

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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 JOHN T. WOLFE, JOO H. SONG,
CHRISTAFOR E. SUNDSTROM, DAVID W. RECORD,
DONALD J. TOWNSEND, KEVIN B. BRODERICK,
and
PHILIP G. SCHNELL

Appeal No. 1998-1722
Application No. 08/527,018

ON BRIEF

Before WARREN, TIMM, and DELMENDO, Administrative Patent Judges.
DELMENDO, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal under 35 U.S.C. § 134 (2003) from the examiner's final rejection of claims 1 through 20 (final Office action mailed Mar. 7, 1997, paper 9), which are all the claims pending in the above-identified application.

The subject matter on appeal relates to a method of manufacturing chewing gum (claims 1-4, 6-9, 11, 12, 14-17, 19,

and 20) and to a chewing gum product (claims 5, 10, 13, and 18).

Further details of this appealed subject matter are recited in representative claims 1, 4, 5, 6, and 16 reproduced below:

1. A method of manufacturing chewing gum comprising the steps of adding chewing gum ingredients to a high efficiency continuous mixer that includes a conveyor element on a screw of the mixer at a location that is not directly under an ingredient addition port.

4. The method of Claim 1 wherein finished gum base is added to the high efficiency continuous mixer.

5. The chewing gum product manufacturing [sic] according to the method of Claim 1.

6. A method of continuously manufacturing chewing gum without requiring separate manufacture of a chewing gum base, comprising the steps of:

a) adding at least an elastomer and filler into a high efficiency continuous mixer, and mixing the elastomer and filler together in the continuous mixer;

b) adding a [sic, at] least one ingredient selected from the group consisting of fats, oils, waxes and elastomer plasticizers into the continuous mixer, and mixing said ingredient with the elastomer and filler in the continuous mixer;

c) adding at least one sweetener and at least one flavor into the continuous mixer, and mixing said sweetener and flavor with the remaining ingredients to form a chewing gum product; and

d) wherein after one of the ingredients is added to the mixer, it is subjected to a conveyor element on a screw of a single high efficiency continuous mixer, the conveyor element being located at a position that is not directly under an ingredient addition port.

16. A method of continuously manufacturing chewing gum comprising the steps of:

a) adding a gum base to a blade-and-pin mixer;

b) adding at least one sweetener and at least

I. 35 U.S.C. § 102(e): Claims 1-15

A. Claim 1

To aid us in determining whether the examiner applied the prior art correctly against the appealed claims, we must first consider the scope and meaning of certain terms that appear in appealed claim 1. Gechter v. Davidson, 116 F.3d 1454, 1457, 1460 n.3, 43 USPQ2d 1030, 1032, 1035 n.3 (Fed. Cir. 1997); In re Paulsen, 30 F.3d 1475, 1479, 31 USPQ2d 1671, 1674 (Fed. Cir. 1994). It is well settled that, in proceedings before the United States Patent and Trademark Office (PTO), claims in an application are to be given their broadest reasonable interpretation, taking into account the written description found in the specification. In re Morris, 127 F.3d 1048, 1054, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997); In re Zletz, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989) ("During

independent claims separate and apart from each other." (Appeal brief filed Jul. 30, 1997, paper 15, p. 6.) Regarding product claims 5, 10, and 13, however, the appellants do not provide any argument as to why these product claims are separately patentable relative to each other. Thus, as to these product claims, we confine our discussion to appealed claim 5. See 37 CFR § 1.192(c)(7)(2003)(effective Apr. 21, 1995); In re McDaniel, 293 F.3d 1379, 1383, 63 USPQ2d 1462, 1465 (Fed. Cir. 2002) ("If the brief fails to meet either requirement [as provided under 37 CFR § 1.192(c)(7)], the Board is free to select a single claim from each group of claims subject to a common ground of rejection as representative of all claims in that group and to decide the appeal of that rejection based solely on the selected representative claim.").

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patent examination the pending claims must be interpreted as broadly as their terms reasonably allow."); In re Yamamoto, 740 F.2d 1569, 1571, 222 USPQ 934, 936 (Fed. Cir. 1984)("The PTO broadly interprets claims during examination of a patent application since the applicant may 'amend his claim to obtain protection commensurate with his actual contribution to the art.'")(quoting In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550 (CCPA 1969)).

As noted above, appealed claim 1 recites:

A method of manufacturing chewing gum comprising the steps of adding chewing gum ingredients to a high efficiency continuous mixer that includes a conveyor element on a screw of the mixer at a location that is not directly under an ingredient addition port.

First, we note that in reciting the steps of the method, appealed claim 1 includes the term "comprising." The use of the term "comprising" would alert potential infringers that the recited step is essential, but that other unrecited step or steps may be included and still form a construct within the scope of the claim.² Thus, appealed claim 1 encompasses a method including a further step of adding a gum base to an additional mixer to form a chewing gum product.

² See, e.g., In re Baxter, 656 F.2d 679, 686, 210 USPQ 795, 802 (CCPA 1981).

Second, the present specification clearly enlightens one skilled in the relevant art that the manufacture of a chewing gum base and the final chewing gum product in a single high efficiency mixer constitutes one, not the sole, embodiment of the invention. (Page 3, lines 11-17.)

Third, the present specification defines the term "high efficiency continuous mixer" as "one which is capable of providing thorough mixing over a relatively short distance or length of the mixer." (Id. at page 5, lines 7-9.) While the specification describes an embodiment in which the total L/D ratio ("ratio of the length of a particular active region of the mixer screw, which is composed of mixing elements, divided by the maximum diameter of the mixer barrel in this active region") is not more than about 40, it does not limit the term "high efficiency continuous mixer" to any particular L/D ratio.

Fourth, the present specification states that the phrase "not directly under" as used in appealed claim 1 "means that no significant portion of the [conveyor] element is adjacent to the port." (Id. at page 9, lines 19-21.) In elaborating on this language, the specification explains that "it is acceptable for a small overlap to occur between the element and port, so long as the majority of the element extends beyond the wall of the port." (Id. at page 9, lines 21-24.)

Having analyzed the scope of appealed claim 1, we consider the teachings of the Song reference. Song describes a method for producing chewing gum comprising the steps of: (a) adding 5.0-95% by weight of elastomer(s), 0-50% by weight of elastomer solvent(s), 0-75% by weight of plasticizer(s), 0-30% by weight of wax(es), 0.5-40% by weight of emulsifier(s), 1.0-65% by weight of filler(s), and 0-3.0% by weight of colorant(s)/flavor(s) into a continuous extruder providing highly dispersive mixing to form a chewing gum base; and then (b) using the chewing gum base to produce conventional chewing gums. (Column 2, line 49 to column 3, line 24; column 4, lines 23-25.) The examiner found (answer, page 5), and the appellants do not specifically dispute, that Song's element 32 (Figure 1), which is "not directly under an ingredient addition port," is a "conveyor element."

On the basis of these findings, we agree with the examiner that Song describes each and every limitation of appealed claim 1 within the meaning of 35 U.S.C. § 102. In re Schreiber, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997).

The appellants argue that Song's "chewing gum base is made separate and apart from the chewing gum." (Appeal brief, page 7.) As we discussed above, however, appealed claim 1 reads on a

method in which the chewing gum base is "made separate and apart from the chewing gum."

The appellants contend that Song's "extruders are not high efficiency mixers as used in the claims" because Song's extruders are exemplified as having L/D ratios of 48, 58, and 35, as contrasted with the here recited "high efficiency continuous mixer" allegedly having a L/D ratio of 40 or less. (Appeal brief, pages 8 and 10; see also reply brief filed Oct. 20, 1997, paper 17, page 2.) This argument lacks merit, because the appellants have not pointed to anything in the language of the claim itself or in the record to substantiate this restrictive definition of "high efficiency continuous mixer." Contrary to the appellants' belief, nothing in the specification limits the "high efficiency continuous mixer" to any particular L/D ratio. The portion of the specification cited by the appellants (appeal brief, page 10) merely describes one embodiment of the invention. Moreover, as correctly pointed out by the examiner (answer, page 8), Song's disclosed extruder having an L/D ratio of 35 is within the appellants' argued range of L/D ratios.

Because none of the appellants' arguments are sufficient to rebut the examiner's prima facie case of anticipation as to

appealed claim 1, we uphold the examiner's rejection as to appealed claims 1 through 3.

B. Claims 4, 6-9, 11, 12, 14, and 15

Regarding dependent claim 4 and independent claims 6 and 11, the appellants argue that Song does not disclose a method of making chewing gum in a "high efficiency continuous mixer." (Appeal brief, pages 6-10; see also reply brief, pages 1-2.) Other than to state that Song "clearly teaches the production of chewing gum once the particular gum base has been produced" (answer, page 7), the examiner offers no analysis or rebuttal.

Accordingly, we cannot uphold the examiner's rejection as to appealed claims 4, 6 through 9, 11, 12, 14, and 15.

C. Claim 5

As to appealed claim 5, we are in complete agreement with the examiner's position (answer, pages 5 and 9). In this regard, when a product recited in a product-by-process claim reasonably appears to be the same as or obvious from a product of the prior art, the burden is on the applicants to show that the prior art product is in fact different from the claimed product, even though the products are made by different processes. In re Thorpe, 777 F.2d 695, 697, 227 USPQ 964, 966 (Fed. Cir. 1985).

II. 35 U.S.C. § 103(a): Claims 16-20

The appellants do not dispute the examiner's finding (Office letter mailed Oct. 6, 2003, paper 25) that Rose (I)³ discloses the same "blade-and-pin mixer" recited in appealed claims 16 through 20. Further, the appellants do not contest the examiner's finding (id.) that Rose (I) describes a method in which "both the chewing gum base and the chewing gum are integrally manufactured in a single continuous mixer," as required by appealed claim 20, and that sweetener and flavor are also added to the same mixer. In another embodiment, Rose (I) discloses a method in which gum base is fed into the mixer as pellets and then sweetener and flavor are added to the same mixer. (Page 5.)

Accordingly, we determine that Rose (I) describes each and every limitation of appealed claims 16 and 20.⁴ Although the examiner's rejection of claim 16 has been made under 35 U.S.C. § 103, a prior art disclosure that anticipates under 35 U.S.C. § 102 also renders the claim obvious under 35 U.S.C. § 103, for anticipation is the epitome of obviousness. In re Baxter

³ While a more legible copy of Rose (I) would have been desirable, we think that the record copy is sufficient for us to render a reasoned decision.

⁴ We do not have to discuss the other references because they are not necessary to support the examiner's rejection.

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Travenol Laboratories, 952 F.2d 388, 391, 21 USPQ2d 1281, 1284-85 (Fed. Cir. 1991); In re Fracalossi, 681 F.2d 792, 794, 215 USPQ 569, 571 (CCPA 1982); In re May, 574 F.2d 1082, 1089, 197 USPQ 601, 607 (CCPA 1978).

The appellants urge that none of the cited references teach a mixer including "at least one conveyor element that is not located directly under a feed port of the mixer." (Appeal brief, page 12.) We disagree. As pointed out by the examiner (Oct. 6, 2003 letter), the present specification describes the use of the same mixer as described in Rose (I).

Summary

In summary, we affirm the examiner's rejections under: (i) 35 U.S.C. § 102(e) of appealed claims 1 through 3, 5, 10, and 13 as anticipated by Song and (ii) 35 U.S.C. § 103(a) of appealed claims 16 through 20 as unpatentable over Song in view of Rose I and Rose II. We reverse, however, the examiner's rejection under 35 U.S.C. § 102(e) of appealed claims 4, 6 through 9, 11, 12, 14, and 15 as anticipated by Song.

The decision of the examiner is therefore affirmed in part.

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

AFFIRMED IN PART

Charles F. Warren)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
Catherine Timm)	
Administrative Patent Judge)	APPEALS AND
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