

United States District Court,
N.D. Illinois, Eastern Division.

VISKASE CORPORATION,
Plaintiff.

v.

AMERICAN NATIONAL CAN COMPANY,
Defendant.

Oct. 10, 1996.

Patentee brought action against competitor, alleging infringement of its patents relating to heat-shrinkable thermoplastic films. On patentee's motion for summary judgment, the District Court, Bucklo, J., held that: (1) claim in patent for heat-shrinkable thermoplastic film with "density below about 0.91 g/cm³" meant number between 0.905 and 0.914, and (2) patentee's film was infringed by competitor's film.

Motion granted.

4,863,769, 4,976,898, 5,256,351. Infringed.

Roy E. Hofer, William H. Frankel, Robert W. Stevenson, Allan J. Sternstein, Andrew D. Stover, Brinks, Hofer, Gilson & Lione, Chicago, IL, for plaintiff.

Jeffrey D. Colman, William Denby Heinz, Barry Levenstam, Jenner & Block, Harry J. Roper, Steven Raymond Trybus, Sarah Lynn Taylor, Roper & Quigg, Chicago, IL, Douglas W. Wyatt, Thomas A. O'Rourke, Frederick J. Dorchak, Joseph C. Kirincich, John C. Todaro, Wyatt, Gerber, Burke & Badie, New York City, for Defendant.

MEMORANDUM OPINION AND ORDER

Claim Interpretations

BUCKLO, District Judge.

I held a hearing pursuant to *Markman v. Westview*, 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996), at which the parties presented evidence, including the testimony of their experts, on the proper interpretation of terms in the claim language of the various patents in suit, where such terms are disputed. Having heard the evidence, I reach the following conclusions.

[1] The term "about" as used in the phrase "a density below about 0.91 g/cm³" means a number between 0.905 and 0.914. I reach this conclusion for the following reasons: First, the ordinary dictionary definition of "about" means "reasonably close to," "near" or "around." WEBSTER'S NINTH NEW COLLEGIATE

DICTIONARY (1983), p. 45. Thus, as one of the experts testified, a person skilled in the art of the invention, reading this language, would assume the term included numbers slightly above and slightly below 0.91 g/cm³. *Accord, e.g., Eiselstein v. Frank*, 52 F.3d 1035, 1039 (Fed.Cir.1995) ("about" means "approximate"); *Conopco, Inc. v. May Dept. Stores Co.*, 46 F.3d 1556, 1561 and n. 2 (Fed.Cir.1994), *cert. denied*, 514 U.S. 1078, 115 S.Ct. 1724, 131 L.Ed.2d 582 (1995).

[2] Second, as experts on both sides in this case agreed, persons skilled in the art understand that ordinarily numbers defined with two decimal places encompass any three decimal place number within a .005 range of the two decimal place number. That is, 0.91 encompasses 0.905 to 0.914, because either of these numbers would be rounded off to 0.91 if the third decimal place is removed. An exception to this rule lies in cases in which a patentee has itself limited the interpretation ordinarily given a two decimal place number. *E.I. DuPont de Nemours & Co. v. Phillips Petroleum Co.*, 711 F.Supp. 1205, 1222 (D.Del.1989).

In the present case, Viskase consistently used two digit numbers in its specifications. ANC argues that Viskase is limited to 0.910 as a result of statements made to the patent examiner during the prosecution of U.S. Pat. 4,863,769. I disagree. ANC relies, first, on the fact that the original patent application (Serial No. 745,236) did not have a density limitation. After its rejection in February, 1986, Viskase filed the continuation application that became the '769 patent. In that continuation application, Viskase narrowed its claims by adding language stating "below about 0.91 g/cm³." ANC's patent expert testified that this history precluded a broad range of interpretation. But he ignores the word "about." "Below about 0.91" is, for the reasons stated, different from "below 0.91."

ANC's second argument is that Viskase's actions with respect to two additional claims in the continuation application which as submitted stated that the copolymer had a density "above 0.91 g/cm³", and which were subsequently changed to "below" rather than "above," limit all of the claims to densities below 0.91 g/cm³. The examiner rejected these claims as originally filed, stating that there was no support in the specification for a VLDPE of above 0.91. But he also noted that "clearly applicant intended to claim below 0.91." (Viskase Trial Ex. 3, p. 253) Furthermore, in the same paragraph the examiner held that the disclosure for other claims, correctly stating the density limitation as below rather than above 0.91 g/cm³, was "enabling for claims limited to the VLDPE having a density of from about 0.86 to about 0.91." As the examiner concluded, the use of "above" was obviously just an error, although a careless one, which was corrected. It carried no meaning that would limit the interpretation of these claims to exactly 0.910. That the examiner understood that the claims encompassed some inexactness that could go beyond 0.910 is shown by his own repetition of the word "about" in the same paragraph in discussing the claims, as well, of course, by his allowance of the claims with the inclusion of the word "about" as modifying 0.91.

ANC next argues that one of the patents relied on by the examiner in initially rejecting the application that became the '769 patent, *Nishimoto*, U.S. Patent No. 4,456,646 encompassed a density between 0.900 to 0.950 g/cm³. ANC argues that Viskase's argument against this patent was that it described linear low density polyethylene (LLDPE) rather than VLDPE, and thus necessarily agreed that LLDPE densities went as low as 0.900 (or at least stopped at 0.91 g/cm³). But ANC has misconstrued Viskase's argument before the examiner. Viskase did say that *Nishimoto* described its own copolymer as LLDPE, but the point of that was that LLDPE's are different from VLDPE's. Viskase went on to attach various articles discussing the newly discovered VLDPE's and the differences between them and LLDPE's. Viskase also distinguished *Nishimoto* on the ground that the 0.90 density lower limit in that patent was hypothetical and that the copolymers disclosed in *Nishimoto* are made using different catalysts and are incompatible with the VLDPE copolymers. The examiner in response agreed that *Nishimoto* did not anticipate the claims in the '769 patent.

ANC also argues that a statement made by Viskase in a disclosure made after the notice of allowance limits Viskase's claims to copolymers with a density below 0.910 g/cm³. The notice of allowance was dated November 6, 1988. On November 23, 1988, Viskase notified the Patent Office, pursuant to its duty of disclosure under 37 C.F.R. 1.56, of the existence of Shibata U.S. Patent No. 4,429,079, which issued January 31, 1985, and which Viskase stated that it had recently learned. Viskase described Shibata as describing two ethylene/alpha-olefin copolymers designated as "A" and "B." The "A" copolymer is the one of concern in this suit. Viskase stated that the Shibata "A" copolymer was different from its claimed invention because "the present application ... does not have a density below about 0.910 g/cm³ as defined in all pending claims." Shibata describes a copolymer with a density of 0.910 to 0.940 g/cm³. Viskase says the use of the third decimal point was an obvious error. Whether or not it was intentional, I agree that in no other place in the prosecution history did Viskase use a third decimal point. As Viskase argues also, the same letter distinguished Shibata on the ground that the Viskase patent claims did not have densities below "about" the 0.910 g/cm³ range. I conclude that *Intervet America, Inc. v. Kee-Vet Laboratories, Inc.*, 887 F.2d 1050, 1054 (Fed.Cir.1989), controls. In that case, the Federal Circuit held that remarks made by an attorney during the prosecution history that claims were restricted to a certain vaccination scheme, although some claims were not so limited, did not alter the claim language, and that the claim language controlled. In this case, the examiner certainly knew that the claims themselves included broader language than the limitation of 0.910. He did not require an amendment. The language, accordingly, is not so limited.

Finally, ANC argues that "about 0.91 g/cm³" cannot include a range of 0.912 g/cm³ because of the further language in the relevant claims stating that the film has "a 1% secant modulus below about 140,000 kPa." ANC says such a film necessarily has a secant modulus in the 165,000 or 170,000 range. In support of this conclusion, ANC introduced the testimony of its expert, Dr. Quirk. Dr. Quirk relied upon a measurement taken from an illustration in an article cited to the Patent Office by Viskase and the Karol patent, which Dr. Quirk testified discussed the relationship between density and secant modulus. On cross examination, however, Dr. Quirk agreed that the secant modulus measurement will vary depending upon the method used to make the film. He did not explain his reference to the Karol patent. ANC has failed to show that the limitation of "a 1% secant modulus below about 140,000 kPa" requires that "about 0.91 g/cm³" be limited to 0.910 g/cm³.

The second issue involving claim interpretation is the meaning of "linear" as used in each of the claims asserted in this action. The claims describe a film "comprising a very low density polyethylene which is a linear copolymer of ethylene and higher alpha olefin containing from 3 to 8 carbon atoms, ..." The parties agree that "linear" means without significant long chain branching. "Significant" implies the allowance of some long chain branching. FN1 The parties' disagree over the definition of "significant." Viskase argues that "insignificant" in terms of long chain branching means that the long chain branching present is not great enough to affect density. ANC argues that density is irrelevant to this issue, but that the question is whether there is enough long chain branching present to affect the commercial properties of the copolymer. From the evidence presented at the hearing, it would appear that both positions could be correct. I will hear further argument on this point. I will also hear further argument on the question of whether "VLDPE" should be defined with respect to "heterogeneous" or "homogeneous" properties.

FN1. One ANC witness testified that "linear" means without any long chain branching. Neither the patents themselves nor the prosecution history discuss the meaning of linear or long chain branching. Literature published at about the time the first patent application was filed does state the VLDPE is a "linear polymer generally without long chain branching." Viskase Ex. 824, Tab J, Kurtz, "VLDPE: A Breakthrough in

Flexible Linear Polyethylene." It appears that techniques developed or perfected after 1985 have been able to demonstrate the existence of long chain branching where previously it was not thought to exist. By 1991, the Annual Book of ASTM Standards, p. 328, defined "linear polyethylene plastics" (which includes a linear copolymer) to be plastics "containing insignificant amounts of long-chain branching but which may contain significant amounts, by design, of short-chain branching." The ASTM or American Society of Testing Materials is the body that sets standards for testing "all kinds of products ... in the United States." Porter testimony, p. 368. Since the parties have stipulated that the issue with respect to long chain branching is what is meant by "significant," which ANC has defined as the ability to affect commercial properties, I have not considered this argument further.

Motions for Partial Summary Judgment

[3] Viskase seeks summary judgment on the question of infringement with respect to certain patent claims. Its first motion is directed to the "first family" of patents, including claim 33 of U.S. Patent No 4,863,769, claim 1 of U.S. Patent No. 4,976,898, claim 1 of U.S. Patent No. 5,059,481, and claim 1 of U.S. Patent No. 5,256,351. All of the asserted claims are directed to heat-shrinkable thermoplastic films containing VLDPE or the process for making such films. Viskase argues that there are no disputed material issues of fact and that ANC heat-shrinkable film products made from the Dow Attane 4001 or 4201 VLDPE resin literally infringe each of these patent claims. Viskase's motion is properly supported by its Rule 12M statement. I previously held that ANC is precluded from arguing that its Attane films do not infringe these claims on any basis other than that its films did not meet the density recitation of Viskase's claims because it had not asserted any other noninfringement defense during the discovery period in this case. I have now ruled that the density limitation in Viskase's patents includes densities up to and including 0.914 g/cm³. It is undisputed that ANC's Attane films have a density range from 0.910 g/cm³ to 0.914 g/cm³.

In its response to Viskase's motion for summary judgment, ANC argued that summary judgment was nevertheless inappropriate because its Attane films do not have a VLDPE with a 1% secant modulus below about 140,000 kPa, as required by each of the patent claims. FN2 During the Markman hearing, however, ANC stated that this was not its position, and that if the 0.912 g/cm³ density was found to be within the patent claims, that also decided the secant modulus issue. Tr. 597. FN3 Accordingly, since there is no disputed issue of fact and Viskase has shown that it is entitled to partial summary judgment on the claims in question as a matter of law, its motion is granted.

FN2. This defense had not been asserted in response to interrogatories directly asking ANC for any basis on which it claimed that its Attane films did not infringe Viskase's patents. ANC did state, apparently (it failed to attach copies of the answers to its response to Viskase's motion to preclude newly asserted defenses) in denials to motions to admit that the Attane resin did not have a 1% secant modulus below 140,000 kPa.

FN3. I note that if ANC had not agreed that it was not arguing non-infringement on this basis, its response to Viskase's statement of uncontested facts cited solely to an affidavit of A. Willem deGroot. Mr. deGroot's affidavit, however, as Viskase argues, is improperly conclusory. He states that Viskase's test results cannot be correct (contradicting ANC's response to Viskase Statement of Uncontested Fact 15), but cites only to tests that were not submitted and presumably are those previously excluded by me because of their untimeliness. In view of the resolution of this issue, ANC's motion to preclude Viskase's secant modulus tests is moot.

Viskase has filed a second motion for partial summary judgment, seeking a judgment that claim 1 of U.S. Patent No. 4,863,784 and claim 1 of U.S. Patent No. 4,988,465 are infringed by ANC three layer films containing the Dow Attane VLDPE resin. Viskase's motion is properly supported by its Rule 12M statement and relevant evidence. In response, ANC admits most of the facts asserted by Viskase, but argues that summary judgment should be denied. ANC's principal argument, and the argument made in opposition to Viskase's related motion to preclude assertion of new defenses (brought in response to ANC's responses to Viskase's motions for partial summary judgment), is that it always said that these patents were invalid and since a patent should be construed to sustain validity if possible, FN4 the alternative is to conclude that the patents do not cover its three layer films. Specifically, ANC stated, and argues here, that the '784 and '465 patents (referred to by the parties as the MA-Saran patents) do not cover films whose outer layers are made from 90% EVA and 10% Dow Attane resin because the prior art showed it was well known to use EVA blends in heat shrinkable films. Whether prior art renders a patent claim invalid is a different argument and defense from a claim that the language of the patent does not cover the product in question. I have reread ANC's opposition to Viskase's motion to preclude as well as its motion for reconsideration of my ruling. Nowhere does ANC cite to any statement made in discovery that would have apprised Viskase that ANC was claiming that the patent claims did not literally cover its three layer films. Accordingly, since Viskase's motion is supported by the undisputed facts, the motion for partial summary judgment is granted.

FN4. The case cited by ANC, *Carman Industries, Inc. v. Wahl*, 724 F.2d 932, 937 n. 5 (Fed.Cir.1983), states only that a limitation on the use of the doctrine of equivalents is that claims cannot be given a construction that would encompass the prior art. That is not the issue here in which Viskase is asserting, and ANC never disputed, that the films literally infringe the claims in question.

ANC has also filed a motion for summary judgment on the basis that its films made from Affinity PL-1840 polyolefin plastomer do not infringe the patents in suit either literally or under the doctrine of equivalents. Since I conclude there are material issues of fact with respect to infringement by the Affinity films, ANC's summary judgment motion is denied. FN5

FN5. ANC did assert that its Affinity films do not infringe Viskase's patents. It may present evidence at trial.

Motions for Reconsideration

ANC's motion for reconsideration of my ruling precluding it from asserting new infringement defenses is denied. ANC repeats the arguments made earlier. I have considered each of its arguments and find them frivolous. I will comment on one point only. ANC says Viskase is not prejudiced by its newly asserted defenses. On the contrary, they were first raised when this case was set to go to trial, after the pretrial order had been filed, during the final trial preparation, and in response to a motion for summary judgment which the new defenses would defeat-forcing Viskase to prepare for an entirely different trial than it had reasonably expected, and undoubtedly forcing it to seek a delay in trial, a reopening of discovery and new experts. FN6

FN6. Although this is the only part of ANC's motion that bears comment I note that the repetition contained in ANC's motion is just a fragment of the paper with which I have been inundated during the past few

weeks. Since the Markman hearing concluded in August, I have received in excess of a thousand pages in multiple filings from ANC, with substantially overlapping arguments. The amount of filings has not been helpful to a quick and just resolution of the issues before me.

Motion to Refuse Entry of ANC's February 16, 1996 Invalidity Defenses

Viskase's motion to refuse entry of ANC's February 16, 1996 invalidity statement is granted. ANC's attempt to justify the statement turns reality inside out. ANC avoided taking a position on whether it was claiming that any of the patents were invalid, and continued this position until the end of discovery, as Viskase charges. Assuming that ANC was acting in good faith, and that Rule 1 of the Federal Rules of Civil Procedure would best be served by allowing ANC to assert invalidity, I allowed it. Rather than informing Viskase of its invalidity position even then, ANC waited until the day the pretrial order was due, long after all discovery was closed, to suddenly assert a myriad of new defenses. ANC will be limited to the invalidity defenses it provided to Viskase in October, 1995.

N.D.Ill.,1996.

Viskase Corp. v. American Nat. Can Co.

Produced by Sans Paper, LLC.