United States District Court,
E.D. Pennsylvania.

GREENE, TWEED OF DELAWARE,
INC. Plaintiff/Counterdefendant.
v.
DUPONT DOW ELASTOMERS, L.L.C. and E.I. DuPont De Nemours and Co., Inc,
Defendants/Counterplaintiffs.

Nov. 18, 2002.

David P. Callet, Michael S. Caldwell, Nicole H. Sprinzen, Shari L. Fleishman, Akin Gump Strauss Hauer & Feld, Washington, DC, Kevin R. Hamel, Kristyne A. Bullock, Lynda L. Calderone, Ronald L. Panitch, Akin, Gump, Strauss,Hauer & Field,LLP, Philadelphia, PA, for Plaintiff.

Christopher Serbagi, Gerard P. Norton, Jacqueline M. Vernon, Neer Gupta, Philip E. Roux, Samuel Waxman, Steven J. Lever, Clifford Chance Rogers & Wells LLP, Leora Ben-Ami, Thomas F. Fleming, Kaye Scholer LLP, New York, NY, Mark S. Stewart, Ballard Spahr Andrews & Ingersoll, LLP, Philadelphia, PA, for Defendants.

MEMORANDUM AND ORDER

BUCKWALTER**, J.**

On November 12, 2002, the court held a Markman hearing to interpret Claim 9 which reads as follows FN1 (the claim terms to be defined are highlighted):

FN1. The court will not recite the background of this case nor the standard law regarding Markman hearings, all of which are familiar to the parties as set forth in each of the briefs.

9. A method for increasing the resistance to chemical attack of an elastomeric seal and decreasing the coefficients of friction at a surface of the seal, the seal being for preventing the leakage of a fluid between a first member and second member, comprising:
mixing a perfluoroelastomer with a non-fibrillating fluorocarbon particulate polymer to form an elastomeric composition, wherein the perfluoroelastomer comprises a terpolymer of tetrafluoroethylene, a perfluoroalkyl vinyl ether and a perfluorinated cure site monomer which includes a functional group which permits crosslinking of the terpolymer; and

processing the elastomeric composition at a temperature less than the melting temperature of the non-fibrillating fluorocarbon particulate polymer to disperse the fluorocarbon polymer throughout the elastomeric composition while maintaining the fluorocarbon polymer in particulate form to form an elastomeric seal, such that the seal has increased resistance to chemical attack and reduced coefficients of

friction at the seal surface.

Initially, I find that the highlighted preamble language and the "increased resistance to chemical attack" in the body of the claim is a limitation on the claim because this language distinguishes the seal formed through the process set forth in the claim from prior seals. I also find that plaintiff's proposed definition is not supported by the specifications when read as a whole. It is, of course, supportive of plaintiff's position to cite Exh. 1 at col. 6, 11. 30-41 (see bottom of page 64, top of page 65 of plaintiff's brief in support of its construction of disputed claims). This does not stand for the proposition that increased resistance to chemical attack is measured against seals made from perfluoroelastomer alone. It is clear that the inventors also found that their invention provided chemical resistance over typical prior art perfluoroelastomeric compositions using conventional fillers as pointed out on page 66 of plaintiff's brief. As noted by defendants, at page 10 of the amendment, the inventor is clearly referring to his invention improving resistance to chemical attack as compared to any seals. A reading of the history as a whole leads me to conclude that defendants' definition is correct regarding increasing the resistance to chemical attack.

Upon the foregoing and consideration of the briefs and the parties' argument at the hearing on November 12, 2002, it is hereby ORDERED:

The below terms found in the claim of U.S. Patent No. 5,461,107 shall be construed as follows:

(A) "*such that the seal has increased resistance to chemical attack*"

Possessing the property of being more resistant to deterioration when exposed to a broad range of harsh chemical agents when compared to the closest prior art seals known as of the filing date of the '107 patent, measured and analyzed according to accepted scientific standards set forth by the scientific community, such as those set forth in ASTM standards.

(B) "*Perfluoroelastomer*"

Perfluoroelastomer means an amorphous polymer of one or more perfluorinated monomers being substantially free of hydrogen substituents.

(C) "*Tetrafluoroethylene*"

A repeating molecular unit (monomer) comprised of two carbon atoms and four fluorine atoms, also known as C_2F_4.

(D) "*perfluroalkyl vinyl ether*"

Perfluoro alkyl vinyl ether (PAVE) has the meaning as reflected in the monomer of structure (II) in the terpolymer where no hydrogen atoms are present, and where the alkyl ether chain (OR_f) may contain one or more oxygen atoms.

TABULAR OR GRAPHIC MATERIAL SET AT THIS POINT IS NOT DISPLAYABLE

(E) "*Perfluorinated Cure Site Monomer which includes a functional group which permits crosslinking of the terpolymer*"

A fluorinated molecule which is incorporated into the terpolymer as a third monomer, which contains a

functional group where crosslinking occurs, which can be any functional group including hydrogen.

(F) "***A non-fibrillating fluorocarbon particulate polymer***"

Any fluorocarbon polymer which remains in particulate form and does not fibrillate under typical processing conditions.

(G) "***remains in particulate form***"

When the fluorocarbon polymer is processed under typical processing conditions, the fluorocarbon polymer continue to be well-defined solid pieces and do not lose their solid boundaries.

(H) "***Maintaining the fluorocarbon polymer in particulate form***"

The non-fibrillating fluorocarbon particulate polymer remains in discrete solid pieces throughout processing.

(I) "***processing ... to form an elastomeric seal***"

The elastomeric composition is formed into a seal and the seal is cured sufficiently to develop elastomeric properties.

(J) "***melting temperature***"

Peak of the melting endotherm as reflected by a DSC trace.

(K) ***Reduced coefficients of friction***

A ratio of the force that maintains contact between an object and a surface, and the frictional force that resists the motion of the object in the static state and in the dynamic state.

(L) ***Disperse***

Distribute throughout the composition.

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