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United States Court of Appeals for the Federal Circuit

00-1398

PURDUE PHARMA L.P., THE PURDUE FREDERICK COMPANY

THE P.F. LABORATORIES, INC., and THE PURDUE PHARMA COMPANY,

Plaintiffs-Appellees,

v.

BOEHRINGER INGELHEIM GMBH, ROXANE LABORATORIES, INC.,

and BOEHRINGER INGELHEIM CORPORATION,

Defendants-Appellants.

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Herbert F. Schwartz, Fish & Neave, of New York, New York, argued for plaintiffs-appellees. With him on the brief were Robert J. Goldman, Kelsey I. Nix, Richard A. Inz, and Jennifer D. Choe.

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Appealed from: United States District Court for the Southern District of New York

Judge Sidney H. Stein

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DECIDED: February 1, 2001

Before MAYER, Chief Judge, MICHEL and SCHALL, Circuit Judges.

MAYER, Chief Judge.

Boehringer Ingelheim GmbH, Roxane Laboratories, Inc. and Boehringer Ingelheim Corporation (collectively, "Roxane") appeal the order of the United States District Court for the Southern District of New York granting the motion brought by Purdue Pharma L.P., The Purdue Frederick Company, The P.F. Laboratories, Inc. and The Purdue Pharma Company (collectively, "Purdue") to preliminarily enjoin Roxane from infringing, actively inducing infringement of, or contributing to the infringement of Purdue's United States Patents Nos. 5,549,912 ('912 patent) (claim 2), 5,508,042 ('042 patent) (claims 1 and 2), and 5,656,295 ('295 patent) (claim 8) directed toward a "controlled release oxycodone" formulation of pain medication. Purdue Pharma L.P., et

al. v. Boerhinger Ingelheim GmbH, et al., No. 99-CV-3658, (S.D.N.Y. May 25, 2000) (order for a preliminary injunction); (May 16, 2000) (order granting motion). Because the court did not abuse its discretion in granting the injunction, we affirm and remand.

Background

Purdue and Roxane are pharmaceutical companies that each have developed controlled release oxycodone medications for the treatment of moderate to severe pain. Purdue is the owner of the '912, '042, and '295 patents, which are respectively a continuation-in-part, divisional application and continuation-in-part of United States Patent No. 5,266,331 (the '331 parent). The asserted claims of the patents-in-suit are similar, and their specifications are virtually identical. Claim 2 of the '912 patent is representative of the asserted claims and reads as follows:

> A controlled release oxycodone formulation for oral administration to human patients, comprising from about 10 to about 40 mg oxycodone or a salt thereof, said formulation providing a mean maximum plasma concentration of oxycodone from about 6 to about 60 ng/ml from a mean of about 2 to about 4.5 hours after administration, and a mean minimum plasma concentration from about 3 to about 120 ng/ml from a mean of about 10 to about 14 hours after repeated administration every 12 hours through steady-state conditions.

'912 patent, col. 20, ll. 45-54.

During the prosecution of the '912 patent, the applicants filed a terminal disclaimer with respect to the '331 parent to overcome a rejection based on the parent. At the examiner's suggestion, the applicants amended the specification of the '912 patent to claim priority of the filing date of the '331 parent.

On May 18, 1999, Purdue filed suit against Roxane alleging that its oxycodone controlled-release product, Roxycodone™ SR, infringed claims of the '912, '042 and '295 patents. Roxane filed counterclaims of invalidity (based on anticipation of the patents-in-suit) and inequitable conduct. On October 1, 1999, Purdue moved for a preliminary injunction. By stipulated order, the parties conducted expedited discovery, and on November 15-18, 1999, the district court held an evidentiary hearing that included live fact witness testimony and submitted expert declarations. Purdue's and Roxane's respective economics experts submitted written testimony concerning the likelihood of price erosion, loss of market share, and market expansion.

Following the hearing, on February 3, 2000, the Food and Drug Administration independently stayed its approval of Roxane's oxycodone pain relief product in response to a Citizen's Petition brought by Purdue. Roxane's accused product has therefore never been marketed in the United States. In contrast, Purdue's controlled release oxycodone product, OxyContin, accounted for approximately 63% of Purdue's 1999 sales and a projected 79% of Purdue's 2000 sales. Purdue has chosen not to license its patent portfolio.

On May 16, 2000, the district court issued its order granting Purdue's motion for preliminary injunctive relief, holding that: (1) Purdue was likely to prove infringement

under a claim construction of the term "administration" encompassing values for the time of maximum oxycodone blood plasma concentration ("T_{max}") determined in a multiple dose steady-state study; (2) Roxane's defense that the '331 parent anticipates and renders invalid the patents-in-suit lacks substantial merit; (3) Roxane's inequitable conduct defense that applicants made an improper claim of priority to the '331 parent lacks substantial merit; and (4) Purdue would suffer irreparable harm if no preliminary injunction were to issue. The district court entered the injunction on May 25, 2000.

Discussion

As the moving party, Purdue was required to establish its right to a preliminary injunction in light of four factors: "(1) a reasonable likelihood of success on the merits; (2) irreparable harm if the injunction were not granted; (3) the balance of the hardships and (4) the impact of the injunction on the public interest." Polymer Techs. v. Bridwell, 103 F.3d 970, 973; 41 USPQ2d 1185, 1188 (Fed. Cir. 1996) (citing Nutrition 21 v. United States, 930 F.2d 867, 869, 18 USPQ2d 1347, 1348-49 (Fed. Cir. 1991)). If Purdue as the moving party "clearly establishe[s] the first factor (by making a 'clear showing' of both validity and infringement), it [is] entitled to a rebuttable presumption" of irreparable harm. Id. The only issues Roxane argues on appeal are the district court's determination of factors one and two.

The decision to grant a preliminary injunction is within the discretion of the district court. See 35 U.S.C. § 283 (1994); Polymer Techs.,103 F.3d at 973, 41 USPQ2d at 1188. An abuse of discretion may be shown if the district court made a clear error of judgment, or based its decision on an erroneous legal conclusion or clearly erroneous factual findings. Canon Computer Sys. Inc. v. Nu-Kote Int'l, Inc., 134 F.3d 1085, 1087-88, 45 USPQ2d 1355, 1358 (Fed. Cir. 1998). We are also mindful that all findings of fact and conclusions of law at the preliminary injunction stage are subject to change upon the ultimate trial on the merits. See Illinois Tool Works, Inc. v. Grip-Pak, Inc., 906 F.2d 679, 681, 15 USPQ2d 1307, 1308-09 (Fed. Cir. 1990) (citations omitted).

With respect to the first factor of reasonable likelihood of success on the merits, Purdue was required to show that "in light of the presumptions and burdens that will inhere at trial on the merits, (1) it will likely prove [infringement] and (2) its infringement claim will likely withstand [Roxane's] challenges to the validity and enforceability of the . . . patent[s]." Genentech, Inc. v. Novo Nordisk, A/S, 108 F.3d 1361, 1364, 42 USPQ2d 1001, 1003 (Fed. Cir. 1997) (quoting New England Braiding Co. v. A.W. Chesterson Co., 970 F.2d 878, 882-83, 23 USPQ2d 1622, 1625-26 (Fed. Cir. 1992)). If Roxane defends with evidence raising a "substantial question" concerning validity, enforceability, or infringement, Purdue was required to produce countervailing evidence demonstrating that these defenses "lack[ ] substantial merit." Genentech, Inc., 108 F.3d at 1364, 42 USPQ2d at 1001.

An infringement analysis entails two steps. The first step is determining the meaning and scope of the patent claims asserted to be infringed. The second step is comparing the properly construed claims to the device accused of infringing. Markman v. Westview Instruments, Inc., 52 F.3d 967, 976, 24 USPQ2d 1321, 1326 (Fed. Cir. 1995) (en banc). Claim construction is a question of law that we review de novo. Cybor

v. FAS Techs., Inc., 138 F.3d 1448, 1456, 46 USPQ2d 1169, 1174 (Fed. Cir. 1998) (en banc). Infringement, both literal and under the doctrine of equivalents, is a question of fact. Insituform Techs., Inc. v. Cat Contracting, Inc., 161 F. 3d 688, 692, 48 USPQ2d 1610, 1614 (Fed. Cir. 1998).

The claim language at issue concerns the type of administration (single dose, or multiple dose, steady-state) used to determine the mean time "after administration" at which the maximum mean plasma level of oxycodone in human patients is reached. Roxane contends that the claim language limits the determination of T_{max} to single dose studies, while Purdue contends that the language encompasses both single dose and multiple dose, steady-state studies.

Finding the language of the claim ambiguous, and ultimately relying on the specification and the "'fundamental purpose and significance' of the invention," the district court held that the range of values for T_{max} "after administration" encompasses values obtained from multiple dose, steady-state studies. Purdue Pharma L.P., slip op. at 20. Roxane argues that this claim construction is erroneous because the plain language of the claim shows that when the drafters wanted to require multiple dose administrations (as for mean minimum plasma concentration values), they so specified, while specification examples and language and the '331 parent refer to single dose administration to determine T_{max} .

We see no error in the district court's initial conclusion and reasoning. The bare language of the claim is unclear as to the type of administration to determine T_{max} . The specification includes examples of single and multiple dose administrations, and the district court's refusal to read in a single dose limitation from the specification and thereby ignore its references to multiple dose, steady-state examples is not improper. See Burke v. Bruno Indep. Living Aids, Inc., 183 F.3d 1334, 1340-41, 51 USPQ2d 1295, 1299-1300 (Fed. Cir. 1999). Moreover, the construction is "consistent with and furthers the purpose of the invention," which the court determined to be to administer steady-state dosages to a patient "to facilitate the titration process by reducing the range of daily dosages needed to provide effective pain relief across the spectrum of patients." See CVI/BETA Ventures, Inc. v. Tura LP, 112 F.3d 1146, 1160, 42 USPQ2d 1577, 1587 (Fed. Cir. 1997); Purdue Pharma L.P., slip op. at 20.

In arguing that the patents teach that T_{max} is determined in a single dose study, Roxane cites the following paragraph from the specifications of the patents:

> In order to obtain a controlled release drug dosage form having at least a 12 hour therapeutic effect, it is usual in the pharmaceutical art to produce a formulation that gives a peak plasma level of the drug between about 4-8 hours after administration (in a single dose study). The present inventors have surprisingly found that, in the case of oxycodone, a peak plasma level at between 2-4.5 hours after administration gives at least 12 hours pain relief and, most surprisingly, that the pain relief obtained with such a formulation is greater than that achieved with formulations giving peak plasma levels (of oxycodone) in the normal period of up to 2 hours after administration.

’912 patent, col. 5, II. 5-16; ’042 patent, col. 5, II. 7-18; ’295 patent, col. 5, II. 5-16. Roxane contends that the parenthetical reference to a single dose study defines "administration" within the context of the invention. The district court, however, determined that the reference to a single dose study merely explains prior art. Although there was testimony that supports the court’s interpretation, its interpretation is a reasonable one independent of that testimony. We therefore cannot say that the court impermissibly relied on extrinsic evidence when construing the claims.

Moreover, the court did not err in rejecting Roxane’s argument that the ’331 parent’s patent prosecution history limits the claim to values obtained in single dose administrations. The ’331 parent, which uses the bare term "administration," also discloses values obtained in multiple dose, steady-state studies. Finally, although the specifications of the patents-in-suit refer to the use of "methods" set forth in United States Patent No. 4,990,341 (a Purdue patent on a hydromorphone-based controlled release pain medication that relied specifically on T_{max} determinations in a single dose study), this language is narrower than the reading urged by Roxane, and refers to the preparation of the oxycodone medication formulation itself.

There appears to be no real dispute that Roxane’s accused product infringes under the above claim construction. The district court thus did not err in finding that Purdue made a strong showing of a reasonable likelihood that it would succeed on the merits of its infringement claim.

We next consider the trial court’s determination that Purdue made a strong showing that Roxane’s anticipation defense lacked substantial merit. Roxane bears the ultimate burden of proof at trial of proving invalidity by clear and convincing evidence. See Oney v. Ratliff, 182 F.3d 893, 895, 51 USPQ2d 1697, 1699 (Fed. Cir. 1999). However, to support its preliminary injunction, Purdue bore the burden of establishing a likelihood of success on these issues and thus must have shown that Roxane likely will not prove that the patent is invalid. Canon Computer Sys., Inc., 134 F.3d at 1088, 45 USPQ2d at 1358. Every patent is presumed valid, so if Roxane fails to identify any persuasive evidence of invalidity, the very existence of the patent satisfies Purdue’s burden on validity. Id.

Roxane contends that the ’331 parent is prior art that anticipates and invalidates the patents-in-suit because the inventive entity of the ’331 parent is different from its progeny. Purdue argues and the district court held that the ’331 parent is not relevant prior art because the inventions disclosed in the patents-in-suit were conceived and reduced to practice before the filing date of the ’331 parent application.

Conception and reduction to practice are questions of law, based on subsidiary findings of fact. Hybritech Inc. v. Monoclonal Antibodies, Inc., 802 F.2d 1367, 1376, 231 USPQ 81, 87 (Fed. Cir. 1986). To antedate (or establish priority) of an invention, a party must show either an earlier reduction to practice, or an earlier conception followed by a diligent reduction to practice. See Price v. Symsek, 988 F.2d 1187, 1190, 26 USPQ2d 1031, 1037-38 (Fed. Cir. 1993).

Conception requires proof that the inventor formed in his mind "a definite and

permanent idea of the complete and operative invention, as it is hereafter to be applied in practice," and that the idea be "so clearly defined in the inventor's mind that only ordinary skill would be necessary to reduce the invention to practice, without extensive research or experimentation." Burroughs Wellcome Co. v. Barr Labs., Inc., 40 F.3d 1223, 1228, 40 USPQ2d 1915, 1920 (Fed. Cir. 1994) (citations omitted). Where a party seeks to show conception though oral testimony of an inventor, it must produce independent evidence corroborating that testimony. Price, 988 F.2d at 1195, 26 USPQ2d at 1036-37. Such evidence is to be evaluated under a rule of reason. Id.

To prove actual reduction to practice, "an inventor must establish that he 'actually prepared the composition and knew it would work.'" Estee Lauder Inc. v. L'Oreal, S.A., 129 F.3d 588, 592, 44 USPQ2d 1610, 1613 (Fed. Cir. 1997) (citations omitted); see also Mahurkar v. C.R. Bard, Inc., 79 F.3d 1572, 1577, 38 USPQ2d 1288, 1291 (Fed. Cir. 1996). The inventor must also have "contemporaneous recognition and appreciation of the invention represented" by the claims. Estee Lauder Inc., 129 F.3d at 593, 44 USPQ2d at 1614 (citations omitted). Where an inventor is unable to establish conception until he has reduced the invention to practice through a successful experiment, simultaneous conception and reduction to practice occur. Amgen, Inc. v. Chugai Pharm. Co., 927 F.2d 1200, 1206, 18 USPQ2d 1016, 1021 (Fed. Cir. 1991).

The district court credited the testimony via declaration of Robert F. Kaiko, one of the named inventors of the patents-in-suit, together with three exhibits that it found demonstrated conception and reduction to practice. Focusing on each exhibit individually, Roxane argues that the court erred because the documents either did not demonstrate all of the limitations of the invention, or were insufficiently corroborated. We see no error in the district court's conclusion. Despite Roxane's arguments to the contrary, the T_{max} , C_{max} , T_{min} , and C_{min} values of the invention can be read in a graph entitled "Bioavailability of CR Oxycodone" (Figure 1, Exhibit 2). There is adequate support linking this graph to the remainder of the document, which further demonstrates the concentrations of oxycodone preparations and the intention of 12-hour usage. A table in Exhibit 3 discloses in vivo test use of these formulations in five randomized crossover bioavailability studies. Finally, a memo in Exhibit 4 discussed the clinical trials and showed an appreciation of the invention, its benefit of the reduction of variability of dose, and its practice in the trials. Dr. Kaiko's testimony provided an adequate explanation of the documents, which indicate that Kaiko communicated the invention to others. The district court did not err, under the rule of reason, in holding that the group of documents constitutes adequate proof of conception and reduction to practice. See Price, 988 F.2d at 1196, 26 USPQ2d at 1037-38. Further, because the district court's finding of conception and reduction to practice adequately supports a "strong showing" that Roxane's anticipation defense lacks substantial merit, there is no need to reach the remainder of the anticipation arguments briefed by the parties.

As with anticipation, at trial Roxane bears the ultimate burden of proving inequitable conduct by clear and convincing evidence, while Purdue bore the burden on the preliminary injunction of showing that Roxane's claim lacks substantial merit. See Scripps Clinic & Research Found. v. Genentech, Inc., 927 F.2d 1565, 1582, 18 USPQ2d 1001, 1008 (Fed. Cir. 1991). Inequitable conduct is committed to the discretion

of the trial court and is reviewed by this court under an abuse of discretion standard. "We, accordingly, will not simply substitute our judgment for that of the trial court in relation to inequitable conduct." Kingsdown Med. Consultants v. Hollister, Inc., 863 F.2d 867, 876, 9 USPQ2d 1384, 1392 (Fed. Cir. 1988) (en banc). To prove inequitable conduct in the prosecution of a patent, Roxane must have provided evidence of "affirmative misrepresentations of a material fact, failure to disclose material information, or submission of false material information, coupled with an intent to deceive." Baxter Int'l, Inc. v. McGaw, Inc., 149 F.3d 1321, 1327, 47 USPQ2d 1225, 1228-29 (Fed. Cir. 1998) (citations omitted). Inequitable conduct entails a two-step analysis: first, a determination of whether the withheld reference meets a threshold level of materiality and intent to mislead, and second, a weighing of the materiality and intent "[i]n light of all the circumstances" to determine "whether the applicant's conduct is so culpable that the patent should be held unenforceable." Id. Both intent and materiality are questions of fact. Id.

Roxane argues that when Purdue filed a terminal disclaimer and acquiesced in the examiner's suggestion to amend its specification of the '912 patent to claim the benefit of the filing date of the '331 parent, it should have advised the patent examiner that the '331 parent was prior art and that the amendment was inappropriate. After rejecting a similar argument with respect to the prosecution of the '331 parent itself (crediting the testimony of Purdue's patent attorney that he submitted the terminal disclaimer in the belief that the examiner had intended to issue an obviousness-type double patenting rejection and finding no threshold intent to deceive even assuming the materiality of Roxane's claim), the trial court rejected the present argument because the '331 reference was disclosed to and discussed by the examiner in the '912 prosecution and included in the '042 and '295 information disclosure statements. Roxane argues that the trial court misconstrued its inequitable conduct claim because it is not founded on an allegation that the '331 parent was withheld from the examiner, but on the assertion that Purdue misled the examiner into believing that the '331 parent is not prior art against the '912, '042, and '295 patents. We see no error, however, in the court's determination that Purdue demonstrated that Roxane's inequitable conduct defense lacks substantial merit.

When Purdue filed the '912 patent, it claimed priority to the '331 parent. During prosecution of the '912 patent, in the last Office Action on the merits, the examiner noted that the priority claim did not satisfy all of the requirements of 35 U.S.C. § 120 and 37 C.F.R. § 1.78, and invited Purdue to amend the application to remedy the deficiency. Purdue responded to this Office Action by making the necessary amendment to the application and by stating, "[T]he Examiner indicated that Applicants might desire to obtain the benefit of the filing date of the ['331 parent], filed November 27, 1991. In response, it is noted that the specification has now been amended to make it clear that this Application is, indeed, a continuation-in-part of the ['331 parent]. This Amendment was made in order to complete the formal requirements to claim priority under 35 U.S.C. § 120." The '042 and '295 patents were filed with priority claims that satisfied the requirements of 35 U.S.C. § 120 and 37 C.F.R. § 1.78.

These facts do not make out a case of inequitable conduct. There is no evidence that

Purdue actively misled the examiner into believing that the ’331 parent is not prior art, or that Purdue argued that the claims of the asserted patents are entitled to the priority date of the ’331 parent. In fact, the examiner himself recognized that the claims of the ’912 patent were based on "additional disclosure not presented in the [’331 parent]," which suggests that the examiner did not assume that the claims are entitled to the priority date of the ’331 parent. Thus, we are not faced with a situation like that in KangaROOS U.S.A., Inc. v. Caldor, Inc., 778 F.2d 1571, 228 USPQ 32 (Fed. Cir. 1985), where the applicant made an invalid priority claim to overcome an intervening reference.

Because the specifications of the asserted patents and the ’331 parent are largely identical, it was logical for Purdue to claim priority to the ’331 parent, even if the claims of the asserted patents are not entitled to the earlier priority date of the ’331 patent. As pointed out in In re Wertheim, 646 F.2d 527, 533, 209 USPQ 554, 561 (C.C.P.A. 1981) (discussing In re Lund, 376 F.2d 982, 988, 153 USPQ 625, 630-31) (C.C.P.A. 1967)), a claim to priority to an earlier patent strengthens the offensive value of a later patent, because, for disclosures common to both documents, the later patent will be effective as prior art as of the filing date of the earlier patent. We therefore decline to find inequitable conduct in the mere act of claiming priority to an earlier patent where the specifications, but not the claims, of the later patents are supported by the earlier patent.

Considering the infringement, anticipation and inequitable conduct arguments discussed above, we find no error in the district court’s holding that Purdue made a clear showing of its likely success on the merits. Therefore, under the rule prevailing in our circuit, Purdue was entitled to a rebuttable presumption of irreparable harm. See Polymer Techs., 103 F.3d at 973, 41 USPQ2d at 118 (citations omitted). Because the district court afforded Purdue the benefit of the presumption, the burden properly was on Roxane to produce evidence sufficient to establish that Purdue would not be irreparably harmed by denial of its motion for preliminary injunction. See Rosemount Inc. v. United States Int'l Trade Comm'n, 910 F.2d 819, 822 n.2, 15 USPQ2d 1569, 1571-72 n.2 (Fed. Cir. 1990). Roxane argues that the district court erred by crediting "speculative testimony" of Purdue’s economics expert that price erosion and loss of market position was likely and would constitute irreparable harm. Given the testimony of the likelihood of price erosion and loss of market position without corresponding market expansion from the introduction of Roxane’s product, we see no deficiency in the district court’s finding of irreparable harm. See Polymer Techs., 103 F.3d at 975-76, 41 USPQ2d at 1190.

Conclusion

Accordingly, the judgment of the United States District Court for the Southern District of New York is affirmed and the case is remanded for further proceedings.

AFFIRMED AND REMANDED