

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLORADO
Judge William J. Martínez**

Civil Action No. 18-cv-1922-WJM-NYW

UNITED CANNABIS CORPORATION, a Colorado Corporation,

Plaintiffs,

v.

PURE HEMP COLLECTIVE INC., a Colorado Corporation,

Defendant.

CLAIM CONSTRUCTION ORDER

United Cannabis Corporation (which refers to itself as “UCANN”) sues Pure Hemp Collective Inc. (“Pure Hemp”) for infringement of UCANN’s patent, U.S. Patent No. 9,730,911 (“911 Patent”), which issued on August 15, 2017. Currently before the Court is the parties’ Joint Motion for Determination (ECF No. 66), which seeks a resolution of the claim construction disputes framed in their claim construction briefing. (See ECF Nos. 54, 60, 64, 65.) The Court grants the motion and construes the claims in the manner explained below.

I. LEGAL STANDARD

The fundamental purpose of a patent is to give notice to others of that in which the inventor claims exclusive rights. *Oakley Inc. v. Sunglass Hut Int’l*, 316 F.3d 1331, 1340 (Fed. Cir. 2003). Thus, the focus of claim construction is ascertaining how a reasonable competitor would interpret the actual claim language, not what the inventor subjectively intended the language to claim. *Id.* at 1340–41. The words used in the

patent are evaluated by employing their “ordinary and customary meaning,” as would be understood by a person of ordinary skill in the art at the time of the invention. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (en banc).

In attempting to give meaning to the inventor’s language, the Court “looks to those sources available to the public that show what a person of skill in the art would have understood disputed claim language to mean.” *Id.* at 1314. Among those sources are: (i) the words of the claims themselves; (ii) the remainder of the patent’s specification; (iii) the prosecution history of the patent; (iv) extrinsic evidence concerning relevant scientific principles; (v) the common meanings of technical terms used; and (vi) the state of the art at the time of the invention. *Id.* Terms must be construed in light of the entirety of the patent, not just in the context of the particular claim(s) in which they appear. *Id.* at 1313. In other words, claim language must be read in conjunction with the more general and descriptive specification portion of the patent; indeed, the specification is often “the single best guide to the meaning of a disputed term.” *Id.* at 1315. Because the patent is examined as a whole, the Court assumes that claim terms will normally be used consistently throughout the patent, and thus, the meaning of a term used in one claim can illustrate the meaning of that same term used elsewhere in the patent. *Id.* at 1314.

II. BACKGROUND

The 911 Patent addresses itself to the field of cannabinoids—various chemicals derived from the *cannabis sativa* plant—for human consumption. Every independent claim describes “[a] liquid cannabinoid formulation, wherein at least 95% of the total cannabinoids is” a specified cannabinoid or combination of them. See Claims 1, 5, 10,

16, 20, 25. The specified cannabinoids are tetrahydrocannabinolic acid (THCa), tetrahydrocannabinol (THC), cannabidiol (CBD), cannabidiolic acid (CBDa), and cannabinol (CBN).

Claim 31, a dependent claim at issue here, reads, “The formulation of any one of the preceding claims, wherein the formulation is infused in a medium chain triglyceride (MCT).”¹

III. UNDISPUTED CONSTRUCTIONS

The parties agree on the following constructions, and the Court therefore adopts them:

- “cannabidiol” (abbreviated “CBD”) means “the decarboxylated form of cannabidiolic acid (CBDa)”;
- “THC” means “the decarboxylated form of tetrahydrocannabinolic acid (THCa)”;
- “cannabinol” (abbreviated “CBN”) means “the decarboxylated form of cannabinolic acid (CBNa).”

IV. ANALYSIS OF DISPUTED TERMS

A. “Cannabinoids” (Claims 1, 5, 10, 16, 20, and 25)

Again, every independent claim describes “[a] liquid cannabinoid formulation, wherein at least 95% of the total cannabinoids is” a specified cannabinoid or combination of them. UCANN asserts that “cannabinoids” should be construed as

¹ Claim 31 originally said “proceeding,” not “preceding.” The Patent Act requires that “a claim in dependent form shall contain a reference to a claim *previously* set forth and then specify a further limitation of the subject matter claimed.” 35 U.S.C. § 112(d) (emphasis added). Obviously, referring to “proceeding claims” fails this requirement. UCANN has since obtained a certificate of correction from the U.S. Patent & Trademark Office, stating that “proceeding” should read “preceding.” (ECF No. 52-2.)

“more than one cannabinoid.” (ECF No. 54 at 2.) Pure Hemp counters that the word needs no construction, but if the Court concludes otherwise, then it should be construed to mean “cannabinoid content” or “cannabinoid concentration” (*id.*), leaving open the possibility that the claims could apply to formulations with a single cannabinoid (see ECF No. 60 at 3–8).

UCANN says, rather awkwardly, that “Pure Hemp’s first proposed construction—that no construction is necessary—is inconsistent with the plain and ordinary meaning of ‘cannabinoids’ because[] Pure Hemp mistakenly contends that the plural of ‘cannabinoid’—‘cannabinoids’[—] may be used to describe formulations that contain only a single cannabinoid.” (ECF No. 64 at 7 (emphasis in original).) It is hard to see how the position that “no construction is necessary” could ever be “inconsistent with the plain and ordinary meaning” of the term in question. However, the Court understands UCANN to be saying that if the Court does not decide now whether “cannabinoids” can be both singular and plural, the Court will only be deferring the issue. This is so, UCANN later explains, because Pure Hemp intends to “argue that the asserted claims are invalid in light of prior art laboratory standards containing a liquid formulation of a single isolated cannabinoid.” (*Id.* at 14.)

The Court agrees with UCANN that “cannabinoids” means “more than one cannabinoid.” “Cannabinoids” is, obviously, the plural of “cannabinoid,” and “more than one” is the very definition of plural.

The Court recognizes that, “in context, the plural can describe a universe ranging from one to some higher number, rather than requiring more than one item.” *Versa Corp. v. Ag-Bag Int’l Ltd.*, 392 F.3d 1325, 1330 (Fed. Cir. 2004). The Court is not

persuaded that any context from the 911 Patent (or otherwise) shows that “cannabinoids” should not be construed literally.

Pure Hemp first notes that the 911 Patent’s specification at times uses the phrase “cannabinoid content” “both when referencing how to calculate cannabinoid content as percent and when describing amounts of individual cannabinoids found in a product or formulation.” (ECF No. 60 at 4; see *also id.* at 4–6.) This is true, and so “cannabinoid content” might be a fair synonym for “cannabinoids” in Claims 1, 5, 10, 16, 20, and 25, but there is nothing about “cannabinoid content” that necessarily means “one cannabinoid only.” There is also no point in the specification where “cannabinoid content” is used to refer to a formulation that obviously has only a single cannabinoid. Thus, the fact that the specification sometimes uses the phrase “cannabinoid content” neither establishes nor refutes the necessarily plural nature of “cannabinoids” as used in the claims.

Pure Hemp next points out that the specification at times refers to exemplary formulations such as the following:

- “the concentration of THCa is greater than or equal to 95%; CBDa is less than 1%; CBNa is less than 3%; and CBCa is less than 1%,” 911 Patent at 2:2–4;
- “the concentration of THCa is less than or equal to 35%; CBDa is greater than or equal to 60%; THC is less than 1%; CBN is less than 1%; and CBC is less than 1%,” *id.* at 2:9–12.

Because the specification uses comparators like “greater than” and “less than,” the first example could theoretically apply to something that is 100% THCa, because 100% is

“greater than or equal to 95%,” and necessarily means that the percentage of other cannabinoids is 0%, which is necessarily less than the specified “less than” percentages. (ECF No. 65 at 2–3.) Similarly, the second example “literally reads on a formulation having 0% THCa, 100% CBDa, 0% THC, 0% CBN, and 0% CBC.” (*Id.* at 3.) But UCANN never explains why a person of ordinary skill in the art would ever read the specific “less than” percentages as suggesting the total absence of the specified cannabinoid—a highly unnatural reading in light of the entire patent.

Pure Hemp also never explains why “at least 95% of the total cannabinoids” would “immediately indicate[] to one skilled in the art that only a single cannabinoid might be present in the formulation.” (ECF No. 60 at 7.) “Properly viewed, the ‘ordinary meaning’ of a claim term is its meaning to the ordinary artisan after reading *the entire patent.*” *Phillips*, 415 F.3d at 1321 (emphasis added). The only examples provided in the specification are examples that obviously, or at least most naturally, demand more than one cannabinoid. Pure Hemp argues that some of these examples could be rephrased in the singular and still make sense (ECF No. 60 at 7–8), but that is hardly a demonstration that they should be so rephrased, much less that such rephrasing suddenly turns “cannabinoids” into a potentially singular noun.

For all these reasons, the Court construes “cannabinoids” as “more than one cannabinoid.”

B. “Infused in a Medium Chain Triglyceride (MCT)” (Claim 31)

Claim 31 requires “[t]he formulation of any one of the preceding claims [*i.e.*, the liquid formulations with at least 95% of their cannabinoid content being one or more specified cannabinoids], wherein the formulation is infused in a medium chain triglyceride (MCT).” Pure Hemp argues that “infused in a medium chain triglyceride”

must be construed as “MCT oil and cannabis material have been heated together in a brewer, double boiler, or on a heat plate at 41 celsius/106 fahrenheit for a minimum of 3 hrs in order to extract and infuse the desired cannabinoids into the MCT oil.” (ECF No. 54 at 1.) Pure Hemp draws this construction from a preferred embodiment designated “Example 3,” which, according to Pure Hemp, resolves an ambiguity created by a preferred embodiment designated “Example 6.”

The Court will address both examples momentarily. UCANN responds, however, that this phrase requires no construction, but if the Court concludes otherwise, then the Court should construe it with reference to the definition of “infusion” in *Dorland’s Illustrated Medical Dictionary* (32d ed. 2013) (“the product of the process of steeping a drug for the extraction of its medicinal principles”) and the definition of “infuse” in *Webster’s New World College Dictionary* (5th ed. 2014) (“to steep or soak (tea leaves, etc.) so as to extract flavor or other qualities”). (See ECF No. 54 at 1.)

According to Pure Hemp, “infused” in Claim 31 does not obviously track any dictionary definition. Pure Hemp says that, in light of the specification, “infused” “could be construed in two different ways: (1) as synonymous with being merely ‘mixed’ or ‘combined’ with MCT, or (2) as requiring something more than simply mixing or combining with MCT.” (ECF No. 60 at 8.) Pure Hemp further argues that this alleged ambiguity arises from Example 6 in the specification (a preferred embodiment), which requires an already-created cannabinoid-plus-MCT “infusion” to be mixed with more MCT “to produce capsules at 5 mg, 10 mg, 20 mg, and 50 mg total cannabinoids.” 911 Patent at 13:58–67. But, having called out Example 6 as the supposed illustration of an *ambiguity* in the word “infused,” Pure Hemp then immediately contradicts itself: “Thus,

the 911 Patent specification *distinguishes between* infusing on the one hand, and mixing or combining on the other.” (ECF No. 60 at 9 (emphasis added).) Unaware of the contradiction, however, Pure Hemp continues, “If something more than mere mixing or combining is required for a formulation to be infused into MCT, it is appropriate to look to the specification for any special definition or disclaimer of that term provided by the patentee.” (*Id.*)

All of the foregoing is to set up Pure Hemp’s premise that it can look somewhere else in the specification for a “special definition” of “infused.” Pure Hemp finds this special definition in Example 3. But the premise—*i.e.*, that one needs to look for a special definition—fails because the argument behind it is logical nonsense.

Even if the premise were sound, Pure Hemp fails to show that anything from Example 3 provides a special definition for “infused” in Claim 31.² Example 3 reads in full as follows, with bracketed numerals inserted for clarity of reference later:

Example 3: Extraction Using NEOBEE 895 MCT

[1] Start with cured and dried cannabis flowers, flower rosin, hash rosin, hashish, or kif³ with specific starting ratio’s [*sic*] of cannabinoids 1:1, 2:1, 3:1, 4:1, 8:1, 18:1, 20:1, 30:1, 50:1, 70:1. Cannabis flowers should be dried out with a moisture content of below 3% and gently broken apart into small sized pieces less then 0.7 inches, or finely milled into 2 mm to 3 mm sized pieces. **[2]** Cannabis flowers, flower rosin, hash rosin, hashish, or kif are combined with NEOBEE 895 MCT. The ratio of cannabis to MCT is determined based on the

² “Example 3” is actually the *second* example enumerated “3” in the 911 Patent—or, in other words, it should have been designated “Example 4.” *Compare* 911 Patent at 12:1–35 *with id.* at 12:36–13:8. When the Court says “Example 3,” it refers only to the second example “3” (the first is irrelevant for present purposes).

³ Merriam-Webster Online defines “kif” as a variant of “kef,” meaning “a state of dreamy tranquility” or (as probably relevant here) “a smoking material (such as marijuana) that produces [that state of dreamy tranquility].” See <https://www.merriam-webster.com/dictionary/kif> (last accessed Jan. 23, 2020).

starting material, test results, ratio's [sic], and desired mg per ml outcome. Example 50 g of 20% Cannabis flowers combined with 100 ml of MCT oil. [3] The MCT Oil and starting cannabis material is heated together in a brewer, double boiler, or on a heat plate at 41 celsius/106 fahrenheit for a minimum of 3 hrs in order to extract and infuse the desired cannabinoids into the MCT oil. [4] The oil is strained thru a 15 micron stainless steel filter, or silk screen to separate the cannabis content from the oil. Utilizing a Buchner funnel and 5 micron filtration system under vacuum will provide the best results for flirtation [sic]. [5] The soaked cannabis content is pressed to remove all remaining oil, filtered, and added back to the concentrated infused THCa and/or CBDa NEOBEE 895 MCT mixture. [6] This initial mixture is considered a [sic] INACTIVE state since the cannabinoids are still in the acid forms of THCa and/or CBDa. [7] The infused cannabis and NEOBEE 895 MCT oil can be heated at 105 celsius/221 fahrenheit for 15 min, and repeated at 140 celsius/284 fahrenheit 45 min-120 min to ACTIVATE the phytocannabinoids into THC and/or CBD. [8] Decarboxylate cannabis flowers, flower rosin, hash rosin, hasish, or kif THC, or CBN, can also be combined to [sic] the NEOBEE 895 MCT and heated together at 41 celsius/106 fahrenheit for a minimum of 3 hrs in order to infuse the ACTIVE content into the MCT oil. [9] This process is used to create all products with specific ratio's [sic] and milligram to milliliter dosages for capsules, sublingual's [sic], topical, transdermal, etc.

Id. at 12:36–13:8.

Pure Hemp says that what the Court has designated section [9], which is also the last sentence of Example 3, identifies the “process” that one should use “to create all products,” thus requiring “infused” in Claim 31 to be narrowed to a method using the specified heat for the specified amount of time. (ECF No. 60 at 11.) The Court need not delve into case law about the appropriateness (or not) of using the specification to limit the claims, *see Phillips*, 415 F.3d at 1323, because the Court can reject Pure Hemp’s argument on simpler grounds—namely, Example 3 is not clear enough to permit the Court to confidently rely on the portion highlighted by Pure Hemp.

Example 3 seems to be describing three ways to create a cannabinoid-MCT infusion: the first with inactive cannabinoids, requiring heating at 41°C/106°F for a minimum of three hours (sections [1]–[6]); the second to activate the inactive cannabinoids in the first infusion, requiring a more complicated heating process (section [7]); and the third with “decarboxylate” cannabinoids, using the same heating process specified in the first infusion (section [8]). Section [9] could be referring to everything that came before it in Example 3—in which case “this process” is vague and should probably read “these three processes”—or it could be referring solely to section [8], which immediately precedes it. The Court has no way of knowing which is the proper interpretation.

Finally, the remainder of the relevant passage is also obscure: “This process is used to create all products *with specific ratio’s [sic] and milligram to milliliter dosages for capsules, sublingual’s [sic], topical, transdermal, etc.*” (emphasis added). It is not clear if the product in Claim 31 is always the sort of product being discussed here.

For all these reasons, the Court rejects Pure Hemp’s attempt to limit “infused” in Claim 31 to a particular infusion process described in Example 3. However, Pure Hemp is nonetheless stumbling around a problem in Claim 31, even though Pure Hemp has failed to clearly identify it. The Court returns to Pure Hemp’s initial argument, *i.e.*, that “infused,” in light of the specification, “could be construed in two different ways: (1) as synonymous with being merely ‘mixed’ or ‘combined’ with MCT, or (2) as requiring something more than simply mixing or combining with MCT.” (ECF No. 60 at 8.) The Court believes it is more accurate to say that Claim 31, *by itself*, creates the noted ambiguity between mere mixing, as opposed to something more technical.

Again, the complete text of Claim 31 is: “The formulation of any one of the preceding claims, wherein the formulation is infused in a medium chain triglyceride (MCT).” The cross-referenced “formulation of any one of the preceding claims” is a “liquid cannabinoid formulation” with specified cannabinoid percentages. See Claims 1, 5, 10, 16, 20, and 25. Claim 31 thus seems to be saying, “Take a liquid cannabinoid formulation and ‘infuse’ it into a medium chain triglyceride.” But how does one infuse a liquid into a liquid? Perhaps UCANN uses “infuse” like a modern-day product marketer, supposing it to be classier-sounding synonym of “mix.” But UCANN’s proposed dictionary definitions—“the product of the process of steeping a drug for the extraction of its medicinal principles” or “to steep or soak (tea leaves, etc.) so as to extract flavor or other qualities” (see ECF No. 54 at 1)—seem to show that UCANN understands “infuse” in its more technical sense. If so, the definitions themselves show why they are inappropriate to Claim 31, because—to rephrase the prior question—how does one steep or soak a liquid in a liquid?

Thus, the real problem the Court foresees is that Claim 31 may be indefinite. See *Media Rights Techs., Inc. v. Capital One Fin. Corp.*, 800 F.3d 1366, 1371 (Fed. Cir. 2015) (“[A] claim is indefinite if its language might mean several different things and no informed and confident choice is available among the contending definitions.” (internal quotations marks omitted)). Such apparent indefiniteness prevents the Court from construing the claim at this stage. The Court expects the parties to address the matter of indefiniteness through summary judgment.

V. CONCLUSION

For the reasons set forth above, the Court ORDERS as follows:

1. The parties Joint Motion for Determination (ECF No. 66) is GRANTED; and
2. The Court ORDERS the following constructions of terms in the 911 Patent:
 - a. “cannabidiol” (abbreviated “CBD”) means “the decarboxylated form of cannabidiolic acid (CBDa)”;
 - b. “THC” means “the decarboxylated form of tetrahydrocannabinolic acid (THCa)”;
 - c. “cannabinol” (abbreviated “CBN”) means “the decarboxylated form of cannabinolic acid (CBNa)”;
 - d. “cannabinoids” in Claims 1, 5, 10, 16, 20, and 25 means “more than one cannabinoid.”

Dated this 23rd day of January, 2020.

BY THE COURT:



William J. Martinez
United States District Judge