IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

E.I. DUPONT DE NEMOURS AND COMPANY,

Plaintiff,

v.

UNIFRAX I LLC,

Defendant.

Civil Action No. 14-1250-RGA

MEMORANDUM ORDER

Presently before me is the issue of claim construction of the term "adhesive layer capable of activation" in U.S. Patent No. 8,607,926 (the "'926 patent"). I have considered the parties' letters. (D.I. 288; D.I. 289; D.I. 291; D.I. 292).

I. LEGAL STANDARD

"It is a bedrock principle of patent law that the claims of a patent define the invention to which the patentee is entitled the right to exclude." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (internal quotation marks omitted). "'[T]here is no magic formula or catechism for conducting claim construction.' Instead, the court is free to attach the appropriate weight to appropriate sources 'in light of the statutes and policies that inform patent law.'" *SoftView LLC v. Apple Inc.*, 2013 WL 4758195, at *1 (D. Del. Sept. 4, 2013) (quoting *Phillips*, 415 F.3d at 1324) (alteration in original). When construing patent claims, a court considers the literal language of the claim, the patent specification, and the prosecution history. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 977–80 (Fed. Cir. 1995) (en banc), *aff'd*, 517 U.S. 370 (1996). Of these sources, "the specification is always highly relevant to the claim construction

analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term." *Phillips*, 415 F.3d at 1315 (internal quotation marks omitted).

"[T]he words of a claim are generally given their ordinary and customary meaning. . . . [Which is] the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." *Id.* at 1312–13 (citations and internal quotation marks omitted). "[T]he ordinary meaning of a claim term is its meaning to [an] ordinary artisan after reading the entire patent." *Id.* at 1321 (internal quotation marks omitted). "In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words." *Id.* at 1314.

When a court relies solely upon the intrinsic evidence—the patent claims, the specification, and the prosecution history—the court's construction is a determination of law. *See Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 841 (2015). The court may also make factual findings based upon consideration of extrinsic evidence, which "consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises." *Phillips*, 415 F.3d at 1317–19. Extrinsic evidence may assist the court in understanding the underlying technology, the meaning of terms to one skilled in the art, and how the invention works. *Id.* Extrinsic evidence, however, is less reliable and less useful in claim construction than the patent and its prosecution history. *Id.*

"A claim construction is persuasive, not because it follows a certain rule, but because it defines terms in the context of the whole patent." *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998). It follows that "a claim interpretation that would

exclude the inventor's device is rarely the correct interpretation." *Osram GMBH v. Int'l Trade Comm'n*, 505 F.3d 1351, 1358 (Fed. Cir. 2007) (citation omitted).

II. "capable of activation at a temperature of from 75 to 200 degrees C." (Claim 1 of the '976 Patent)

a. *Plaintiff's proposed construction*: "Capable of" means "the ability to so perform." "Activation" means "bonding." In the alternative, "capable of activation" means "the ability to bond." Furthermore, the term "at a temperature of from 75 to 200 degrees C" needs no construction because it has its plain and ordinary meaning.

b. *Defendant's proposed construction*: An adhesive layer . . . where the adhesive becomes able to bond only after it is heated to a temperature in the range of 75 to 200 Celsius (167 to 392 degrees Fahrenheit).

c. *Court's construction*: The ability to bond at a temperature of from 75 to 200 degrees C.

Claim 1 of the'926 patent provides:

> 1. A multilayer laminate for use as a flame barrier layer for an aircraft comprising in order (i) a polymeric film layer capable of withstanding a temperature of at least 200 C for at least 10 min,
>
> (ii) an adhesive layer having an areal weight of from 2 to 40 gsm capable of activation at a temperature of from 75 to 200 degrees C., and
>
> (iii) an inorganic refractory layer;
>
> wherein the inorganic refractory layer of (iii) comprises platelets in an amount of 100% by weight with a dry areal weight of 15 to 50 gsm and a residual moisture content of no greater than 10 percent by weight.

(D.I. 288-1, Exh. 4).

Beginning with the word "activation," the specification supports the interpretation that it means "bonding." For example, the specification provides the following:

> The adhesive must be capable of activation at a temperature in the range of 75 to 200 degrees C. In some embodiments, the activation range is from 120 to 140 degrees C. By activation we mean that for a thermoset resin, the resin must bond to the polymeric film layer and the refractory layer within the specified temperature range. For a thermoplastic resin, activation means that the resin softens and flows sufficiently to bond to the polymeric film layer and the refractory layer. The adhesive bond between the inorganic refractory layer and the

> polymeric film is at least 0.25 lb/in. In some embodiments, the adhesive bond between the inorganic refractory layer and the polymeric film is at least 0.8 lb/in.

(*Id.* at 2:61–3:5).

The meaning of "capable of" is explained in the prosecution history as "the ability to so perform." For example, during prosecution of the '976 patent, the examiner stated the following:

> In terms of claim 1, it has been held that the recitation that an element is "capable of" performing a function is not a positive limitation but only requires the ability to so perform.

(D.I. 288-1, Exh. 1 at DUPON00000078). The prosecuting attorney agreed with this understanding. (*See id.* at DUPON00000093). This meaning is consistent with Federal Circuit precedent. *See Finjan, Inc. v. Secure Computer Corp.*, 626 F.3d 1197, 1204 (Fed. Cir. 2010) ("Accordingly, we have held that, to infringe a claim that recites capability and not actual operation, an accused device 'need only be capable of operating' in the described mode.").

Thus, "capable of activation" collectively means "the ability to bond." The phrase "at a temperature of from 75 to 200 degrees C" indicates the temperature range which the material must have the ability to bond. The term "at a temperature of from 75 to 200 degrees C" needs no construction because one skilled in the art would understand its meaning.

Unifrax's proposed construction implies that if a substance is "capable of activation" outside of the temperature range of 75 to 200 degrees, then the claim limitation is necessarily not met. This is not supported by the specification. The '926 patent describes Bostik L7132R as one example of an adhesive that can be used. (D.I. 288-1, Exh. 4 at 6:1–11). This adhesive has a "minimum activation temperature" of 110 degrees Fahrenheit, or approximately 43 degrees Celsius. (D.I. 292-1, Exh. 8 at DUPON00044473). Thus, the claim requires that the adhesive be able to bond at the claimed range; the claim creates no limitation about whether the adhesive is able to bond outside of the claimed range. Because of this, there is also likely no written

description issue. There is thus no need to construe the claim in a way to avoid encompassing subject matter not mentioned in the specification.

Unifrax also suggests that a construction that covers pressure-sensitive adhesives would not be supported by the specification. The claims and the specification do not suggest that the invention is limited to only heat-activated adhesives. Within the universe of "pressure-sensitive adhesives," it is possible that a subset would have the property of being capable of activation at a temperature of from 75 to 200 degrees C. (*See id.*, Exh. 9). Unifrax argues that the specification discloses only heat-activated adhesives, but such disclosure does not necessarily limit the claims to only those adhesives. For example, the language, "[t]he adhesive layer may be a thermoplastic or thermoset resin," suggests that the adhesive layer could be something other than a thermoplastic or thermoset resin. (D.I. 288-1, Exh. 4 at 2:32–33). Unifrax's position risks limiting the claims to specific embodiments. *See Phillips*, 415 F.3d at 1323 ("For instance, although the specification often describes very specific embodiments of the invention, we have repeatedly warned against confining the claims to those embodiments.").

Unifrax also relies on various pieces of extrinsic evidence to support its position. (*See* D.I. 289-1, Exh. E–G). The evidence does not necessarily support Unifrax's position that if a substance is "capable of activation" outside of the temperature range of 75 to 200 degrees, then the claim limitation is necessarily not met. For example, Dr. Kawka testified that "capable of activation" means "where the adhesive can become adhesive within that range [of the temperatures]." (*Id.*, Exh. G at 124:23–125:9). The evidence also does not necessarily support Unifrax's position that pressure-sensitive adhesives are not covered by the claims. For example, activation is the noun form of activate. One definition of activate is "to render (molecules) capable of reaction or to increase the reactivity of (parts of molecules) by the presence of

neighboring groups." (*Id.*, Exh. F). It is possible that pressure-sensitive adhesives are also capable of "activation." (D.I. 292-1, Exh. 9).

For the foregoing reasons, "capable of activation at a temperature of from 75 to 200 degrees C." is construed as "the ability to bond at a temperature of from 75 to 200 degrees C."

IT IS SO ORDERED this 5 day of May, 2017.

United States District Judge