Canopy Growth Corporation v. Gw Pharma Limited

2023 | Cited 0 times | Federal Circuit | April 24, 2023

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NOTE: This disposition is nonprecedential.

United States Court of Appeals for the Federal Circuit _____

CANOPY GROWTH CORPORATION, Plaintiff-Appellant

v.

GW PHARMA LIMITED, GW RESEARCH LIMITED, Defendants-Appellees

_____

2022-1603 _____

Appeal from the United States District Court for the Western District of Texas in No. 6:20-cv-01180-ADA, Judge Alan D. Albright. _____

Decided: April 24, 2023 _____

DAVID G. WILLE, Baker Botts LLP, Dallas, TX, argued for plaintiff-appellant. Also represented by MELISSA MUENKS, KURT M. PANKRATZ, CLARKE STAVINOHA; MICHAEL HAWES, Houston, TX.

GERALD J. FLATTMANN, JR., Cahill Gordon & Reindel LLP, New York, NY, argued for defendants-appellees. Also represented by JESSE SNYDER, AMY R. UPSHAW, King & Spalding LLP, Washington, DC. _____

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Before LOURIE, TARANTO, and STARK, Circuit Judges. TARANTO, Circuit Judge. Canopy Growth Corp. sued GW Pharma Ltd. and GW Research Ltd. (collectively, GW) in the United States Dis- trict Court for the Western District of Texas, alleging in- fringement of at least claims 1–25 of

its U.S. Patent No. 10,870,632 . The district court issued an order construing the sole disputed claim limitation: "CO2 in liquefied form under subcritical pressure and temperature conditions." Canopy Growth Corp. v. GW Pharmaceuticals PLC, No. 20- cv-01180, 2021 WL 8015834 , at *4–15 (W.D. Tex. Nov. 27, 2021). Based on the district court's construction, the par- ties stipulated to non-infringement, and the court then en- tered final judgment in favor of GW on infringement and dismissed GW's remaining affirmative defenses and coun- terclaims without prejudice. Canopy appeals. Because the phrase "subcritical pressure and temperature conditions," as used in the claims here, requires both pressure and tem- perature to be subcritical, we affirm. I The '632 patent describes and claims processes for pro- ducing an extract containing tetrahydrocannabinol (THC) and/or cannabidiol (CBD) from cannabis using liquid car- bon dioxide (i.e., CO2). CO2 can exist in the solid, liquid, and gas phases. But when temperature and pressure are high enough, CO2 can transition from the liquid or gas phase into a supercritical fluid state. The lowest combina- tion of temperature and pressure at which this transition can occur is the critical point; only if both temperature and pressure are above the critical point will CO2 enter the su- percritical fluid state. CO2 can be described as subcritical when either its tem- perature or its pressure is below the critical point, and, put- ting aside its solid phase (which is not relevant here), CO2

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can be in the subcritical state as either a liquid or a gas, depending on the specific temperature and pressure of the CO2. When its temperature is supercritical but its pres- sure is subcritical, CO2 will form a gas because the pres- sure is not sufficient to force the CO2—expanding due to the high temperature—to liquify. In contrast, when its temperature is subcritical but its pressure is supercritical, the CO2 will form a liquid. And when both temperature and pressure are subcritical, CO2 can form either a liquid or a gas, depending on the specific temperature and pres- sure. The critical-point temperature for CO2 is 31°C, and the critical-point pressure for CO2 is 73.8 bar (or 72.8 atm). The parties do not dispute any of those principles, which are depicted in the CO2 phase diagram below. 1

1 Canopy contends in its reply brief that "[t]he pres- ence of impurities in the CO2 can result in liquefied CO2 at a temperature above what is generally understood as the critical temperature of CO2." Reply Br. at 3 n.1 (citing J.A. 1215). Neither the document Canopy cites nor the argu- ment Canopy makes appears in Canopy's briefing before

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J.A. 90. Independent claim 1 of the '632 patent recites 1. A process for producing an extract contain-

ing Tetrahydrocannabinol (THC) and/or canna- bidiol (CBD), and optionally the carboxylic acids thereof, from a cannabis plant material or a pri- mary extract thereof, said process comprising: (1) subjecting the cannabis plant material or primary extract thereof to CO2 in liquefied form under subcritical pressure and tem- perature conditions to extract cannabinoid components; and (2) reducing the pressure and/or tempera- ture to separate tetrahydrocannabinol and/or cannabidiol, and optionally the carboxylic ac- ids thereof, from the CO2. '632 patent, col. 14, lines 30–41 (bolding added for empha- sis). The only other independent claim, claim 14, is rele- vantly similar, and all claims of the '632 patent include the limitation at issue. The '632 patent's specification lists the phrase at issue among itemized temperature and pressure conditions for

the district court, notwithstanding GW's argument before the district court that CO2 is a gas under these conditions. Even if this court could take judicial notice of the document for its content, which has not been requested or justified, Canopy has doubly forfeited this argument. See In re Google Technology Holdings LLC, 980 F.3d 858 , 863 (Fed. Cir. 2020) (arguments not presented to the reviewed tribu- nal are generally forfeited); Aventis Pharma S.A. v. Hos- pira, Inc., 675 F.3d 1324 , 1332–33 (Fed. Cir. 2012) (arguments not raised before us until reply briefing are for- feited).

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CO2 that are "[i]n accordance with the invention." Id., col. 5, lines 6–20. Specifically, it provides that extraction can occur with the aid of CO2 under supercritical pressure and temperature conditions at a temperature in the range of approx[.] 31° C. to 80° C. and at a pres- sure in the range of approx. 75 bar to 500 bar, or in the subcri[t]i[c]al range at a temperature of ap- prox. 20° C. to 30° C. and a supercritical pressure of approx. 100 bar to 350 bar; or extracted under subcri[t]i[c]al pressure and temperature condi- tions; and the obtained primary extract is sepa- rated under subcri[t]i[c]al conditions, or under conditions that are subcri[t]i[c]al in terms of pres- sure and supercritical in terms of temperature. Id. The limitation at issue, with the other possible CO2 conditions quoted above, also appears in the prosecution history. The '632 patent issued from a continuation of Ap- plication No. 10/399,362. During prosecution of that appli- cation, the applicant sought claims to these conditions in a claimed process that it described as reciting three "alterna- tive steps," J.A. 372 (emphasis omitted), depicted below:

J.A. 366. As described by the applicant during prosecution, these alternative steps permitted extraction via CO2 under

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"(a) supercritical pressure and temperature conditions; or (b) subcritical temperature range and a supercritical pres- sure; or (c) subcritical pressure and temperature condi- tions." J.A. 372–73. The '362 application issued with claims directed to these steps as U.S. Patent No. 8,895,078 . For the application that gave rise to the '632 patent, Application No. 14/276,165, the prosecution history starts off similarly, in that the applicant began by seeking claims directed to the same three alternative steps. J.A. 399. But in response to an examiner rejection of the claims over prior art that discloses the use of supercritical fluid CO2 for extraction, Webster (U.S. Patent No. 6,403,126), J.A. 404– 05, the applicant amended the pending claims to remove the first of the alternative steps—"under supercritical pres- sure and temperature conditions at a temperature in a range of approx. 31°C to 80°C and at a pressure in a range of approx. 75 bar or 500 bar," J.A. 420. Then, in response to the examiner's continued rejection based on Webster's disclosure of supercritical fluid CO2 and Webster's state- ment that temperature and pressure can be adjusted, J.A. 431–33; J.A.445–48, the applicant amended the claims to also remove the second alternative step—"in liquefied form in the subcritical range at a temperature of approx. 20°C to 30°C and a supercritical pressure of approx. 100 bar to 350 bar," J.A. 437. This amendment left the applicant with claims directed only to the third of the alternative steps— "in liquefied form under subcritical pressure and tempera- ture conditions," though further limited through amend- ment to "a pressure of 70 bar or less and a temperature of approx. 20°C to 30°C." Id. The applicant ultimately can- celed the claims, J.A. 152, but the issued claims now in dis- pute include this same phrase (without the numerical pressure and temperature limits). The district court concluded that the phrase, "CO2 in liquefied form under subcritical pressure and temperature conditions," requires that both the pressure and tempera- ture be subcritical. Canopy, 2021 WL 8015834 , at *15. The

court relied on the claim's use of "and" instead of "or," which it viewed as indicating that the claim required both pressure and temperature to be subcritical. Id. at *4 . The court concluded that the use of "conditions" (a plural) does nothing to change this. Id. Looking next to the specifica- tion, the court viewed the above-quoted passage, in column 5, as listing three alternative options, rejecting Canopy's argument that the second, which includes subcritical tem- perature and supercritical pressure, is a subset of the third, which is defined by the "subcritical pressure and tempera- ture conditions" phrase at issue. Id. at *8–10. Finally, the court viewed the prosecution history as not "provid[ing] any additional insight . . . beyond the plain language of the claims and the specification." Id. at *14 . The prosecution history statements, the court determined, "mirror those in the specification, namely, that the claims in the parent pa- tent and the as-filed/amended claims in the asserted patent recite three pressure and temperature conditions." Id. The court likewise deemed extrinsic evidence, involving the use of similar but notably different phrases, to be "not directly relevant" and not sufficient to "outweigh the intrinsic evi- dence." Id. at *15 . The district court entered final judgment, following the parties' stipulation to non-infringement, on February 25, 2022.

Canopy timely appealed on March 24, 2022. See 28 U.S.C. § 2107 (a); Fed. R. App. P. 4(a)(1)(A). We have juris- diction under 28 U.S.C. § 1295 (a)(1). II "[T]here is no magic formula or catechism for conduct- ing claim construction." Intel Corp. v. Qualcomm Inc., 21 F.4th 801 , 809 (Fed. Cir. 2021) (alteration in original) (quoting Phillips v. AWH Corp., 415 F.3d 1303 , 1324 (Fed. Cir. 2005) (en banc)). But [w]e generally give words of a claim their ordinary meaning in the context of the claim and the whole patent document; the specification particularly,

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but also the prosecution history, informs the deter- mination of claim meaning in context, including by resolving ambiguities; and even if the meaning is plain on the face of the claim language, the pa- tentee can, by acting with sufficient clarity, dis- claim such a plain meaning or prescribe a special definition. SIMO Holdings Inc. v. Hong Kong uCloudlink Network Technology Ltd., 983 F.3d 1367 , 1374 (Fed. Cir. 2021) (al- teration in original) (quoting World Class Technology Corp. v. Ormo Corp., 769 F.3d 1120 , 1123 (Fed. Cir. 2014)). That undertaking is ultimately one of law, for us to make de novo. Intel Corp., 21 F.4th at 808. But sometimes there are underlying determinations of fact, concerning usage or other matters extrinsic to the patent, and we review such determinations for clear error. Id. The ordinary meaning of "subcritical pressure and tem- perature conditions" favors the construction advanced by GW and accepted by the district court. In that phrase, with its use of "and," the term "subcritical" operates most plainly as a prepositive modifier that modifies either both "pres- sure" and "temperature" or both "pressure conditions" and "temperature conditions." We have held that the ordinary construction of language such as this reads the "prepositive . . . modifier [as] normally appl[ying] to the entire series." SIMO Holdings, 983 F.3d at 1377 (quoting Antonin Scalia & Bryan A. Garner, Reading Law: The Interpretation of Legal Texts § 19, at 147 (2012)). Thus, the ordinary mean- ing is that both pressure and temperature must be subcrit- ical for the limitation to be satisfied. See id. Canopy disagrees. It contends that the patent discloses two embodiments, one in which CO2 has both supercritical pressure and temperature, which it opted not to claim, and one in which either the temperature or pressure of CO2 (or both) are subcritical, part of which the district court ex- cluded without sufficient reason. It offers a construction

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that it contends is "reasonabl[e]" and captures the full scope of this purported second embodiment—one in which the phrase "pressure and temperature" is read as a unit modifying "conditions" in such a way that it means a com- bination of "pressure and temperature conditions" that is subcritical. For support beyond the claim language, Can- opy argues that no evidence suggests that a person of ordi- nary skill in the art would have reason to distinguish between liquid CO2 with

both subcritical pressure and tem- perature and liquid CO2 with subcritical temperature and supercritical pressure, as both are subcritical and function- ally indistinct. But we need not decide whether that substantive sci- entific context would be enough in another case to over- come the ordinary English-language meaning of "subcritical pressure and temperature conditions." Nor need we decide whether one might consider Canopy's read- ing of the claim "reasonable." Here, the prosecution history forecloses Canopy's construction and two-embodiment reading. During prosecution, Canopy clearly sought claims di- rected to three alternatives, not two: (1) supercritical fluid CO2, (2) CO2 with subcritical temperature and supercriti- cal pressure, and (3) CO2 with subcritical pressure and temperature conditions. J.A. 399; see also J.A. 366. Can- opy sequentially deleted the first and second sets of condi- tions from the initially sought claims, J.A. 420; J.A. 437, and ultimately claimed only the third set of conditions. And that third set of conditions must be limited to having both subcritical temperature and subcritical pressure be- cause, if the third set included CO2 with subcritical tem- perature and supercritical pressure, then it would entirely subsume the second initially claimed condition set, render- ing that set superfluous. See Intel Corp., 21 F.4th at 810 ("It is highly disfavored to construe terms in a way that renders them void, meaningless, or superfluous." (quoting Wasica Finance GmbH v. Continental Automotive Systems,

Inc., 853 F.3d 1272 , 1288 n.10 (Fed. Cir. 2017))); see also Scalia & Garner, Reading Law § 26, at 174 ("If possible, every word and every provision is to be given effect."). Can- opy nevertheless contends that the initially claimed alter- natives were not mutually exclusive alternatives but were instead akin to a "Markush" group. But that characteriza- tion does not overcome the problem that the third set of conditions, understood as Canopy proposes, would sub- sume the second. Each member of a Markush group is cov- ered by the group, so there is no reason to include an alternative in a Markush group that falls entirely within another alternative. See Multilayer Stretch Cling Film Holdings, Inc. v. Berry Plastics Corp., 831 F.3d 1350 , 1357 (Fed. Cir. 2016) (describing Markush groups). This prosecution history clarifies the meaning of the claim language both directly and, by clarifying the specifi- cation's disclosures, indirectly. The specification, like the claims sought earlier in prosecution, lists the three alter- native condition sets, but it does so with various transition phrases, commas, and semicolons that leave its proper parsing less than clear. See '632 patent, col. 5, lines 6–20. 2

2 As detailed above, the specification states that, "[i]n accordance with the invention," extraction can occur with the aid of CO2 under supercritical pressure and temperature conditions at a temperature in the range of approx[.] 31° C. to 80° C. and at a pres- sure in the range of approx. 75 bar to 500 bar, or in the subcri[t]i[c]al range at a temperature of ap- prox. 20° C. to 30° C. and a supercritical pressure of approx. 100 bar to 350 bar; or extracted under subcri[t]i[c]al pressure and temperature condi- tions; and the obtained primary extract is sepa- rated under subcri[t]i[c]al conditions, or under

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The prosecution history clarifies that, contrary to Canopy's two-embodiment reading (in which the "subcritical [tem- perature] range . . . and supercritical pressure" is a subset of "subcritical pressure and temperature conditions," Opening Br. at 10–11 (characterizing the former as an ex- ample of the latter)), this passage discloses three distinct embodiments, and the claims recite only one of them. Canopy argues that we should disregard this history because the relevant amendments were to claims that were ultimately cancelled and replaced. Reply Br. at 24 (citing Massachusetts Institute of Technology v. Shire Pharmaceu- ticals, Inc., 839 F.3d 1111 , 1120–22 (Fed. Cir. 2016), for the proposition that statements made relating to cancelled claims should be discounted). But the same phrase present in the now-cancelled claims is the now-at-issue phrase re- cited in the issued claims. In the prosecution history asso- ciated with the phrase, Canopy made clear that it encompasses only CO2 with both subcritical pressure and subcritical temperature, as explained above. Canopy also argues that the amendments do not amount to disclaimer or disavowal and therefore cannot justify a construction that excludes an embodiment. Can- opy notes that, before cancellation, the claims recited spe- cific numerical ranges of pressure and temperature, in addition to the phrase at issue, and that the issued inde- pendent claims omit the specific numerical ranges. But we need not decide whether the amendments here amount to disavowal or disclaimer because we need not find disa- vowal or disclaimer to conclude, based on a review of the prosecution history, that Canopy chose to claim only one of three options. See University of Massachusetts v. L'Oreal

conditions that are subcri[t]i[c]al in terms of pres- sure and supercritical in terms of temperature. '632 patent, col. 5, lines 6–20.

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S.A., 36 F.4th 1374 , 1379 (Fed. Cir. 2022) ("The prosecution history, in particular, may be critical in interpreting dis- puted claim terms, and even where prosecution history statements do not rise to the level of unmistakable disa- vowal, they do inform the claim construction." (internal quotation marks omitted) (quoting Personalized Media Communications, LLC v. Apple Inc., 952 F.3d 1336 , 1345 (Fed. Cir. 2020))). To be sure, constructions that read out embodiments are sometimes wrong. See Oatey Co. v. IPS Corp., 514 F.3d 1271 , 1276 (Fed. Cir. 2008) ("We normally do not interpret claim terms in a way that excludes embod- iments disclosed in the specification."); SIMO Holdings, 983 F.3d at 1378–79 (explaining the limited reach of the language from Oatey, properly understood). Here, though, the plain language of the claims, along with the prosecu- tion history and the specification viewed in light of the prosecution history, make clear that the '632 patent dis- closes three non-overlapping embodiments while claiming only one of them: the one in which pressure and

tempera- ture both must be subcritical. Canopy's other arguments are also unavailing. Canopy contends, for example, that the district court's inclusion of "both" in its construction somehow rewrites the claim. But to achieve the object of definition or clarification, it is typi- cal in presenting a clarifying interpretation that one uses expressions absent from the interpreted language itself. Canopy also points to extrinsic evidence, citing references that use phrases that are somewhat similar to the phrase at issue here. Opening Br. at 37–38 (citing use of the phrases "subcritical conditions," "subcritical and super- critical conditions," and "a subcritical CO2 process" (quot- ing J.A. 161, J.A. 172–73, J.A. 177, and J.A. 192, respectively)). But these phrases all involve "subcritical" clearly modifying either "conditions" or "process," whereas here, the very dispute turns on what "subcritical" modifies in the claim language, and the district court did not clearly err in deeming the evidence not directly relevant.

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III For the foregoing reasons, we affirm the district court's claim construction order and entry of final judgment of non-infringement in favor of GW. AFFIRMED