

United States District Court,
D. Colorado.

Jack BARRECA,
Plaintiff.

v.

SOUTH BEACH BEVERAGE CO., INC., Lotte USA, and 7-Eleven, Inc,
Defendants.

No. CIV.A.02F2303PAC

June 16, 2004.

Background: Suit was brought alleging infringement of patent for a product described in the title of the patent as a "center-filled supplement gum."

Holding: In construing the patent claims, the District Court, Figa, J., held that claims required that the active ingredients be found in the liquid center-fill of the gum.

Claims construed.

6,491,540. Construed.

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ORDER ON CLAIMS CONSTRUCTION- *MARKMAN* HEARING

FIGA, District Judge.

[1] This patent infringement case is set for a jury trial to commence on September 20, 2004. At the Final Trial Preparation Conference held on May 13, 2004, the Court, pursuant to the request of the defendants, set this matter for a *Markman* FN1 hearing on June 7, 2004, later continued to June 8, 2004. On June 8, 2004, this Court conducted the *Markman* hearing, receiving the briefs of the parties, the arguments of counsel and various exhibits. This Court now makes the following findings and conclusions regarding the construction of the patent claims at issue.

FN1. A *Markman* hearing, named for the decision of the Supreme Court in *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996), is held for the purpose of determining the scope of the patent claims alleged to be infringed.

BACKGROUND

Plaintiff Jack Barreca alleges that Defendant Lotte USA manufactures a chewing gum product that infringes on plaintiff's United States patent No. 6,491,540 ('540 patent) for a product described in the title of the patent as a "center-filled supplement gum." The alleged infringing product manufactured by Lotte is distributed by Defendant South Beach Beverage Co., and is known, at least in this case, as "SoBe Energy gum." Defendant 7-Eleven at one time was the exclusive sales outlet for the SoBe product and is named as a contributory infringer.

[2] Before a fact finder can determine whether there has been an infringement of a patent, the Court must first construe the patent claims alleged to be infringed to ascertain the meaning and scope of the patent claims as a matter of law. *See Markman v. Westview Instruments*, 52 F.3d 967, 976 (Fed.Cir.1995) (*en banc*), *aff'd* 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996). This step of the process is called claim construction. The construction of a patent, including terms of art within its claims, is exclusively within the province of the court. *Markman*, *supra*, 517 U.S. at 372, 116 S.Ct. 1384.

[3] [4] In the Supreme Court's *Markman* decision, and in numerous decisions from the Federal Circuit, certain principles of patent claim construction have emerged that guide this Court in the task of construing plaintiff's patent claims. The Supreme Court has emphasized that the purpose of patent claims is to apprise the public of what is protected by a particular patent. *See Markman*, *supra*, 517 U.S. at 373, 116 S.Ct. 1384: "[A] patent must describe the exact scope of the invention and its manufacture to 'secure to [the patentee] all to which he is entitled, [and] to apprise the public of what is still open to them.'" *Id.* In other words, the claims in the patent provide the "metes and bounds" of the right which the patent confers on the patentee to exclude others from making, using or selling the protected invention. *See Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.*, 868 F.2d 1251, 1257 (Fed.Cir.1989). Although construction of patent claims is similar to construction of any written document, and general principles of construction are used, special considerations apply to patent claim construction, based on the need for the public and other inventors to know as precisely as possible the scope of the patentee's claims. Thus, the Court looks primarily to matters in the public record when construing patent claims.

Exactly what constitutes the "public record" has been described in various decisions of the Federal Circuit. As stated by the Federal Circuit in *Burke, Inc. v. Bruno Independent Living Aids, Inc.*, 183 F.3d 1334 (Fed.Cir.1999); "This court has held that the language of the claims, the specification and the prosecution history are principally involved in construing patent claims because these constitute the public record." 183 F.3d at 1340. The language of the patent claims, the specification and the prosecution history are referred to as the "intrinsic evidence" of the patent. At least one court has stated that the specification includes "relevant drawings" of the invention. *See Bailey v. Dart Container Corporation*, 157 F.Supp.2d 110, 114 (D.Mass.2001)

[5] [6] Under certain circumstances, the construing court goes beyond the intrinsic evidence. As stated by the Federal Circuit in *Zodiac Pool Care, Inc., v. Hoffinger Industries, Inc.*, 206 F.3d 1408 (Fed.Cir.2000):

When construing the meaning of a claim, the court may consider both intrinsic and extrinsic evidence. Intrinsic evidence consists of the claim itself, the specification, and any prosecution history. Extrinsic evidence includes expert testimony, inventor testimony, dictionaries, treatises, and prior art not cited in the prosecution history. The court turns to extrinsic evidence only when the intrinsic evidence is insufficient to establish the clear meaning of the asserted claim. See generally *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582-84 (Fed.Cir.1996).

206 F.3d at 1414.

Vitronics does not prohibit courts from examining extrinsic evidence, even when the patent document is itself clear.... Rather, *Vitronics* merely warned courts not to rely on extrinsic evidence in claim construction to contradict the meaning of claims discernible from thoughtful examination of the claims, the written description, and the prosecution history-the intrinsic evidence.

182 F.3d at 1308.

Bearing these principles in mind, the Court now turns to the requisite considered examination and construction of the claims of plaintiff's patent at issue in this case.

THE PATENT CLAIMS AT ISSUE

Plaintiff's '540 patent lists 22 claims. Plaintiff alleges that the SoBe gum infringes at least two, and possibly four, of the 22 claims contained in the '540 patent. In the pretrial order filed on April 19, 2004, plaintiff asserts that "at least" Claims 14 and/or 22 are infringed by the SoBe gum, based on what plaintiff claims are defendants' admissions as to the contents of the SoBe gum. Plaintiff further asserts that if he fails to show that SoBe gum has taurine in the liquid or semi-liquid portion of the gum, Claim 2 of the '540 patent would still be infringed because it calls for the active ingredient of guarana and ginseng, compounds "admittedly" included in the SoBe gum about which plaintiff's experts have testified that both are present in the liquid or semi-liquid portion of the gum. Similarly, plaintiff asserts that if defendants show there is no ginseng or taurine in a liquid or semi-liquid center of the SoBe gum, Claim 1 of the '540 patent would still be infringed because it requires only guarana as the active ingredient (*see* Pretrial Order, pp. 3-4). Accordingly, without agreeing with plaintiff's assertions of infringement, it is apparent that the *Markman* hearing and this order need to address and construe only Claims 1, 2, 14 and 22 of the '540 patent. This Court offers no construction of the remaining claims.

As specified in the patent, these four claims read as follows:

[Claim 1]: A chewing gum consisting essentially of a first substance comprised of gum configured so as to have at least one cavity capable of retaining a liquid or semi-liquid substance, said liquid or semi-liquid substance having an active ingredient consisting essentially of guarana in an amount of at least about 0.05 mg and up to 5 grams.

[Claim 2]: A chewing gum consisting essentially of a first substance comprised of gum configured so as to have at least one cavity capable of retaining a liquid or semi-liquid substance, said liquid or semi-liquid substance having an active ingredient consisting essentially of guarana and ginseng in an amount of at least

about 0.05 mg and up to 5 grams.

[Claim 14]: A chewing gum consisting essentially of a first substance comprised of gum configured so as to have at least one cavity capable of retaining a liquid or semi-liquid substance, said liquid or semi-liquid substance having an active ingredient consisting essentially of guarana and metabolic enhancers that increase a user's metabolism in order to achieve a higher caloric burn rate, in an amount of at least about 0.05 mg and up to 5 grams.

[Claim 22]: A chewing gum consisting essentially of a first substance comprised of gum configured so as to have at least one cavity capable of retaining a liquid or semi-liquid substance, said liquid or semi-liquid substance having an active ingredient consisting essentially of guarana, ginseng and metabolic enhancers that increases a user's metabolism in order to achieve a higher caloric burn rate, in an amount of at least about 0.05 mg and up to 5 grams.

DEFENDANTS' POSITION ON INFRINGEMENT

Although the case law teaches that the Court's task at this stage is to interpret and construe the patent claims without reference to the alleged infringing product, some explanation of the defendant's position is helpful to place the claims of infringement and the related claim construction into a context. The defendants assert that there is no infringement of any of the four claims of plaintiff's patent because a proper construction of those four claims restricts plaintiff's patent to a product upon which the SoBe gum does not infringe. According to defendants, the SoBe gum does not infringe the '540 patent "because the ingredients guarana, ginseng and taurine are contained only in the casing of the gum, not in the liquid center-fill." (See Pretrial Order, pp. 10-11). Based on this defense, the construction of plaintiff's claims becomes important to the ultimate issue of whether an infringement can be demonstrated here.

THE DISPUTED CONSTRUCTION ISSUES

In the *Markman* briefs submitted to the Court, and at the *Markman* hearing itself, the parties submitted arguments and evidence as to the disputed issues regarding how the four claims should be construed. These arguments are summarized to provide context to the claim construction made by the Court.

Is the '540 patent limited only to a gum that is made with a liquid or semi-liquid fill in the center where the active ingredients are contained ?

Defendants assert that each of the four claims in plaintiff's patent describes a gum product that has a liquid or semi-liquid center containing guarana (Claim 1), or guarana and ginseng (Claim 2) or guarana and at least two metabolic enhancers (Claim 14) or guarana, ginseng and at least two metabolic enhancers (Claim 22), whereas the SoBe Energy gum does not have a liquid or semi-liquid center containing those ingredients.

Plaintiff asserts that its patent is infringed even by a product where the active ingredients are found in the outer gum shell and not necessarily in the liquid or semi-liquid center. Defendants assert that the '540 patent is properly construed to encompass only a gum that is manufactured with the active ingredients in the liquid center-fill, and not a gum with the active components in the outer gum base.

Plaintiff argues that his patent should not be limited to a "liquid center-fill" formulation, despite the title of the patent and notwithstanding the diagrams of the product that appear in the patent. Plaintiff further asserts

that the '540 claims are not limited to encompass only "liquid center-filled gums." (Plaintiff's *Markman* brief, pp. 8-9.)

Plaintiff makes the related argument that the "active ingredient" need not reside in the inner cavity, that the inner cavity as described in the claim need only be "capable of retaining" the liquid (or semi-liquid), and not actually "retaining" the liquid, and that the active ingredient may reside elsewhere in the gum. (Plaintiff's *Markman* brief, pp. 16-19.)

Does the phrase "having an active ingredient consisting essentially of" limit the claims to products containing only those listed active ingredients and not others?

Defendants assert that in each claim where the language states the "active consisting essentially of" the claim must be construed to allow only for the presence of that ingredient. For example, Claim 1 states it consists essentially of guarana, and thus it should be construed to allow for the presence of guarana only, and no other substantive ingredients. Similarly, Claim 2 states it consists essentially of guarana and ginseng, and thus it should be construed to allow for the presence of guarana and ginseng only, and no other substantive ingredients. In support of this position, defendants cite case law interpreting the meaning of the phrase "consisting essentially of" state. (*See* Defendants' *Markman* brief, p. 9.)

Plaintiff, citing other case law, asserts that this language signals a "partially open claim" meaning the patent necessarily includes the listed ingredients and is open to unlisted ingredients that do not materially affect the basic and novel properties of the invention. (Plaintiff's *Markman* brief, p. 11.) Plaintiff says the phrase, "consisting essentially of" at least as used in Claims 14 and 22, (but not necessarily in Claims 1 and 2) does not limit the presence of other aspects of the gum, although not specifically listed in the claims.

Does the claim require the presence of the active ingredients listed, and not just a portion of those ingredients?

Defendants argue that the claims require the presence of the active ingredients listed, and not just a "marker" of these active ingredients, such as the presence of caffeine which is a component of guarana. In other words, defendants urge a construction does not permit the presence of a "marker" as a substitute for the listed active ingredient.

Plaintiff's response to this point appears to be that the presence of caffeine can be used to demonstrate the presence of a "metabolic enhancer" for purposes of Claims 14 and 22, although not as a substitute for showing the presence of guarana. (*See* Plaintiff's *Markman* brief, pp. 26, 34, 36.)

Are claims 14 and 22 construed so as require the presence of multiple "metabolic enhancers" ?

Defendants argue that since the claims descriptions use the plural, there must be proof that the infringing product contains multiple metabolic enhancers, and presumably if there is only one shown, there is no infringement of these claims. Defendants cite case law that says when a word is written in the plural it means plural. (Defendants' *Markman* brief at 10-11). Plaintiff does not directly address this argument, but in his discussion of the patent references to metabolic enhancers argues that it references the ingredient in the singular. (*See* Plaintiff's *Markman* brief, pp. 19-20.)

Are Claims 14 and 22 construed so as to require both the ingredient, or ingredients, specified and metabolic enhancers, or can the specified ingredient serve as one of the metabolic enhancers?

Defendants argue that plaintiff is attempting to show that, if the patent Claims 14 and 22 do require multiple metabolic enhancers, the claim is satisfied because the specified ingredient, that is either guarana or ginseng, is included as one of the required metabolic enhancers. Defendants assert that such an approach is an improper interpretation of the word "and" as it is used in Claims 14 and 22.

Plaintiff's *Markman* brief argues that metabolic enhancers are present in his product, that the various specified ingredients are metabolic enhancers, or they contain compounds that are metabolic enhancers, apparently suggesting that Claims 14 and 22 allow the active ingredient to be considered the "metabolic enhancer."

Are the claims construed to require proof that the product actually increases a user's metabolism to achieve a higher caloric burn rate?

Defendants assert that Claims 14 and 22 should be construed as describing a product that has demonstrable effect on the user's metabolism, and not just a product containing a substance that has the potential to increase metabolism. Plaintiff argues such a construction is unreasonable and entirely subjective to the user.

INTRINSIC EVIDENCE

[8] Consistent with the above cited cases, the Court will start its examination by reviewing the intrinsic evidence relevant to the claims construction. As mandated, this Court will look first to the language of the claims, then the specifications, then the prosecution history.

1. The Claims Language

The words of the claims themselves, used to define the scope of the patented invention, are the starting point of claim construction. Resort must be had in the first instance to the words of the claim. *Bell Communications Research, Inc., v. Vitalink Communications Corp.*, 55 F.3d 615, 620 (Fed.Cir.1995). A court must presume that the terms in the claim mean what they say, and, unless otherwise compelled, give full effect to the ordinary and accustomed meaning of claim terms. *Johnson Worldwide Associates, Inc., v. Zebco Corp.*, 175 F.3d 985, 989 (Fed.Cir.1999). Plain English words are entitled to their plain English meaning, see, *e.g.*, *In re Wright*, 866 F.2d 422, 425 (Fed.Cir.1989), unless it is apparent from the patent specification and prosecution history that the inventor used a term with a different meaning. *Hoechst Celanese Corp. v. BP Chemicals Ltd.*, 78 F.3d 1575, 1578 (Fed.Cir.1996). This Court now turns to the application of these principles to the above-quoted language of the four claims.

In this Court's view, the plain reading of the four claims requires, at a minimum, a product with a liquid center-fill, or semi-liquid center-fill, placed in the center cavity at the time of manufacture and containing the different active ingredients, or combination of ingredients, listed in the claims. The Court reaches this conclusion for the following reasons.

First, each of the four claims begins by describing a "chewing gum consisting essentially of a first substance comprised of gum." Although the claim does not use the phrase "a second substance" the implication of this language is that there are two substances to the chewing gum—the outer shell of gum and what is inside of the outer shell. The language says the "first substance," which this Court understands to mean the outer shell, is "comprised of gum." There is no mention of the "first substance" being comprised of anything other than gum. Thus, there is no basis to interpret these claims as containing active ingredients in the outer shell.

Although the words "consisting essentially of" precede the phrase "first substance" the Court does not view the phrase "consisting essentially of" as referring to the "first substance" but rather as modifying "a chewing gum." In his *Markman* brief, plaintiff argues that the claim phrase "consisting essentially of" signals a "partially open claim" meaning the patent necessarily includes the listed ingredients and is open to unlisted ingredients that do not materially affect the basic and novel properties of the invention. (Plaintiff's *Markman* brief, p. 11). Although plaintiff makes this point with respect to the list of active ingredients in Claims 14 and 22, the Court has considered whether that language application may apply here to the phrase "a first substance," but concludes that it does not.

Second, each of the four claims describes the first substance, or outer shell, as being "configured so as to have at least one cavity capable of retaining a liquid or semi-liquid substance." To the Court, the word "cavity" means a hollow space inside the outer shell and completely encased by the outer shell. The "cavity" must be capable of retaining a liquid. To this Court, this means that the purpose of the cavity is to contain and retain a liquid or semi-liquid placed inside the cavity at the time of the product's manufacture. To this Court, these claims cannot be describing a gum that merely has an empty, unfilled hollow cavity. As plaintiff's counsel himself stated at the *Markman* hearing, such a construction would render the claims meaningless, and subject to be stricken as obvious.

Since the function of the cavity is to retain a liquid or semi-liquid substance, it is only logical to construe the language to mean that the liquid or semi-liquid substance is placed in the cavity at the time of manufacture, with the intent that the "cavity" is designed to retain the liquid or semi-liquid substance within it. The Court can not read these claims, as suggested by plaintiff, to include a product in which the liquid or semi-liquid substance "migrates" from the outer gum shell to the cavity, or from the cavity to the outer gum shell.

Furthermore, this Court construes each of the four claims to mean that there must be either a liquid substance, or semi-liquid substance, or both, (*i.e.*, either/or both) found in the center cavity at the time of manufacture, and the substance must have as its active ingredient, at the time of manufacture, a compound consisting essentially of the stated active ingredient, or active ingredients, set forth in each of the four claims. Therefore, under Claim 1, the liquid or semi-liquid substance placed in the center cavity at the time of manufacture, must contain an "active ingredient," and that active ingredient must contain primarily guarana, but it may contain other ingredients. Under Claim 2, the liquid or semi-liquid substance placed in the center cavity at the time of manufacture, must contain an "active ingredient," and that active ingredient must contain primarily guarana and ginseng, but it may contain other ingredients. Under Claim 14, the liquid or semi-liquid substance placed in the center cavity at the time of manufacture must contain an "active ingredient," and that active ingredient must contain primarily guarana and metabolic enhancers (discussed below) but it may contain other ingredients. Under Claim 22, the liquid or semi-liquid substance placed in the center cavity at the time of manufacture must contain an "active ingredient," and that active ingredient must contain primarily guarana, ginseng and metabolic enhancers (discussed below) but it may contain other ingredients.

The Court finds that the phrase "consisting essentially of," as used following the words "an active ingredient" is a phrase that in effect means "including but not limited to," but it modifies the claim language "an active ingredient" and not the words "liquid or semi-liquid substance."

Furthermore, the Court construes the claims to require that the quantity of the guarana found in the "active

ingredient" must be at least 0.05 mg and up to 5 grams under Claim 1; the quantity of the guarana and ginseng found in the "active ingredient" must be at least 0.05 mg and up to 5 grams under Claim 2; the quantity of the guarana and metabolic enhancers (discussed below) found in the "active ingredient" must be at least 0.05 mg and up to 5 grams under Claim 14; and the quantity of the guarana, ginseng and metabolic enhancers (discussed below) found in the "active ingredient" must be at least 0.05 mg and up to 5 grams under Claim 22.

As indicated above, Claims 14 and 22 require additional specific construction rulings regarding the phrase "and metabolic enhancers that increase(s) a users's metabolism in order to achieve a higher caloric burn rate" as the phrase appears only in those two claims at issue. First, the Court finds that each claim requires, in the active ingredient, the presence of "metabolic enhancers" in addition to the guarana, or guarana and ginseng, that are part of the active ingredients. In other words, this Court gives the plain and common meaning to the word "and" and finds that the words "and metabolic enhancers" means "plus" metabolic enhancers, in addition to the active ingredients of guarana and/or ginseng. The Court rejects any suggestion that the guarana and/or ginseng itself satisfies the requirement that there be present in each claim "metabolic enhancers."

Furthermore, since the phrase "metabolic enhancers" is written in the plural the Court construes the phrase to require at least two metabolic enhancers as part of the active ingredient in addition to the guarana and/or guarana and ginseng.

In Claim 14, the phrase "metabolic enhancers" is followed by the words "that increase a user's metabolism." The Court interprets the phrase "that increase a user's metabolism" to refer to the antecedent "metabolic enhancers" and not to the prior phrase "an active ingredient." Thus, Claim 14 requires the presence of metabolic enhancers that at least have the capacity to increase a user's metabolism, and not simply "an active ingredient" that has the capacity to increase a user's metabolism. Again, the Court reaches this construction by applying the grammatical rule that the word "increase" is a verbal expression in the plural and not singular, therefore it must have as its antecedent a plural noun, in this case the metabolic enhancers referred to before the verb.

In Claim 22, the phrase "metabolic enhancers" is followed by the words "that increases a user's metabolism." Here, since the verb "increases" is in the singular form, there has been a suggestion that in this claim the antecedent is the phrase "an active ingredient" rather than the words "metabolic enhancers." This Court rejects this suggestion, and finds that in Claim 22 the addition of the letter "s" on the word increases is most likely a typographical error, and should not be used as a element in the construction of the claim so as to give it a different meaning. The Court reaches this result for several reasons. First, simply as a matter of language construction, the Court finds that the placement of the phrase "that increases a user's metabolism" immediately after the words "metabolic enhancers" suggests that the intended antecedent is the phrase "metabolic enhancers" and not the phrase "an active ingredient" which is more distant from the verb in the sentence. If the sentence had meant to state that it is the "active ingredient that increases a user's metabolism," as opposed to the metabolic enhancers, it could have easily been written that way, but it was not. Second, the Court notes that Claim 15 in the '540 also requires the presence of "metabolic enhancers" and there uses the word "increase" immediately after the words "metabolic enhancers" and not he word "increases." The Court finds this language supportive of the construction that Claim 22 contains a typographical error by adding the letter "s" to the word increase.

Having constructed Claims 14 and 22 to require the presence in the active ingredient in the liquid center of

at least two metabolic enhancers that increase a user's metabolism, the Court turns to a specific construction argument raised by defendants at the hearing. Defendants have argued that the phrase "increase(s) a user's metabolism," as used in Claims 14 and 22, requires evidence that the included metabolic enhancers actually have the stated effect of increasing a user's, or in this case a chewer's, metabolism to achieve a higher caloric burn rate. The defendants argue that this functional aspect of the patented gum product is an essential part of the claims, pointing to various mentions in the specification of the patent that indicate a functional aspect to the invention.

The defendants cite, for example, the sentence in the section entitled "field of invention" where the document states that the invention has "distinct metabolic and functional characteristics designed to appeal to weight conscious individuals ..." ('540 patent, Exhibit A to defendants' *Markman* brief, Col. 1, II. 16-17). Defendants also cite language in the section entitled "Summary of the Invention" where the document states: "The present invention is directed to a method and product which provides a weight control substance to an individual ..." (Col.3, II.7-9). As further support defendants cite to the language which states "the purpose of the present invention is to increase metabolic efficiency and to burn calories in an individual." (Col.4, II.5-7.) Based on these references and others, defendants assert that "claims 14 and 22 must be interpreted to require a showing that an accused product actually increases a user's metabolism to achieve a higher caloric burn rate." (Defendant's *Markman* brief, p. 13.)

Putting aside the fact that what defendants are urging is a matter reserved to the infringement phase of the case, the Court nonetheless interprets Claims 14 and 22 to require the presence of metabolic enhancers that have the capability of somehow increasing the user's metabolism in order to achieve a higher burn rate, but without the requirement, as urged by defendants, of proof that such an effect is achieved. The Court reaches this construction for the following reasons.

First, the Court finds that the language of the claims themselves does not indicate one way or another whether the product is claimed to have the actual effect as described in the claim, or just the potential to have the effect described in the claim. Since the matter is ambiguous, the Court looks to the specifications.

The Court agrees with the defendants that the cited language sheds some light on this issue, and certainly indicates that "the purpose" of the product may be to increase metabolism to burn calories, or the invention "may be directed to a method" for weight control, but the Court does not read this language as a claim that the product will necessarily have the desired effect for every user. The Court simply cannot read this language, or the claim language, as a claim of "efficacy" for a product as one might claim for a drug being considered for approval by the Food and Drug Administration. Moreover, where the specifications do describe the process by which the gum may work to contribute to weight loss, the language is more precise: "In a preferred embodiment, the substance contained within the gum (e.g. the interior liquid substance) would have as a principal characteristic the capability of increasing a user's caloric burn rate (e.g. by increasing a person's metabolism ...)" (Col.3, II.27-33.) Here, the specification clearly expresses the meaning that the active ingredients in the liquid center, presumably the metabolic enhancers, would have the "capability" of increasing caloric burn rates, but not necessarily the absolute effect of doing so.

In addition, the claim interpretation proposed by defendants is impractical to enforce, if not impossible to achieve. How could a member of the public reading this claim as defendants suggest possibly know whether or not the product has the actual effect of increasing metabolism and caloric rate in the user? Defendants suggest that testing of the product will reveal if it has the desired effect. But surely whether and to what extent the product has the effect of causing increased caloric burn rate would be personal and subjective to

each consumer of the product. In some persons it may have a measurable effect; in others it may not, although the potential was there. In what percentage of the test subjects must the desired effect be achieved? Such matters can not reasonably be read into Claims 14 and 22. The most that can reasonably be said is that the claims require that the product contain an active ingredient consisting of guarana and metabolic enhancers (Claim 14) or guarana, ginseng and metabolic enhancers (Claim 22) that have the capability of increasing a user's metabolism in order to achieve a higher caloric burn rate. Whether such ingredients are present and whether they have the expressed capability is a matter that scientists should be able to determine from an objective test, and report to any member of the public who wants to know the scope of these claims.

2. *The Specification*

[9] As stated in *Vitronics, supra*, the specification is "always highly relevant to the claim construction analysis" because it "contains a written description of the invention which must be clear and complete enough to enable those of ordinary skill in the art ... to make and use it." *Vitronics, supra*, 90 F.3d at 1582. The specification operates as a sort of dictionary, which explains the invention and may define terms used in the claims. *Markman, supra*, 52 F.3d at 979.

As indicated above, this Court has looked carefully at the specifications as well as the claims language, to understand and construe the claims. In addition to the claims language as discussed above, the Court finds other independent indications in the patent specification that support the above construction.

First, the title of the patent is "center-filled supplement gum." This title supports the construction that the supplement to the gum is contained in the "center-fill" and not in the outer shell of the gum. Second, figure 1 on page 2 of the patent describes the product as containing "liquid or syrup **center** consisting of all or some of ingredients." (emphasis added). This language and description support the construction that the liquid center-fill contains the active ingredients. The figure also describes the outer shell as consisting of all or some of ingredients. The plaintiff argues that "a patent's drawings are not meant to represent the invention or to limit the scope of coverage defined by the words used in the claims themselves," citing *Gart v. Logitech*, 254 F.3d 1334 (Fed.Cir.2001). In *Gart*, the Court stated "the '165 patent presents these drawings only to depict the preferred embodiment These drawings are not meant to represent 'the' invention or to limit the scope of coverage defined by the words used in the claims themselves." 254 F.3d at 1342. By contrast, in the instant case the above-referenced figure 1 is described as "one embodiment of the invention depicting both a gum-based outer shell and a liquid or syrup center, both consisting of all or some of the ingredients listed in Table I or Table II." (Col.4, II.36-38.) To this Court, this description does not clarify which ingredients are contained in which part of the gum. The language does not refer to figure 1 as "a preferred embodiment." The next sentence distinguishes the prior sentence stating: "FIG. 2 represents another embodiment of the present invention in lollipop form." (Col.4, II.40-41). To this Court, it appears that these two figures represent the two embodiments of the patented product contemplated by the claims, and that the "preferred embodiments," which are subsequently discussed in the specification, actually address the different active ingredients that can be placed in either of the two structures, but not the structures containing them. Thus, this Court finds this figure 1 helpful, but not dispositive, in the claims construction. Neither the figure 1 nor the specification language regarding the figure overcome the more explicit language in claims themselves.

Third, various sentences in the specification support the above construction. The patent Abstract describes the invention as a "gum, lollipop or lozenge having at least two separate components, the first component

having desirable taste characteristics and the second component having a diet control composition incorporated therein." (*See* Exhibit A to defendant's *Markman* brief, p. 1). This language strongly suggests the two component construction discussed above, and the construction that the active ingredients must be in the second, distinct component, *i.e.*, the center.

Similarly, the section entitled "Summary Of The Invention" describes one embodiment the invention as a "particular gum product having at its center a composition different from the surrounding gum and having distinct functional and metabolic characteristics." (Col.3, II.12-14). This supports the construction that the "center" (whatever its composition) is distinct from the surrounding gum, and has a "distinct functional characteristic," indicative that it is the location of the active ingredient or ingredients.

This section goes on to refer repeatedly to the function of the liquid center as distinct from the exterior of the gum:

-> For example, various metabolism increasing components can be provided in the interior of the gum in a liquid or semi-liquid form while the gum itself can be of a traditional gum composition (Col.3., II.14-17.)

-> Chewing of the gum-based product releases the interior liquid substance, thus providing a product and method desirable by weight conscious individuals (Col.3, II.23-26.)

-> Or, as already noted above, the reference that states: In a preferred embodiment, the substance contained within the gum (e.g. the interior liquid substance) would have as a principal characteristic the capability of increasing a user's caloric burn rate (e.g. by increasing a person's metabolism) (Col.3, II.27-33.)

-> Or again, the specification describes an embodiment as "a gum ... having liquid interior components surrounded by the dense gum" (Col.3, II.35-36.)

It is true, as plaintiff points out, that there is a sentence in the summary of the invention which states that "[i]t is within the scope of the present invention to incorporate various known diet control substances in either the gum material itself and/or in the liquid interior material encompassed by the gum material." (Col.3, II.47-50). But the very next sentence states: "In a preferred embodiment, however, the surrounding gum material is comprised of traditional gum flavors and compositions and the interior liquid and/or semi-liquid (e.g. gel) components of the present invention comprise diet regulating substances." (Col.3, II. 50-55.)

Finally, the Court notes that in the "Detailed Description of the Preferred Embodiment" the specification states: "The following table contains a list of the possible components that may be incorporated into the center of the gum" (Col.4, II.45-46). This statement does not indicate that these ingredients would be in the outer shell of the gum. The description goes on to state: "The cavities that are extruded in both the gum and the lollipop can be made with one or more cavities that can be filled with multiple bio-enhancing and weight management substances, compiling all or some of the properties in Table II." (Col.5, II.19-23.) Among the substances listed in Table II are guarana and Siberian ginseng.

3. Patent Prosecution History

As noted above, case law recognizes that the history of the patent prosecution may provide intrinsic evidence of the proper construction of the claims at issue. In the instant case, the Court has been presented

with two pieces of the patent prosecution history that provide guidance for the construction of these claims.

First, in an effort to distinguish his patent application from another patent (the Cherukuri reference), on which the examiner relied to reject some of plaintiff's claims, the plaintiff filed an Amendment and Response on April 22, 2002 (Exhibit C to defendant's *Markman* brief). In that response, plaintiff states that "nowhere does Cherukuri et al teach the use of diet and weight control substance in the center-fill (concentrating instead on lessening the amount of sugar in the gum base). Again, Cherukuri, et al. is particularly directed to the exterior gum base components, rather than the center-filled components." (*Id.*, at p. 9). Although this statement is far from dispositive on the issue, it is indicative that at the time of application, plaintiff viewed his patent as different to the extent that the active ingredients were contained in the centerfill.

Second, in July 2002, plaintiff submitted a declaration in support of his application from an expert named Dr. Robert Yang (Exhibit E to defendant's *Markman* brief). The declaration contains additional statements indicating that the novelty of plaintiff's patent application comes, at least in part, from the idea of having a "center-filled chewing gum" containing the active ingredients. For example, Dr Yang states: "Providing such components in a center-fill, rather than in the solid gum base itself, would not be obvious to one of skill in the art" (*Id.*, p. 3). This declaration, like plaintiff's amendment, is not in and of itself be dispositive of the construction of the claims, but it is indicative of the claims plaintiff was intending to patent at the time.

SUMMARY OF CLAIM CONSTRUCTION

Based on its review of all the intrinsic evidence discussed above, the Court construes the four claims at issue from the plaintiff's '540 patent as limited to the following: a chewing gum consisting at the time of manufacture of an outer gum shell with a center cavity containing a liquid center-fill substance, or semi-liquid center-fill substance, or both, placed in the center cavity; and the liquid or semi-liquid center-fill substance must consist primarily, but not exclusively, of the specific different active ingredient, or combination of ingredients, listed in each of the four claims, with the amount of the active ingredient, or combination of ingredients, present in the liquid or semi-liquid center-fill substance being not less than 0.05 mg. and up to 5 grams. Under Claims 14 and 22 the liquid or semi-liquid center-fill substance, or both, must contain, in addition to the specified active ingredient (guarana in Claim 14 and guarana and ginseng in Claim 22) at least two metabolic enhancers, which metabolic enhancers are capable of increasing a user's metabolism to achieve a higher caloric burn rate.

EXTRINSIC EVIDENCE

[10] As taught by *Markman* and some of its progeny, extrinsic evidence may be considered in claims construction even when the claims language is unambiguous. *See, e.g.,* Pitney Bowes v. Hewlett-Packard Co., supra, 182 F.3d at 1308. The extrinsic evidence may not be used to contradict the meaning of the claim or arrive at a construction that is at odds with the language of the claims. *See* Elkay Mfg. Co. v. Ebco Mfg. Co., 192 F.3d 973, 976-77 (Fed.Cir.1999). But presumably it can be relied on to support a construction arrived at from the language itself.

Here, the parties did not offer extrinsic evidence by way of expert testimony. However, defendants submitted to the Court excerpts from the deposition of plaintiff, the inventor and owner of the patent, taken in this case. *Markman* recognized that extrinsic evidence may include the testimony of the inventor. *Markman*, supra, 52 F.3d at 980. The opinion cited favorably to the opinion of the Supreme Court in United

Carbon Co., v. Binney & Smith Co., 317 U.S. 228, 63 S.Ct. 165, 87 L.Ed. 232 (1942) pointing out that in *United Carbon* the court construed the claim by relying in part on the testimony of one of the patentees as the "clearest exposition of the significance which the terms employed in the claims had for those skilled in the art." 52 F.3d at 980, citing to 317 U.S. at 233, 63 S.Ct. 165. Accordingly, the Court here received excerpts of plaintiff's deposition, considered it as extrinsic evidence consisting of "inventor testimony," and finds that it is not at odds with the construction of the claims based on the language, but rather provides further support for the claims construction set forth in this order.

In his deposition, plaintiff was asked to state his understanding of what the first claim covers. He replied: "It covers a center-fill chewing gum with an exterior component and interior component. And the interior component having guarana as the active ingredient." (Plaintiff's Depo., Vol. 1, p. 151.) In the context of distinguishing the '540 patent from other work he was developing, the plaintiff was asked:

Q. But the '540 patent only talks about guarana in the center-fill and does not talk about guarana in the gum base, correct?

A. That's correct. (*Id.*, at pp. 168-69.)

The Court finds this testimony supportive of the claim construction requiring that the active ingredients be found in the liquid center-fill of the gum.

CONCLUSION

Based on all the evidence and arguments submitted by the parties, this Court construes the four claims of plaintiff's '540 patent that are at issue in this case, Claims 1, 2, 14 and 22, as set forth above.

The parties shall file within ten days of this Order, in submissions not to exceed ten pages, their respective positions as to how this Order affects the determination of the various pending motions for summary judgment.

D.Colo.,2004.

Barreca v. South Beach Beverage Co., Inc.

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