

27 F.3d 539, *, 1994 U.S. App. LEXIS 11977, **;
30 U.S.P.Q.2D (BNA) 1862

LEXSEE 27 F3D 539

**ELMAR BOSIES AND RUDI GALL, Appellants, v. JAMES J. BENEDICT AND
CHRISTOPHER M. PERKINS, Appellees.**

93-1555

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

27 F.3d 539; 1994 U.S. App. LEXIS 11977; 30 U.S.P.Q.2D (BNA) 1862

May 25, 1994, Decided

PRIOR HISTORY: [**1] Appealed from: U.S. Patent and Trademark Office Board of Patent Appeals and Interferences. Interference No. 102,399

DISPOSITION: REVERSED.

LexisNexis(R) Headnotes

COUNSEL: Norman D. Hanson, Felfe & Lynch, of New York, New York, argued for appellants. With him on the brief were Peter F. Felfe and Andrew L. Tiajloff.

David L. Sutter, The Proctor & Gamble Company, Miami Valley Laboratories, of Cincinnati, Ohio, argued for appellees. With him on the brief were Joseph R. Papp, Michael P. Brennan and Eric M. Dobrusin, Harness, Dickey & Pierce, of Troy, Michigan.

JUDGES: Before ARCHER, Chief Judge, * PLAGER, and LOURIE, Circuit Judges.

* Chief Judge Glenn L. Archer, Jr. assumed the position of Chief Judge on March 18, 1994.

OPINIONBY: LOURIE

OPINION: [*540] LOURIE, Circuit Judge.

Elmar Bosies and Rudi Gall (Bosies) appeal from the June 30, 1993 decision of the United States Patent and Trademark Office Board of Patent Appeals and Interferences awarding priority in Interference No. 102,399 to James J. Benedict and Christopher M. Perkins (Benedict). Because the board erred as a matter of law in concluding that Benedict proved conception of the subject matter of the counts prior to Bosies' effective filing date, we reverse.

BACKGROUND

This interference was declared [**2] on May 24, 1990 between an application of Benedict, Serial No. 06/806,155, assigned to Proctor and Gamble Company, and U.S. Patent 4,687,767 to Bosies, assigned to Boehringer Mannheim GmbH. Bosies, the senior party, was accorded the benefit of the August 2, 1984 filing date of his German patent application. Benedict was accorded the benefit of the December 21, 1984 filing date of his parent application.

The interfering subject matter relates to diphosphonate compounds, compositions, and methods for the treatment of calcium metabolism disorders. The three counts are respectively directed to the compounds, compositions, and methods. Count 1 is illustrative and reads as follows:

Count 1:

A diphosphonate compound of the formula

[SEE ILLUSTRATION IN ORIGINAL]

where in

Het is a substituted or unsubstituted heterocyclic selected from the group consisting of imidazole, or pyridine, 1,2,4-[sic, triazole?] and wherein the substituents are selected from the group consisting of C[1]-C[4] alkyl, C[1]-C[4] alkoxy, halogen selected from the group consisting of fluorine, chlorine, bromine, iodine; hydroxyl, carboxyl, an amino group optionally substituted by C[1]-C[4] alkyl or alkanoyl with [**3] up to 6 carbon atoms; benzyl and benzyl substituted by C[1]-C[4] alkyl, nitro, amino or aminoalkyl with 1 to 4 carbon

27 F.3d 539, *, 1994 U.S. App. LEXIS 11977, **;

30 U.S.P.Q.2D (BNA) 1862

atoms, A is a straight-chained [sic] or branched, saturated or unsaturated hydrocarbon chain containing 2 to 8 carbon atoms,

X is a hydrogen atom, hydroxy, or alkanoyl of up to 6 carbon atoms and R is a hydrogen atom or an alkyl of 1 to 4 carbon atoms; or a pharmacologically acceptable salt thereof.

[*541] (emphasis added). n2

n2 Counts 2 and 3 read as follows:

Count 2:

A pharmaceutical composition for the treatment of calcium metabolism disorders containing an effective amount of the diphosphonate according to count 1 for the treatment of calcium metabolism disorders, in combination with an inert conventional carrier or adjuvant.

Count 3:

A method for the treatment of calcium metabolism disturbances comprising administering to a mammal in need of said treatment an effective amount of a diphosphonate according to count 1.

Bosies relied solely on his effective filing date of August [*4] 2, 1984 as a constructive reduction to practice of the subject matter of the counts. Benedict asserted conception of the subject matter of the counts prior to Bosies' effective filing date and diligence in thereafter reducing the invention to practice. See 35 U.S.C. § 102(g) (1988). As junior party, Benedict bore the burden of proving prior conception and diligence. See *Oka v. Youssefyeh*, 849 F.2d 581, 584, 7 U.S.P.Q.2D (BNA) 1169, 1172 (Fed. Cir. 1988).

Benedict's evidence of conception consisted of an entry from his laboratory notebook, dated June 30, 1983, in which he wrote that compounds of the following structure, among others, should be evaluated for bone resorption inhibition activity:

[SEE NOTEBOOK ENTRY IN ORIGINAL]

The notebook entry disclosed that R could equal alkyl, aryl, or H. The encircled "P" indicated the phosphonate

group. These values correspond to those specified in the counts. Benedict argued that because his generic formula encompassed the compounds of count 1, his conception constituted a conception of the invention of count 1.

Benedict's laboratory notebook entry, however, nowhere [*5] defined the value of the variable "n," which would indicate whether or not the compounds met the definition of "A" in count 1. The count specifically requires that "A" be a hydrocarbon chain containing from 2 to 8 carbon atoms. On this issue, Benedict did not submit the testimony of either inventor. Benedict's sole evidence pertaining to the meaning of "n" was an affidavit of Benedict's laboratory technician, Richard J. Sunberg, who witnessed the notebook entry. Sunberg testified that in witnessing the entry, Sunberg "considered 'n' to be a range of values, including n=1 and n=2." Benedict argued that the formula in Benedict's laboratory notebook, coupled with the testimony of Sunberg, established conception of at least one compound of count 1, a compound in which "A" contains two carbon atoms. Therefore, Benedict argued, he proved conception of the subject matter of the counts.

The board agreed, accepting Sunberg's testimony as sufficient proof of the meaning of "n" in Benedict's notebook entry and as evidence that Benedict proved the meaning of "A" in the formula of count 1. The board stated that Sunberg's testimony was reasonable because "use of the term 'n' in the formula signifies [*6] to those reading the formula that 'n' is more than 1 [and if] 'n' were meant only to be 1, then 1 would have been used instead of 'n.'" Slip op. at 8. The board thus concluded that Benedict conceived the subject matter of the counts prior to Bosies' effective filing date and further held that Benedict also established diligence. Accordingly, the board awarded judgment to Benedict.

DISCUSSION

Benedict argues that because its application was copending with that of Bosies, Benedict, as the junior party, was required to prove prior invention only by a preponderance of the evidence. Bosies asserts the standard of proof to be one of clear and convincing evidence. The board applied the preponderance of the evidence standard.

It is well settled that where an interference is between a patent that issued on an application that was copending with an interfering [*542] application, n3 the applicable standard of proof is preponderance of the evidence. See *Peeler v. Miller*, 535 F.2d 647, 651 n.5, 190 U.S.P.Q. (BNA) 117, 120 n.5 (CCPA 1976); *Linkow v. Linkow*, 517 F.2d 1370, 1373, 186 U.S.P.Q. (BNA) 223, 225 (CCPA 1975); *Frilette v. Kimberlin*, 56 C.C.P.A. 1242, 412 F.2d 1390, 1391, 162 U.S.P.Q. (BNA) 148, 149 (CCPA 1969), [*7] cert. denied, 396 U.S. 1002, 24 L. Ed. 2d 493, 90 S. Ct. 550 (1970).

27 F.3d 539, *, 1994 U.S. App. LEXIS 11977, **;

30 U.S.P.Q.2D (BNA) 1862

Bosies' reliance on *Price v. Symsek*, 988 F.2d 1187, 26 U.S.P.Q.2D (BNA) 1031 (Fed. Cir. 1993), for the contrary proposition is inapposite, as that interference did not involve an application and a patent which before issuance had been copending with the application, but an application which was filed for purposes of provoking an interference after issuance of a patent. The court held that under those facts the applicant was required to prove prior invention by clear and convincing evidence. 988 F.2d at 1194, 26 U.S.P.Q.2D (BNA) at 1033. Moreover, Bosies' reliance on *Amax Fly Ash Corp. v. United States*, 514 F.2d 1041, 182 U.S.P.Q. (BNA) 210 (Ct. Cl. 1974) is misplaced, as that case did not involve an interference between copending applications, but a patent infringement action in which the defendant was required to prove its invalidity defense of derivation by clear and convincing evidence. 514 F.2d at 1048, 182 U.S.P.Q. (BNA) at 215. **[**8]**

n3 Bosies filed his U.S. application on July 26, 1985 and his application issued as the '767 patent on August 18, 1987. Benedict filed his U.S. application on December 6, 1985.

The board thus properly required Benedict to prove conception and diligence by a preponderance of the evidence, a standard which only requires the fact finder "to believe that the existence of a fact is more probable than its nonexistence before [he] may find in favor of the party who has the burden to persuade the [judge] of the fact's existence." *In re Winship*, 397 U.S. 358, 371-72, 25 L. Ed. 2d 368, 90 S. Ct. 1068 (1970) (alterations in original) (Harlan, J., concurring). Having determined the proper burden of proof, we now address the merits.

Bosies argues that the board's determination that Benedict proved conception of the compounds of count 1 before August 2, 1984 was erroneous because Benedict failed to show that he described, and thereby conceived, a compound of count 1. **[**9]** Bosies asserts that Benedict's conception of a broad genus in which the value of "n" is undefined cannot constitute conception of the specific compounds of count 1 and that Sunberg's testimony is insufficient as a matter of law to establish the meaning of "n."

Conception is a question of law that we review de novo. *Fiers v. Sugano*, 984 F.2d 1164, 1168, 25 U.S.P.Q.2D (BNA) 1601, 1604 (Fed. Cir. 1993). "It is well established in our law that conception of a chemical compound requires that the inventor be able to define it so as to distinguish it from other materials, and to describe how to obtain it." *Amgen, Inc. v. Chugai Pharmaceutical Co.*, 927 F.2d 1200, 1206, 18 U.S.P.Q.2D (BNA) 1016, 1021 (Fed. Cir.), cert. denied, 112 S. Ct. 169 (1991). In order to establish conception,

Benedict thus was required to submit evidence showing, inter alia, a description of the compounds of the count. See *Oka*, 849 F.2d at 583, 7 U.S.P.Q.2D (BNA) at 1171. Absent such a showing, Benedict's case for conception must fail. See *Fiers*, 984 F.2d at 1168-69, 25 U.S.P.Q.2D (BNA) at 1604-05. **[**10]**

In the instant case, count 1 is directed to a group of compounds in which "A" would, in the notebook formulation, correspond to "n" being two to eight. The formula disclosed, however, is a generic one that does not ascribe a value to "n" and thus does not specifically define any of the compounds to which count 1 is directed. Although the compounds of the count arguably might be within the scope of the generic formula set out in Benedict's notebook, that formula does not constitute a definite description of the compounds of the count. See *D'Silva v. Drabek*, 214 U.S.P.Q. (BNA) 556, 564 (BPAI 1981), aff'd, 691 F.2d 513 (CCPA 1982) (table).

Benedict's only evidence pertaining to the meaning of "n" was Sunberg's testimony that when he witnessed Benedict's notebook he understood "n" to mean one or two. Sunberg's testimony, however, was directed only to what Sunberg, a non-inventor, understood "n" to mean, and did not show the inventor's intended meaning of that variable. Sunberg did not testify that Benedict indicated in any way what "n" meant.

[*543] The question of conception is properly directed to whether there was "formation [] in **[**11]** the mind of the inventor of a definite and permanent idea of the complete and operative invention . . . [and whether] every limitation of the count [was] known to the inventor at the time of the alleged conception." *Coleman v. Dines*, 754 F.2d 353, 359, 224 U.S.P.Q. (BNA) 857, 862 (Fed. Cir. 1985) (emphasis added). Because Sunberg's testimony was not probative of what the inventors conceived, it was insufficient as a matter of law to establish the meaning of "n." Bosies, the senior party, was presumed to be the first inventor and Benedict bore the burden of proving otherwise. See 37 C.F.R. 1.657 (1993). Benedict cannot satisfy his burden of proof and thereby rebut the presumption in favor of Bosies on the basis of an incomplete written conception plus testimony of a non-inventor as to what he, the non-inventor, thought the formula meant.

In accepting Sunberg's testimony as dispositive of the meaning of "n," the board reasoned that Bosies' failure to cross-examine Sunberg or otherwise present rebuttal testimony "raises a strong presumption that [Sunberg's] testimony is accurate." Slip op. at 8. The board's reasoning was incorrect. **[**12]** "No adverse inference can be drawn from a senior party's refraining from taking testimony, because [the senior party] has a right to stand on his position that the junior party failed to establish a prima facie case [of conception]." *Linkow*, 517 F.2d at 1374, 186 U.S.P.Q. (BNA) at 226. Bosies

27 F.3d 539, *; 1994 U.S. App. LEXIS 11977, **;

30 U.S.P.Q.2D (BNA) 1862

should have been entitled to argue against the sufficiency of Benedict's asserted writing without cross-examining a witness who was not one of the inventors.

The board's assumption that "n" had to be more than one, in which case Benedict conceived the invention of the count, because otherwise the designation "1" would have been used instead of "n," cannot be correct. The value of "n" could have been zero, in which case the formula would not have met the count. Even if the board was correct in reasoning that "n" had to be greater than one, "n" could have been nine or more, in which case Benedict's formula also would not have met the count.

The meaning of "n" is especially critical because the record reveals that Benedict himself considered the length of the hydrocarbon chain to be critical in defining the invention. Benedict argued that "short" (where "n" is **[**13]** zero or one) and "long" (where "n" is two or more) chain compounds were patentably distinct inventions because the short chain compounds exhibited superior efficacy over the longer chain compounds. For example, Benedict argued ex parte, in asserting that an interference should be declared with Bosies' patent, that Benedict's claims to compounds in which "n" was zero or one should not be designated as corresponding to the count, which defines "A" as having two to eight carbon atoms. Benedict made the same argument, that the different lengths of the hydrocarbon chain made for separate patentability, before the examiner-in-chief (EIC) in a preliminary motion to designate claims directed to compounds in which "n" was one as not corresponding to the count. The EIC agreed with Benedict and granted the motion. These actions determined the future course of the interference. Benedict cannot now maintain a position contrary to his previous assertions. n4

n4 Interestingly, during the preliminary motions period, Benedict took a contrary position and filed a motion to expand the counts to include compounds wherein A is zero to 8 carbon atoms, and the EIC denied the motion on the ground that such a broadened count would improperly encompass two patentably distinct inventions, short and long chain compounds. See 37 C.F.R. § 1.601(f) (1993) (each count must define a separate patentable invention).

[14]**

In *Bigham v. Godtfredsen*, 857 F.2d 1415, 8 U.S.P.Q.2D (BNA) 1266 (Fed. Cir. 1988), this court held that a party to an interference cannot rely on one argument for the purpose of bifurcating a count and subsequently urge a contrary argument for the purpose of proving priority. *Bigham* involved a count directed to specific penicillanic acid compounds in which an "X"

substituent was defined as, inter alia, chloro, bromo, and iodo. On Godtfredsen's motion, the count was split into two counts, one in which "X" was iodo or bromo and the other in which "X" was chloro. Subsequently, Godtfredsen argued that he was entitled to the filing date of his British **[*544]** application which disclosed "X" as consisting of "a halogen atom." The court held that the phrase "a halogen atom" in the British application was not a description of the iodo and bromo species of the second count for purposes of 35 U.S.C. § 112, stating that "Godtfredsen can not invoke one theory of law based on chemistry (i.e. that bromo and iodo are patentably distinct from chloro . . .) and, having obtained a bifurcation of [the count] on that theory, urge **[**15]** a contrary theory (i.e. that halogen exemplified by chloro comprises disclosure of the bromo and iodo species) in order to obtain priority as to those species." *Id.* at 1417, 8 U.S.P.Q.2D (BNA) at 1268-69.

Similarly here, Benedict cannot rely on one theory (that "short" and "long" chain compounds are patentably distinct) in order to establish that certain of his claims should not correspond to the count, and then urge another theory (that the value of "n," or "A" in the count, is not critical) for purposes of establishing conception of the count. Benedict's reliance on *Water Technologies Corp. v. Calco, Ltd.*, 850 F.2d 660, 665, 7 U.S.P.Q.2D (BNA) 1097, 1101 (Fed. Cir.), cert. denied, 488 U.S. 968, 102 L. Ed. 2d 534, 109 S. Ct. 498 (1988), for the proposition that his inconsistent arguments "are not relevant since Benedict did not obtain any litigation benefit from them" is unpersuasive. Benedict did in fact obtain a benefit from his initial argument that short and long chain compounds are patentably distinct inventions when the EIC granted Benedict's **[**16]** preliminary motion to designate certain of his claims as not corresponding to the count.

We conclude as a matter of law that Benedict failed to prove conception of the subject matter of the counts by preponderant evidence prior to Bosies' effective filing date. n5 In view of our determination that there was no conception, we need not address the issue of diligence. See *Oka*, 849 F.2d at 584 n.1, 7 U.S.P.Q.2D (BNA) at 1171 n.1.

n5 Because counts 2 and 3 incorporate the compounds of count 1, determination of priority with respect to count 1 resolves the issue of priority with respect to counts 2 and 3 as well.

CONCLUSION

Because Benedict failed to establish conception of the subject matter of the counts prior to Bosies' effective filing date, the decision of the board awarding priority of invention to Benedict is reversed.

27 F.3d 539, *; 1994 U.S. App. LEXIS 11977, **;
30 U.S.P.Q.2D (BNA) 1862

REVERSED