

United States Court of Appeals for the Federal Circuit

03-1617

MARS, INC.,

Plaintiff-Appellant,

v.

H.J. HEINZ COMPANY, L.P., HEINZ MANAGEMENT COMPANY,
and DEL MONTE CORPORATION,

Defendants-Appellees.

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Appealed from: United States District Court for the Central District of California

Judge R. Gary Klausner

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DECIDED: July 29, 2004

Before SCHALL, DYK and PROST, Circuit Judges.

DYK, Circuit Judge.

Appellant Mars, Inc. (“Mars”) appeals the final judgment of the United States District Court for the Central District of California granting appellees H.J. Heinz Company, L.P., Heinz Management Company, and Del Monte Corporation (collectively “Heinz”) summary judgment of non-infringement of U.S. Patent No. 6,312,746 (the “’746 patent”). Mars, Inc. v. H.J. Heinz Co., L.P., No. CV-01-10961-RGK (C.D. Cal. Jul. 28, 2003). Because the district court applied the incorrect claim construction, we vacate and remand.

BACKGROUND

The ’746 patent is directed to a dual texture animal food product with a soft inner component

surrounded by a harder, more rigid shell. The soft inner component increases palatability, and the claimed product's low total moisture content lengthens shelf-life. Thirty-three claims of the '746 patent, including independent claims 1, 17, 25, 78 and 89, have been asserted in this case. Claim 1 is representative:

1. A dual texture pet or animal food product comprising:
a soft inner component of a dual texture pet or animal food product
containing a mixture of lipid and solid ingredients, the first component having a water activity, a_w , less than about 0.65 and a total moisture content less than about 15 wt %;
a cereal based shell component of the dual texture pet or animal food product containing at least one ingredient comprising a carbohydrate, fat, protein or combination thereof, the shell component having a total moisture content less than about 20 wt %;
wherein the shell component completely surrounds the soft inner component and is formed by the co-extrusion of the soft inner component within the shell component to form one dual component pet or animal food product.

'746 patent, col. 18, ll.11-26 (emphasis added). The central issue in this case is the meaning of the claim language "containing a mixture of lipid and solid ingredients," which appears in all five of the asserted independent claims.^[1]

On December 19, 2001, Mars filed this suit against Heinz, alleging that certain lines of pet food marketed by Heinz infringed the '746 patent. At a Markman hearing held on February 4, 2003, Mars argued that the "containing a mixture of lipid and solid ingredients" limitation means that the claimed "soft inner component" contains, but is not limited solely to, lipid and solid ingredients. Specifically, Mars urged that the terms "containing" and "mixture" are open-ended terms that do not exclude the presence of unlisted ingredients. The district court disagreed. It held that the limitation was close-ended and must include only lipid or solid ingredients. Kal Kan Foods, Inc. v. H.J. Heinz Co., L.P., No. CV01-10961 RGK, slip op. at 4 (C.D. Cal. Feb. 5, 2003). The court based its construction on statements in the specification indicating that the soft inner component should "not exceed 100 wt%" of lipids and solids and that "the most preferred embodiment comprises about '60 wt% solids and 40 wt% lipids.'" Id. at 5. The court further noted that other limitations in the asserted claims use the term "containing at least." Id. at 4. According to the district court, Mars's "failure to use a qualifier, such as 'at least,' when referring to the soft inner component, yet including such a qualifier [for other limitations], indicates that

[Mars] meant for the inner component to be exclusive of ingredients other than lipids and solids.” Id. The district court subsequently denied Mars’s motion for reconsideration of its claim construction order. Mars, Inc. v. H.J. Heinz Co., No. CV 01-10961-RGK (C.D. Cal. May 19, 2003).

Following issuance of the claim construction order, both parties moved for summary judgment on the issue of infringement. The meaning of the term “ingredients” was not argued at the Markman hearing, and the claim construction order did not construe this term. Mars argued that “ingredients” should be construed to refer to either the starting materials or the end components of the finished product. Mars contended that the “containing a mixture of lipid and solid ingredients” limitation was met because the end components of the accused finished product contained only lipids and solids. Heinz, on the other hand, argued that the term “ingredients” referred only to the starting materials used to make the product. Because it was undisputed that water-based syrups, which were neither lipids nor solids, were used to make the inner component of the accused products, Heinz urged that the “containing a mixture of lipid and solid ingredients” limitation was not met as a matter of law. Heinz also argued that even under Mars’s construction of ingredients, summary judgment of non-infringement was proper because there remained non-lipid, non-solid ingredients in the inner component of its finished product. Finally, Heinz argued that the “all limitations rule” and prosecution history estoppel barred infringement under the doctrine of equivalents.

The district court granted Heinz’s motion for summary judgment of non-infringement. Mars, Inc. v. H.J. Heinz Co., No. CV 01-10961-RGK (C.D. Cal. July 21, 2003)(“Mars”). The court reiterated its close-ended construction of the term “containing.” Id., slip op. at 4. The court then held that there was no literal infringement because “ingredients” referred only to the starting materials used to make the product, and Mars did not dispute that certain non-lipid, non-solid syrups were used to make the accused products. Id., slip op. at 4-5. Further, there was no infringement under the doctrine of equivalents because “such application of the doctrine of equivalents would vitiate the ‘containing a mixture of lipid and solid ingredients’ limitation, and thereby run afoul of the all-limitations rule.” Id. at 6. The district court did not reach Heinz’s prosecution history estoppel argument with respect to the doctrine of equivalents. Id. at 6 n.2.

Final judgment was entered on July 28, 2003, and Mars timely appealed. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(1).

DISCUSSION

The issue on appeal is whether Heinz was entitled to summary judgment of non-infringement under a correct construction of the claim language.

Determination of patent infringement requires a two-step analysis: (1) the scope of the claims must be construed; and (2) the allegedly infringing device must be compared to the construed claims. PSC Computer Prods., Inc. v. Foxconn Int'l, Inc., 355 F.3d 1353, 1357 (Fed. Cir. 2004). We review the district court's claim construction and the grant of summary judgment based thereon without deference. Id.

I. Claim Construction

We begin our claim construction analysis with the words of the claim itself. See Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996). Unless there is an express intent to impart a novel meaning to the claim terms, the words of the claim are presumed to take on “the ordinary and customary meanings attributed to them by those of ordinary skill in the art.” Int'l Rectifier Corp. v. IXYS Corp., 361 F.3d 1363, 1369 (Fed. Cir. 2004); Brookhill-Wilk 1, LLC v. Intuitive Surgical, Inc., 334 F.3d 1294, 1298 (Fed. Cir. 2003). Dictionaries are one source for determining the ordinary meaning of a claim term. Texas Digital Sys. v. Telegenix, Inc., 308 F.3d 1193, 1202 (Fed. Cir. 2002). Nevertheless, “[t]he specification must be examined in every case to determine which of the possible dictionary meanings is consistent with the use of the claim term in the context of the claims and the written description” Int'l Rectifier, 361 F.3d at 1369.

A

The appellant first contends that the district court erred in holding that the term “ingredients” in the phrase “a mixture of solid and lipid ingredients” refers only to starting materials. We agree that the

claims are not so limited.

The parties direct us to Webster's Third New International Dictionary (2002) (“Webster's”), which provides that an “ingredient” is “something that enters into a compound or is a component part of any combination or mixture.” Id. at 1162. So too, the Oxford English Dictionary 2d ed., vol. 7 (1989) (“OED”), defines “ingredient” as “[s]omething that enters into the formation of a compound or mixture; a component part, constituent, element.” Id. at 963. These definitions indicate that the ordinary meaning of “ingredients” can refer to either starting materials (e.g., as in a recipe) or to the components of a mixture after they have been combined.

Here, the term “ingredients” must be read in context of the claims’ reference to “a mixture of lipid and solid ingredients.” The parties agree that “mixture” means “a portion of matter consisting of two or more components in varying proportions that retain their own properties.” (J.A. at 1224); see also Webster's at 1449 (defining “mixture” as “a product of mixing: COMBINATION,” or more specifically as “a combination of several different kinds of some article of consumption”). The claims at issue are for “a mixture . . . of ingredients.” This strongly suggests that “ingredients” refers to the components after they have been combined to form that “mixture.”[2]

Our decisions in PIN/NIP, Inc. v. Platte Chemical Co., 304 F.3d 1235 (Fed. Cir. 2002) and Exxon Chemical Patents, Inc. v. Lubrizol Corp., 64 F.3d 1553 (Fed. Cir. 1995), support this construction. In those cases “we equated a ‘composition’ with a ‘mixture’” and construed the term “composition” to refer to the claimed ingredients after they were joined together. PIN/NIP, 304 F.3d at 1244. We explained that:

[A] chemical composition exists at the moment the ingredients are mixed together. Before the creation of the mixture, the ingredients exist independently. . . . Consequently, as properly interpreted, [the patentee's] claims are to a composition that contains the specified ingredients at any time from the moment the ingredients are mixed together.

Id. (emphasis added); see also Exxon Chem., 64 F.3d at 1558. So too, in this case the ordinary meaning of the phrase “a mixture of lipid and solid ingredients” refers to the components of the inner component

“at any time from the moment at which the ingredients are mixed together.”^[3] See id.

The specification does not, as Heinz contends, provide a basis for deviating from this ordinary meaning. The mere fact that the patent examples appear to use the term “ingredients” to refer to starting materials is not a sufficient reason, in and of itself, to deviate from the ordinary meaning of claim language. See Liebel-Flarsheim Co. v. Medrad, Inc., 358 F.3d 898, 909 (Fed. Cir. 2004). Moreover, Heinz’s argument that the specification in other respects uses the term “ingredients” to refer only to starting materials^[4] fails for at least two reasons. First, these statements do not provide the “clear definition” required by our precedent to show that the patentee has acted as a lexicographer in redefining a claim term. See, e.g., Golight, Inc. v. Wal-Mart Stores, Inc., 355 F.3d 1327, 1331 (Fed. Cir. 2004). Second, these statements refer only to “ingredients,” and not to “a mixture of . . . ingredients” as required by the claims. The specification therefore provides no basis for deviating from the ordinary meaning of the phrase “a mixture of solid and lipid ingredients,” and Heinz does not argue that the prosecution history suggests otherwise.

For these reasons we hold that the term “ingredients,” as used in the phrase “a mixture of lipid and solid ingredients,” refers to the components of the inner component at any time after they have been mixed together. This would include, but is not limited to, the ingredients as found in the final food product.

B

The next question is the meaning of the terms “containing” and “mixture” in the phrase “containing a mixture of lipid and solid ingredients.” We hold that neither term requires that the ingredients be limited only to those ingredients listed in the claim itself. In other words, like the term “comprising,” the terms “containing” and “mixture” are open-ended.

The general purpose dictionary teaches that “containing” is synonymous with “comprising” and “including.” See Webster’s at 491 (defining “contain” as “to consist of wholly or in part: COMPRISE, INCLUDE”). Moreover, the Manual of Patent Examining Procedure (“MPEP”) is helpful for

determining the meaning of “containing” in the context of a patent application. See Ethicon, Inc. v. Quigg, 849 F.2d 1422, 1425 (Fed. Cir. 1988); In re Kaghan, 387 F.2d 398, 401 (CCPA 1967) (“[A]n applicant should be entitled to rely not only on the statutes and Rules of Practice but also on the provisions of the MPEP in the prosecution of his patent application.”). The MPEP specifically provides that “[t]he transitional term ‘comprising,’ . . . is synonymous with ‘including,’ ‘containing,’ or ‘characterized by,’ [and] is open-ended and does not exclude additional, unrecited elements or method steps.” MPEP, 8th ed., rev. 1 § 2111.03 (2003); see, e.g., Genetech, Inc. v. Chiron Corp., 112 F.3d 495, 501 (Fed. Cir. 1997) (“‘Comprising’ is a term of art used in claim language which means that the named elements are essential, but other elements may be added and still form a construct within the scope of the claim.”). Thus, neither the dictionary nor the MPEP provides a definition for “containing” that excludes additional, unnamed ingredients.

The use of the term “mixture” does not exclude additional, unnamed ingredients. As noted above, the parties agree that “mixture” means “a portion of matter consisting of two or more components in varying proportions that retain their own properties.” (J.A. at 1224.) Heinz argues that this definition bars the addition of ingredients other than lipids or solids because “a mixture of three classes of ingredients . . . [would] not [be] the same mixture[]” as one consisting of only lipids and solids. (Br. of Defs.-Appellees at 17 (internal quotation marks omitted).) This argument misses the point. A mixture with lipids, solids and a third ingredient is a different mixture than one containing only lipids and solids, but both are still “mixture[s] of lipid and solid ingredients” as required by the claims. There is nothing within the ordinary meaning of “mixture” that bars additional, unnamed ingredients.

[5]

The district court erred in concluding that the specification was inconsistent with the ordinary, open-ended meaning of the terms “containing” and “mixture.” The portion of the specification that describes “preferable” amounts of lipids and solids in the inner component states:

It is preferable for the inner portion or component to comprise about 40-90 wt % solids and about 10-60 wt % lipids; more advantageous for the inner portion or component to comprise about 50-80 wt % solids and about 20-50% lipids; and still more advantageous for the inner portion or component to comprise about 55-65 wt % solids and about 45-35

wt % lipids, with the sum of the wt % of solids and lipids, in all cases, [does] not exceed 100 wt %.

'746 patent, col. 6, ll.4-11 (emphasis added). This passage does not, as the district court concluded, bar a sum weight percentage of solids and lipids less than 100%. The mere fact that the sum of the minimum and maximum values of the stated ranges equals 100%, does not suggest that the sum of the percentage of solids and lipids must always equal 100%. To the contrary, the specification recites a range of values in which the weight percentage of lipids and solids may vary given the presence of additional, unnamed ingredients. See Key Pharms. v. Hercon Labs. Corp., 161 F.3d 709, 717 (Fed. Cir. 1998) (refusing to limit the claims based on a combination of minimum values from ranges stated in the specification because “there [wa]s no suggestion to use the lowest stated flux rate with the smallest stated preferred patch size”).

Likewise, Heinz’s argument that Mars narrowed the scope of its claims during prosecution to require an inner component made wholly of lipid and solid ingredients fails. During prosecution of a related application, Mars replaced claims requiring an inner component “containing at least an ingredient comprising a lipid, wherein said [inner] component has a total moisture content less than about 25 wt%,” (J.A. at 342), with claims requiring an inner component “containing a mixture of lipid and solid ingredients forming a cream-like matrix . . . and a total moisture content less than about 15 wt%.” (J.A. at 398.) While it is conceded that this amendment narrowed the total moisture content limitation (from 25% to 15%), the extent to which additional subject matter, if any, has been surrendered is ambiguous. “It is inappropriate to limit a broad definition of a claim term based on prosecution history that is itself ambiguous.” Inverness, 309 F.3d at 1382; see also Omega Eng’g, Inc. v. Raytek Corp., 334 F.3d 1314, 1324 (Fed. Cir. 2003). Thus, we decline to limit the ordinary meaning of the claims at issue here.

Finally, we reject the argument that using the term “containing” to describe the inner component, as opposed to “containing at least,” which was used to describe the outer shell, “indicates that [Mars] meant for the inner component to be exclusive of ingredients other than lipids and solids.” Mars, slip op. at 4. The phrase “at least” is not required to make the outer shell limitation open-ended. Instead it

was included to make clear that not all, but “at least” one, of the listed ingredients must be present in the outer shell. The phrase “at least” does not appear in the inner component limitation because that limitation, as the parties admit, is drafted to require the presence of both lipid and solid ingredients. Thus, the use of the phrase “at least” to describe the outer shell does not suggest that the term “containing” is close-ended.

As such, we conclude that, like the term “comprising,” the claim term “containing” is open-ended. Since the term “mixture” is entirely consistent with this construction, we hold that the “containing a mixture of lipid and solid ingredients” limitation does not exclude the presence of additional, unnamed ingredients in the inner component of the claimed invention. The district court’s construction to the contrary was erroneous.

C

Finally, Heinz argues that even if the claim language is open-ended, the patentee has disclaimed the addition of water in any amount to the starting materials used to make the inner component. We again disagree.

First, the specification and the claims themselves make clear that water is present in the inner component. Each of the claims asserted by Mars contain “water activity” and “total moisture content” limitations for the inner component. *See, e.g.*, ’764 patent, col. 18, ll.14-17 (claiming an inner “component having a water activity, a_w , less than about 0.65 and a total moisture content less than about 15 wt %”). The presence of water in the inner component is confirmed by the specification, which teaches that:

[t]he softer inner portion or component . . . is a lipid based composition having a low total moisture content less than about 25 wt %, advantageously less than about 20 wt %, more advantageously less than about 15 wt % moisture, even more advantageously less than about 12 wt %, still more advantageously less than 10 wt %, even still more preferably less than 8 wt %, and most preferably less than 6 wt %.

’764 patent, col. 5, ll.26-33; *see also id.* at col. 5, ll.59-63 (using similar language to describe the “advantageous” water activity level for the inner component). While teaching that the amount of water

should be limited, these statements make very clear that at least some water can be present in the inner component of the claimed invention.

Heinz attempts to distinguish the statements providing for “moisture” and “water activity” in the inner component by arguing that water is different from the moisture, *i.e.*, that claims and specification are referring to “the ‘moisture’ inherent in the ‘solid ingredients,’” as opposed to water that is intentionally added in the form of water-based ingredients. (Br. of Defs.-Appellees at 23.) No such distinction is made anywhere in the intrinsic record. All the claims require is a total moisture content and water activity below the claimed the amount.

Finally, none of the statements relied upon by Heinz amounts to the “clear disclaimer of particular subject matter” required by our precedent to narrow the ordinary meaning of the claim language. *See, e.g., Liebel-Flarsheim*, 358 F.3d at 909 (quoting *Northrop Grumman Corp. v. Intel Corp.*, 325 F.3d 1346, 1355 (Fed. Cir. 2003)). Heinz primarily relies on the statement in the specification that:

[i]n other examples, the extruded shell material can include up to 25% water added to the meal ingredient, prior to extrusion, to improve the extrusion process. However, the soft inner portion that is coextruded in the center of the extruded rope does not contain any added water. . . . The water in this invention is only in the shell which is relatively thin compared to the overall thickness of the product.

’764 patent, col. 4, 1.65 – col. 5, 1.7 (emphasis added).^[6] Heinz urges that this statement bars the addition of water to the inner component other than that which comes from the inherent moisture content of the lipid and solid ingredients. Again we disagree. Given its context, the more plausible interpretation of this statement is that water, as a separate ingredient, cannot be added to the inner component to improve the extrusion process. However, it does not follow that any water in the inner component must only come from the lipid and solid ingredients. There is simply no basis to draw a distinction between the water, which Heinz admits may be present in the lipid and solid ingredients, and the water that may be present in any additional, unnamed ingredients.

Under these circumstances, there is no reason to narrow the plain meaning of the claims, which

allows for the presence of water in the inner component, provided the water activity and total moisture content limitations are met.

II. Infringement

The district court's summary judgment was based on an erroneous claim construction. Under the correct construction, genuine issues of fact remain as to whether the accused products meet, either literally or under the doctrine of equivalents, all of the limitations, including the water activity and total moisture content limitations, of the asserted claims.^[7]

CONCLUSION

For the reasons explained above, we conclude that: (1) "ingredients" as used in the phrase "a mixture of lipid and solid ingredients" refers to the components of the inner core at any time after they have been mixed together, and (2) the phrase "containing a mixture" is open-ended. Thus, the claim language, "containing a mixture of lipid and solid ingredients," does not exclude the presence of additional, unnamed ingredients in the inner core mixture that are neither lipids or solids. Since genuine issues remain as to infringement under this construction, we vacate the district court's grant of summary judgment of non-infringement and non-infringement under the doctrine of equivalents and remand for further consideration.

VACATED AND REMANDED

COSTS

No costs.

[1] Independent claims 17, 78 and 89 contain identical language. Independent claim 25 substitutes the word “contains” for “containing.” Neither party contends that this difference requires a different interpretation of the disputed claim language.

[2] It may be that the use of the word “ingredients” standing alone – in the absence of anything contrary in the intrinsic record – could be entitled to the full range of both dictionary definitions. See Inverness Med. Switz. GmbH v. Warner Lambert Co., 309 F.3d 1373, 1379 (Fed. Cir. 2002). However, given the use of “mixture” in conjunction with “ingredients,” that is not the case here.

[3] We agree with the parties that regulations issued by regulatory agencies can be helpful to a claim construction analysis if they are probative of an industry-specific meaning for a disputed claim term. See E-Pass Techs., Inc. v. 3COM Corp., 343 F.3d 1364, 1368 (Fed. Cir. 2003). The FDA and USDA regulations cited by the parties however do not address the meaning of the phrase “a mixture . . . of ingredients.” See id. (rejecting the use of industry standards to provide the ordinary meaning of claim terms because “there [wa]s no suggestion in the . . . standards that . . . either was intended to define [the claim terms in dispute]”). Nor is the use of the term “ingredients” in the cited regulations inconsistent with the dictionary definitions. See 7 C.F.R. § 205.2 (2003) (stating that an “ingredient” is “[a]ny substance used in the preparation of an agricultural product that is still present in the final commercial product as consumed”) (emphases added); 21 C.F.R. § 501.4 (2003) (stating that “ingredients [must be listed] in descending order of predominance in the finished food”).

[4] For example, the specification teaches that “[i]n general, it is recommended that the dry mean component of the inner [component] be added to the mixer first, followed by the tallow and other fat and oil ingredients during a batch operation process.” ’746 patent, col. 9, ll.7-10 (emphasis added). There is also a reference to “[t]he safe handling of the softer core ingredients” prior to production of the finished product. Id. at col. 8, l. 62 (emphasis added).

[5] We did not hold otherwise in Abbott Laboratories v. Novopharm Ltd., 323 F.3d 1324 (Fed. Cir. 2003). There, we construed the claim language “containing a co-micronized mixture of particles of fenofibrate and a solid surfactant” to be close-ended, i.e., to exclude ingredients other than fenofibrate and a solid surfactant. Id. at 1327. That construction however was based on the meaning of “co-micronization,” as opposed to the meaning of “containing” or “mixture.” Id. at 1330. Moreover, the patentee in Abbott acted as “his own lexicographer” and specifically defined “co-micronization of fenofibrate and a solid surfactant” as a “micronization of an intimate mixture of fenofibrate and a solid surfactant.” Id. Our decision in Abbott was based on a specialized meaning attributed to the term “co-micronization,” and not on the broader, ordinary meaning of the terms “containing” and “mixture” at issue here.

[6] Heinz also relies on the portion of the specification distinguishing the prior art and stating that “[i]t is desirable to provide a palatable edible product without the use of water.” ’764 patent, col. 2, ll.59-60.

[7] In view of our disposition that summary judgment of non-infringement was improper, we do not reach Heinz's argument that prosecution history estoppel bars application of the doctrine of equivalents.