United States District Court,
N.D. Illinois.

GLAXO, INC., Glaxo Group Limited, Plaintiffs,
Counterdefendants.
v.
TORPHARM, INC., Apotex USA, Inc., Apotex, Inc., Defendants,
Counterclaimants.

Aug. 22, 1997.

MEMORANDUM OPINION AND ORDER

HART**, United States District Judge.**

On August 14, 1995, plaintiffs Glaxo, Inc. and Glaxo Group Limited (collectively, "Glaxo") sued defendants TorPharm Inc., Apotex USA, Inc. and Apotex, Inc (collectively, "TorPharm"), alleging that TorPharm infringed U.S. Letters Patent 4,521,431 (the " '431 patent") under 35 U.S.C. s. 271(e) (" s. 271(e)") by filing an abbreviated new drug application ("ANDA") for a generic version of an anti-ulcer medication containing ranitidine hydrochloride. Presently pending is TorPharm's motion to shorten the 30-month period contained in 21 U.S.C. s. 355(j)(4)(B)(iii) and TorPharm's motion for summary judgment. FN1

FN1. Torpharm's motion for leave to file a supplemental brief in support of their motion to shorten the 30-month period will be granted. Glaxo's motion for leave to fie a supplemental brief in opposition to TorPharm's motion will be granted.

I. MOTION TO SHORTEN 30-MONTH PERIOD FOR FDA APPROVAL

TorPharm asserts that Glaxo's pattern of delay and refusal to cooperate in this litigation warrants shortening the 30-month period contained in 21 U.S.C. s. 355(j)(4)(B)(iii) ("section 355"). Some background information relating to section 355 is needed to understand the basis of TorPharm's motion. Section 355 is part of The Drug Price Competition and Patent Term Restoration Act, often called the Waxman-Hatch Act. 21 U.S.C. s.s. 301 *et seq*. and 35 U.S .C. s. 271(d)-(h). The Waxman-Hatch Act allows drug companies wishing to market a generic version of a drug to submit an Abbreviated New Drug Application ("ANDA") instead of the more rigorous New Drug Application. The Waxman-Hatch Act provides that drug companies may develop and test the patented drug without infringing the patent so long as the company's use of the drug is necessary for the preparation and submission of its ANDA. Bristol-Myers Squibb Co. v. Royce Laboratories, Inc., 69 F.3d 1130, 1132 (Fed.Cir.1995).

An applicant submitting an ANDA must make one of four certifications specified under the Waxman-Hatch Act. 12 U.S.C. s. 355(j)(2)(A)(vii)(I)-(IV). In this case, TorPharm made a "paragraph IV" certification. If an applicant makes paragraph IV certification and meets all applicable scientific and regulatory requirements,

the FDA is required to approve the ANDA "effective immediately" unless the patent owner brings an action for infringement under 35 U.S.C.A. s. 271(e)(2)(A) within forty-five days of receiving notice of the paragraph IV certification. *Id*. (citing 21 U.S.C. s. 355(j)(4)(B)(iii)). Once the patent owner brings a section 271(e)(2)(A) infringement action, the FDA must suspend approval of the ANDA. *Id*. The suspension, or statutory bar against approval, continues until the earliest of three dates: (i) the date of a court's decision ruling the patent invalid or not infringed; (ii) the date that the patent expires if a court has decided that the patent has been infringed; or (iii) subject to modification by the court, the date that is thirty months from the patent owner's receipt of notice of the filing of the paragraph IV certification. 21 U.S.C. s. 355(j)(4)(B)(iii)(I)-(III).

A court may shorten or lengthen the 30-month period under section (iii) above if "either party to the action failed to reasonably cooperate in expediting the action." Id. s. 355(j)(4)(B)(iii). The 30-month period in this case will expire in January 1998. Therefore, TorPharm seeks to shorten the 30-month period by approximately five months.

TorPharm alleges that the following acts or omissions by Glaxo demonstrate that Glaxo "failed to reasonably cooperate in expediting" this action: (i) Glaxo misrepresented the effect of the Federal Circuit's decision in Glaxo, Inc. v. Novopharm, Ltd., 110 F.3d 1562 (Fed.Cir.1997) (" *Novopharm III* "), resulting in five-month long stay of the proceedings; (ii) after Glaxo received TorPharm's paragraph IV certification, Glaxo waited until near the end of the 45-day statutory period to file this action; (iii) Glaxo did not serve process on defendant Apotex, Inc. until two months after the complaint was filed; (iv) Glaxo did not serve its first set of discovery requests until November 21, 1995; (v) Glaxo was still delivering documents responsive to TorPharm's discovery requests in mid-August 1996, or two months after the close of discovery; and (vi) Glaxo indicated in responses to TorPharm's discovery requests that subject to certain objections, responsive documents would be produced, but TorPharm ultimately had to file four motions to compel the production of documents.

In response, Glaxo points out that, in 1995, civil cases in this district had a median time of 24 months from filing to trial, according to the 1996 Federal Court Management Statistics. The median time was 27 months in 1996. Glaxo argues that this case, which is 23 months old, has not had an unreasonably long pretrial period given the complexity of the case. Glaxo states that its efforts in conducting discovery have been substantial. Glaxo has produced over 72,000 pages of documents to TorPharm. The parties have conducted 48 days of depositions, including a five-week period of depositions of Glaxo personnel in England and Scotland.

Further, Glaxo contends that TorPharm must take some responsibility for the length of the pretrial process. First, Glaxo argues that TorPharm could have filed its ANDA earlier to coincide with the expiration of the '658 patent, especially since its parent company, defendant Apotex, Inc. had been selling RHCl in Canada for several years. Second, TorPharm did not turn over a sample of its product to Glaxo until six months after Glaxo's initial request. Third, Glaxo asserts that much of the discovery in this case has centered on TorPharm's affirmative defenses of invalidity, unenforceability and patent misuse. Fourth, Glaxo asserts that defendant Apotex, Inc. delayed this action by contesting personal jurisdiction although it ultimately withdrew its motion to dismiss on this ground. Finally, Glaxo asserts that it is not responsible for delay due to the stay over the proceedings because the stay was imposed *sua sponte* by this court.

TorPharm has not demonstrated that Glaxo's behavior warrants shortening the 30-month statutory bar. Although TorPharm has repeatedly insisted in court and in its motion papers that Glaxo misrepresented that

it would dismiss this action if the Federal Circuit affirmed *Glaxo, Inc. v. Novopharm, Ltd.,* 931 F.Supp. 1230 (E.D.N.C.1996) (" *Novopharm II* "), the transcripts of the various hearings discussing the impending Federal Circuit decision suggest otherwise. Glaxo represented that if the Federal Circuit affirmed the claims construction portion of *Novopharm II,* it would likely dismiss this action. In *Novopharm II,* the district court had held that a mixture of Form 1 and Form 2 RHCl did not infringe the '431 patent and, in this action, Glaxo contends that TorPharm's product contains a mixture of Form 1 and Form 2 RHCI. The Federal Circuit, however, reversed the claims construction portion of *Novopharm II* and held that a mixture of Form 1 and Form 2 RHCl could infringe the '431 patent. Glaxo subsequently indicated it would not dismiss this action. None of Glaxo's representations misstated its intentions.

Moreover, the overall impression of this case during the discovery phase is that both parties conducted a tremendous amount of discovery within a relatively short period of time. Certainly the record also indicates that the parties have engaged in discovery disputes. Both parties have been forced to seek judicial intervention to resolve their disputes. TorPharm argues Glaxo's untimely document productions are particularly egregious because Glaxo was merely reproducing documents already copied and Bates-stamped in other litigation, but this reasoning is not convincing. Producing 72,000 documents is a large task by any standard, and TorPharm's assertion that the delay should be treated more harshly because the prior productions should have resulted in timely submissions to TorPharm is after-the-fact speculation. In addition, some of TorPharm's document requests were deemed to be overbroad because the requests sought all documents relating to Glaxo's prior litigations over ranitidine hydrochloride. Glaxo was untimely in its document productions, but it has nonetheless cooperated in moving along this litigation.

Finally, TorPharm's allegations regarding Glaxo's initial delay in commencing activity in this litigation-waiting until the end of the 45-day statutory period to file its complaint, failing to serve Apotex, Inc. promptly and waiting until November 1995 to serve discovery on TorPharm-either do not constitute impermissible delay tactics or are explained by the circumstances of the case. The Waxman-Hatch Act allots a patent holder 45 days to file an action against the ANDA applicant after the patent holder receives a notice of the applicant's paragraph IV certification. A patent holder is entitled to file at any time during the statutory period without fear that a court will later decide that it failed to cooperate. It is irrelevant that Glaxo sued TorPharm near the end of the statutory period. Glaxo's suit was still timely. In addition, TorPharm's motion to dismiss Count II of Glaxo's complaint was not decided until November 17, 1995. Glaxo served its first discovery requests on November 21, 1995. This delay is not patently unreasonable. While not condoning that activity in this litigation was slow to start, Glaxo did not "fail to cooperate" and TorPharm's motion will be denied.

II. MOTION FOR SUMMARY JUDGMENT

On November 27, 1996, TorPharm filed a motion for summary judgment. TorPharm's motion was granted in part and denied in part in a memorandum opinion and order dated May 15, 1997. Glaxo, Inc. v. TorPharm, Inc., 1997 WL 282742 (N.D.Ill. May 18, 1997). The opinion specifically reserved ruling on an issue raised by TorPharm in its reply memorandum in support of its motion for summary judgment. In its memorandum, TorPharm asserted that summary judgment should be granted because the level of Form 2 RHCl in its product was too small to be deemed infringing. Glaxo asserts that TorPharm's product contains 0.5 percent level of Form 2 RHCl. TorPharm's specification in its ANDA requires a polymorphic purity of 99.37%. Because this ground for summary judgment was raised in TorPharm's reply memorandum, no ruling was made as to this argument. Instead, the parties were asked to brief whether a 0.5 percent level of Form 2 RHCl in TorPharm's product would constitute infringement of the '431 patent.

A. The De Minimus Exception

Glaxo argues that small amounts of Form 2 RHCL in TorPharm's product infringe the '431 patent because the *de minimus* exception does not excuse infringement where the infringing activity is committed by a business to further a commercial enterprise. Since TorPharm's reason for seeking FDA approval for its product is to further its commercial gain, Glaxo contends that the *de minimus* exception is unavailable to TorPharm. Moreover, Glaxo asserts, even if the *de minimus* exception were applicable, TorPharm could not show *de minimus* infringement because the 0.5 percent of Form 2 RHCl in TorPharm's product would correspond to over $18 million in sales-.005 multiplied by Glaxo's estimate that TorPharm could sell $3.75 billion worth of its product.

Glaxo is correct in asserting that the *de minimus* exception has no application to this case. The *de minimus* exception is applicable only to experimental use which is not coupled with a commercial purpose. Spray Refrigeration Co. v. Sea Spray Fishing, Inc., 322 F.2d 34, 36 (9th Cir.1963). But the *de minimus* exception is not relevant to the question of whether a product containing a 0.5 percent Form 2 RHCl and over 99 percent Form 1 RHCl infringes Glaxo's patent. Rather, this issue is one of claim construction of both the '658 and '431 patents. TorPharm claims it is practicing the teaching of the '658 patent and not the '431 patent. The question then is whether TorPharm can practice the '658 patent at less than 100% polymorphic purity, even if the impurities contain Form 2 RHCl. If the '658 patent is properly construed to include only 100% Form 1 RHCl, then TorPharm is not practicing the '658 patent. If, however, the '658 patent is construed more broadly, then a polymorphic purity level of 99% percent might be considered within the teaching of the '658 patent.

B. Claims Construction of Glaxo's Patents

To determine what constitutes practicing the '658 patent without infringing the '431 patent-and as TorPharm correctly points out, there must be a way to accomplish this or Glaxo has obtained a double patent-the claims of the '658 patent must be construed. Determining whether a patent is literally infringed involves a two-step analysis: "the proper construction of the asserted claim and a determination as to whether the accused method or product infringes the asserted claim as properly construed." Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1581-82 (Fed.Cir.1996). The first step, claim construction, is a question of law. Id. at 1582. The Federal Circuit has provided guidance for determining the proper construction of a claim:

It is well-settled that, in interpreting an asserted claim, the court should look first to the intrinsic evidence of record, *i.e.*, the patent itself, including the claims, the specification and, if in evidence, the prosecution history. Such intrinsic evidence is the most significant source of the legally operative meaning of disputed claim language.

First, we look to the words of the claims themselves, both asserted and nonasserted, to define the scope of the patented invention. Although words in a claim are generally given their ordinary and customary meaning, a patentee may choose to be his own lexicographer and use terms in a manner other than their ordinary meaning, as long as the special definition of the term is clearly stated in the patent specification or file history.

Thus, second it is always necessary to review the specification to determine whether the inventor has used any terms in a manner inconsistent with their ordinary meaning.... [T]he specification is always highly

relevant to the claim construction analysis. Usually it is dispositive; it is the single best guide to the meaning of a disputed term.

Id. (citations omitted). In addition, a court may look to the prosecution history of the patent, if it is in evidence. *Id*. Where, as in most cases, intrinsic evidence alone resolves any ambiguity in a claim term, relying on extrinsic evidence is unnecessary and improper. *Id*. at 1583.

Two Federal Circuit opinions discuss the patents at issue in this case, Glaxo, Inc. v. Novopharm, Ltd., 52 F.3d 1043 (Fed.Cir.1995) ("Novopharm I"), and Glaxo, Inc. v. Novopharm, Ltd., 110 F.3d 1562 (Fed.Cir.1997). In *Novopharm I,* the Federal Circuit affirmed the district court's decision to enjoin Novopharm from manufacturing or selling Form 2 RHCl. Novopharm I, 52 F.3d at 1045. The district court had held that the '431 patent was valid and was infringed by Novopharm's manufacture and sale of its product. Novopharm had claimed that the '431 patent was invalid because it was inherently anticipated by Glaxo's '658 patent covering Form 1 RHCl. Novopharm asserted that following the procedures in Example 32 the '658 patent always yielded Form 2 RHCl, instead of Form 1 RHCl. Id. at 1047. The Federal Circuit rejected this argument, upholding the district court's finding that practicing Example 32 could yield either Form 1 or Form 2 RHCl. The Federal Circuit stated that the district court's finding that experts of both Glaxo and Novopharm had produced Form 1 RHCl by practicing Example 32 was not clearly erroneous and thus Novopharm had not proved its anticipation defense. Id.

In *Novopharm III,* the Federal Circuit upheld the district court's decision that Glaxo failed to prove infringement of the '431 and '133 patents. Novopharm III, 110 F.3d at 1563. After a bench trial, the district court held that the '431 and '133 patents were limited to pure Form 2 RHCl, but even assuming that a mixture of Form 1 and Form 2 RHCl would infringe the patent, Glaxo had not proven infringement. The Federal Circuit reversed the district court's determination that the claims of the '431 patent were limited to pure Form 2 RHCl. Citing *Novopharm I,* the Federal Circuit concluded "Form 2 RHCl was not inherently produced by the procedures of the '658 patent and therefore the validity of the claims to Form 2 RHCl does not depend on their being limited to pure Form 2 RHCl." *Id*. The Federal Circuit, however, expressly left open the question of whether small amounts of Form 2 RHCl would infringe Glaxo's '431 patent, and if so, what amount of Form 2 RHCl would be required to demonstrate infringement. Id. at 1566 n. 1.

Under *Vitronics,* the intrinsic evidence of the record, *i.e.,* the patent itself, including the claims, the specification and, if in evidence, the prosecution history, is first examined in construing a patent. Vitronics, 90 F.3d at 1581. The '658 patent covers the basic drug substance, ranitidine, and a variety of "physiologically acceptable salts." One of these salts, ranitidine hydrochloride, is described in Example 32 of the patent, which describes a method for synthesis of the salt. Example 32 does not define the salt by its infrared spectral characteristics or its x-ray powder diffraction pattern.

In the abstract of the '431 patent, the invention is described as "[a] novel crystal form of ranitidine ... designated Form 2, and having favorable filtration and drying characteristics ... characterized by its infra-red spectrum and/or by its x-ray powder diffraction patterns." Claim 1 of the '431 patent claims "Form 2 ranitidine hydrochloride characterized by an infra-red spectrum as a mull in mineral oil showing the following main peaks...." A table of 29 main peaks in the infrared spectrum is listed.

The prosecution history of the patent indicates that Glaxo's application for the '431 patent was rejected twice because the Examiner concluded that Form 2 RHCl was anticipated by, or inherent in, the prior art as disclosed by Example 32 of the '658 patent. In a letter dated July 28, 1993, Examiner Richard Raymond

stated as follows:

Claims 1 and 2 are rejected under 35 USC 102(e) as being anticipated by.... or as being obvious over [the '658 patent].... The present claims are drawn to a specific form of this compound.... Further, a mere difference in physical form absent a showing of unexpected properties does not establish a patentable distinction.

In response, Glaxo submitted the declaration of its senior infrared spectroscopist, Dr. John H. Hunt and the declaration of David Trevor Collin, a Research Leader in the Chemical Development Department at Glaxo. Hunt compared the differences in the infrared spectra and d-spacings in the x-ray powder diffraction pattern between Form 1 and Form 2 RHCl. Collin described several advantages of Form 2 RHCl over Form 1 RHCl: (i) Form 2 RHCL can be prepared and isolated in presence of concentrated hydrochloric acid, avoiding the need to use hydrogen chloride gas, which is used to make Form 1 RHCL and is corrosive and difficult to handle; and (ii) and Form 2 RHCL possesses better filtration and drying characteristics, which are important in determining the ease with which a substance can be obtained in pure form. Based upon these submissions, the Examiner allowed the '431 patent to issue.

The prosecution history demonstrates that Glaxo had to demonstrate that Form 2 RHCl was not only different from a spectral viewpoint, but that it was also distinguishable from Form 1 RHCl on the basis of its advantageous properties. Glaxo chose to define these advantageous properties in terms of its desirable manufacturing characteristics-it can be produced in the presence of hydrochloric acid instead hydrogen chloride gas, and it can be more easily isolated in a pure form.

Discerning whether a particular mixture of Form 1 RHCL and Form 2 RHCl infringes the '431 patent is difficult because the patents define polymorphs of the same compound, ranitidine hydrochloride, in different manners. On the one hand, the '658 patent contains a broad definition of ranitidine hydrochloride and sets forth a method of producing the salt form that can produce either Form 1 or Form 2 RHCl. On the other hand, the '431 patent specifically defines the invention through the product's infrared spectrum and x-ray diffraction pattern and the Federal Circuit held that a mixture of Form 1 and Form 2 may infringe the '431 patent. Since Example 32 in the '658 patent can sometimes produce Form 2 RHCl, it would appear that some percentage of Form 2 RHCl in a product that was made using Example 32 would be within the teaching of the '658 patent. It would be simpler, of course, if it were clear that the '658 patent covered or yielded only pure Form 1 RHCl, but the language of the patent contains no such limitation. Moreover, the record indicates that such a reading would be incorrect because no evidence suggests that Example 32 produces pure Form 1. Indeed, the record does not demonstrate that pure Form 1 even exists. The lower court opinion in *Novopharm I* found, and the Federal Circuit affirmed, the finding that Example 32 produces both Form 1 and Form 2 RHCl. Glaxo itself never determined whether its original product contained Form 2 RHCl. There is nothing in the language of the patent to indicate that when Example 32 is practiced, the result yields a polymorphically pure product. The only evidence submitted indicates that the opposite is true.

This leads to the question of what exactly will be dedicated to the public upon the expiration of the '658 patent. It is, of course, not possible to simply decide this matter by stating an upper percentage threshold of Form 2 RHCl that a product may contain and still be said to be practicing the '658 patent. This case need not draw the line at what level Form 2 RHCl need be present in a mixture to constitute infringement. The level asserted by Glaxo, however, 0.5 percent, does not constitute infringement of the '431 patent. Glaxo's limit of detection FN2 in its polymorphic purity tests has never been lower than 1 percent. When Glaxo submitted its supporting materials to the PTO, it did not and could not have made the representation that

Example 32 yielded Form 1 RHCl in pure form. TorPharm cannot now be held to a limit of detection that did not exist at the time Glaxo obtained its patent. In 1990, one of Glaxo's analytical chemists, Susan Staniforth, was asked if there was any laboratory method that could be used to detect any Form 2 RHCl in Glaxo's own Form 1 RHCl at a level of 1 percent or less. Staniforth answered, "No. Not on the basis of existing data."

FN2. Dr. David Coffin-Beach, TorPharm's president, testified in his affidavit that the phrase detection limit is used in analytical chemistry to describe the sensitivity of a laboratory test.

In its statement of uncontested facts, TorPharm asserts that Glaxo never tested whether the Form 1 RHCL it was producing before it identified Form 2 RHCl contained Form 2. Glaxo responds that Judge Boyle found and the Federal Circuit agreed that Form 2 RHCl did not exist before April 15, 1980. This averment, however, is not quite accurate. At trial, Glaxo had presented evidence accepted by Judge Boyle that had determined that its thirteenth batch of RHCl contained a different crystallized form of RHCl. There was no finding that the RHCl produced by following Example 32 was pure Form 1 containing no Form 2 RHCl.

A little bit of common sense is in order. TorPharm is attempting to practice Example 32 and produce Form 1 RHCl. It cannot escape the by-product of .05 Form 2 RHCl in its product. Such a minute percentage will not result in a product that yields the distinguishing characteristics of Form 2 RHCl of better filtering and drying characteristics. There is no evidence that TorPharm's product embodies Form 2 RHCl characteristics. TorPharm's product does not possess the characteristics that Glaxo claimed distinguished its product from the product produced by Example 32.

Glaxo's evidence of infringement consists of expert testimony that TorPharm's product contains over 99 percent Form 1 RHCl and 0.5 percent Form 2 RHCl. This composition is within the teaching of the '658 patent and does not infringe the '431 patent. Summary judgment will be granted in favor of TorPharm on both counts of Glaxo's complaint.

IT IS THEREFORE ORDERED that:

(1) Upon further consideration, defendants TorPharm, Inc., Apotex USA, Inc. and Apotex, Inc.'s motion for summary judgment [120-1] is granted in its entirety. The Clerk of the Court is directed to enter judgment in favor of TorPharm, Inc., Apotex USA, Inc. and Apotex, Inc and against plaintiffs Glaxo, Inc. and Glaxo Group Limited, dismissing the case with prejudice.

(2) TorPharm Inc., Apotex USA, Inc. and Apotex Inc.'s motion to shorten the 30-month period for FDA approval [146-1] is denied.

(3) Defendants' motion for leave to file a supplemental brief in support of their motion to shorten the 30-month period for FDA approval of TorPharm's ANDA [155] is granted.

(4) Plaintiffs' motion for leave to file a supplemental brief in opposition to defendants' supplemental motion to shorten 30-month period [156] is granted.

DATED: AUGUST 20, 1997

N.D.Ill.,1997.
Glaxo, Inc. v. Torpharm, Inc.