

United States District Court,  
S.D. California.

**ALLIED-SIGNAL INC,**  
Plaintiff.

v.

**FILMTEC CORPORATION, and the Dow Chemical Company,**  
Defendants.

Civ. No. 89-0862-GT (M)

**May 25, 1990.**

Robert D. Rose, Lorenz, Alhadeff, Lundin & Oggel, San Diego, Cal., William J. Gilbreth, Eric C. Woglom, Daniel M. Gantt, Fish & Neave, New York City, for plaintiff Allied-Signal Inc.

John R. Wertz, Sullivan, Cummins, Wertz, McDade & Wallace, San Diego, Cal., Bernd W. Sandt, Philip D. Shepherd, The Dow Chemical Company, Midland, Mich., Douglas E. Whitney, Morris, Nichols, Arsht & Tunnell, Wilmington, Del., for FilmTec, and The Dow Chemical Company.

### **MEMORANDUM DECISION AND ORDER**

GORDON THOMPSON, Jr., **District Judge.**

This motion for a preliminary injunction came on for hearing April 23, 1990. Robert D. Rose of Lorenz Alhadeff Lunden & Oggell and William J. Gilbreth, Thomas Vetter and Roberta Morris of Fish & Neave appeared on behalf of Plaintiff. John R. Wertz of Sullivan Cummins Wertz McDade & Wallace, Bernd W. Sandt and Philip D. Shepherd of Dow Chemical Company and Douglas E. Whitney of Morris Nichols Arsht & Tunnel appeared on behalf of Defendants. The court took the matter under submission. Having reviewed the pleadings, exhibits, declarations and arguments in favor and in opposition to the motion, the court hereby grants the request for a preliminary injunction.

Plaintiff bring this motion pursuant to 35 U.S.C. s. 283 and F.R.Civ.P. 65 and requests that the court preliminarily enjoin Defendants from infringing claim 9 of United States Patent 3,744,642 (" '642 patent") with sales of its FT-30 reverse osmosis membrane. The '642 patent was assigned to Allied-Signal on March 27, 1989. This lawsuit was filed in June 1989.

To obtain a preliminary injunction pursuant to 35 U.S.C. s. 283, Allied-Signal must:

establish a right thereto in light of four factors: (1) a reasonable likelihood of success on the merits; (2) irreparable harm; (3) the balance of hardships tipping in its favor; and (4) the impact of the injunction on the public interest.

These factors, taken individually, are not dispositive; rather, the district court must weigh and measure each factor against the other factors and against the form and magnitude of the relief requested.

Hybritech Inc., v. Abbott Laboratories, 849 F.2d 1446, 1451 (Fed.Cir.1988).

### ***Reasonable Likelihood of Success on the Merits***

To prevail on this element of its request for injunctive relief, Allied-Signal must show a reasonable likelihood of success on the merits with respect to patent validity and patent infringement. *Hybritech* at 1451. Turning first to validity, the burden at trial will be on defendants to show by clear and convincing evidence that the patent is invalid. *H.H. Robertson, Co. v. United Steel Deck, Inc.* 820 F.2d 384, 387 (Fed.Cir.1987). To obtain the preliminary injunction, Allied-Signal must show that there is a reasonable likelihood that FilmTec cannot make its showing at trial of invalidity by clear and convincing evidence.

### ***Validity***

FilmTec attacks the validity of the patent on two grounds: that it is invalid over the prior art, and that it fails to meet the disclosure standards of 35 U.S.C. s. 112.

FilmTec's claims of anticipation rest upon arguments under 35 U.S.C. s. 102(a), (b), and (g). For the reasons below, the court finds claim 9 is not anticipated by the cited references.

To the extent that Filmtec relies upon documents and reports to show claim 9 is anticipated and therefore invalid, every element of the claimed invention must be literally present in a single prior art reference document. *Panduit Corp. v. The Dennison Manufacturing Company* 774 F.2d 1082, 1101 (F.Cir.1985). In determining whether a publication was "printed" for the purposes of the statute, the key is whether the reference was "sufficiently accessible to the public interested in the art; dissemination and public accessibility are the keys to the legal determination ..." *Constant v. Advanced Micro-Devices, Inc.* 848 F.2d 1560, 1568 (Fed.Cir.1988). Allied-Signal argues that publications to be accessible must be catalogued or indexed, citing to *In re Cronyn* 890 F.2d 1158 (Fed.Cir 1989). This court is not bound by that holding in *In re Cronyn*, as that court explicitly limited its holding and analysis to the facts in that case, where the documents in question were undergraduate senior theses indexed by author in a college library.

The reference to the research contract at North Star in the Office of Saline Water's 1964 annual report is not sufficient to constitute anticipation under 102(b). Standing alone, this reference does not reflect the elements of claim 9. Defendants urge the court to read the more explicit contract itself into the reference, arguing that the contract was available to the public by incorporation. The court finds that the contract was not accessible to the public simply because it was listed in a long list of contracts issued by the government. The reference in the 1964 report was not specific enough to have put a fellow scientist on notice of the type of work which was the subject of the contract.

Defendants also claim anticipation in the work of Peter Riley, which is discussed at length in a final government report dated October 1970. The reference to Mr. Riley's work in the reports issued previous to this were too vague to anticipate patent '642. One of these reports appears to have been filed confidentially, and could not be released without prior approval of General Atomic. The October 1970 report issued by the Government was widely disseminated and available, and did specifically discuss almost element for element the type of membrane described in claim 9. However, this report is dated too late to constitute anticipation under the statute. For the publication to anticipate under 102(a), it must have been printed before June 1968,

the claimed invention date. Under 102(b), it must have been printed more than one year prior to December 1970, the '642 patent application date. Moreover, Riley himself stated that he abandoned his experiments as he failed to create a desalination membrane. Such failures cannot anticipate. *United States v. Adams* 383 U.S. 39, 50 (1966).

Defendants claim that Cadotte, the inventor of the FilmTec patent, anticipated claim 9 under 35 s. 102(g) as he allegedly manufactured many such membranes in the late 1960's. There is no evidence of this invention except for Cadotte's own declaration, and his own reference to the invention in a 1985 article which he wrote. Furthermore, Cadotte in a subsequent patent application ('440) called the method of the Scala patent "completely unrelated" to his invention. From this evidence the court must conclude that it is reasonably likely FilmTec could not meet its burden of showing invalidity by clear and convincing evidence pursuant to 35 U.S.C. 102(g), nor pursuant to 35 U.S.C. s. 102(a) or (b).

The court finds that FilmTec's argument pursuant to 35 U.S.C. s. 112 as to invalidity for failure to disclose the best mode contemplated for carrying out the invention is without merit. The record does not support the allegation that Scala or Westinghouse concealed the best mode for duplicating the membrane described in claim 9. As Allied-Signal pointed out in their oral argument at the hearing, the simple fact that dozens of subsequent patents cite this patent and its method as prior art attests to the ability of others to learn from this patent.

FilmTec also argues that the invention was obvious over the prior art pursuant to 35 U.S.C. s. 103. In considering this argument, the court bears in mind that the patent officer's decision is presumed valid under law. *American Hoist & Derrick Co. v. Sowa & Sons* 725 F.2d 1350, 1361. (Fed.Cir.1984), *cert. denied*, 469 U.S. 821 (1984).

As to the authorities before the examiner, FilmTec presents no new arguments which convince the court that it should question the judgment of the patent officer in reviewing the prior art before him. FilmTec does not make a convincing case for its argument that Scala's claim of having first invented the membrane was false or intentionally misleading. The court does not imply from Scala's subsequent failure or abandonment of his research that he had not, in fact, before October 1969 reduced to practice a desalinizing membrane according to the method of claim 9.

FilmTec also presents new authorities not before the patent officer which it claims establish obviousness. To the contrary, the court finds that these authorities cannot establish that at the time Scala claims to have reduced the invention to practice that the method to produce an *in situ* desalinizing membrane on a porous substrate was obvious. Cadotte, long after Scala's invention date, did eventually perfect the technique so as to be commercially useful. But the failed experiments of Riley and uncompleted projects of Francis are not clear and convincing evidence of obviousness.

### ***Infringement***

Claim 9 of the '642 patent states:

9. A method of making an interface condensation desalination membrane-substrate composite comprising the steps of:

1. depositing a solution of a first organic compound dissolved in a first solvent on at least one side of a

porous substrate, and

2. contacting said first deposit with a solution of a second organic compound dissolved in a second solvent, said solvents being relatively immiscible in each other, said first organic compound being reactive with said second organic compound, to form a desalination membrane layer of polymeric material in-situ on the substrate by an interfacial condensation reaction.

The claim describes a method by which you combine two organic compounds, which are relatively insoluble with each other, to form a membrane *in situ* on a porous substrate. The membrane performs the function necessary for reverse osmosis; it serves as a type of filter. The porous substrate supports the membrane.

The court finds that the FilmTec patent literally infringes claim 9. It is formed by interfacial condensation, the basic method described in claim 9. The two organic compounds used to form the membrane, diaminobenzene and trimesoyl chloride, are relatively immiscible. They are each dissolved in a solvent, as described in the claim. The porous substrate is composed of a polysulfone layer supported by a polyester web.

FilmTec argues that FT-30 does not infringe because its support web is in fact microporous, as the polysulfone is very small pored. FilmTec urges the court to read limitations into the claim as to pore size. These limitations are found in the patent prosecution and the specifications of the patent.

The court finds that there is nothing ambiguous in the term "porous" which would require the court to use the specifications to interpret what the patentee meant by that word. Reading in a pore size limitation would be placing an extraneous limitation on the specifications, something which the Federal Circuit has repeatedly stated should not be done. *E.I. DuPont De Nemours & Co. v. Phillips Petro.* 849 F.2d 1430 (Fed.Cir.1988). Given that claim 10 of patent '642 does include a pore size specification, the court is persuaded that the patent officer and the patentee fully intended the term "porous" to identify a general characteristic of the substrate, and not to limit this claim to any particular range of porosity.

### *Estoppel*

FilmTec vigorously argued that Allied-Signal should be barred from enforcing the patent because of the failure of the previous patent owner, Union Carbide, to enforce the patent against FilmTec and in fact, against Allied-Signal as well. While the court recognizes that many years have passed since this patent was issued, FilmTec cannot raise the equitable defense of estoppel.

In a patent suit, a showing of inequitable conduct such as to give rise to the defense of estoppel completely bars recovery. Estoppel is shown by 1) an unreasonable and inexcusable delay in filing suit, 2) prejudice to the infringer, 3) affirmative conduct by the patentee inducing belief that it abandoned its claim against the alleged infringer and 4) detrimental reliance by the infringer. *Jamesbury Corp. v. Litton Industrial Products, Inc.* 839 F.2d 1544, 1554 (Fed.Cir.1988). Allied-Signal filed suit within months of acquiring the patent. The focus of the court's inquiry then must be upon the behavior of Union Carbide and its relationship to FilmTec.

FilmTec's claim of estoppel fails for two reasons. First, there was no reliance by FilmTec upon Union Carbide's failure to enforce the patent because FilmTec didn't know that Union Carbide owned the patent. FilmTec argues at length that Union Carbide's sale to it of polysulfone for the FT-30 was in fact a

representation that Union Carbide would not enforce the contract, resulting in FilmTec's reliance. Yet Dr. Peterson, a principal at FilmTec, stated that until this suit was brought FilmTec was not aware of who owned the '642 patent.

Second, the patent owner has to do more than simply not enforce the patent, for more than mere silence is required to raise the defense of estoppel. *Hottel Corp. v. Seaman Corp.* 833 F.2d 1570, 1573 (Fed.Cir.1987). In that case, the owner of the patent gave notice that the patent would be enforced, but then through a long period of silence induced reliance by the alleged infringer. There is no such behavior alleged here. At most, there is a disputed claim that the salesman for Union Carbide knew that polysulfone was being used to produce the FT-30.

### ***Irreparable Injury***

Where validity and continuing infringement have been clearly shown, immediate irreparable harm is presumed. *Smith Intern., Inc. v. Hughes Tool*, 718 F.2d 1573, 1581 (Fed.Cir.1983). Injury to Allied-Signal's business is compensable with money damages. But the right to exclude is the essence of a patent, and the presumption of irreparable harm exists because of this right. *H.H. Robertson v. United Steel Deck, Inc.* 820 F.2d 384, 390 (Fed.Cir.1987).

FilmTec argues that Allied-Signal's alleged consideration of one dollar for the '642 patent somehow affects its argument of irreparable harm. This argument is not persuasive, and no authority is presented for this proposition. FilmTec also presents the deposition testimony of Truby, an employee of Allied-Signal's, to the effect that there would be no effect on Allied-Signal's business if FilmTec was to stop selling FT-30. This statement was denied by Allied-Signal at the hearing. Due to the court's extensive knowledge of this litigation and of Civ.Case No. 89-0919 GT (IEG), *FilmTec v. Allied-Signal*, the court takes judicial notice of the competition between these parties.

Allied-Signal has been enjoined from selling its TFCL membrane as a result of a preliminary injunction granted in *FilmTec v. Allied-Signal*. However, the court does not find that this leaves Allied-Signal with no injuries as a result of FilmTec's infringement. There may currently be no monetary injuries, but other injuries in the marketplace as a result of the infringement and the presumed injury when patent rights are violated are still present.

### ***Balance of Equities***

The court is well aware of the short time left to run on the patent. However, this alone does not make any less important the right of the patent holder to exclude others. *Atlas Powder v. Ireco Chemicals*, 773 F.2d 1230 (Fed.Cir.1985). In fact, in this case the hardship on FilmTec is to refrain from selling its infringing products for less than two months. This hardship does not outweigh Allied-Signal's right to protect the remaining days of its patent.

### ***The Public Interest***

FilmTec has not made a showing that there will be any adverse impact on the public interest through the grant of this preliminary injunction. There appear to be other competitors in the market who can offer this product to the public.

For the above reasons,

IT IS HEREBY ORDERED:

1. As of the effective date of this Order, defendants, their officers, agents, servants, employees, attorneys and those persons in active concert or participation with them who receive actual notice of this Preliminary Injunction Order by personal service or otherwise are enjoined from making, using or selling, and actively inducing others to make, use or sell, FT-30 membrane, including "TW-", "BW-", and "SW-" designations thereof, in the United States, and from otherwise infringing claim 9 of United States Patent No. 3,744,642;
2. This Order shall be effective as of 12:00 noon on May 29, 1990, and unless stayed, modified, vacated or reversed, this Order shall continue in full force and effect until and including July 10, 1990.
3. Plaintiff's shall post a bond of \$5,000 before this Order shall become effective. Should Plaintiff or Defendant wish to request a different bond amount, they may petition the court to do so on Tuesday, May 29, 1990 at 10:30 a.m.

S.D.Cal.,1990.

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