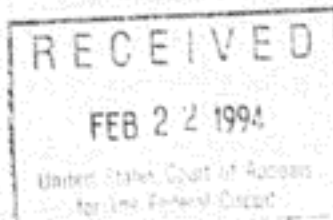


Supplemental

Reply Brief

For

Appellant



FILED  
U.S. COURT OF APPEALS FOR  
THE FEDERAL CIRCUIT

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FRANCIS X. GINDHART  
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SUPPLEMENTAL REPLY BRIEF FOR  
DEFENDANT-APPELLANT,  
WARNER-JENKINSON COMPANY, INC.,  
ON REHEARING IN BANC

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IN THE  
**United States Court Of Appeals**  
FOR THE FEDERAL CIRCUIT

93-1088

HILTON DAVIS CHEMICAL CO.,  
*Plaintiff-Appellee.*

v.

WARNER-JENKINSON COMPANY, INC.,  
*Defendant-Appellant.*

Appeal from a Decision of the United States District Court  
for the Southern District of Ohio, Western Division  
Civil Action No. C-1-91-218  
Honorable Herman J. Weber, District Judge

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**SUPPLEMENTAL REPLY BRIEF FOR  
DEFENDANT-APPELLANT,  
WARNER-JENKINSON COMPANY, INC.,  
ON REHEARING IN BANC**

This brief is submitted in reply to the Supplemental Brief for Plaintiff-Appellee Hilton Davis Chemical Co. on Rehearing In Banc.

**I. The Doctrine Of Prosecution History Estoppel Limits Application Of The Doctrine Of Equivalents In This Case**

The essence of prosecution history estoppel is that a patentee should not be able to obtain, through the doctrine of equivalents, coverage of subject matter that was relinquished during prosecution to procure issuance of the patent. *Hoganas AB v. Dresser Indus., Inc.*, 9 F.3d 948, 951-52, 28 U.S.P.Q.2d 1936, 1939 (Fed. Cir. 1993); *Loctite Corp. v. Ultraseal Ltd.*, 781 F.2d 861, 870, 228 U.S.P.Q. 90, 96 (Fed. Cir. 1985).

Numerous decisions of this court have held that prosecution history estoppel preventing expansion of claim scope arises from a variety of conduct, not just where a claim is amended because the prior art requires it. For example, in *Haynes Int'l, Inc. v. Jessop Steel Co.*, 8 F.3d 1573, 28 U.S.P.Q.2d 1652 (Fed. Cir. 1993), this court reviewed this body of precedent and listed conduct giving rise to prosecution history estoppel: "statements contained in a disclosure document placed in the PTO file as well as representations made during the prosecution of the parent application; remarks made during prosecution of a claim not in suit as well as statements made after the examiner indicated the claims in suit were allowable; and arguments submitted to obtain the patent." *Id.* at 1579, 28 U.S.P.Q.2d at 1657. Hilton Davis argues that even though it amended its claims in the PTO to overcome the Examiner's rejection based on prior art, the limits on the doctrine of equivalents imposed by prosecution history estoppel can be no broader than that imposed by



the prior art when viewed in hindsight. This court in *Haynes Int'l* specifically rejected any such argument.

[T]he prior art and prosecution history estoppel are separate and distinct limitations on the doctrine of equivalents. See *Loctite Corp.*, 781 F.2d at 879, 228 U.S.P.Q. at 96. Therefore, the limits imposed by prosecution history estoppel can be, and frequently are, broader than those imposed by the prior art. Whether the prior art would have precluded Haynes from successfully invoking the doctrine of equivalents in this case is not before us; it is enough that the prosecution history does. (*Id.* at 1579, 28 U.S.P.Q.2d at 1656-57).

The identical holding is found in this court's decisions in *Hoganas AB v. Dresser Indus., Inc.*, 9 F.3d 948, 28 U.S.P.Q.2d 1936 (Fed. Cir. 1993); *Texas Instruments, Inc. v. Int'l Trade Comm'n*, 988 F.2d 1165, 26 U.S.P.Q.2d 1018 (Fed. Cir. 1993); *Wang Labs., Inc. v. Toshiba Corp.*, 993 F.2d 858, 26 U.S.P.Q.2d 1767 (Fed. Cir. 1993); *Hormone Research Found., Inc. v. Genentech, Inc.*, 904 F.2d 1558, 15 U.S.P.Q.2d 1039 (Fed. Cir. 1990); *Prodyne Enterprises, Inc. v. Julie Pomerantz, Inc.*, 743 F.2d 1581, 223 U.S.P.Q. 477 (Fed. Cir. 1984); and *Kinzenbaw v. Deere & Co.*, 741 F.2d 383, 222 U.S.P.Q. 929 (Fed. Cir. 1984). Although Hilton Davis asserted this rejected argument in its first brief, it has never responded to these decisions of this court and does not do so in its Supplemental Brief. The reason that Hilton Davis does not respond is because no response is possible.

Here, with respect to the limitation that pH lie within the range of 6.0 to 9.0 and the limitation that pressure lie in the range of 200 to 400 psig, both were **argued during prosecution** to be critical to distinguishing the claims sought by Hilton Davis in the PTO from the prior art Booth et al. patent. (DX501, A2164-66, 2149, 2165, 2150-56). Still further, the only independent claim in the application (claim 1) was **amended during prose-**

**caution** in response to the Examiner's prior art rejection to recite the specific pH range of 6.0 to 9.0. (A2150, A2139). The reason the lower limit of 6.0 was set out in the specification and the claims was the inventor's own choice. Dr. Cook, the only inventor to testify at trial, testified in response to his own lawyer's questions:

What we found is that if you lower the pH of the coupling solution much below about six, there is tremendous foaming problems in the plant. And then like having something small foam up or so in your home, here you've got several thousand gallons of stuff that's foaming up going all over the floor and going all over the plant, so that's an undesirable situation. (A232)

Then, on cross-examination, Dr. Cook responded:

Q. And the reason you chose 9 was because that's just where the coupling reaction pH lies?

A. That's about where it ends up, yes.

Q. And so you put that in your patent application?

A. Yes.

Q. And then even though Osmonics had told you you could operate 2 to 8, you cut it off at 6?

A. Right.

Q. And the reason you did that was because of your Red 40 process would foam if you went below 6?

A. That's correct. (A1475)

Hilton Davis' responds in its Supplemental Brief only that these statements were not made to the PTO. However, nothing requires that the inventor tell the PTO why he or she has chosen to claim a particular, limited range of process parameters. It is

only necessary that the inventor did so. *Haynes Int'l*, 8 F.3d at 1579, 28 U.S.P.Q.2d at 1657. Here, the only independent claim (claim 1) was amended to overcome the prior art and to recite the range of pH of 6.0 to 9.0 because Dr. Cook, by his own admission, knew that the process was not workable in production at pH's below 6.0. See, *Texas Instruments, Inc. v. Int'l Trade Comm'n*, 988 F.2d at 1174, 26 U.S.P.Q.2d at 1025: "The inventors' own assumptions provided the motivation for purposeful exclusion of same-side gating from claim 12. As far as they were concerned same-side gating in transfer molding was an obvious but unworkable limitation." This court concluded: "[T]he inventors unmistakably excluded the same-side gating as an equivalent." *Id.* at 1175, 26 U.S.P.Q.2d at 1026.

Hilton Davis' only other argument regarding the prosecution history estoppel made in its Supplemental Brief is that a Hilton Davis technician had noted pH's below 6.0 in running some laboratory tests for brief periods of time. However, that fact does not detract from the inventor's twice-made admission that he considered pH's below 6.0 to be unworkable in production where "several thousand gallons" of liquid were involved, and, therefore, purposefully excluded pH's below 6.0 from the patent application. If there was any doubt, we know from Dr. Cook's own admissions that he was concerned about the scope of patent coverage and had a continuation-in-part (CIP) application prepared in order to "broaden out the range" (A210) and "expand patent coverage" (A1415), to make it more difficult for someone "to get around." (A1416). In this regard in the CIP application, Dr. Cook had Hilton Davis' patent agent expand the range of membrane pore sizes from 11 Angstroms to 5 to 15 Angstroms even though he freely admitted that he had no experimental basis for selecting this range. (PX41, A2883; A1507-09). He also expanded the pH range from 7.0 to 9.0 in the parent application (A2031) to 6.0 to 9.0 in the CIP application (A2124), but not below 6.0. The CIP application was filed November 30, 1984. The laboratory data referred to by Hilton Davis was recorded in April, May, and June of 1983 and was

witnessed by Dr. Cook himself on October 25, 1983. Had Dr. Cook believed that a pH below 6.0 was workable in production surely he would have included it in the CIP application which was filed solely for the purpose of "expanding patent coverage." As this court stated in *Haynes Int'l, Inc.*, 8 F.3d at 1579, 28 U.S.P.Q.2d at 1657:

Haynes next argues that Cabot failed to obtain broader claim coverage during prosecution simply because it lacked the test data necessary to do so, not because it intended to relinquish this subject matter. This argument, however, is unpersuasive on these facts; the question is not what Cabot might have done or meant to do, but what it did. . . . **It is also not persuasive, even if true, because it leaves unexplained why Cabot did not submit the data at a later time in conjunction with a continuation or reissue application.** (Emphasis added).

Hilton Davis simply cannot foreclose reliance upon its unambiguous surrender of subject matter in this case because "other players in the marketplace are entitled to rely on the record made in the Patent Office in determining the meaning and scope of the patent." *Texas Instruments, Inc. v. Int'l Trade Comm'n*, 988 F.2d at 1175, 26 U.S.P.Q.2d at 1026, citing *Lemelson v. General Mills, Inc.*, 968 F.2d 1202, 1208, 23 U.S.P.Q.2d 1284, 1289 (Fed. Cir. 1992). The legal standard for determining what subject matter was relinquished is an objective one, measured from the vantage point of what a competitor was reasonably entitled to conclude, from the prosecution history, that the applicant gave up to procure issuance of the patent. See, *Hoganas AB v. Dresser Indus., Inc.*, 9 F.3d at 952, 28 U.S.P.Q.2d at 1939; *Prodyne Enterprises, Inc. v. Julie Pomerantz, Inc.*, 743 F.2d at 1583, 223 U.S.P.Q. at 478; *Kinzenbaw v. Deere & Co.*, 741 F.2d at 389, 222 U.S.P.Q. at

<sup>1</sup> In both *Prodyne* and *Kinzenbaw*, this court declined to undertake "the speculative inquiry" as to the necessity of the claim limitation in receiving the patent grant.

933.<sup>1</sup> Having stressed the criticality of the pH and pressure limitations in the PTO, and having **amended** the only independent claim in the application to recite a pH range of 6.0 to 9.0 to overcome a rejection based on prior art, Hilton Davis cannot now escape the accompanying strictures on its right to exclude under 35 U.S.C. §§154, 271. There can be no question but that Hilton Davis is estopped from obtaining coverage of Warner-Jenkinson's process, which operates at a pH of 5.0 to destroy the triazene impurity, under the doctrine of equivalents. See, *Chemical Eng'g Corp. v. Essef Indus., Inc.*, 795 F.2d 1565, 230 U.S.P.Q. 385 (Fed. Cir. 1986) (estoppel requiring claimed pH to rise to 7.0-7.5 not met where in the accused device pH remained constant at 6.6).<sup>2</sup>

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<sup>2</sup> This case therefore falls squarely in the holdings of the Supreme Court in *Smith v. Magic City Kennel Club*, 282 U.S. 784, 790 (1931):

[W]here a patentee has narrowed his claim, in order to escape rejection, he may not "by resort to the doctrine of equivalents, give to the claim the larger scope which it might have had without the amendments, which amount to disclaimer."

and *Exhibit Supply Co. v. Ace Patents Corp.*, 315 U.S. 126, 136 (1942):

Whatever may be the appropriate scope and application of the doctrine of equivalents, where a claim is allowed without a restrictive amendment, it has long been settled that recourse may not be had to that doctrine to recapture claims which the patentee has surrendered by amendment.

Neither case was referred to by the Supreme Court in *Graver Tank* because in that case, unlike here, there was no contention that the patentee was estopped by its previous conduct.

## II. The Argument That The Doctrine Of Equivalents Is Constitutionally Mandated Is Unquestionably Legally Wrong

The novel argument made by Hilton Davis that application of the doctrine of equivalents is compelled in every case by Article I, Section 8 of the Constitution and, therefore, may not be touched by this court is obviously erroneous. Like any provision under the Commerce Clause of the Constitution, Article I, Section 8, empowers Congress to act but does not tell Congress how best to act. *Gibbons v. Ogden*, 9 Wheat. 1, 6 L.Ed. 23 (1824). Article I, Section 8 of the Constitution empowers Congress to secure for limited times to inventors the exclusive right to their discoveries to "promote the progress of useful arts" but does not tell Congress how best to do this. *Graham v. John Deere Co.*, 383 U.S. 1, 5 (1966) ("Within the limits of the constitutional grant, the Congress may, of course, implement the stated purpose of the Framers by selecting the policy which in its judgment best effectuates the constitutional aim. This is but a corollary to the grant to Congress of any Article I power. *Gibbons v. Ogden*, 9 Wheat. 1, 6 L.Ed. 23.") This provision enables Congress to "provide such instrumentalities in respect of securing to inventors the exclusive right to their discoveries as in its judgment will be best calculated to achieve that object." *United States v. Duell*, 172 U.S. 576, 583 (1899). See also, *United States v. American Bell Tel. Co.*, 167 U.S. 224, 247 (1897).

"The legislation based on this provision regards the right of property in the inventor as the medium of the public advantage derived from his invention; so that in every grant of the limited monopoly two interests are involved, that of the public, who are the grantors, and that of the patentee." *Butterworth v. Hoe*, 112 U.S. 50, 59 (1884); *United States v. Duell*, 172 U.S. at 583.

Congress, since the Patent Act of 1870, has deemed that these two interests—that of the public and that of the patentee—

are best secured by a claim-based patent system requiring that the applicant for patent particularly point out and distinctly claim the subject matter which the applicant regards as his invention and, further, that an examination system exist to examine such claims in light of the prior art under defined statutory standards for patentability. Congress has thus concluded that the "exclusive right" to be secured under the Constitution is that which is particularly and distinctly defined by the metes and bounds of the patent claims issued after examination. Simply put, the claims measure the invention and define the limits of patent protection. *United Carbon Co. v. Binney & Smith Co.*, 317 U.S. 228, 232 (1942); *Continental Paper Bag Co. v. Eastern Paper Bag Co.*, 210 U.S. 405, 419 (1908). As stated by the Supreme Court in *General Elec. Co. v. Wabash App. Corp.*, 304 U.S. 364, 369 (1938):

Patents, whether basic or for improvements, must comply accurately and precisely with the statutory requirement as to claims of invention or discovery. The limits of a patent must be known for the protection of the patentee, the encouragement of the inventive genius of others and the assurance that the subject of the patent will be dedicated ultimately to the public. The statute seeks to guard against unreasonable advantages to the patentee and disadvantages to others arising from uncertainty as to their rights. The inventor must "inform the public during the life of the patent of the limits of the monopoly asserted, so that it may be known which features may be safely used or manufactured without a license and which may not." The claims "measure the invention." . . . In a limited field the variant must be clearly defined.

Thus, although Hilton Davis argues a constitutional requirement of securing to inventors exclusive right to their discoveries, it must be acknowledged that under our patent system the "invention" or "discovery" to be secured is that which is examined and claimed in the patent. As stated by the Supreme

Court in *Deepsouth Packing Co. v. Laitram Corp.*, 406 U.S. 518, 530-31 (1972):

The direction of Art. I is that Congress shall have the power to promote the progress of science and the useful arts. When, as here, the Constitution is permissive, the sign of how far Congress has chosen to go can come only from Congress. . . .

"[I]n rewarding useful invention, the 'rights and welfare of the community must be fairly dealt with and effectively guarded.' *Kendall v. Winsor*, 62 U.S. 322, 21 How. 322, 329, 16 L.Ed. 165 (1859). To that end the prerequisites to obtaining a patent are strictly observed, and when the patent has issued the limitations on its exercise are equally strictly enforced."

The doctrine of equivalents is not statutory in origin. Rather, it is a judicially-created doctrine that is antithetical to the Congressional requirement stated in the statute that the claims "particularly point[ ] out and distinctly claim[ ] the subject matter which the applicant regards as his invention." 35 U.S.C. §112. The courts having created the doctrine of equivalents certainly can establish and enforce limitations imposed on the doctrine. *Texas Instruments, Inc. v. Int'l Trade Comm'n.*, 988 F.2d at 1173, 26 U.S.P.Q.2d at 1024-25; *Hoganas AB v. Dresser Indus., Inc.*, 9 F.3d at 952, 28 U.S.P.Q.2d at 1939.<sup>3</sup>

<sup>3</sup> Further, the judiciary can modify or discard judicially-created doctrines. For example, in *Blonder-Tongue Labs., Inc. v. University of Illinois Foundation*, 402 U.S. 313 (1971), the Supreme Court in examining the continued viability of the doctrine of mutuality of estoppel under *Triplett v. Lowell*, examined the "court-produced doctrine" and noted that it was undergoing a fundamental change in the common-law tradition, and that an increasing number of courts were rejecting the "judge-made doctrine" as unsound. The court thought that at the very least these decisions caused it to reexamine whether mutuality



### **III. The Argument That The Doctrine Of Equivalents In Its Current Sense To Expand The Scope Of The Right To Exclude Finds Precedent In English Law And Early American Decisions Is Unquestionably Historically Inaccurate**

It is unassailable that the doctrine of equivalents in the sense used today, i.e., to expand the right of the scope to exclude, was unknown in the English common law. England in the 17th, 18th, and 19th century, like the United States up until 1870, did not require patent claims. Indeed, in England, there was not even a requirement for examination of patents for novelty until the Patent Act of 1902 and actual examination was not begun until 1905. *See generally*, Edward Armitage, *Two Hundred Years of English Patent Law*, Bicentennial Symposium presented by the ABA Section of Patent, Trademark, and Copyright Law, August 9, 1976. Further, prior to 1776, there was no requirement in England for even a written description of the patented subject matter. The patent grant from the crown was defined by the grantee's own use. *Id.* Although a descriptive specification was thereafter required, there was no requirement for claims as we know them today. Since the patent grant was based on the royal prerogative, infringement actions were rare, and there is virtually no English case law prior to 1791. Certainly, there is no authority for the proposition that a judicially-created doctrine of equivalents, as applied to a *peripheral* system

of estoppel was a viable rule, 402 U.S. at 320-27, and decided that it was "today out of place." *Id.* at 350. A judicially-created doctrine thus can be modified by the judiciary. *Laws v. Aetna Finance Co.*, 667 F. Supp. 342, 345 (N.D. Miss. 1987); *Stancil v. Mergenthaler Linotype Co.*, 589 F. Supp. 78, 81 (D. Haw. 1984); 1B *Moore's Federal Practice* ¶0.402[3-1] at 45-46 ("In the case of common law doctrines such as these, the rule is judicially created and judicially administered and when experience demonstrates that it is a bad rule, the courts should not shrink from repudiating it.").

of patent claiming in use in this country today to expand the scope of the right to exclude beyond the literal terms of the claims, finds its roots in English common law. *Id.*

Likewise, it is unassailable that the peripheral system of patent claiming did not arise in American patent law until the Patent Act of 1870. Ridsdale Ellis, *Patent Claims* §4 (1948) [hereinafter "Ellis"]. As Ellis points out, even thereafter it took decades for the patent system to adapt to the change from the *central* definition of patent claiming to the *peripheral* definition. Ellis §6. Hilton Davis refuses to acknowledge this historical fact and refuses to acknowledge that patent claims prior to 1870 were drafted according to the *central* definition system, but that system was changed by Congress only in 1870. Hilton Davis thus freely argues that the "doctrine of equivalents," as we use that term today, originated in 1804. This argument is disingenuous. Under the *central* definition of patent claiming, the scope of the right to exclude was determined by the description in the specification. "It was the universal practice between the 1836 and 1870 Acts to terminate the description with one, sometimes two and occasionally more claims. These claims, however, served merely to call attention to what the inventor considered the salient features of his invention. The drawings and description were the main thing, the claims a mere adjunct thereto. The idea that the claim is just as important if not more important than the description and drawings did not develop until the Act of 1870 or thereabouts." Ellis §3. The law accorded the patentee under the *central* definition of claiming rights to that which was described in the specification and that which was substantially the same in the principles and mode of operation. Under the *central* definition, the substantial equivalent to what was described in the specification was treated as the same thing. Ellis §4. However, this was *literal* infringement under the *central* definition system. Hilton Davis argues that these early cases contained no suggestion of a requirement of equity. Of course they do not, because equity was not an issue. There was no equitable "doctrine of equivalents" in the 20th century usage of

that term. There was only *literal* infringement which encompassed that which was described in the specification and equivalent constructions. Ellis §4. Indeed, the earliest known use of the term "doctrine of equivalents" by the Supreme Court was in the *McCormick v. Talcott*, 61 U.S. 402 (1857). There, the patentee's argument that the defendant's improvement was an "equivalent" was rejected: "This attempt to treat the earlier and better device used by defendant as an infringement of a later device to obviate a difficulty unknown to the first, is an application of the doctrine of equivalents which needs no further comment." 61 U.S. at 407. The "doctrine of equivalents" referred to, however, was in its sense as applied to the *central* definition of patent claiming. This system is the direct opposite of the current *peripheral* definition system.

After the Patent Act of 1870, patent claims rather than the drawings and specifications became critical. Ellis §6. The Supreme Court in 1886 thus cautioned:

The claim is a statutory requirement, prescribed for the very purpose of making the patentee define precisely what his invention is; and it is unjust to the public, as well as an evasion of the law, to construe it in a manner different from the plain import of its terms.

*White v. Dunbar*, 119 U.S. 47, 52 (1886). See also, *Keystone Bridge Co. v. Phoenix Iron Co.*, 95 U.S. 278 (1877); *Merrill v. Yeomans*, 94 U.S. 568 (1876).

It was only after the switch to the peripheral claiming system that it thus became necessary to judicially develop what we now call the doctrine of equivalents "to temper unsparing logic" and prevent "pirating" of an invention when literal infringement of the patent *claims* failed.

#### IV. Hilton Davis' Argument That Application Of The Doctrine Of Equivalents In Every Case Will Result In Greater Certainty Of Patent Claims Also Is Unquestionably Wrong

Hilton Davis argues that the equitable element of the doctrine of equivalents makes the infringement analysis less certain and invokes the familiar argument that two companies B and C practicing the same process could be treated differently if company B was an unscrupulous copyist while company C independently developed its process. This argument, however, ignores the fact that, as a matter of public policy, Congress has decided that patent claims must be "particular" and "distinct" so that the public has fair notice of what the patentee and the PTO have agreed constitute the metes and bounds of the claimed invention. 35 U.S.C. §112. The courts have decided, also as a matter of policy, that there can be an exception to this rule "inimical to the basic precept of patent law that the claims are the measure of the grant" where equity demands it to "temper unsparing logic" and thus to serve the greater interest of justice." *Texas Instruments, Inc. v. Int'l Trade Comm'n*, 805 F.2d 1558, 1572, 231 U.S.P.Q. 833, 841-42 (Fed. Cir. 1986). "Concomitantly, two policy oriented limitations, applied as questions of law, have developed. First, the doctrine will not extend to an infringing device within the public domain, i.e., found in the prior art at the time the patent issued; second, prosecution history estoppel will not allow the patentee to recapture through equivalence certain coverage given up during prosecution." *Loctite Corp. v. Ultraseal Ltd.*, 781 F.2d 861, 870, 228 U.S.P.Q. 90, 96 (1985).

Thus, as a policy matter, different companies differently situated may well be treated differently based upon all of the circumstances of the case. This result is neither unique nor unusual. There are other areas of patent law where differently situated defendants are indeed treated differently, with the result that one is prevented from practicing the patented invention while the other is free to use it. For example, as a matter of

public policy, a licensee is not estopped to challenge the validity of a licensed patent. *Lear, Inc. v. Adkins*, 395 U.S. 653 (1969). However, as a matter of competing public policy, where a consent decree acknowledging a patent's validity was entered into in settlement of litigation, challenge of the patent is precluded. See, e.g., *Foster v. Halco Mfg. Co.*, 947 F.2d 469, 474-75, 20 U.S.P.Q.2d 1241, 1245 (Fed. Cir. 1991). In *Hemstreet v. Spiegel, Inc.*, 851 F.2d 348, 7 U.S.P.Q.2d 1502 (Fed. Cir. 1988), this court held that a party who entered into a settlement order requiring it to make royalty payments to the patentee without regard to any subsequent determination of validity or enforceability of the patent was precluded from terminating those payments after the patent was adjudged unenforceable in a separate action. Thus, as a matter of public interest and policy, the licensee had to continue paying royalties even though all of the world was otherwise free to practice the invention. Likewise, in *Broyhill Furniture Indus., Inc. v. Craftmaster Furniture Corp.*, \_\_\_ F.3d \_\_\_, 29 U.S.P.Q.2d 1283 (Fed. Cir. 1993), this court held that where a party entered into a consent order settling a patent litigation, that party could be precluded from practicing the invention even after the patent had been declared unenforceable and the remainder of the public was free to practice it.

This court has also recognized as a matter of policy the doctrine of assignor estoppel whereby a patent assignor is deprived of the right to challenge the validity of the assigned patent. See, *Diamond Scientific Co. v. Ambico, Inc.*, 848 F.2d 1220, 6 U.S.P.Q.2d 2028 (Fed. Cir. 1988). Thus, although one competitor may have the right to challenge patent validity, another competitor, differently situated, being the patent assignor, is deprived of that same right for reasons of public policy.

The doctrine of equivalents is an equitable doctrine designed to do justice in the particular circumstances of the case. The fact that the equities of one case may call for invocation of the doctrine where the equities of another case do not does not mean that the doctrine of equivalents therefore must be applied

in every case irrespective of the circumstances and irrespective of the equities. To ignore the equitable purpose of the doctrine takes the doctrine from being the exception to the rule that the claims define the measure of the patent grant and makes it the rule so that the public will never know the legal limits of patent protection. Where a party is indeed an unscrupulous copyist who seeks to pirate the patented invention by making insubstantial changes, it is acceptable as a matter of policy to shift the burden of possible uncertainty of claim scope to the copyist. But that is not every case, and that burden cannot and should not be shifted to the public in every case. The public has a right to rely on the patent claims as defining the metes and bounds of the patent protection. *Texas Instruments, Inc. v. Int'l Trade Comm'n*, 805 F.2d at 1572, 231 U.S.P.Q. at 841-42. If equity is ignored and the doctrine of equivalents is routinely applied to extend protection beyond the scope of the claims whenever literal infringement fails, then patent claims will have ceased to serve their Congressional purpose. Competitors will never know whether their actions infringe a granted patent. *London v. Carson Pirie Scott & Co.*, 946 F.2d 1534, 1538, 20 U.S.P.Q.2d 1456, 1458-59 (Fed. Cir. 1991).

For example, in this case, how could one predict and how could a lawyer counsel his client that any pH below 6.0, be it 5, 4, 3, or 2 would be held to be an infringement of a claim reciting a specific range of 6.0 to 9.0? How could one counsel a client as to what pressure could be used? Is it 450 psig, 500 psig, 600 psig, or even 1,000 psig? Under Hilton Davis' argument, no one knows, and the risk of millions of dollars in potential damages as well as loss of investment is shifted to the public. Here, although the claimed range was 200 to 400 psig, pressures as high as 500 psig were held to be an "equivalent." However, pressures above 500 were deemed not equivalent. How could the public possibly have predicted this expansion of claim scope?

Rather, Hilton Davis and the amici curiae supporting Hilton Davis seek a system where the doctrine of equivalents in

combination with jury trials can be used to rewrite patent claims before the jury to thereby encompass subject matter that was never disclosed, never examined by the PTO, never allowed by the PTO, and never would have been allowed by the PTO. Here, for example, Hilton Davis concedes that it had no idea what parameters of pressure and pH, and what membrane Warner-Jenkinson was using at the time it brought suit. It was only during discovery that Hilton Davis to its surprise learned that Warner-Jenkinson was using a pH of 5.0 to destroy the triazene impurity when Dr. Cook was previously of the belief that a pH below 6.0 was unworkable. It was only during discovery that Hilton Davis to its surprise learned that Warner-Jenkinson was operating at a high pressure well outside the range of 200 to 400 psig when Dr. Cook thought that high pressures were of no advantage. And it was only during discovery that Hilton Davis to its surprise learned that Warner-Jenkinson was using a different and proprietary membrane from a different company than that which Osmonics had employed for Hilton Davis. Accordingly, it became necessary for Hilton Davis to rewrite the patent claims and to rewrite the prosecution history. The vehicle for doing so was a jury and the doctrine of equivalents. pH and pressure which had been so critical in the PTO to obtaining allowance of the claims over Booth et al. now became unimportant to performance of the process. (A232, 228). A pH of 6.0 to 9.0 was no longer the claimed range. The range was now any pH of 9.0 and below. A pressure of 200 to 400 psig was no longer the claimed range. Any pressure above the osmotic pressure of 180 psig was now the range. (A228). A membrane pore size in the range of 5 to 15 Angstroms was no longer the claimed range. Rather, any membrane which worked became a "functional equivalent." The patent claim was simply rewritten before the jury to conform it to Warner-Jenkinson's practice.

Then history was rewritten. The amendments and arguments made in the PTO were simply treated as if they had never been made, and the clear prosecution history estoppel was ignored as well as estoppel based on the prior art of the enlarged

claim scope. The lack of any evidence of pore size was likewise ignored under the doctrine of equivalents rubric, and a process, which had been developed by Warner-Jenkinson in cooperation with Osmonics and other experienced membrane and ultrafiltration equipment vendors wholly independent of anything that Hilton Davis did, was held to be an infringement, and damages of over \$3,500,000 awarded to Hilton Davis. Hilton Davis conceded no literal infringement, but then sought to prohibit Warner-Jenkinson from using ultrafiltration in the manufacture of these dyes, without paying tribute to Hilton Davis, by expanding the scope of the right to exclude by the jury to encompass ultrafiltration of dyes under any conditions—a claim scope the PTO had specifically refused to give to Hilton Davis.

If the doctrine of equivalents is to be applied in every case regardless of the equities to extend protection beyond the scope of the claims whenever literal infringement fails uncertainty and unpredictability will be the rule. When coupled with the uncertainty and unpredictability of jury decisions, companies who have legitimately and independently developed their technology will have no choice but to take licenses under patents they do not infringe merely to avoid the risk of later being held by a jury to be an infringer under the doctrine of equivalents. Otherwise, the company faces a loss of potentially millions of dollars in investment whenever the patentee later asserts infringement under the doctrine of equivalents and asks for a jury. There is nothing in *Graver Tank* which condemns either independent invention or designing around patent claims. This court has repeatedly recognized that designing around patent claims is not an evil but rather is to be fostered. See, e.g., *Slimfold Mfg. Co. v. Kinkead Indus., Inc.*, 932 F.2d 1453, 1457, 18 U.S.P.Q. 2d 1842, 1845-46 (Fed. Cir. 1991); *Texas Instruments, Inc. v. Int'l Trade Comm'n*, 805 F.2d at 1572, 231 U.S.P.Q. at 842 ("We caution that the incentive to innovation that flows from 'inventing around' an adversely held patent must be preserved."); *State Indus., Inc. v. A. O. Smith Corp.*, 751 F.2d 1226, 1235-36, 224 U.S.P.Q. 418, 424 (Fed. Cir. 1985). One who legitimately seeks



to design around patent claims is not a copyist within the meaning of *Graver Tank*.

As this court has emphasized:

Inherent in our claim-based patent system is also the principle that the protected invention is what the claims say it is, and thus that infringement can be avoided by avoiding the language of the claims.

*Slimfold Mfg. Co. v. Kinkead Indus., Inc.*, 932 F.2d at 1457; 18 U.S.P.Q.2d at 1845.

Hilton Davis' argument notwithstanding, the courts can distinguish between legitimate and good faith designing around patent claims and piracy.

**V. Application Of The Doctrine Of Equivalents Is Discretionary To Be Decided By The Court In Accordance With The Circumstances Of The Case**

Application of the doctrine of equivalents requires balancing of the competing policies that the public has a right to know the precise legal limits of patent protection without recourse to judicial ruling and the policy that an invention not be pirated by unreasonable adherence to verbal formalism. Hilton Davis agrees that a jury is ill-equipped to make such a determination. ("Experts cannot, however, give much assistance [to a jury] concerning what constitutes 'equity' or 'fairness'". Supplemental Brief for Plaintiff-Appellee, Hilton Davis Chemical Company on Rehearing In Banc at 30.) Rather, historically the choice of discretionary ruling in furtherance of the policies of the laws that are being enforced has been made by the court based on its familiarity with the matter in litigation and the interests of justice. See, e.g., *S. C. Johnson & Son, Inc. v. Carter-Wallace, Inc.*, 781 F.2d 198, 201, 228 U.S.P.Q. 367, 369 (Fed. Cir. 1986).

Whether or not the doctrine of equivalents should be available to a patentee as a matter of equity in a particular case requires balancing of the policies referred to above as well as

the policies underlying the doctrines of prosecution history estoppel and estoppel based on the prior art. This is a legal function. The ultimate determination of whether or not the application of the doctrine of equivalents should be available in a particular case thus is for the court to decide as a matter of equity, not a jury.

Hilton Davis argues that since infringement seeks a legal remedy, all issues must then be submitted to the jury. Hilton Davis, however, ignores the fact that in any legal case there may be and often are equitable issues which must be decided by the court even involving disputes as to historical fact. This is true even where the court's decision on the equitable issue results in the plaintiff being deprived of a jury award.

A clear example involves reformation of a contract. An action on a contract is an action at law which seeks money damages; and, a jury trial is available. However, whether or not the plaintiff is entitled to the relief sought depends on whether or not the trial court as a matter of equity will permit the contract to be reformed. Failure of the trial court to reform the contract may mean that the plaintiff then does not have a case to submit to the jury. However, the equitable issue has always still been regarded as one for the courts. See, e.g., *Smith v. Bear*, 237 F.2d 79, 86-87 (2d Cir. 1956), where the appellate court ruled that the district court was correct in not reforming a written agreement between the parties to conform to the parties' earlier alleged oral agreement. The trial court's decision not to permit equitable reformation of the contract resulted in a jury verdict for the defendants. See also, *Maryland Casualty Co. v. United States*, 169 F.2d 102 (8th Cir. 1948); *City of Morgantown v. Royal Ins. Co., Ltd.*, 169 F.2d 713 (4th Cir. 1948), *aff'd on other grounds*, 337 U.S. 254 (1949); *Royal Aviation, Inc. v. Aetna Casualty & Surety Co.*, 770 F.2d 1298 (5th Cir. 1985) (If plaintiff seeks reformation and money damages on the contract as reformed, the court may decide whether to allow reformation but there is a right to a jury trial on the reformed contract.); *Enserch Corp. v. Shand Morahan & Co., Inc.*, 952 F.2d 1485,

1502 (5th Cir. 1992) (Reformation is an equitable decision made by the court, not the jury, and the parties are not entitled to a jury trial even where there is conflicting evidence of historical facts); *American Casualty Co. v. Glaskin*, 805 F. Supp. 866, 873 (D. Colo. 1992) (the equitable character of reformation does not change merely because defendants could seek this remedy within a lawsuit for money damages.).

The only limitation is where the facts regarding the availability of equitable doctrine and those regarding the right to recovery are common. However, as pointed out in Warner-Jenkinson's Supplemental Brief on Rehearing In Banc at 36-37, the issue of the availability of the doctrine of equivalents as a matter of equity is distinct from the tripartite test of technical equivalents under *Graver Tank*. Hilton Davis does not contend otherwise.

## VI. Conclusion

Hilton Davis concedes the absence of literal infringement of the patent claims. There is no rational basis why Hilton Davis under the doctrine of equivalents is entitled to an exception to the requirement that the claims define the metes and bounds of the patent protection. Infringement in this case was based on an unconscionable expansion of claim scope ignoring totally the clear prosecution history estoppel and the policies underlying the doctrine of equivalents. The judgment in this case should be reversed.

Respectfully submitted,

  
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