Reed*, if the center contained hydrogenated starch hydrolysate, it would be combined with another softener such as glycerin" (brief, page 15). This argument is not convincing because the teachings in *Reed* '453 that glycerin is one of a number of softeners which are suitable alone or in combination (col. 3, lines 12-16) and that glycerin is optional (col. 3, lines 26-27) would have fairly suggested, to one of ordinary skill in the art, use of the hydrogenated starch hydrolysate in combination with one or more softeners other than glycerin.

The appellants argue that inventive example 2 in their specification shows that the claimed invention provides unexpected improvement in crunchiness and shelf life (brief, pages 15-16; reply brief, page 3). This argument is not persuasive because, first, the appellants have not identified the closest prior art and compared their claimed invention to it.

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See *In re Baxter Travenol Labs.*, 952 F.2d 388, 392, 21 USPQ2d 1281, 1285 (Fed. Cir. 1991); *In re De Blauwe*, 736 F.2d 699, 705, 222 USPQ 191, 196 (Fed. Cir. 1984). Second, the appellants have not established that the results obtained by their "trained sensory technicians" are reliable and repeatable. Third, the appellants have not established that the evidence shows an unexpected difference in crunchiness and shelf life between the inventive example and the comparative examples. See *In re Freeman*, 474 F.2d 1318, 1324, 177 USPQ 139, 143 (CCPA 1973); *In re Klosak*, 455 F.2d 1077, 1080, 173 USPQ 14, 16 (CCPA 1972). Reed '508 teaches that glycerine in a gum center coated with hydrogenated isomaltulose, which is the coating used in Reed '453 (col. 2, lines 17-20), pulls moisture from the coating and thereby reduces the shelf life of the gum by causing the coating to soften and lose its desirable texture (col. 1, line 38 - col. 2, line 3). This teaching indicates that the appellants' observed improvement in crunchiness and shelf life when the center is free of glycerin is an expected result rather than an unexpected result. Fourth, the appellants' comparative evidence, which is limited to one inventive composition, is not commensurate in scope with the claims. See *In re Grasselli*, 713

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F.2d 731, 743, 218 USPQ 769, 778 (Fed. Cir. 1983); *In re Clemens*,
622 F.2d 1029, 1035, 206 USPQ 289, 296 (CCPA 1980).

For the above reasons we conclude that the method claimed in
the appellants' claim 15 would have been obvious to one of
ordinary skill in the art over Reed '453 in view of Yotka.

*Rejection of claims 1-5, 8-10, 13, 14, 16, 17 and 20
under 35 U.S.C. § 103 over Hopkins in view of
Reed '453, Reed '508 or Reed '406*

The appellants state that the claims stand or fall
separately (brief, page 6), but the appellants do not separately
argue the patentability of the claims. We therefore limit our
discussion to one claim, i.e., claim 1. See *In re Ochiai*, 71
F.3d 1565, 1566 n.2, 37 USPQ2d 1127, 1129 n.2 (Fed. Cir. 1995);
37 CFR § 1.192(c)(7) (1997).

Hopkins discloses a sugarless chewing gum product comprising
a water-soluble portion and a water-insoluble portion (col. 1,
lines 6-10; col. 3, lines 66-67; col. 6, lines 4-7). Exemplary
chewing gums include hydrogenated starch hydrolysate and sorbitol
powder (col. 6, lines 50-59; col. 7, lines 1-12, 20-30 and 57-
67). These chewing gums contain 0.1-2 wt% lecithin as a
softener, and there is no indication that this is an aqueous
softener.

Hopkins does not teach that the chewing gum product is coated. However, 1) Reed '453 teaches that coating a chewing gum center, which can contain hydrogenated starch hydrolysate and can be free of glycerin and sorbitol solution, with hydrogenated isomaltulose produces a sugarless hard coated chewing gum comparable in appearance and mouth feel to chewing gums containing hard sugar coatings (col. 3, lines 14, 26-27 and 38-39; col. 7, lines 20-23), 2) Reed '508 teaches that coating a sugarless pellet gum center, which preferably contains no glycerin, with hydrogenated isomaltulose produces a pellet gum which is shelf stable for relatively long periods of time (col. 2, lines 18-20 and 26-28; col. 10, lines 24-26), and 3) Reed '406 teaches that "[s]ugarless gums coated with hydrogenated isomaltulose-containing syrup possess excellent appearance, taste, texture, mouth feel and other desirable properties of hard coated chewing gums" (col. 2, lines 4-7). These teachings would have fairly suggested, to one of ordinary skill in the art, coating Hopkins' sugarless gum with hydrogenated isomaltulose to obtain the benefits of doing so disclosed in the Reed patents.

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The appellants argue that Hopkins discloses that the chewing gum optionally can contain liquid sorbitol (brief, page 16; reply brief, pages 2-3). This argument is not well taken because Hopkins discloses a chewing gum composition which contains sorbitol powder and is free of liquid sorbitol (col. 6, lines 50-59; col. 7, lines 1-12, 20-30 and 57-67).

We therefore conclude that a *prima facie* case of obviousness of the appellants' claimed invention over Hopkins in view of each Reed patent has been established and has not been effectively rebutted by the appellants. Hence, we affirm the rejections under 35 U.S.C. § 103 over Hopkins in view of each Reed patent.

Rejection of claim 15 under 35 U.S.C. § 103 as obvious over Hopkins in view of Reed '453, Reed '508 or Reed '406, further in view of Yatka

The appellants argue that Yatka does not remedy the deficiencies in Hopkins and the Reed patents as to claim 13 from which claim 15 depends. For the reasons given above regarding the rejection of claim 1 over Hopkins in view of each Reed patent, we are not persuaded by the appellants' argument that the applied references are deficient as to claim 13. Accordingly, we affirm the rejections under 35 U.S.C. § 103 over Hopkins in view of each Reed patent.

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DECISION

The rejections of claims 1-5 under 35 U.S.C. § 112, second paragraph, and claims 1-5, 8-10, 13, 14, 16, 17 and 20 under 35 U.S.C. § 102(b) over Reed '453, are reversed. The rejections of claim 15 under 35 U.S.C. § 103 over Reed '453 in view of Yatka, claims 1-5, 8-10, 13, 14, 16, 17 and 20 under 35 U.S.C. § 103 over Hopkins in view of Reed '453, Reed '508 or Reed '406, and claim 15 under 35 U.S.C. § 103 over Hopkins in view of Reed '453, Reed '508 or Reed '406, further in view of Yatka, are affirmed.

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

AFFIRMED

BRADLEY R. GARRIS)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
TERRY J. OWENS)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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PETER F. KRATZ)	
Administrative Patent Judge)	

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Robert M. Barrett, Esq.
BELL, BOYD & LLOYD LLC
P.O. Box 1135
Chicago, IL 60690-1135