**NOT FOR PUBLICATION**

UNITED STATES DISTRICT COURT
DISTRICT OF NEW JERSEY

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| E.I. DU PONT DE NEMOURS & COMPANY, Plaintiff, v. MACDERMID, INC., et al. Defendants. | CIVIL ACTION NO. 06-3383 (MLC) **MEMORANDUM OPINION & ORDER** |

**COOPER, District Judge**

Several terms in two patents concerning flexographic printing plates are at issue here. The plaintiff, E.I. du Pont de Nemours & Company ("DuPont"), alleges that the defendant MacDermid Printing Solutions, L.L.C. ("MacDermid") has (1) manufactured and sold flexographic printing elements (a) that directly infringe one or more claims of DuPont's United States Patent No. 6,171,758 B1 ("'758 patent"), and (b) to be used, treated, processed, or developed in a manner that directly infringes one or more claims of DuPont's United States Patent No. 6,773,859 B2 ("'859 patent"), and (2) encouraged others to infringe one or more claims of the '758 patent and '859 patent. (Dkt. entry no. 1, Compl. at ¶¶ 6-9, 14-17.) MacDermid counterclaims, seeking a judgment declaring that (1) it does not infringe either patent, and (2) both patents are invalid. (Dkt. entry no. 73, 2d Am. Answer, Affirmative Defenses & Counterclaims at 14-31.)[1]

[1] MacDermid commenced a separate action against DuPont, alleging, inter alia, the infringement of MacDermid's United States Patent No. RE39,835. See No. 07-4325 (MLC).

DuPont moved to preliminarily enjoin MacDermid from directly infringing the '859 patent; the Court denied that motion. (Dkt. entry no. 31, Mot. for Prelim. Inj.; dkt. entry no. 193, Order; dkt. entry no. 192, Op. ("Prelim. Inj. Op.").) In doing so, the Court tentatively construed some terms contained in claim 1 of the '859 patent. (Prelim. Inj. Op. at 21-53.) The Court now provides a final construction of several disputed terms from the '859 Patent and '758 patent.

The parties filed briefs and documentation to support their respective proposed constructions.[2] The Court considered those papers and heard oral argument (dkt. entry no. 297, Tr.), and thereby conducted a Markman hearing. See Markman v. Westview Instruments, 52 F.3d 967 (Fed. Cir. 1995), aff'd, 517 U.S. 370 (1996). The Court takes into account a "[Proposed] Consent Order

[2] The submissions include: (1) MacDermid's Opening Markman Brief ("MacDermid Opening Brief"), with attached declarations and exhibits (dkt. entry no. 77); (2) DuPont's Opening Claim Construction Brief ("DuPont Opening Brief"), with an attached declaration and exhibits (dkt. entry no. 78); (3) DuPont's Responsive Claim Construction Brief ("DuPont Responsive Brief"), with an attached declaration and exhibits (dkt. entry no. 95); (4) MacDermid's Brief in Opposition to DuPont's Opening Brief ("MacDermid Responsive Brief"), with an attached declaration and exhibits (dkt. entry no. 96); (5) MacDermid's Brief in Reply to DuPont's Responsive Brief ("MacDermid Reply Brief"), with an attached declaration and exhibits (dkt. entry no. 103); (6) an April 30, 2007 letter from DuPont explaining that it would not file a "Reply Claim Construction Brief"; (7) redacted and unredacted versions of MacDermid's Supplemental Claim Construction Memorandum of Law ("MacDermid Supplemental Brief"), with a declaration and exhibits (dkt. entry nos. 223 & 224); and (8) DuPont's Response to MacDermid's Supplemental Claim Construction Brief ("DuPont Supplemental Brief"), with a declaration and an exhibit (dkt. entry no. 231).

on Claim Construction" filed by DuPont for both parties ("Proposed Consent Order"). (Dkt. entry no. 279.) The Court issues the following findings of fact and conclusions of law as to the construction of the claims in the '758 patent and '859 patent.

**BACKGROUND**

**I. The '758 Patent**

**A. The Claims**

The '758 patent is entitled "Dimensionally Stable Flexographic Printing Plates". (Dkt. entry no. 78-1, Decl. of Tricia Bevelock O'Reilly ("O'Reilly Decl."), Ex. B, '758 Patent.) The abstract states that:

> The present invention is a flexographic printing plate having a very low degree of thermal distortion during development. This flexographic printing plate comprises a dimensionally stable substrate and an image bearing relief layer, wherein the thermal distortion of the flexographic printing plate in both the machine and the transverse directions is less than 0.02% when the plate is developed at temperatures in the range from about $100^0$C. to about $180^0$C.

(Id. at Abstract.) The '758 patent is composed of 21 claims, but only claims 1 and 19 are independent. (Id. at cols. 8-10.) DuPont asserts claims 1, 3, 4, 6, and 8 against MacDermid here. The parties disagree as to the meaning of four terms: in claim 1, (1) "dimensionally stable"; (2) "thermal distortion"; and (3) "developed"; and, in claim 4, (4) "thermoplastic elastomeric block copolymer".

Claim 1 of the '758 patent states:

> **1.** A photosensitive plate suitable for use as a flexographic printing plate comprising a dimensionally

> stable, flexible, polymeric substrate and a photosensitive elastomer layer, wherein the plate has a thermal distortion in both the machine and the transverse directions which is less than 0.03% when the plate is exposed to actinic radiation and, after exposure, is developed at temperatures between 100 and 180$^0$ C.

(Id. at col. 8, lines 18-25.)

In turn, claim 4 covers:

> **4**. The plate of claim **1** wherein the photosensitive elastomer layer comprises a thermoplastic elastomeric block copolymer mixed with a cross-linking agent and a photoinitiator.

(Id. at col. 8, lines 31-34.)

**B. Prosecution History**

The application leading to the '758 Patent was filed in November 1994. (Id. at Filed.) In an Office Action mailed in March 1995, the United States Patent and Trademark Office ("PTO") examiner found the claims subject to a restriction or election requirement. (Dkt. entry no. 77-2, Decl. of James Mahanna ("Mahanna Decl."), Ex. 10, '758 Patent Prosecution History ("Prosecution History") at 3-1 to 3-5.) After the applicants filed a response in April 1995 (id. at 5-1 to 5-2), the examiner rejected the claims in an Office Action mailed in June 1995. (Id. at 6-1 to 6-10.) The applicants traversed the rejections in a response filed in August 1995. (Id. at 7-1 to 7-9.) The examiner finally rejected the claims in a November 1995 Office Action. (Id. at 8-1 to 8-12.) The applicants submitted an amendment and response in January 1996. (Id. at 9-1 to 9-7.) They then appealed to the

Board of Patent Appeals and Interferences ("Appeals Board"). (Id. at 11-1.)

The applicants submitted a brief defending the patent claims, which was received in April 1996. (Id. at 12-1 to 12-16.) The examiner also submitted an answer defending the rejections. (Id. at 13-2 to 13-16.) In a decision mailed on June 29, 2000, the Appeals Board disagreed with the examiner and allowed the patent to be issued. (Id. at 18-1 to 18-6.) The '758 patent was issued on January 9, 2001.

**II. The '859 Patent**

The '859 patent was issued on August 10, 2004; it is entitled "Process For Making A Flexographic Printing Plate And A Photosensitive Element For Use In The Process". (O'Reilly Decl., Ex. A, '859 Patent ("'859 Patent").) The abstract discloses:

> The invention relates to a process for preparing a flexographic printing plate from a photosensitive element having a photopolymerizable layer and a thermally removable layer on the photopolymerizable layer. The process includes imagewise exposing the photosensitive element and thermally treating the exposed element to form a relief suitable for use in flexographic printing. The thermally removable layer can be transparent or opaque to actinic radiation. The invention also relates to a photosensitive element for use in this process. The photosensitive element includes a photopolymerizable layer and at least one thermally removable layer having a filler and a binder, wherein the binder is less than 49% by weight, based on the total weight of the binder and filler.

(Id. at Abstract.) The '859 patent is composed of 54 claims, but only claims 1 and 51 are independent. (Id. at cols. 43-48.) DuPont alleges infringement of claims 1(1)(a), 6, 21, 22, 30, 33,

36, 40, 41, and 48. The parties advance different constructions of five terms: in claim 1, (1) "softening or melting temperature"; (2) "filler"; and (3) "particulate material"; and, in claim 21, (4) "release layer"; and (5) "surface modifying layer".

Claim 1 states:

> **1**. A process for making a flexographic printing plate comprising:
> 1) providing a photosensitive element comprising: at least one photopolymerizable layer on a support comprising an elastomeric binder, at least one monomer, and a photoinitiator, and at least one thermally removable layer disposed above the photopolymerizable layer, the thermally removable layer selected from the group consisting of
> **(a)** an actinic radiation opaque layer comprising (i) at least one infrared absorbing material, (ii) a radiation opaque material, wherein (i) and (ii) can be the same or different, and at least one binder having a softening or melting temperature less than $190^0$C.;
> **(b)** a layer of a composition comprising at least one binder and filler, wherein the binder is less than 49% by weight based on the total weight of the binder and filler, and
> **(c)** a layer of particulate material having particle size of less than 23 micrometers;
> 2) imagewise exposing the photopolymerizable layer to actinic radiation forming polymerized portions and unpolymerized portions; and
> 3) thermally treating the element of step 2) by heating to a temperature sufficient to remove the thermally removable layer and to remove the unpolymerized portions of the photopolymerizable layer and form a relief.

(Id. at col. 43, lines 34-40.)

Claim 21 states:

> **21**. The process of claim **1** wherein the photosensitive element further comprises at least one more additional layer selected from the group consisting of:
> release layer, adhesion-modifying layer, barrier layer, and surface modifying layer, wherein the at

least one more additional layer is transparent to actinic radiation.

(Id. at col. 45, lines 16-21.)

**DISCUSSION**

**I. Applicable Legal Standards**

The Court, in a patent infringement inquiry, first determines the scope and meaning of the patent claims as a matter of law. Markman, 52 F.3d at 979. The Court then compares the allegedly infringing device to each claim at issue to determine if "all of the limitations of at least one claim are present, either literally or by substantial equivalent, in the accused device." Teleflex, Inc. v. Ficosa N. Am. Corp., 299 F.3d 1313, 1323 (Fed. Cir. 2002). The Court is primarily concerned with the first step here.

There is a heavy presumption that a claim term carries its ordinary and customary meaning. CCS Fitness v. Brunswick Corp., 288 F.3d 1359, 1366 (Fed. Cir. 2002). The ordinary and customary meaning of a claim term is the meaning that a "person of ordinary skill in the art in question" would give such a term on the effective filing date of the patent application. Phillips v. AWH Corp., 415 F.3d 1303, 1313 (Fed. Cir. 2005). Such a person is deemed to interpret the claim term in the context of the entire patent, including the specification and prosecution history. Id. Thus, the words in a claim are generally given their ordinary and customary meaning in the absence of a contrary indication in the

patent specification or file history. Wolverine World Wide v. Nike, Inc., 38 F.3d 1192, 1196 (Fed. Cir. 1994).

When interpreting an asserted patent claim, the Court looks first to the intrinsic evidence of record, which includes the patent's claims, specification, and complete prosecution history. Such intrinsic evidence is the most significant source for the legally operative meaning of disputed claim language. Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1583 (Fed. Cir. 1996). In reviewing the intrinsic evidence, the Court considers the context in which a term is used within both the claim at issue and the claims not at issue. Phillips, 415 F.3d at 1314. The same term appearing in different claims should generally be given the same meaning unless it is clear from the specification and prosecution history that the term at issue has a different meaning from claim to claim. Fin Control Sys. Pty v. OAM, Inc., 265 F.3d 1311, 1318 (Fed. Cir. 2001). Similarly, differences between claims can be useful in arriving at the proper construction. Phillips, 415 F.3d at 1314. Under the doctrine of claim differentiation, the presence of a dependent claim adding a further limitation raises a presumption that the same limitation is not present in the independent claim. Phillips, 415 F.3d at 1315; RF Del. v. Pac. Keystone Techs., 326 F.3d 1255, 1263 (Fed. Cir. 2003). But such a presumption may be trumped by a clear and unambiguous disclaimer. Seachange Int'l v. C-COR Inc., 413 F.3d 1361, 1369 (Fed. Cir. 2005).

The specification is always highly relevant to the claim construction analysis, and is the single best guide to the meaning of a disputed term. Honeywell Int'l v. ITT Indus., 452 F.3d 1312, 1318 (Fed. Cir. 2006). The specification may contain an intentional disclaimer or a disavowal of claim scope by the inventor, in which case the inventor's intention, expressed in the specification, is dispositive. Phillips, 415 F.3d at 1316. But it is improper to read a limitation from the specification into the claims themselves. Teleflex, 299 F.3d at 1326. Therefore, the Court should "not import limitations from a preferred embodiment" described in the specification. Seachange Int'l, 413 F.3d at 1377.

The prosecution history shows (1) how the inventor understood the patent, and (2) whether the inventor limited the invention during the course of the patent prosecution, thus narrowing the scope of the ultimately patented product. Phillips, 415 F.3d at 1317. As the prosecution history reflects ongoing negotiations between the inventor and the PTO, it is often less clear and less useful than the specification. Id.

The Court may in certain circumstances consider "extrinsic evidence", including "expert and inventor testimony, dictionaries, and learned treatises." Phillips, 415 F.3d at 1317. In general, such evidence is less reliable than its intrinsic counterparts. Id. at 1318. In some situations, the ordinary meaning of claim language as understood by a person of skill in the art will be

readily apparent, and claim construction will then involve the simple application of the widely accepted meanings of commonly understood words. Id. at 1314. In such circumstances, general purpose dictionaries may be helpful. Id. However, "heavy reliance on the dictionary divorced from the intrinsic evidence risks transforming the meaning of the claim term to the artisan into the meaning of the term in the abstract, out of its particular context, which is the specification." Id. at 1321. Also, expert evidence may be useful for certain limited purposes. Id. at 1318. However, unsupported assertions by experts as to the definition of a claim term are not useful, and the after-the-fact testimony of the inventor is accorded little if any weight in the claim construction inquiry. Id.; Bell & Howell Document Mgmt Prods. Co. v. Altek Sys., 132 F.3d 701, 706 (Fed. Cir. 1997).

If, after applying these principles, the Court concludes that a claim term remains "insolubly ambiguous", it must hold that the claim limitation is indefinite. Honeywell v. Int'l Trade Comm'n, 341 F.3d 1332, 1340-42 (Fed. Cir. 2003). When that occurs, the Court must strike down all claims of which the term is a part as indefinite and therefore invalid pursuant to 35 U.S.C. § 112. Aero Prods. Int'l v. Intex Recreation, 466 F.3d 1000, 1005 (Fed. Cir. 2006).

**II. Legal Standards Applied Here**

The parties have reduced the number of terms in dispute to nine, specifically four terms in the '758 patent and five terms

in the '859 patent. The Court therefore only addresses these remaining disputed terms here. It is noted that the parties have submitted a Proposed Consent Order as to a number of terms no longer in dispute, which the Court will enter along with this Opinion and Order

**A. Construction of the '758 Patent**

**1. Claim 1**

**a. "dimensionally stable"**

DuPont proposes this construction of the term "dimensionally stable": "a polymeric substrate that results in a flexographic printing plate having thermal distortion of less than 0.03% when developed at temperatures between 100 and 180$^0$C, or [results in] an individual polymeric substrate having less than 0.07% distortion when heated to temperatures from 110 to 180$^0$C". (DuPont Opening Br. at 21.) The first component of this proposed construction deals with the meaning of the term "dimensionally stable" as used in claim 1. ('758 Patent at col. 8, lines 18-25.) The second component addresses the use of this term in claim 19. (Id. at col. 10, lines 1-6.)

MacDermid proposes this construction, which it actually modified over the course of the claim construction proceedings:

> A flexible polymeric substrate whose dimensional stability has been controlled through a special annealing process, namely an annealing process that: (1) is in addition and subsequent to the heat treating steps associated with manufacturing the polymeric film, (2) is not the process of bonding the photosensitive elastomer layer to the polymeric substrate, and (3) comprises: (i) heating the substrate to a temperature above its glass

> transition temperature but below its melting temperature and at or greater than the temperature to which the substrate is later subjected during thermal development, (ii) at tensions of less than 200 psi, and (iii) for a time greater than the time required to bring the film to the annealing temperature, such that a specially annealed substrate has less thermally induced distortion than a non-specially annealed substrate.

(MacDermid Supplemental Br. at 3-4.) The parties devoted much attention to this term in their briefing, with the supplemental briefing exclusively concerned with the proper construction of this term, and at the Markman hearing. They raise a range of complicated issues, but the heart of the dispute appears to be over whether the claim term at issue here should be construed as limited to a so-called "special annealing process."

DuPont argues that: (1) its own construction is supported by (a) the plain language of claim 1, which defines "dimensionally stable" by reference to the thermal distortion limit of 0.03%, and (b) the specification, which also indicates that the term should be defined by reference to the thermal distortion limit and otherwise states that "[t]he present invention is a flexographic printing plate having a very low degree of thermal distortion during development" ('758 Patent at col. 1, lines 51-53); (2) MacDermid's proposed construction improperly imports process limitations from the specification into a product claim and otherwise improperly limits the claim to a preferred embodiment; (3) the specification lacks the clear disavowal required to adopt MacDermid's proposed construction; (4) the term "special annealing

process" is not used in the claims; (5) the specification only mentions the term "special annealing process" once, in the context of discussing a preferred embodiment using semicrystalline polymers; (6) such semicrystalline polymers are actually claimed in dependent claim 7, and, under the doctrine of claim differentiation, this embodiment should not be read into the broader claim 1; (7) because of the examiner's determination that the applicants had to choose between the product and the process claims, the applicants actually cancelled claim 23, which claimed a method of making a flexible photosensitive element by "annealing a semi-crystalline polymeric firm at temperatures of at least $120^0$C and tensions less than $1.4 \times 10^6$ N/$m^2$" and "by coating onto the annealed polymeric film a photopolymerizable composition" (Prosecution History at 1-21 (emphasis added)); (8) to overcome the examiner's inherency rejection, the applicants merely had to demonstrate one example of a plate made with the same substrate that did not achieve the claimed thermal distortion, and such a demonstration did not amount to the requisite clear disavowal of claim scope; (9) the prosecution history otherwise lacks any such disavowals; (10) MacDermid's requirement in subsection (1) of its proposed construction that the annealing process be in addition and subsequent to the heat treating steps associated with manufacturing the film is not found in the claims themselves; (11) MacDermid's additional requirements, found in subsections

(2) and (3) of its proposed construction, also are not found in either the claims, the specification, or the prosecution history; and (12) these additional steps are actually covered in dependent claims 9 and 16 and therefore it would be inappropriate to read them into claim 1 given the claim differentiation doctrine. (DuPont Opening Br. at 17-20; DuPont Responsive Br. at 2-12; DuPont Supplemental Br. at 1-20; Tr. at 69-84, 186-94.)

MacDermid, in contrast, argues that: (1) DuPont's proposed construction ignores the requirement of a special, further, and important annealing step, which was used by the applicants to secure the issuance of the '758 patent; (2) DuPont's proposed construction collapses the term "dimensionally stable" into the term "thermal distortion", thereby effectively eliminating the "dimensionally stable" limitation from the claim itself; (3) DuPont's approach improperly grants it a right to exclude as to all thermally developed plates with favorable thermal distortion regardless of how this distortion result is achieved and even though the patent itself describes only one means to achieve this result; (4) the specification supports MacDermid's proposed construction because it: (a) describes the problem of thermal distortion, (b) states that a "special annealing process" solves this problem, (c) identifies the "special annealing process" as comprised of the three parameters of temperature, tension, and time, (d) discusses these three parameters in some detail, (e)

notes that various annealing methods exist, such as air-oven annealing, hot can annealing, or combinations of such methods, and (f) provides four examples wherein the annealed samples are compared to non-annealed samples; (5) the prosecution history further supports its proposed construction because — to overcome the examiner's rejections, distinguish prior art, and prevail on appeal — the applicants repeatedly relied upon the "special annealing process", and the Appeals Board cited their annealing arguments to reverse the examiner's rejections; (6) the extrinsic evidence, including the deposition testimony of an inventor, supports the "special annealing process" construction; and (7) as a matter of law, (a) the applicants intentionally and clearly disclaimed or disavowed the claim scope and otherwise disparaged non-annealed substrates and photosensitive plates made with non-annealed substrates, (b) the claims must be construed in light of the prosecution history, as the applicants successfully argued that their claims were enabled and distinguished from prior art due to the "special annealing process", (c) the extrinsic evidence, although less significant than the intrinsic evidence, should be viewed as supporting the proposed construction, (d) MacDermid's proposed construction does not improperly import limitations from a preferred embodiment, as it relies on the specification's identification of the "special annealing process" as the inventors' "discovery", and (e) the "special annealing

process" should be treated as part of the product claims because the process steps form an essential part of the invention. (MacDermid Opening Br. at 8-20; MacDermid Responsive Br. at 15-25; MacDermid Reply Br. at 1-8; MacDermid Supplemental Br. at 1-29; Tr. at 92-142.)

Both parties have presented reasonable — if complicated — arguments for the Court to consider. But the Court agrees with MacDermid's proposed construction, in view of the specification and the prosecution history of the '758 patent itself.

As MacDermid explains, the patent specification repeatedly highlights the importance of annealing. The specification even states that "[t]he desirability of such semicrystalline polymers arises from the discovery that dimensional stability of these polymer substrates may be controlled through a special annealing process." ('758 Patent at col. 2, lines 55-59.) In addition to mentioning different annealing methods, the specification explains this annealing process, focusing on temperature, tension, and time. (Id. at col. 2, lines 59-67, col. 3, lines 1-26.) The specification then provides four examples, in which the crucial distinguishing feature of the testing was whether the tested samples were in fact subjected to annealing. (Id. at col. 5, lines 26-66, col. 6, lines 1-67, col. 7, lines 1-67, col. 8, lines 1-16.) In turn, the applicants significantly found that the annealed samples showed less thermal distortion than their non-annealed counterparts. (Id.)

The prosecution history also supports MacDermid's proposed construction. In overcoming the examiner's rejections, the applicants repeatedly emphasized the whole notion of annealing. Indeed, in their August 1995 response, the applicants responded to the examiner's 35 U.S.C. § 103 obviousness rejection by stating:

> The concept that all flexographic printing plates, including those disclosed in Martens and Prioleau, will have some "inherent" degree of thermal distortion, does not overcome Martens' and Prioleau's lack of teaching or suggestion as to the importance or desirability of dimensional stability. There is no basis for the inference that the inherent degree of distortion in Martens' and Prioleau's plates is in the range claimed. In fact, the Examples in the specification show that absent a critical annealing step, many polymeric films, including PEN and PET films, and plates made from such films do not meet the low distortion levels claimed in the present invention.

(Prosecution History at 7-5 (emphasis added).) As to the 35 U.S.C. § 112 enablement rejection, the applicants argued "that Examples 3 and 4 additionally provide support and enablement for the invention as described in Claim 1." (Id. at 7-3.) In their subsequent January 1996 response, the applicants defended their claims against an anticipation rejection under 35 U.S.C. § 102 by asserting:

> The rejection indicates that, nevertheless, Martens or Prioleau anticipate the present claims because they disclose substrate materials, e.g., polyethylene terephthalate, which the Examiner asserts "inherently have the characteristic of experiencing" low thermal distortion. There is no basis for the assertion that Martens' and Prioleau's plates or substrates inherently possess the degree of distortion in the range claimed. In fact, the Examples in the specification show that absent further treatment by annealing, many polymeric films, including polyethylene naphthalate and

> polyethethelene terephthalate films, and plates made from such films do not meet the low distortion levels claimed in the present invention. Example 4, which discusses plates made with polyethethelene terephthalate substrates, clearly demonstrates that not all polyethylene terephthalate films will yield plates having the claimed maximum distortion levels. The other examples show similar findings for polyethylene naphthalate films. Therefore, the specification clearly rebuts the assertion that polyethylene terephthalate films and plates made from such inherently have the characteristic of low thermal distortion as required by the claims. In view of the clear evidence set forth in the specification, Applicants respectfully assert that this rejection under 35 U.S.C. 102(b) is improper and should be withdrawn.

(Id. at 9-3 to 9-4 (emphasis added).) Responding to the obviousness rejection, the applicants again emphasized the importance of the annealing process:

> The Martens patents and Prioleau are addressed to photosensitive plates and flexographic printing plates made therefrom having specific chemistry and construction. These patents do disclose that the plates can have polymeric substrates. The Examiner acknowledges that these references do not teach the important annealing step which enables one to achieve the very low degrees of distortion. Locey teaches a specific method of heat treating film to avoid draw lines which are out-of-plane distortions of biaxially oriented film. Lu teaches an alternate method of providing films that have thermal distortions less than 0.5%. However, Lu does not contain any specific showing that distortions of 0.07% or less can be obtained.

(Id. at 9-5 (emphasis added).)

The brief filed by the applicants with the Appeals Board contained even more pointed references to the "special annealing process." At the end of the "Summary of the Invention" section, the applicants stated:

> Applicants have achieved such reduced levels of thermal distortion by subjecting the substrate of the plate to

> a special annealing process. This process is described at page 4, line 15 through page 6, line 190 of the specification.

(Id. at 12-6 (emphasis added).) They then reiterated many of the same arguments they had previously made to the examiner. Dealing with the anticipation rejection, the applicants stated that "the examples in the specification of the present invention show that absent further treatment by annealing, many polymeric films (including polyethylene naphthalate and polyethylene terephthalate films) and plates made from such films do not meet the low distortion levels claimed in the present invention." (Id. at 12-9 (emphasis added).) The applicants discussed the four examples, noting the different thermal distortion results obtained based on whether the samples had been annealed. (Id.) As to the issue of obviousness, the applicants emphasized that "[t]he Examiner acknowledges that these references do not teach the important annealing step which enables one to achieve the very low degrees of thermal distortion." (Id. at 12-11 (emphasis added).)

The applicants' contentions were successful, and the Appeals Board allowed the patent to be issued. The Appeals Board even relied on the annealing arguments in its June 29, 2000 decision, stating that:

> Each of the § 102 rejections before us on this appeal is based upon the examiner's proposition that the respective plates of the applied references inherently possess limited distortion within the here claimed ranges because the prior art and here claimed plates may be manufactured from the same polymeric material,

> namely, polyethylene terephthalate. The appellants point out, however, that polyethylene terephthalate printing plates which are not annealed in accordance with their disclosed invention (i.e., the plates of Martens, Gibson or Worns) do not necessarily and inherently possess distortion values within the appealed claim ranges as evidenced by Example 4 including Table IV on pages 13 and 14 of the subject specification. Significantly, the examiner has not responded meaningfully to the appellants' point on this matter.
>
> . . . . Under the circumstances recounted above, it is clear that the record before us on this appeal reflects that polyethylene terephthalate printing plates which have not been subjected to the annealing process disclosed by the appellants, that is, the plates of the references under consideration, do not necessarily and inherently possess the appellants' claimed distortion values.

(Id. at 18-3 to 18-4 (emphasis added).) The Appeals Board then "perceive[d] substantial merit in the appellants' arguments against the examiner's conclusion of obviousness." (Id. at 18-4.)

The Court thus construes the term "dimensionally stable" in light of the clear and unambiguous statements regarding the annealing process made in both the specification and over the course of the prosecution history. Cf., e.g., Novo Nordisk A/S v. Sanofi-Aventis U.S., No. 07-3206, 2009 WL 2185905, at *8 (D.N.J. July 22, 2009) ("The Court concludes that the specification and the prosecution history do not include expressions of manifest exclusion or restriction, representing a clear disavowal of claim scope, that demonstrate an intent to limit the invention to devices that have a gearbox and a non-rotatable piston rod" (citing Teleflex, 299 F.3d at 1327-28)). The Court therefore adopts the construction proposed by MacDermid.

**b. "thermal distortion"**

DuPont asks the Court to construe the term "thermal distortion" as meaning "[t]he magnitude of change in the machine and transverse direction caused by thermal development of the flexographic printing plate." (DuPont Responsive Br. at 13.) But MacDermid advances the following construction of this term: "The magnitude of plate image distortion in the machine and transverse direction caused by thermal development of the flexographic printing plate that is measured by comparing the developed image of the flexographic printing plate with the image of the negative phototool." (MacDermid Opening Br. at 20.)

DuPont contends that its proposed construction should be adopted because it is: (1) supported by the plain language of claim 1 itself, which refers to thermal distortion "in both the machine and the transverse directions" ('758 Patent at col. 8, lines 21-22); (2) consistent with the specification, which states that the "[t]he thermal distortion (includes both elongation and shrinkage) of the plate in both the machine and the transverse directions is less than 0.03%" (id. at col. 2, lines 22-24) and (in Example 1) that "[t]he amount of distortion was well balanced between the machine and transverse directions" (id. at col. 5, lines 44-46); and (3) "[s]imple and straightforward" (Tr. at 84). (DuPont Responsive Br. at 12; Tr. at 84-88.)

As to MacDermid's proposed construction, DuPont argues that: (1) the '758 patent and its prosecution history are not limited to

phototools or analog printing plates; (2) although the '758 patent contains no express "digital" references, "[i]t is well settled law that the '758 patent does not have to expressly describe embodiments directed to digitally imaged flexographic printing plates for the claims to be construed to cover digitally imaged plates" (DuPont Responsive Br. at 14 (citations omitted)); and (3) the proposed construction would require use of a single measuring technique even though the specification provides several examples of how to measure thermal distortion. (DuPont Responsive Br. at 13-14; Tr. at 84-88.)

DuPont counters MacDermid's assertions that DuPont's proposed construction would render the '758 patent insolubly ambiguous and indefinite by arguing that: (1) "[t]hermal distortion of an analog plate, a digitally imaged plate or the individual polymeric substrate are all easily measured by comparing the dimensions of the plate or substrate before and after being developed with heat" (DuPont Responsive Br. at 15); (2) in contrast to the infringer in Honeywell v. International Trade Commission, 341 F.3d 1332 (Fed. Cir. 2003), "MacDermid can only point to the arguments of its attorneys, not credible factual evidence, to support its contention that the particular method used to determine thermal distortion is 'critical' to determining thermal distortion" (DuPont Responsive Br. at 16); and (3) the patent does not have to describe a specific and exclusive measurement technique, as a

person of ordinary skill in the art would know how to conduct the proper measurement and, at a trial, the parties' experts will explain how they measured the distortion. (Id. at 15-16; Tr. at 182-86.)

MacDermid defends its proffered construction on the grounds that: (1) the specification "only describes analog plates, analog imaging, and a measurement technique for thermal distortion of analog imaged plates" (MacDermid Opening Br. at 21); (2) the measurement of thermal distortion of the plate is only described in Examples 3 and 4 of the specification, and, in both instances, the method measures the developed image against the image on the "negative" ('758 Patent at col. 7, lines 16, 58-59); (3) the measurement technique identified in Examples 3 and 4 in the specification cannot be used with digitally imaged plates because "the in situ mask is thermally processed (and destroyed) during development" (MacDermid Opening Br. at 22); (4) the prosecution history confirms that the exclusive method of measuring thermal distortion is found in Examples 3 and 4, with the applicants stating "that Examples 3 and 4 additionally provide support and enablement for the invention as described in Claim 1" to overcome the examiner's enablement rejection (Prosecution History at 7-3); and (5) any construction of "thermal distortion" to include digital flexographic plates would render the claims invalid for failure to meet the enablement requirement and invalidate the claims of

the subsequent '859 patent on anticipation grounds. (MacDermid Opening Br. at 20-23; MacDermid Reply Br. at 9-10; Tr. at 142-54.)

MacDermid also argues that DuPont's proposed construction of "thermal distortion" must be rejected because it would "render the claim limitation 'insolubly ambiguous' and indefinite." (MacDermid Opening Br. at 23.) Specifically, it contends that:

> First, as noted, the '758 specification fails to describe any measurement technique of "thermal distortion" of a printing plate other than comparing the imaged surface to the analog phototool. Second, one could conceive of innumerable measurement techniques for "thermal distortion" of an imaged plate. Third, and most significant to the Court's evaluation of indefiniteness, these measurement techniques can result in varied and disparate results.

(Id. at 24.) According to MacDermid, the Court confronts a situation similar to the one addressed in Honeywell:

> [T]here are two possible constructions of "thermal distortion" – the first is an "any one method" and the second is an "all methods." No guidance is given to the Court (or the public) as to which construction is correct, particularly, in the context of a digitally imaged plate. Moreover, different and potentially contradictory results are reached depending on the measurement method employed and/or the equipment used.

(Id. at 25-26.) MacDermid also contends that Examples 1 and 2 of the '758 patent, cited by DuPont, provide two methods to measure the thermal distortion of the substrate, but that claim 1 is concerned with the thermal distortion of the plate while claim 19 expressly addresses the "distortion" in the "said polymeric substrate" ('758 Patent at col. 10, lines 4-5). (Tr. at 142-52.) MacDermid asserts that DuPont's proposed construction fails to define what should be measured and how it should be measured, and

that DuPont improperly leaves it up to a jury to decide which measurement methodology is correct and thereby usurps the Court's responsibility of defining the scope of a patent claim. (Id.)

The parties present the Court with a difficult choice with their contentions. But the Court agrees with DuPont's arguments and adopts its simple and common-sense construction, which also has substantial support in the intrinsic evidence. It would be inappropriate to strike down this construction as indefinite, at least at this juncture. Thus, "thermal distortion" is construed to mean "the magnitude of change in the machine and transverse direction caused by thermal development of the flexographic printing plate."

**c. "developed"**

DuPont asserts that the term "developed" should be construed to mean "[t]reated to form a flexographic printing plate." (DuPont Responsive Br. at 18.) But MacDermid defines the term as the "[r]emoval of unexposed, uncured portions of the photosensitive elastomer layer." (MacDermid Opening Br. at 32.)

DuPont argues that its proposed construction is supported by (1) the word's commonly accepted definition, and (2) the intrinsic evidence and context of the '758 patent, which is directed to a photosensitive element that can be thermally developed to form a flexographic printing plate. (DuPont Responsive Br. at 18-19; Tr. at 89-92.) It also attacks MacDermid's proposed construction as

too narrow because it does not cover the removal of other layers such as the in situ mask. (Tr. at 89-92.) MacDermid contends that its approach is supported by language contained in the patent's specification. (MacDermid Opening Br. at 32; Tr. at 154-56.) MacDermid further attacks DuPont's alternative construction as too broad and unduly ambiguous. (Tr. at 154-56.)

The Court agrees with MacDermid. The specification for the '758 patent defines "developed" by stating: (1) "In a thermal development process, the photosensitive layer, which has been image-wise exposed to actinic radiation, is contacted with an absorbent layer at a temperature sufficient to cause the composition in the unexposed portions of the photosensitive layer to soften or melt and flow into the absorbent material" ('758 Patent at col. 1, lines 41-46); and (2) "'Developing temperature' is the temperature to which the imagewise exposed photosensitive layer is heated to remove the uncured portions of the layer" (id. at col. 2, lines 5-7). The Court therefore construes "developed" as meaning the "removal of unexposed, uncured portions of the photosensitive elastomer layer."

**2. Claim 4, "thermoplastic elastomeric block copolymer"**

The parties did not address the proper construction of "thermoplastic elastomeric block copolymer" at the hearing, as they hoped to arrive at an agreement on this term. (10-27-09 Letter at 1.) They have not done so, and now ask the Court to construe the term after considering their respective briefs.

(Id.) According to DuPont, the Court should construe the term to mean: "A class of polymeric materials composed of two or more comonomeric units in extended segments having hard and soft blocks." (DuPont Responsive Br. at 19-20.) MacDermid offers the following construction: "Any one of a class of elastic polymers containing long stretches of two or more monomeric units linked together by chemical valences in one signal chain that become soft when heated and returns to its original condition when cooled." (MacDermid Opening Br. at 32.)

DuPont asks the Court to adopt its proposed construction, as: (1) the patent's specification provides examples of acceptable "thermoplastic elastomeric block copolymers" ('758 Patent at col. 4, lines 13-26); (2) the specification also states that: "The elastomeric block copolymer is preferably an A-B-A- type block copolymer, where A is a nonelastomeric block, preferably a vinyl polymer and most preferably polystyrene and B is an elastomeric block, preferably polybutadiene or polyisoprene. The nonelastomer to elastomer ratio is preferably in the range of from 10:90 to 35:65" (id. at col. 4, lines 15-21); (3) "even though the patent does not expressly provide a definition of this phrase, it is readily understood by those of ordinary skill in the art in the context of '758 patent" (DuPont Responsive Br. at 20 (citing dictionary definitions)); and (4) the construction proposed by MacDermid is not consistent with the intrinsic evidence and is improperly cobbled together from separate dictionary definitions

of "thermoplastic", "elastomer", and "block co-polymer". (DuPont Responsive Br. at 19-20.) MacDermid contends that its proposed construction should be adopted because: (1) the "non-limited list of preferred substances" provided in the specification "is not a proper construction as the Federal Circuit has held numerous times that one cannot limit a construction to only those preferred embodiments found in the specification" (MacDermid Opening Br. at 33 (citation omitted)); and (2) its proposed construction of this term, which is "common in the field of flexography", is supported by Hawley's Condensed Chemical Dictionary's definitions of "thermoplastic," "elastomer," and "block co-polymer" (id. at 33 (citing definitions)).

The Court, upon considering the parties' respective arguments and the intrinsic and extrinsic evidence, agrees with DuPont. Accordingly, the term "thermoplastic elastomeric block copolymer" is construed to mean "a class of polymeric materials composed of two or more comonomeric units in extended segments having hard and soft blocks."

**B. Construction of the '859 Patent**

**1. Claim 1**

**a. "softening or melting temperature"**

The Court tentatively construed the term "softening or melting temperature" in its Preliminary Injunction Opinion "as referring to any temperature at which the viscosity of the binder contained in the photopolymerizable layer will be reduced to such

a point that the thermally removable layer, or portions thereof, may be removed by absorbing material." (Prelim. Inj. Op. at 44-45.) The Court, in reaching this conclusion, expressly considered and rejected MacDermid's contention that the term itself is indefinite. (Id. at 42-45.)

At the subsequent Markman hearing, MacDermid attacked the tentative construction and asserted that the term at issue is irreparably indefinite. (Tr. at 157-71.) Evidently accepting the validity of the melting temperature component, it contends that "we have a critically fatal indefiniteness problem with respect to the softening part." (Id. at 157.) MacDermid argues:

> We believe that the binder in this part of the claim needs to be directed to the binder of the thermally removable layer[,] not the photopolymerizable layer. Secondly, we don't believe that it can be any temperature. It needs to be a particular temperature in order to be definite. And then third, and I think probably most important is Your Honor's construction is functional. It doesn't define the class of binders by what they are. It defines them by how they operate in this particular process, and, therefore, they're functional.

(Id. at 158.) MacDermid contends that the specification (1) does not define the notion of "softening temperature", leaving no way to know exactly what softening is, when it happens, and how to measure it, and (2) creates further uncertainty by "say[ing] some of the above materials do not have an actual softening or melting point." (Id. at 159-60.) As to the extrinsic evidence, MacDermid notes that "softening temperature" is defined as "the temperature at which material transforms a specific amount when measured under

specific examination conditions, i.e., depends on how you measure it and under what circumstances you measure it." (Id. at 160.) Citing Halliburton Energy Services v. M-I LLC, 514 F.3d 1244 (Fed. Cir. 2008), Datamize, LLC v. Plumtree Software, 417 F.3d 1342 (Fed. Cir. 2005), and Honeywell Int'l v. Int'l Trade Comm'n, 341 F.3d 1332 (Fed. Cir. 2003), MacDermid argues that (1) the term is indefinite, (2) the applicant could have adopted an "ISO-known standard", or another objective method or standard, to measure softening, and (3) the Court's functional approach thus does not provide a meaningfully definite boundary because external circumstances affect the softening of different materials, thereby causing the boundary to shift impermissibly. (Id. at 161-67; see Mahanna Decl. Exs. 4-5.)

DuPont defends the Court's tentative construction, with some minor modifications. (Tr. at 44-47, 179-82.) It proposes the following construction: "Any temperature at which the viscosity of the binder will be reduced to such a point that the thermally removable layer, or portions thereof, may be removed." (Tr. at 44 (referring to slide).) It suggests the removal of the statement that the binder is contained in the photopolymerizable layer because "the binder is actually in the actinic radiation opaque layer." (Id. at 45.) It then recommends the removal of the phrase "by absorbing material" because such a process is addressed in claim 36. (Id.) As to MacDermid's assertions of indefiniteness, DuPont argues that MacDermid's position is

inconsistent with language contained in the specification and its own expert's declaration. (Id. at 46-47.) DuPont explains that:

> [T]heir expert had no problem construing it. Their expert said, "It's the temperature at which the material becomes inviscid enough to flow, and the purpose of specifying a softening temperature or melting temperature is to insure the flow and, therefore, thermal development -" he's talking about this patent "- can occur at a reasonable processing and developing temperature."

(Id. at 46 (quoting D.I. 44-6 at 6-7).)

MacDermid's contentions are reasonable, but the Court is not persuaded to find the term "softening or melting temperature" indefinite. The Court continues to adhere to the finding in the Preliminary Injunction Opinion that "the intrinsic evidence, including the specification and the context in which the term is used in limitation 1(a) of claim 1, provides a sufficient basis for construing 'softening or melting temperature.'" (Prelim. Inj. Op. at 44 (quoting Phillips, 415 F.3d at 1314-15).) After summarizing MacDermid's indefiniteness assertions, the Court explained:

> The specification contains the following statements, which reference the "softening" or "melting" of the thermally removal layer:
>
> Thermally treating the element includes heating the exposed photopolymerizable layer and the thermally removable layer at a temperature sufficient to cause the unexposed (uncured) portions of the element to soften or melt or flow, and contacting the layer to an absorbent surface to absorb the melt or flow portions. The polymerized areas of the photopolymerizable layer have a higher melting temperature than the unpolymerized areas and therefore do not melt, soften, or flow at the development temperatures. The term "melt" is used to describe the behavior of the

> unirradiated portions of the photopolymerizable elastomeric layer subjected to an elevated temperature that softens and reduces the viscosity to permit flow and absorption by the absorbent material. (Taylor Decl., Ex. 1, '859 patent, at col. 20, lines 47-60.)
>
> [S]o the process functions to absorb the heated composition layer at any temperature above some threshold for absorption in the absorbent material. A wide temperature range may be utilized to "melt" the composition layer for the purposes of this invention. (Id. at col. 20, lines 63-67.)
>
> The photopolymerizable layer and the thermally removable layer/s are heated by conduction, convection, radiation, or other heating methods to a temperature sufficient to effect melting of the uncured portions but not so high as to effect distortion of the cured portions of the layer. The photosensitive element is heated to a surface temperature above about $40^0$C.; preferably from about $40^0$C. to about $230^0$C. (104-$446^0$F.), more preferably from about 100 to $200^0$C., and most preferably from 100 to $160^0$C. in order to effect melting or flowing of the uncured portions of the photopolymerizable layer and the thermally removable layer. The absorbent material contacts the surface of the heated photosensitive element, and absorbs the softened or molten or flowing portions of the elastomeric layer from the unirradiated portions, forming a flexographic printing plate in which the uncured portions are removed to form a relief pattern or surface. The thermally removable layer disposed above the photopolymerizable layer may soften or melt or flow and be absorbed as well by the absorbent material. (Id. at col. 21, lines 8-27.)
>
> Thus, there are multiple references in the specification establishing that the "softening or melting temperature" refers only to the temperature necessary to sufficiently reduce the viscosity of the binder contained in the thermally removable layer so that such layer may be absorbed by the absorbent material.

(Id. at 43-44.) This reasoning, made in the context of the Preliminary Injunction Opinion, is re-affirmed and adopted for

claim construction purposes. But the Court accepts the seemingly minor and evidently uncontested changes suggested by DuPont. Accordingly, "softening or melting temperature" means "any temperature at which the viscosity of the binder will be reduced to such a point that the thermally removable layer, or portions thereof, may be removed."

**b. "filler"**

MacDermid argues that the term "filler" should be defined as referring to: "An inert material consisting of fine particles. The filler may be colorless and transparent or have color and be nontransparent." (MacDermid Opening Br. at 40.) DuPont does not respond to MacDermid's proposed construction in its briefing. The Court, in the Preliminary Injunction Opinion, assumed "that DuPont accept[ed] MacDermid's proposed construction of those terms or phrases that DuPont did not address in its brief." (Prelim. Inj. Op. at 22 n.5.)

DuPont contended at the Markman hearing that there is no need for the term to be construed because it (1) does not assert the specific Markush member containing this term, and (2) would be readily understood by a person of ordinary skill in the art. (Tr. at 47-50.) It further argues that MacDermid's proposed construction improperly reads examples from the specification into the claim. (Id. at 48.) But MacDermid contends that its proposed construction is supported by: (1) Hawley's definition

of the term as an inert mineral powder used in plastic products and rubber mix; (2) the specification's statement that the filler is a fine powder that may have color or be colorless; and (3) the specification's subsequent statement that a colorless particulate matter forms a transparent layer while a particulate matter having color forms a nontransparent layer. (MacDermid Opening Br. at 40-41; Tr. at 175-77.) MacDermid further contends that the term must be construed because invalidity of one member of a Markush group invalidates the entire group. (Tr. at 175-77.)

The Court finds that the term "filler" need not be construed, at least at this point. At the very least, such a term would be readily understood by a person of ordinary skill. Also, the parties evidently agree that the term encompasses inert materials, with DuPont noting that the various "filler" examples provided in the specification are all inert materials. (Tr. at 48.)

**c. "particulate material"**

The term "particulate material" presents the same set of circumstances as the term "filler." MacDermid proffers this construction: "A fine powder. The particulate matter may be colorless and transparent or have color and be nontransparent." (MacDermid Opening Br. at 41.) Yet again, DuPont contended for the first time at the Markman hearing that no construction is necessary because it does not assert the specific Markush member containing this term and because the term "particulate material"

would be readily understood by a person of ordinary skill in the art. (Tr. at 48-50.) DuPont also attacks the proffered construction as improperly reading specification examples regarding color and transparency into the term's definition. (Id.) MacDermid asserts that this term must be construed in order to assess the validity of the overall Markush claim and that its own proposed construction is mandated by the specification itself. (MacDermid Opening Br. at 41; Tr. at 175-77.)

The Court reaches the same conclusion as to "particulate material" that it does with respect to the proper construction of the term "filler": there is no need for a construction at this point. The Court also notes that the parties themselves appear to concur that the specification explicitly defines "particulate material" as a "fine powder." ('859 Patent at col. 14, lines 3-4; MacDermid Opening Br. at 41; Tr. at 50.)

**2. Claim 21**

**a. "release layer"**

DuPont asks the Court to construe the term "release layer" as meaning "[a] transparent or substantially transparent layer to actinic radiation," or, as corrected for grammar, "a layer that is transparent or substantially transparent to actinic radiation." (DuPont Responsive Br. at 37.) But MacDermid proposes this construction: "A layer used for ease in placing and removing an image bearing transparency onto and from the photopolymerizable

surface after exposure to a vacuum frame by providing a substantially non-tacky surface to the typically tacky surface of the photopolymerizable layer." (MacDermid Opening Br. at 43.)

Both parties cite the '859 patent specification as support for their respective positions. (DuPont Opening Br. at 37; MacDermid Opening Br. at 43; Tr. at 53-58, 62-65, 171-75, 179.) According to DuPont, MacDermid's proposed construction incorrectly limits the use of a release layer to analog imaging and ignores that, as recognized by both the specification and the Court, such a layer could be used in digital imaging. (Tr. at 53-58, 62-65, 179.) It further contends that MacDermid's proposed construction improperly restricts the term to a preferred embodiment and reads functional limitations into a structural claim element. (DuPont Opening Br. at 37; Tr. at 53-58, 62-65, 179.) MacDermid attacks DuPont's proposed construction as overly broad and inconsistent with the explicit patent language, and adds that a release layer would serve little if any real function in the digital imaging context. (Tr. at 171-75.)

The Court turns to the specification — which provides a lengthy discussion of "release layer" — to construe this term:

> The primary purposes of a release layer are for ease in placing and removing an image-bearing transparency onto and from the photopolymerizable surface after exposure in a vacuum frame. (An image-bearing transparency may also be referred to herein as a mask, target, silver halide target, and phototool.) The release layer provides a substantially non-tacky surface to the typically tacky surface of the photopolymerizable

> layer. The release layer can also protect the surface of the photopolymerizable layer from being damaged during removal of an optional temporary coversheet and can ensure that the photopolymerizable layer does not stick to the coversheet. When the thermally removable layer is functioning as a release layer, the layer is transparent or substantially transparent, i.e., insensitive or substantially insensitive, to actinic radiation.

('859 Patent at col. 10, lines 1-15.)

DuPont's proposed construction comes from the final sentence above, but Dupont fails to take into account the remainder of the specification's "release layer" discussion. The proposed construction also is inconsistent with the actual language of claim 21 itself, which refers to an additional layer selected from the group consisting of a "release layer, adhesion-modifying layer, barrier layer, and surface modifying layer, wherein the at least one more additional layer is transparent to actinic radiation." (Id. at col. 45, lines 17-21 (emphasis added).)

But MacDermid recommends an unduly narrow construction of this term, overlooking language in the specification regarding the presence of a release layer in digital imaging. The Court, in the Preliminary Injunction Opinion, addressed the term in the context of tentatively construing the term "thermally removable layer". (Prelim. Inj. Op. at 33-36.) Quoting the specification, the Court noted that "[a] release layer can also be used with digital imaging." (Id. at 35 (citing '859 Patent at col. 40, lines 1-17).) Specifically, the specification describes an

example of digital imaging where the plate structure includes a release layer. (Id.)

The Court therefore rejects each proposed construction. Returning to the specification passage quoted above, it appears that the patent essentially characterizes a "release layer" as a "substantially non-tacky surface". ('859 Patent at col. 10, lines 6-7.) The Court construes the term "release layer" as referring to "a substantially non-tacky surface."

**b. "surface modifying layer"**

The term "surface modifying layer" presents the same kind of problems presented for "filler" and "particulate material." But MacDermid actually contends that the term itself is indefinite because the specification omits any "discussion of what surface is modified; what characteristic of the surface is modified; and/or how the surface is modified." (MacDermid Opening Br. at 44.) According to MacDermid, "the ordinary meaning of the common terms 'surface' and 'modifying' do not correct the deficiencies in the specification." (Id. (citing dictionary definitions).) DuPont contends that (1) the term need not be construed because it would be readily understood by a person of ordinary skill in the art, and (2) MacDermid's indefiniteness position is contradicted by the specification itself. (Tr. at 58-61.)

DuPont thereby cites to specification language providing a relatively clear definition of the term at issue. The

specification refers to the thermally removable layer functioning as "a layer which alters the surface characteristics of the photosensitive element." ('859 Patent at col. 9, lines 62-63.) This Court accordingly construes "surface modifying layer" as meaning "a layer that alters the surface characteristics of photosensitive element." For good cause appearing:

**IT IS THEREFORE** on this 15th day of March, 2010, **ORDERED** that the Court finds that, in United States Patent No. 6,171,758 B1:

**THE TERM "DIMENSIONALLY STABLE"** in claim 1 is construed to mean: "A flexible polymeric substrate whose dimensional stability has been controlled through a special annealing process, namely an annealing process that: (1) is in addition and subsequent to the heat treating steps associated with manufacturing the polymeric film, (2) is not the process of bonding the photosensitive elastomer layer to the polymeric substrate, and (3) comprises: (i) heating the substrate to a temperature above its glass transition temperature but below its melting temperature and at or greater than the temperature to which the substrate is later subjected during thermal development, (ii) at tensions of less than 200 psi, and (iii) for a time greater than the time required to bring the film to the annealing temperature, such that a specially annealed substrate has less thermally induced distortion than a non-specially annealed substrate"; and

**THE TERM "THERMAL DISTORTION"** in claim 1 is construed to mean: "the magnitude of change in the machine and transverse direction caused by thermal development of the flexographic printing plate"; and

**THE TERM "DEVELOPED"** in claim 1 is construed to mean: "removal of unexposed, uncured portions of the photosensitive elastomer layer"; and

**THE TERM "THERMOPLASTIC ELASTOMERIC BLOCK COPOLYMER"** in claim 4 is construed to mean: "a class of polymeric materials composed of two or more comonomeric units in extended segments having hard and soft blocks"; and

**IT IS FURTHER ORDERED** that the Court finds that, in United States Patent No. 6,773,859 B2:

**THE TERM "SOFTENING OR MELTING TEMPERATURE"** in claim 1 is construed to mean: "any temperature at which the viscosity of the binder will be reduced to such a point that the thermally removable layer, or portions thereof, may be removed"; and

**THE TERM "FILLER"** in claim 1 does not require construction; and

**THE TERM "PARTICULATE MATERIAL"** in claim 1 does not require construction; and

**THE TERM "RELEASE LAYER"** in claim 21 is construed to mean: "a substantially non-tacky surface"; and

**THE TERM "SURFACE MODIFYING LAYER"** in claim 21 is construed to mean: "a layer that alters the surface characteristics of the photosensitive element."

s/Mary L. Cooper
**MARY L. COOPER**
United States District Judge