

UNITED STATES DISTRICT COURT  
DISTRICT OF MINNESOTA

3M Company and 3M Innovative  
Properties Company,

Plaintiffs,

MEMORANDUM OPINION  
AND ORDER  
Civil No. 10-2630

v.

Avery Dennison Corporation,

Defendant.

---

John C. Adkisson and Ann N. Cathcart Chaplin, Fish & Richardson P.C., Kevin H. Rhodes and William D. Miller, 3M Innovative Properties Company and Courtland L. Reichman, and Natasha H. Moffitt, King & Spalding, Counsel for Plaintiffs.

Kurt J. Niederluecke and Lora M. Friedemann, Fredrikson & Byron, P.A. and Charles K. Verhoeven, David Bilsker, Christopher E. Stretch and James E. Baker, Quinn Emanuel Urquhart & Sullivan, LLP, Counsel for Defendant.

---

This matter is before the Court upon Plaintiffs 3M Company and 3M Innovative Properties Company's (collectively "3M") motion for a preliminary injunction and Defendant Avery Dennison Corporation's ("Avery") motion to exclude the testimony of Mary Jo Abler.

In moving for preliminary injunctive relief, 3M focuses on its infringement allegations of two of its patents, U.S. Patent No. 7,556,386 (“the ‘386 patent”) and U.S. Patent No. 7,152,983 (“the ‘983 patent”). 3M asserts that with respect to these two patents, it is clear on the record thus far that Avery infringes claim 1 of the ‘386 patent and claim 26 of the ‘983 patent. Unless the Court takes quick action to preserve the status quo, 3M asserts that Avery’s infringing product will be allowed to flow through complex distribution channels supporting state and local highway projects, and Avery could use its infringing product to procure the release of federal funds for these projects under the incorrect assumption that Avery’s infringing product will be available for use. 3M further argues that if it succeeds on the merits of its infringement claims, 3M will be left with an injunction it cannot enforce without creating chaos and disruption in the marketplace. 3M further asserts it will suffer irreparable harm if the injunctive relief is not granted due to serious damage to its reputation and irreversible price erosion.

As discussed in more detail below, preliminary injunctive relief in patent cases is reserved only for those extraordinary cases in which it is clear that the patents are valid and infringed and the patentee can establish it will suffer

irreparable harm if the requested injunctive relief is not granted. However, even though the parties have extensively briefed the issue, the Court finds that this case is not one that warrants such extraordinary relief. Rather, the Court finds that Avery has raised a substantial question as to the validity of the patents and that 3M has failed to show that it cannot be compensated by money damages if the requested relief is not granted.

## **I. Background**

This action involves thirteen patents, the rights, title and interest having all been assigned to, which cover different aspects of retroreflective sheeting. In the Amended Complaint, 3M alleges that Defendant makes, uses, and sells a product called the OmniCube T-11500 Prismatic Reflective Film that embodies the inventions claimed in the patents-in-suit.

### **A. Retroreflective Sheeting**

The patents in suit involve retroreflective sheeting for use on roadways. 3M's Traffic Safety Systems ("TSS") division has been in this business for over 60 years and 3M currently has over 180 patents directed to retroreflective sheeting. This sheeting is an important invention as it reflects light emitted from a vehicle's headlights back towards the driver, making the sign or marker conspicuous and

easy to read. (Declaration of Dr. Kenneth L. Smith ¶ 9.)

The American Society for Testing and Materials (“ASTM”) has classified this sheeting into various types, such as Type I, II etc. (Id. ¶ 17.) The highest tier presently is Type XI. (Id. ¶ 16.) This type uses “full cube” technology, which is almost twice as bright as the next brightest sheeting available. (Id. ¶¶ 14-18.) 3M asserts that this type of sheeting is much more difficult to manufacture on a commercial scale, and it wasn’t until 3M invented solutions enabling cost effective mass production that the Type XI sheeting was commercialized. (Id. ¶ 14.) 3M released the first Type XI sheeting, called DG<sup>3</sup>. (Declaration of Mary Jo Abler ¶ 18.)

3M asserts that there was a need in the industry for the Type XI sheeting due to new headlights, larger vehicles and an aging population. (Id. ¶¶ 19-20.) Given these needs, 3M asserts the DG<sup>3</sup> product has been a commercial success. (Id. ¶ 21.) It represents 35% of 3M’s business in durable sheeting products and is highly profitable. (Id.)

3M learned that Avery had announced earlier this year that it would be entering the Type XI sheeting market. (Id. ¶ 34; Declaration of Barry Sullivan ¶ 7.) 3M does not believe that to date, Avery has sold any such product. In July,

however, Avery allegedly offered to sell its OmniCube product to a sign fabricator. (Abler Decl. ¶ 34; Sullivan Decl. ¶¶ 7-9.)

It is Avery's position that retroreflective sheeting has existed for almost 100 years, and that Avery has continually been in the forefront of this technology. Retroreflective sheeting was first made in the early 1900's by a company called Stimsonite Corporation; a company Avery acquired in the late 1990's.

Avery asserts that Jonathan Stimson obtained a patent for a novel retroreflective design in 1928, U.S. Patent No. 1,671,086. (Declaration of Dr. Russell Chipman, Ex. 6.) This design was built on the concept of triple reflectors, which reflect light parallel to its source, unlike a mirror which reflects at an angle opposite its entrance angle. Avery asserts that over the years, Stimson made several improvements to his design, including varying the angles of the intersecting reflecting surfaces slightly off 90°. Avery asserts that today, these variations are referred to as dihedral angle errors. (Id. at ¶ 28.) Avery further asserts that it was Stimson who discovered that forming the three reflective surfaces in the shape of squares increased the amount of light returned, as described in U.S. Patent No. 1,848,675. (Id., Ex. 7 at 2:100-116, fig. 1). The square shaped retroreflectors are known as "full cube corners" or "preferred geometry

cube corners.”

Avery asserts that academics began to study the relationship between various parameters, such as light spread and dihedral angle errors. (Id., Ex. 1 at 497, Table II; ¶ 28.) Later, a Stimson employee, Sidney Heenan, obtained U.S. Patent No. 3,833,285 (“the ‘285 patent”). (Id., Ex. 4.) Heenan used specific angle errors to spread the light over a broad range of observation angles. Heenan also obtained the patent for a technique for miniaturizing and manufacturing retroreflective sheeting; U.S. Patent No. 6,015,214 (“the ‘214 patent”) reissued as U.S. Reissued Patent No. RE40,700 (“the RE700 patent”). (Id., Ex. 5.)

## **B. Market for Retroreflective Sheeting**

The ultimate customers for retroreflective sheeting are state and local governments, either directly or through contractors. (Abler Decl. ¶ 22.) Sales usually begin through the bidding process, and invitations to bid usually specify an ASTM type of sheeting to be used. (Id. ¶ 23; Declaration of Terry Yeager ¶¶ 16-17.) The funding for such projects are from federal funds or state/local funds. (Abler Decl. ¶ 25.)

Federal funds are subject to the Proprietary and Patented Products Rule (“PPPR”). The PPPR provides:

Federal funds shall not participate, directly or indirectly, in payment for any premium or royalty on any patented or proprietary material, specification, or process specifically set forth in the plans and specifications for a project . . .

See C.F.R. 635.411. An exception to this rule is when the patented or proprietary item is purchased or obtained through competitive bidding with equally suitable unpatented items. See id. at (a)(1). Up until now, 3M's DG<sup>3</sup> product has been the only commercially available product that meets the ASTM Type XI specification for retroreflective sheeting. (Abler Decl. ¶ 28.) Pursuant to the PPPR, state and local governments typically may not specify only ASTM Type XI sheeting where the sheeting is to be purchased with federal funds. As a result, Type XI sheeting is usually purchased with state/local funds. (Id. ¶ 32.) If Avery enters the market during the pendency of this action, a second source of Type XI sheeting would become available - allowing federal funds to be used to pay for such sheeting. First, however, Avery would need to be approved by states to be added to the Qualified Products List ("QPL"). (Id. ¶ 30.) To 3M's knowledge, Avery's OmniCube T-11500 sheeting is only on one state's QPL. (Id.)

## **II. Motion to Exclude Testimony of Mary Jo Abler**

Mary Jo Abler is the Business Director of the Highway Safety Business Unit

for 3M's Traffic Safety Systems Division, and has been in this division for over six years. In all, she has worked for 3M for over twenty years. She submitted a declaration in support of 3M's motion for a preliminary injunction, and in said declaration, Abler stated that she has personal knowledge of the matters set forth, except where otherwise stated. (Abler Decl. ¶ 2.)

Avery has moved to exclude Abler's testimony to the extent she opines on irreparable harm in the form of loss of goodwill and price erosion, as Abler is not qualified to provide any such opinions. Avery asserts that Abler is not an economist. She has no training or expertise in the specific issues surrounding the analysis of a potential permanent injunction or the resulting loss of goodwill.

3M responds that Mary Jo Abler was not offered as an expert witness. Abler's testimony is based on her experience as a 3M employee and as the current head of 3M's TSS Division. She is the best person to provide a real-world business view of the harm 3M may suffer from Avery's infringement. Abler is offering testimony based upon first hand knowledge, not based on scientific, technical or specialized knowledge, thus her testimony is admissible pursuant to Federal Rules of Evidence 402 and 701 - lay opinion testimony. See Burlington N.R.R. Co. v. Nebraska, 802 F.2d 994, 1004-5 (8th Cir. 1986); Allied Sys. Ltd v.

Teamsters Auto. Transport Chauffeurs, et al., 304 F.3d 785, 792 (8th Cir. 2000). Other courts have allowed lay opinion testimony regarding irreparable harm. See, e.g., Abbott Labs v. Sandoz, Inc., 500 F. Supp. 2d 807, 843 (N.D. Ill. 2007) aff'd, 544 F.3d 1341 (Fed. Cir. 2008) (brand manager testified as to irreversible market share); Sanofi-Synthelabo v. Apotex, 488 F. Supp. 2d 317, 342 (S.D.N.Y. 2006) aff'd, 470 F.3d 1368 (Fed. Cir. 2006).

3M further asserts that Abler can also provide testimony as to loss of goodwill and reputation. Through her years with 3M, Abler has acquired specific knowledge of the traffic industry, including 3M's products, competitors, customers and the bidding process. (Abler Decl. ¶¶ 22-25; Chaplin Decl., Ex. A (Abler Dep. at 12-14).) Abler can also testify as to price erosion, as she has personally seen price erosion occur for other types of retroreflective sheeting, and was involved in general business discussions at 3M regarding price erosion when Avery entered the market. (Chaplin Decl., Ex. A (Abler Dep. at 32-33, 35, 41-43, 45-47).)

Avery responds that Rule 701 allows non-expert opinions that are related to actual perception. Avery argues that applicable case law provides that a lay witness must identify the objective basis for his/her opinion. See United States v.

Rea, 958 F.2d 1206, 1216 (2d Cir. 1992); Duluth Lighthouse for the Blind v. C.G. Bretting Mfg. Co., Inc., 199 F.R.D. 320, 323 (D. Minn. 2000). Abler does not identify the specific facts of actual events that she used to formulate her opinions on price erosion and loss of good will. Instead, she only offers conclusory statements on these issues. During her deposition, Abler admitted that she was aware of only one example to support her conclusion that price erosion due to Avery's launch of its accused product is about to begin. (Chaplin Decl., Ex. A (Abler Dep. at 31-32).) She also admitted in her deposition that she had no experience with a circumstance where the market for retroreflective sheeting went from two competitors to one - yet she offered an opinion on price erosion. (Niederluecke Decl., Ex. 2 (Abler Dep. at 44-45).) Avery asserts it is not enough to base her testimony on her general experience as an employee of 3M, she must offer particularized facts. See United States v. Kaplan, 490 F.3d 110, 119 (2d Cir. 2007).

The Eighth Circuit provides that:

“Personal knowledge or perception acquired through review of records prepared in the ordinary course of business, or perceptions based on industry experience is a sufficient foundation for lay opinion testimony.” Burlington N. R.R. Co. v. Nebraska, 802 F.2d 994, 1004-05 (8th Cir.1986). The opinion testimony of an officer of a business as to value or projected

profits or as to damage to the business, without qualifying the officer as an expert, “is admitted not because of experience, training or specialized knowledge within the realm of an expert, but because of the particularized knowledge that the witness has by virtue of his or her position in the business.” Fed. R. Evid. 701, advisory committee's note (2000).

Allied Sys, Ltd. v. Teamsters Auto. Transportation Chauffeurs, 304 F.3d 785, 792

(8th Cir. 2002). In this case, the Court finds that Abler has relevant experience and personal knowledge of the business and market for retroreflective sheeting. She is thus qualified to provide lay opinion testimony in this case. Avery’s criticism of her testimony goes to the weight of such testimony, not its admissibility. Accordingly, the motion to exclude her testimony will be denied.

### **III. Standard for Motion for Preliminary Injunction**

To be entitled to the extraordinary relief of a preliminary injunction pursuant to 35 U.S.C. § 283, the Court must consider the following factors: 1) whether 3M is likely to succeed on the merits of its infringement claim; 2) whether 3M is likely to suffer irreparable harm if the requested injunctive relief is not granted; 3) the balance of equities; and 4) whether an injunction is in the public interest. Titan Tire Corp. v. Case New Holland, Inc., 566 F.3d 1372, 1375-76 (Fed. Cir. 2009) (citing Winter v. Natural Res. Def. Council, Inc. \_\_\_ U.S. \_\_\_, 129 S. Ct. 365, 374 (2008)). The district court has broad discretion in deciding

whether preliminary injunctive relief is warranted. Id. at 1375.

#### **A. Likelihood of Success on the Merits**

To succeed on its claims of patent infringement, 3M must demonstrate that the asserted patents are valid and infringed. Amazon.com, Inc. v. Barnesandnoble.com, Inc., 239 F.3d 1343, 1350 (Fed. Cir. 2001). To demonstrate a

likelihood of success on the merits, 3M “must show that it will likely prove infringement, and that it will likely withstand challenges, if any, to the validity of the patent.” Titan, 566 F.3d at 1376. “In assessing whether the patentee is entitled to the injunction, the court views the matter in light of the burdens and presumptions that will inhere at trial.” Id.

##### **1. Invalidity**

An issued patent comes with a statutory presumption of validity, therefore an alleged infringer that is challenging the validity of the patent has the ultimate burden of persuasion to prove invalidity by clear and convincing evidence.

Titan, 566 F.3d at 1376. When the question before the Court is whether preliminary injunctive relief is appropriate, the applications of the burdens and presumptions are tailored to fit the preliminary nature of the relief sought. Id. at 1377. Thus, at this stage of the proceedings, where the alleged infringer has

challenged the validity of the patent, the patentee has the burden to persuade the Court that despite this challenge, it is likely to succeed on the merits. Id.

Avery asserts that the '983 patent and the '386 patent are invalid as anticipated pursuant to 35 U.S.C. § 102 and invalid as obvious pursuant to § 103. "A patent is invalid for anticipation if a single prior art reference discloses each and every limitation of the claimed invention." Schering Corp. v. Geneva Pharm., Inc., 339 F.3d 1373, 1377 (Fed. Cir. 2003). Further, "[a]nticipation does not require the actual creation or reduction to practice of the prior art subject matter; anticipation requires only an enabling disclosure." Id. at 1380.

A patent may be invalidated as obvious "if the difference between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." 35 U.S.C. § 103 (a).

**a. Claim 26**

Avery asserts that claim 26 of the '983 patent is anticipated by U.S. Patent No. 6,257,860 ("the '860 patent"). Claim 26 of the '983 patent recites:

Retroreflective sheeting comprising a row of preferred geometry cube

corner elements having face[s] defined by a side groove set wherein the grooves are nominally parallel to each other and range from being greater than nominally parallel to non-parallel to within  $1^\circ$  to reference plane (28).

(Smith Decl., Ex. B.)

Avery has submitted the expert declaration of Dr. Russell Chipman, who opined that the '860 patent discloses each of the three elements of claim 26: 1) preferred geometry cube corners; 2) nominally parallel side grooves; and 3) side grooves that range from being greater than nominally parallel to non-parallel within  $1^\circ$  of the reference plane. (Declaration of Dr. Russell Chipman, ¶ 41.)

The invention disclosed in the '860 patent is a cube corner sheeting mold and the method of making the same. (Id., Ex. 3.) Avery asserts that Figure 12 of the '860 patent discloses the first element of claim 26. The '860 patent specification describes the side grooves of Figures 3, 7, 11, 13 and 25 as parallel. (Id. ¶ 43; Ex. 3 at Col. 8, lines 51-56.) Figure 13 of the '860 patent show an embodiment where the side grooves are skewed such that they are non-parallel to the reference plane. (Id. ¶ 49; Ex 3.) Smith confirmed this as well. (Friedemann Decl., Ex. 7 (Smith Dep. at 89-90).) The grooves are depicted as being off parallel from the reference plane at an angle  $\Phi$ . (Id. ¶¶ 49-50; Ex. 3 at Figures 13 and 25.) The specification provides that the angle  $\Phi$  varies from 0 to

45°. (Id., Ex. 3 at col. 16:65-col. 17.) Dr. Chipman explains that one of ordinary skill in the art would pick values in that range depending on the application, but for an application for spreading light, one would pick a small value in the range of 0-1°. (Id. ¶ 51.)

Further, Avery argues that because one of ordinary skill in the art would find no surprise in the range of the angle selected by Smith, claim 26 is also obvious in light of the '860 patent. See Medichem, S.A. v. Rolabo, S.L., 437 F.3d 1157, 1168 (Fed. Cir. 2006) (finding that it is usually obvious to select a narrow range from within a broad range disclosed in prior art).

Avery also asserts that claim 26 is anticipated by U.S. Patent No. 3,833,285 ("the '285 patent"). (Chipman Decl., Ex. 4.) The '285 patent discloses a retrodirective reflector visible over a wide range of observation angles. (Id.) This patent discloses the preferred geometry cube corners whose faces are formed by side grooves; when the dihedral 1-2 and 1-3 angle errors are set to 0, 6, and 7 arc minutes, and applied to the row of preferred geometry cube corners, the grooves in the side groove set are nominally parallel to each other; and the nominally parallel grooves are off parallel with the reference plane. (Id. ¶¶ 53-61.)

3M responds that the '860 patent was before the Examiner during the

prosecution of the '983 patent. 3M has also submitted an expert declaration from Dr. Duncan Moore, who opines that the '860 patent does not anticipate claim 26 because it does not disclose side grooves that range from being greater than nominally parallel to non-parallel to within  $1^\circ$  to the reference plane. (Moore Decl. ¶¶ 34-35.) Rather, the '860 patent only describes angular rotation of the side grooves, not side grooves with a skew. (Moore Decl. ¶¶ 42-48.) 3M argues that Avery's expert conceded that such angular rotation does not change the cube corner's dihedral angles. (Nichols Decl., Ex. A (Chipman Dep. at 60-61, 77-79, 80-82).) 3M further asserts that the '860 patent fails to disclose side grooves skewed between nominally parallel and  $1^\circ$ . (Moore Decl. ¶¶ 49-53.) 3M argues that Avery's expert agreed the '860 patent did not specifically describe side grooves skewed between nominally parallel and  $1^\circ$ . (Nichols Decl., Ex. A (Chipman Dep. at 85).) Dr. Chipman explained, however, that by providing a range of zero to 45 degrees, one is free to choose a range, which could include between zero and  $1^\circ$ . (Id. at 85-86.)

3M further asserts the '285 patent fails to anticipate claim 26 for similar reasons. The '285 patent fails to disclose 1-2 and 1-3 dihedral angle errors

introduced by skewed side grooves. (Moore Decl. ¶¶ 54-59; Nichols Decl. Ex. A (Chipman Dep. at 92-93).)

**b. Claim 1**

Avery argues that claim 1 of the '386 patent<sup>1</sup> is anticipated by U.S. Patent No. 6,015,214 ("the '214 patent").

Claim 1 of the '386 patent recites:

Retroreflective sheeting comprising an array of preferred geometry cube corner elements wherein at least one cube comprises a 1-2 dihedral angle error and a 1-3 dihedral angle error varied in opposition and the sheeting exhibits an average brightness at 0° and 90° orientation according to ASTM D4596<sup>2</sup>-1a of at least 375 candelas/lux/m<sup>2</sup> for an entrance angle of -4° and an observation angle of 0.5°.

(Smith Decl., Ex. A at claim 1.)

As the claim language demonstrates, claim 1 recites three elements: 1) preferred geometry cube corner; 2) 1-2 and 1-3 dihedral angle errors that are

---

<sup>1</sup>On August 27, 2010, Avery filed a request for ex parte reexamination of the '386 patent asserting a priority error. (Friedemann Decl., Ex. 8.) Such request was granted on October 14, 2010. (Avery Post Hearing Submissions, Ex 1 p. 5.) 3M responds that the reexamination request does not involve any prior art Avery cites in this case. Further, Avery argues that due to a technicality, 3M's earlier patent application is prior art to the '386 patent. 3M asserts, however, that it is entitled to correct a technical error. The Court has not taken the status of the reexamination into consideration in determining whether preliminary injunctive relief is warranted.

<sup>2</sup>3M asserts that this is a typographical error. It should read ASTM D4956-1a.

different from each other; and 3) a minimum level of brightness as measured by ASTM specification D4956.

Avery asserts the '214 patent discloses the first element, as confirmed by the '386 patent inventor, Kenneth Smith. (Friedemann Decl., Ex. 7 (Smith Dep. at 20).) Avery asserts that the second element - the use of dihedral angle errors to spread reflected light - was well known in the art. (Chipman Decl. ¶ 78; Friedemann Decl., Ex. 7 (Smith Dep. at 119-120).) There have also been many papers published detailing how to mathematically predict the spread in light and observation angle that particular angle errors would cause. (Chipman Decl. ¶¶ 86-88.)

In the '285 patent, the inventor, Heenan, taught varying all three angles up to seven degrees to maximize observation angles. (Id. ¶ 93.) In the '214 patent, Heenan taught methods for mass manufacturing full cube corners on a micro scale. (Id. ¶ 104.) Heenan also added the concept of canting the cube corners to achieve greater brightness and focusing effect. (Id. ¶ 116.) Heenan also disclosed a novel method of varying the method the dihedral angle errors in opposition by varying a single groove as it was being cut. (Id.)

With regard to the third element of claim 1 of the '386 patent, Avery asserts that such limitation was disclosed in the '214 patent. Examples 1 and 3 of the '214 patent disclose how to take a hex cube and convert it into a rectangular preferred geometry cube with particular dimensions. (Id. ¶ 1117.) Heenan also referenced the '285 patent that discloses specific angle errors. (Id.) When the 1-2 and 1-3 dihedral angle errors disclosed in the '285 patent are incorporated into the '214 patent, the brightness values exceed the 375 brightness value in claim 1 of the '386 patent. (Id.)

Even if the '214 patent did not disclose specific values, it would have been obvious to a person of ordinary skill in the art. (Id. ¶¶ 116, 123-127.) The '214 patent provided all of the teachings to create the preferred geometry cube corners disclosed in claim 1 of the '386 patent.

Avery further asserts that claim 1 would be obvious in light of the '214 patent in combination with the '219 patent. (Id. ¶ 100.) Dr. Chipman describes the '219 patent as disclosing angles akin to dihedral 1-2 and 1-3 angles that vary in opposition. (Id. ¶ 96.) Dr. Chipman further notes that the '219 patent, in Table IV, plots observations angles against different presentation angles and shows that

for both existing sheeting and the sheeting of the invention, the average brightness at an observation angle of  $0.5^\circ$  appears to be over 463 candelas/lux/m<sup>2</sup>. (Id. ¶ 97.) He further notes that although the '219 patent does not disclose preferred geometry cube corners, a person of ordinary skill in the art in January 2000 would have expected to get higher brightness values using the preferred geometry cube corners. (Id. ¶ 100.)

3M responds that the '214 patent was also before the Examiner during the prosecution of the '386 patent. (Moore Decl. ¶ 63.) Moreover, the '214 patent fails to disclose 1-2 and 1-3 dihedral angle errors varied in opposition. (Id. ¶¶ 62-69.) Avery's expert further testified that the '214 patent discussed varying one dihedral angle. (Nichols Decl., Ex. A (Chipman Dep. at 173).)

3M further argues that the brightness limitation of claim 1 is not disclosed in the '214 patent; a point that Avery's expert does not dispute. (Id. at 144.) 3M asserts that Avery's expert instead utilized proprietary and confidential software that he created in order to model sheeting based on data that did not appear in the '214 patent. (Id. at 176; Moore Decl. ¶ 73.) 3M asserts the fact that Avery's expert had to go to such lengths underscores the fact that the brightness

limitation is missing from the '214 patent. Dr. Chipman did, however, testify that one skilled in the art could take the cube configurations disclosed in the '214 patent and calculate the corresponding brightness calculations. (Id. at 144.)

3M asserts that the '219 patent was also before the Examiner during prosecution of the '386 patent. Avery's expert conceded that the '219 patent does not disclose preferred geometry cube corner elements. (Nichols Decl., Ex. A (Chipman Dep. at 146).) 3M thus argues that the '219 patent does not disclose dihedral angles, much less vary them in opposition. (Moore Decl. ¶ 66.)

### **c. Conclusion**

The Court finds that Avery has presented a substantial question as to the validity of the '983 and '386 patents. At this time, the Court finds that 3M was not able to materially challenge Dr. Chipman's expert opinion as to whether the patents are invalid as anticipated or obvious. Accordingly, the Court finds that 3M has not met its burden of persuading the Court that despite the challenge to the validity of these patents, 3M is likely to succeed on the merits as to validity. Titan, 566 F.3d at 1377. Because the Court finds that 3M has not met its burden with respect to validity of the patents at issue, the Court need not address the

infringement or waiver arguments at this time.

## **B. Irreparable Harm**

Courts no longer presume irreparable harm from a mere showing that a patentee is likely to succeed on the merits. Instead, the Court must look at the factual record and assess this prong independently. eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388, 393-94 (2006). Also, the burden to demonstrate that an injunction is warranted is heavier when the preliminary relief will substantially grant the relief that the movant would obtain after a trial on the merits.

Rathmann Group v. Tanenbaum, 889 F. 2d 787, 790 (8th Cir. 1989). “[W]ithout a clear showing of validity and infringement, a presumption of irreparable harm does not arise in a preliminary injunction proceeding.” Nutrition 21 v. U.S., 930 F.2d 867, 871 (Fed. Cir. 1991). One factor to consider in determining whether a movant will be irreparably harmed is the effectiveness of money damages to compensate for a market loss. Id.

### **1. Unwinding/Loss of Goodwill**

3M first argues that if a preliminary injunction is not granted, as a practical matter, 3M would not be able to later enforce a permanent injunction without

disrupting the market and damaging its customers. 3M asserts that Avery's introduction of its OmniCube sheeting would create competition for its Type XI sheeting, which would then allow the use of federal funding under the second source exception to the PPPR. (Abler Decl. ¶¶ 27-30.) Presumably, Avery could win some of these projects and its accused products could flow throughout a complex supply chain. Thereafter, if a permanent injunction is entered, 3M would be seen as the driving force behind the removal of Avery's OmniCube sheeting from a number of contracts that are subject to government regulations. Further, if 3M enforced the injunction, it would need to determine whether the injunction effectively eliminates federal funding as the exception to the PPPR might no longer apply. 3M would also need to determine who would be responsible for any resulting additional costs if sheeting other than 3M's must be used and who would pay for project delays and cost overruns. (Abler Decl. ¶¶ 45-46; Yeager Decl. ¶¶ 35-36.)

3M is concerned about the effect this would have on its reputation and good will. Enforcing a permanent injunction would make 3M responsible for inflicting chaos, expense and public safety concerns arising from unwinding

complex federal, state and local government and private relationships on its own customers. 3M asserts that courts have long held that a showing of loss of good will supports a finding of irreparable harm. See, e.g., Sanofi-Synthelabo v. Apotex, Inc., 470 F.3d 1368, 1382 (Fed. Cir. 2006).

Avery responds that 3M's arguments as to loss of goodwill and reputation are based on pure speculation, and an assumption that a permanent injunction will issue. Further, 3M provides no support for its "unwinding" theory. If a permanent injunction issues, its parameters will be crafted by the Court, not 3M. Also, a permanent injunction could be directed to future sales only, allowing Avery to honor its contracts in place and compensate 3M with money damages for past acts of infringement. In fact, federal law arguably prohibits injunctions directed at the federal government with respect to patent infringement claims as provided in 28 U.S.C. § 1498. Thus, 3M would not be entitled to an injunction with respect to products sold to the federal government, but would only be entitled to reasonable compensation.

Finally, Avery argues 3M's unwinding theory ignores the reality of the marketplace. The PPPR currently prevents customers from obtaining federal

funding for projects specifying only Type XI sheeting. By this preliminary injunction, 3M is taking action to enforce its proprietary position. Thus, if the preliminary injunction is granted, its customers will blame 3M for keeping Avery out of the market. Thus, either way, any harm 3M is complaining about will be the result of its own actions. Further, like most industries, companies in the retroreflective sheeting market often upgrade their product, and the customer switches to the new product. If an injunction issues, that is what would happen - the customers would switch the Avery product with the 3M product.

In its post hearing submission, 3M argues that unwinding is not about tearing down signs, it is about how to handle the ongoing, complex and multi-tiered supply commitments into which Avery's products would be integrated by the time of trial. There may also be problems with delays in the supplies of sheeting, stoppage of ongoing obligations, budgetary overruns, rebidding and potential safety issues.

Based on the record thus far, the Court is not persuaded by 3M's theory concerning the unwinding of government contracts using Avery's OmniCube sheeting, and the resultant loss of goodwill and harm to 3M's reputation. Neither

of 3M's lay witnesses, Mary Jo Abler or Terry Yeager, provided any testimony as to personal knowledge that such "unwinding" has occurred in the past. Further, if 3M does eventually win on the merits of its patent claims, it appears that federal law may prevent any contract involving federal funds to be undone. See 28 U.S.C. § 1498. 3M's concerns as to the repercussions a permanent injunction may have as to ongoing projects that involve Avery's OmniCube sheeting are thus based solely on speculation, which is not sufficient to establish irreparable harm.

## **2. Price Erosion**

3M further asserts that it will be irreparably harmed by irreversible price erosion if the requested injunction is not granted. Avery's entry into the market for Type XI sheeting will likely transform 3M's product from a proprietary offering to a mere commodity, thus wrongly driving down prices during the pendency of this case. (Abler Decl. ¶¶ 49-57; Yeager Decl. ¶¶ 39-41.) If the injunction is not granted, it will not as a practical matter be possible to raise prices after a permanent injunction is entered especially in light of state and local

government regulation of road construction projects. (Abler Decl. ¶ 54; Yeager Decl. ¶¶ 39-41.) 3M asserts there is evidence that price erosion has already begun. 3M just learned that Avery has contacted The Maneri Sign Company and offered to sell its product for less than 3M's price. (Sullivan Decl. ¶¶ 7-9.) Maneri then asked 3M to reduce its price for the DG<sup>3</sup> sheeting. (Id. ¶ 10.)

The Court finds that 3M's arguments as to price erosion are also speculative. Evidence of price erosion and loss of market share does not, in and of itself, demonstrate irreparable harm. Lost sales alone cannot establish irreparable injury. Reebok Intern. Ltd. v. J. Baker, Inc., 32 F.3d 1552, 1558 (Fed. Cir. 1994). 3M's evidence concerning The Maneri Sign Company does not demonstrate price erosion. While Avery participated in preliminary negotiations with The Maneri Sign Company, Avery's product is not approved for use in California. Thus, even if The Maneri Sign Company wanted to, it could not award a contract to Avery at this time. (Chapman Decl. ¶ 8.) In addition, 3M ignores instances of its own price cuts. (Friedemann Decl., Ex. 4.) An example concerns a recent sign project in which 3M offered to reduce the price of its Type XI sheeting in order for the contractor to use that type of sheeting versus a Type

IV/VIII Avery sheeting. (Chapman Decl. ¶ 9.)

Finally, the Court is not convinced that if price erosion occurs, it will be irreversible. 3M's expert admitted that if a permanent injunction issues, 3M will regain control of the market as well as its ability to set the price for Type XI sheeting. (Friedemann Decl., Ex. 6 (Yeager Dep. at 132-33).) The case cited by 3M, Baker Hughes Inc. v. Nalco Co., 676 F. Supp.2d 547 (S.D.Tex. 2009) is distinguishable because that case dealt with a market that had a small amount of clients, while here, the client base is huge.

Further, 3M's alleged damages can be compensated by money. 3M has been selling its Type XI sheeting since 2005, therefore there is a record of pricing and sales to assist in computing money damages. Any damage as a result of delay or disruption is easily quantifiable. (Yeager Decl. ¶ 25; Friedemann Decl., Ex. 6 (Yeager Dep. at 157).) See also, 3M Innovative Properties Company v. Avery Dennison Corp., 185 F. Supp. 2d 1031 (D. Minn. 2002) (Doty, J.) (denying motion for preliminary injunction and finding that difficulty in calculating losses or that such losses will occur is not proof of extraordinary circumstances warranting injunctive relief prior to trial).

3M responds that Avery has not provided any business person's testimony supporting its arguments that price erosion will not occur and won't be reversible. In fact, Avery's expert admitted at her deposition that she could see how 3M would be threatened by Avery entering into the market and potentially putting pressure as to pricing. (Moffitt Decl., Ex. A (Mody Dep. at 166). 3M's expert, Professor Hausman, is a world renowned economist, and he explained that economic theory and experience supports the proposition that price erosion under these facts would be irreversible and could not be remedied with damages. (Hausman Decl. ¶¶ 3, 4-17.)

At his deposition, however, Hausman did testify that price erosion could be fully reversible "if things pretty much stayed the same after the second firm exited and they stayed the same for a sufficient amount of time . . . after two or three years . . ." (Avery Post Hearing Submission, Ex. 3 (Hausman Dep. at 151-52).) Hausman further testified that damages could be calculated from the present time up to the time of trial. (Id. at 157.)

Based on the above, the Court finds that 3M has failed to meet its burden of demonstrating it will suffer irreversible price erosion if the requested

injunction is not granted.

**C. Balance of Harms and Public Interest**

Given 3M's failure to demonstrate a likelihood of success on the merits and that it will be irreparably harmed, the balance of harms and public interest tips in favor of Avery.

IT IS HEREBY ORDERED that Plaintiffs' Motion for a Preliminary Injunction [Doc. No. 9] is DENIED. Defendant's Motion to Exclude the Expert Testimony of Mary Jo Abler [Doc. No. 34] is DENIED.

Date: December 21, 2010

s/ Michael J. Davis

Michael J. Davis

Chief Judge

United States District Court