

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 31

UNITED STATES PATENT AND TRADEMARK OFFICE

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Ex parte MICHAEL J. SULLIVAN and R. DENNIS NESBITT

Appeal No. 2002-1924
Application No. 09/102,342

ON BRIEF

Before GARRIS, NASE, and CRAWFORD, Administrative Patent Judges.
NASE, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 18 to 37, which are all of the claims pending in this application.

We AFFIRM-IN-PART.

BACKGROUND

The appellants' invention relates to golf balls having a low rate of spin upon club impact (specification, p. 6). A copy of the claims under appeal is set forth in the appendix to the appellants' brief.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Shama	4,848,770	July 18, 1989
Horiuchi et al. (Horiuchi)	5,222,739	June 29, 1993 (filed Aug. 2, 1991)
Sullivan	5,312,857	May 17, 1994 (filed Jan. 9, 1992)

Claims 18 to 23 and 27 to 32 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Sullivan.

Claims 18 to 29 stand rejected under 35 U.S.C. § 102(e) as being anticipated by or, in the alternative, under 35 U.S.C. § 103 as obvious over Horiuchi.

Claims 18 to 29 and 33 to 37 stand rejected under 35 U.S.C. § 103 as being unpatentable over Shama in view of Horiuchi.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the answer (Paper No. 27, mailed April 3, 2002) for the examiner's complete reasoning in support of the rejections, and to the brief (Paper No. 26, filed March 1, 2002) and reply brief (Paper No. 28, filed May 10, 2002) for the appellants' arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by the appellants and the examiner. As a consequence of our review, we make the determinations which follow.

The anticipation rejection based on Sullivan

We sustain the rejection of claims 18 to 23, 28 and 29 under 35 U.S.C. § 102(e) as being anticipated by Sullivan, but not the rejection of claims 27 and 30 to 32.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. See In re Robertson, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950 (Fed. Cir. 1999); Verdegaal Bros. Inc. v. Union Oil Co., 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir.), cert.

denied, 484 U.S. 827 (1987). The inquiry as to whether a reference anticipates a claim must focus on what subject matter is encompassed by the claim and what subject matter is described by the reference. As set forth by the court in Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984), it is only necessary for the claims to "'read on' something disclosed in the reference, i.e., all limitations of the claim are found in the reference, or 'fully met' by it."

It is well-settled that under principles of inherency, when a reference is silent about an asserted inherent characteristic, it must be clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. See Robertson, 169 F.3d at 745, 49 USPQ2d at 1950-51(citing Continental Can Co. v. Monsanto Co., 948 F.2d 1264, 1268, 20 USPQ2d 1746, 1749 (Fed. Cir. 1991)). As the court stated in In re Oelrich, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981)(quoting Hansgirk v. Kemmer, 102 F.2d 212, 214, 40 USPQ 665, 667 (CCPA 1939)):

Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing *may* result from a given set of circumstances is not sufficient. [Citations omitted.] If, however, the disclosure is sufficient to show that the natural result flowing from the operation as taught would result in the performance of the questioned function, it seems to be well settled that the disclosure should be regarded as sufficient.

With this as background, we turn to the examiner's analysis of Sullivan as applied by the examiner in this rejection claims 18 to 23 and 27 to 32. In this rejection, the examiner ascertained (answer, pp. 3-4) that the subject matter of claims 18 to 23 and 27 to 32 were anticipated by the golf ball having formulation 35 (see Table 13 on column 18). That golf ball has a solid preformed cross-linked polybutadiene core (column 15, lines 55-56) and a cover made from 50% lotek 959 and 50% lotek 960 (Table 13). The cover has a thickness of 0.0675 inches and the golf ball has a diameter of approximately 1.680 inches (column 15, lines 62-63). The golf ball has a Riehle compression of 49 (Table 13). Sullivan teaches (column 12, lines 14-18) that "[a]ccording to Exxon, loteks 959 and 960 contain from about 19.0 to about 21.0 by weight acrylic acid with approximately 30 to about 70 percent of the acid groups neutralized with sodium and zinc ions respectfully." Table 7 on column 12 provides that the Shore D hardness of lotek 959 is 66 and that the Shore D hardness of lotek 960 is 57. The examiner provided (answer, p. 3) that a cover made from 50% lotek 959 and 50% lotek 960 inherently has a Shore D hardness of 68¹ citing Table 3 on page 37 of the appellants' specification (presumably cover 2 having a formulation as provided on page 35 of the specification of 45.2% lotek 959, 45.2% lotek 960 and 9.6% MB²).

¹ The appellants have not contested this determination of inherency made by the examiner.

² MB is comprised of 74.9 wt-% lotek 7030, 23.8 wt-% TiO₂, 0.01 wt-% Unitex OB, 0.002 wt-% ultra marine blue and 300 ppm Santonox R.

Claim 18

Claim 18 reads as follows:

A golf ball comprising:
a molded core; and
a cover having a Shore D hardness of at least 65, wherein the cover is comprised of at least one high acid ionomer resin comprising a copolymer of greater than 16% by weight of an alpha, beta-unsaturated carboxylic acid, and an alpha-olefin of which about 10% to about 90% of the carboxyl groups of the copolymer are neutralized with a metal cation;
wherein the golf ball has a Riehle compression of 47 or greater.

The argument presented by the appellants does not convince us that the subject matter of claim 18 is novel for the reasons that follow.

First, the appellants argue that even if Sullivan disclosed all the recited features of the claims, it would not anticipate any claim since it discloses an additional, necessary feature not claimed in the present application (i.e., high levels of metal stearates in the cover of the golf ball) and that it would be impermissible to remove that feature. Sullivan's golf ball having formulation 35 does not include any metal stearates in its cover (see Table 13). Moreover, the claims under appeal use "comprising" language and thus do not exclude the claimed golf ball from having additional features not claimed in the present application.

Second, the appellants argue that Sullivan does not claim a Riehle compression of above 47 for the subject golf balls. While this is true, the pertinence of this fact escapes us since the rejection is based on Sullivan's golf ball having formulation 35, not Sullivan's claimed subject matter.

Third, the appellants argue that for the anticipation rejection to be proper "any and all possible formulations" according to Sullivan "must necessarily produce a ball with Riehle compression within the presently claimed range." We are not aware of any legal support for this proposition. In fact, the case law cited above supports the proposition that for the anticipation rejection to be proper only one formulation taught Sullivan must necessarily produce a ball with Riehle compression within the presently claimed range.

For the reasons set forth above, the decision of the examiner to reject claim 18 under 35 U.S.C. § 102(e) as being anticipated by Sullivan is affirmed.

Claims 27 and 28

Claims 27 and 28 read as follows:

27. A golf ball, as set forth in claim 18, wherein the cover has a thickness greater than 0.0675 inches.

28. A golf ball, as set forth in claim 18, wherein the cover has a thickness of about 0.0675 inches to about 0.130 inches.

The appellants argue that claims 27 and 28 are patentable since they recite that the cover thickness is greater than 0.0675 inches while Sullivan only teaches a cover thickness of 0.0675 inches. We find this argument persuasive with respect to claim 27 but not with respect to claim 28 since claim 28 includes a cover thickness of 0.0675 inches within its scope due to the language of claim 28 that the cover has a thickness of about 0.0675 inches to about 0.130 inches. Thus, unlike claim 27, claim 28 is not limited to a cover thickness greater than 0.0675 inches.

For the reasons set forth above, the decision of the examiner to reject claim 27 under 35 U.S.C. § 102(e) as being anticipated by Sullivan is reversed and the decision of the examiner to reject claim 28 under 35 U.S.C. § 102(e) as being anticipated by Sullivan is affirmed.

Claims 30 to 32

Claims 30 to 32 read as follows:

30. A golf ball, as set forth in claim 18, wherein the golf ball has a diameter of about 1.700 - 1.800 inches.

31. A golf ball, as set forth in claim 18, wherein the golf ball has a diameter of about 1.710 - 1.730 inches.

32. A golf ball, as set forth in claim 18, wherein the golf ball has a diameter of about 1.717 - 1.720 inches.

The appellants argue that Sullivan does not disclose the claimed diameter ranges. The examiner responded to this argument by stating that the larger ball diameters of claims 30-32 are suggested by Sullivan's teaching (column 14, lines 44-45) of a golf ball diameter of about 1.680 inches or greater.

In our view, Sullivan's golf ball having formulation 35 having a diameter of approximately 1.680 inches does not meet the diameters set forth in claims 30 to 32. We believe that one of ordinary skill in this art would understand the term "about" as used in claims 30 to 32 and the term "approximately" as used by Sullivan to refer to manufacturing tolerances and accordingly the claimed golf ball diameter ranges (e.g., a diameter of about 1.700 - 1.800 inches) are not readable on Sullivan's golf ball having formulation 35 having a diameter of approximately 1.680 inches.

For the reasons set forth above, the decision of the examiner to reject claims 30 to 32 under 35 U.S.C. § 102(e) as being anticipated by Sullivan is reversed.

Claims 19 to 23 and 29

The appellants argue (brief, p. 14) that the rejection ignores many features recited in each of the claims under appeal. However, this argument does not point out any specific limitation in claims 19 to 23 and 29 which is not met by Sullivan. It is not the function of the Board to examine the claims in greater detail than that argued by an appellant, looking for distinctions over the prior art. Cf. In re Baxter Travenol Labs, 952 F.2d 388, 391, 21 USPQ2d 1281, 1285 (Fed. Cir. 1991); In re Wiseman, 596 F.2d 1019, 1022, 201 USPQ 658, 661 (CCPA 1979). Accordingly, the decision of the examiner to reject claims 19 to 23 and 29 under 35 U.S.C. § 102(e) as being anticipated by Sullivan is affirmed.

The anticipation and obviousness rejection based on Horiuchi

We sustain the rejection of claims 18 to 29 under 35 U.S.C. § 102(e) as being anticipated by or, in the alternative, under 35 U.S.C. § 103 as obvious over Horiuchi.

In this rejection, the examiner set forth an analysis (answer, pp. 4-5) as to how the subject matter of claims 18 to 29 were met or suggested by the golf balls having ionomer covers set forth in Table 1 of Horiuchi which analysis we incorporate as our own. Included in that analysis, the examiner explained why the golf balls would inherently have a Shore D hardness of at least 65.

The appellants have not specifically contested this determination of inherency made by the examiner. Instead, the appellants point out (brief, p. 15) that not all high acid ionomers have a Shore D hardness of at least 65 citing Iotek 960 as but one example. As such, the appellants conclude that the claimed Shore D hardness of at least 65 is not inherent in the golf covers disclosed by Horiuchi.

We find this argument unpersuasive. A prior art reference need not expressly disclose each claimed element in order to anticipate the claimed invention. See Tyler Refrigeration v. Kysor Indus. Corp., 777 F.2d 687, 689, 227 USPQ 845, 846-847 (Fed. Cir. 1985). Rather, if a claimed element (or elements) is inherent in a prior art reference, then that element (or elements) is disclosed for purposes of finding anticipation. See Verdegaal Bros., Inc. v. Union Oil Co., 814 F.2d at 631-33, 2 USPQ2d at 1052-54.

It is well settled that the burden of establishing a prima facie case of anticipation resides with the Patent and Trademark Office (PTO). See In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984). When relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art. See Ex parte Levy, 17

USPQ2d 1461, 1464 (Bd. Patent App. & Int. 1990). After the PTO establishes a prima facie case of anticipation based on inherency, the burden shifts to the appellants to prove that the subject matter shown to be in the prior art does not possess the characteristics of the claimed invention. See In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985); In re King, 801 F.2d 1324, 1327, 231 USPQ 136, 138 (Fed. Cir. 1986).

In our view, the examiner at pages 4-5 of the answer has properly established a prima facie case of anticipation based on inherency. Hence, the appellants' burden before the PTO is to prove that the golf ball covers of Horiuchi do not have a Shore D value defined in the claims under appeal. The appellants have not come forward with any evidence to satisfy that burden. Compare In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433-34 (CCPA 1977); In re Ludtke, 441 F.2d 660, 664, 169 USPQ 563, 566-67 (CCPA 1971). The appellants' mere argument that not all high acid ionomers have a Shore D hardness of at least 65 citing Iotek 960 as but one example is not evidence that the golf ball covers of Horiuchi do not have a Shore D hardness of at least 65 especially since the golf ball covers of Horiuchi do not utilize Iotek 960 therein. See In re Pearson, 494 F.2d 1399, 1405, 181 USPQ 641, 646 (CCPA 1974)(attorney's arguments in a brief cannot take the place of evidence).

The appellants arguments that the rejection ignores many features recited in each of the claims under appeal and that for the examiner's inherency determination to be proper any and all possible formulations according to Horiuchi must necessarily produce a golf ball with a Shore D hardness of at least 65 are unconvincing for the rational expressed in our treatment supra of the anticipation rejection based on Sullivan.

For the reasons set forth above, the decision of the examiner to reject claims 18 to 29 under 35 U.S.C. § 102(e) as being anticipated by or, in the alternative, under 35 U.S.C. § 103 as obvious over Horiuchi is affirmed.

The obviousness rejection based on Shama and Horiuchi

We sustain the rejection of claims 18 to 29 and 33 to 37 under 35 U.S.C. § 103 as being unpatentable over Shama in view of Horiuchi.

In this rejection, the examiner set forth an analysis (answer, pp. 5-6) as to how the subject matter of claims 18 to 29 and 33 to 37 were suggested by the combined teachings of Shama and Horiuchi which analysis we incorporate as our own.

The appellants argue that (1) Shama does not disclose the claimed acid content of the cover or the claimed Shore D hardness for the cover; (2) Horiuchi does not

disclose the claimed Shore D hardness for the cover; and (3) that there is no motivation in the applied prior art to combine the teachings of Shama and Horiuchi.

As to the argued deficiencies of each reference on an individual basis, it is well-established that nonobviousness cannot be established by attacking the references individually when the rejection is predicated upon a combination of prior art disclosures. See In re Merck & Co. Inc., 800 F.2d 1091, 1097, 231 USPQ 375, 380 (Fed. Cir. 1986). Furthermore, it is clear to us that Shama's teaching (column 3, lines 55-57) that the cover composition of the golf ball of this invention may be any conventional composition suitable for covering golf balls provides ample motivation for a person of ordinary skill in the art at the time the invention was made to have used Horiuchi's high acid ionomer cover materials as Shama's ionomer cover. Moreover, Horiuchi does inherently disclose the claimed Shore D hardness for the cover for the reasons set forth above.

The appellants further argue that the claims at issue are directed to a low spin golf ball and that Shama teaches away from such a ball. We do not agree. We first note that only claims 34 to 36 are directed to a low spin golf ball. Second, we consider Shama's golf ball to be a low spin golf since the results in Table B in column 7 indicate the ball has less spin and, therefore, inferior green gripping ability than a three piece golf ball.

Lastly, the appellants argument that the rejection ignores many features recited in each of the claims under appeal is unconvincing for the rational expressed in our treatment supra of the anticipated rejection based on Sullivan.

For the reasons set forth above, the decision of the examiner to reject claims 18 to 29 and 33 to 37 under 35 U.S.C. § 103 as being unpatentable over Shama in view of Horiuchi is affirmed.

CONCLUSION

To summarize, the decision of the examiner to reject claims 18 to 23, 28 and 29 under 35 U.S.C. § 102(e) as being anticipated by Sullivan is affirmed; the decision of the examiner to reject claims 27 and 30 to 32 under 35 U.S.C. § 102(e) as being anticipated by Sullivan is reversed; the decision of the examiner to reject claims 18 to 29 under 35 U.S.C. § 102(e) as being anticipated by or, in the alternative, under 35 U.S.C. § 103 as obvious over Horiuchi is affirmed; and the decision of the examiner to reject claims 18 to 29 and 33 to 37 under 35 U.S.C. § 103 as being unpatentable over Shama in view of Horiuchi 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-IN-PART

BRADLEY R. GARRIS)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
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Administrative Patent Judge)	AND
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