

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

FIELDTURF USA, INC., and FieldTurf Tarkett,
Plaintiffs.

v.

SPORTS CONSTRUCTION GROUP LLC,
Defendant.

June 28, 2007.

Background: Patent owner and its exclusive licensee brought action against competitor alleging infringement of patents relating to synthetic grass with resilient granular top surface layer.

Holdings: The District Court, Gaughan, J., held that:

- (1) term "ribbon" specified synthetic structure representing grass blade;
- (2) term "layer" specified distinct, substantially continuous covering of particulate material; and
- (3) phrase "substantially identical size distribution" required that 80% by weight of hard and resilient granules in bottom course be distributed in range spanning numerical difference of no more than 40 screen mesh standard.

So construed.

6,551,689, 6,746,752. Construed.

Jay E. Krasovec, H. Alan Rothenbuecher, Schottenstein, Zox & Dunn, Cleveland, OH, Jody L. Factor, Michael D. Lake, Nicholas S. Lee, Factor & Lake, Chicago, IL, for Plaintiffs.

James Lindon, Lindon & Lindon, Rocky River, OH, John K. Lind, Jr., Ronald H. Lasko, Thomas J. Vozar, Lasko & Lind, Cleveland, OH, for Defendant.

Memorandum Opinion and Order

GAUGHAN, District Judge.

INTRODUCTION

This matter is before the Court upon a request by the parties to construe disputed patent claim terms pursuant to *Markman v. Westview Instruments*, 52 F.3d 967 (Fed.Cir.1995) (en banc), *aff'd*, 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996). Plaintiffs Fieldturf USA, Inc. and FieldTurf Tarkett Inc. allege that

Defendant Sports Construction Group, LLC ("SCG") has infringed certain claims of U.S. Patent No. 6,551,689 (issued April 22, 2003) (the "'689 patent") and U.S. Patent No. 6,746,752 (issued June 8, 2004) (the "'752 patent"). The Court interprets the disputed claim terms as described in more detail infra.

BACKGROUND

Plaintiff FieldTurf Tarkett Inc. is the owner of the '689 and '752 patents while FieldTurf USA, Inc. is the exclusive licensee of the relevant rights under those patents. For purposes of this motion the Court will refer generally to these two entities as "FieldTurf" and the '689 and '752 patents as the "patents-in-suit." The '689 patent issued from U.S. patent application No. 09/589,149 (the "'149 application"), filed on June 21, 2000, which is a continuation-in-part FN1 of application No. PCT/CA99/00704, filed on August 3, 1999. The '752 patent issued from U.S. patent application No. 10/359,635 (the "'635 application"), filed Feb. 7, 2003, which is a divisional of the '149 application. A divisional application includes distinct claims from the parent FN2 but otherwise is based on the same disclosure. Accordingly, the patents-in-suit are essentially identical with the exception of the claims.

FN1. A continuation-in-part is an application that adopts much of the specification of a parent application but may also include new matter. *Applied Materials v. Advanced Semiconductor Materials Am.*, 98 F.3d 1563, 1580 (Fed.Cir.1996). The priority date for a particular claim depends on whether that claim is based on new matter or matter disclosed in the parent application. *Id.*

FN2. 35 U.S.C. s. 121.

Although the specifications of the patents-in-suit will be discussed in greater detail below with respect to particular disputed claim terms, it is helpful to provide some general background regarding the patents-in-suit. The patents-in-suit are entitled "Synthetic Grass with Resilient Granular Top Surface Layer." The "Background" section of the patent explains that a "carpet-like pile fabric having a flexible backing" has "rows of upstanding synthetic ribbons representing grass blades extending upwardly from the top surface of the backing." It continues that "[o]f particular interest to the present invention are the various formulations for granular resilient fill that are placed between the upstanding ribbons on the upper surface of the backing to simulate the presence of soil." The Background continues by describing a number of problems with existing or prior art surfaces before disclosing, in the "Disclosure of the Invention" section of the patent, "a novel synthetic grass assembly for installation on a supporting soil substrate to provide a surface that combines the look and feel of natural turf with the wear resistance of synthetic grass." A number of drawings are provided and the specification includes a "Detailed Description of the Preferred Embodiments." Each of the patents-in-suit concludes with a number of claims. It is the words of these claims that the parties now ask the Court to construe.

The disputed claim terms are in claims 1, 10, 17 and 18 of the '689 patent and claims 1, 11, 18 and 19 of the '752 patent. These claims are listed below with the disputed terms underlined:

'689 patent:

1. A synthetic grass assembly for installation on a supporting substrate, the assembly comprising: a pile fabric with a flexible sheet backing and a plurality of upstanding synthetic *ribbons* of a selected length, the ribbons extending upwardly from an upper surface of the backing;

an infill *layer* of particulate material *disposed interstitially* between the upstanding ribbons upon the upper surface of the backing and of a depth less than the length of the ribbons, the particulate material selected from the group consisting of hard and resilient granules; said infill layer further including

a bottom *course* of *intermixed* hard and resilient granules, *disposed upon* the upper surface of the backing, and

a top *course substantially exclusively* of resilient granules *disposed upon* the bottom course, an upper portion of the synthetic ribbons extending upwardly from a top surface of the top course wherein the synthetic ribbons:

are longitudinally *intermittently slit* in a *predetermined pattern of slits*;

an upper portion of the ribbons extending above the infill layer and longitudinally split into individual *free-standing strands* of a *selected width* to represent grass blades; and

a lower portion of the ribbons having said slits extended open forming *laterally linked strands* disposed in a lattice structure enmeshing the surrounding particulate infill material.

* * * * *

10. A synthetic grass assembly according to claim 1, wherein the synthetic ribbons are disposed in rows spaced apart a *selected minimum distance*.

* * * * *

17. A synthetic grass assembly according to claim 1, wherein the synthetic ribbons are *fibers* selected from the group consisting of polypropylene, polyethylene, nylon and plastic.

18. A synthetic grass assembly according to claim 1, wherein the upper portion of the synthetic ribbons are *fibrillated* into individual strands of a width in the range between 1.0 to 15.0 mm.

'752 patent:

1. A synthetic grass assembly for installation on a supporting substrate, the assembly comprising:
a pile fabric with a flexible sheet backing and a plurality of upstanding synthetic *ribbons* of a selected length, the ribbons extending upwardly from an upper surface of the backing;

an infill *layer* of particulate material *disposed interstitially* between the upstanding ribbons upon the upper surface of the backing and of a depth less than the length of the ribbons, the particulate material selected from the group consisting of hard and resilient granules, wherein the infill layer comprises:

a bottom *course* of *intermixed* hard and resilient granules of *substantially identical size distribution*, *disposed upon* the top surface of the backing; and

a top *course substantially exclusively* of resilient granules *disposed upon* the bottom course, an upper

portion of the synthetic ribbons extending upwardly from a top surface of the top course.

* * * * *

11. The synthetic grass assembly according to claim 1, wherein the synthetic ribbons are disposed in rows spaced apart a *selected minimum distance*.

* * * * *

18. The synthetic grass assembly according to claim 1, wherein the synthetic ribbons are *fibers* selected from the group consisting of polypropylene, polyethylene, nylon, and plastic.

19. The synthetic grass assembly according to claim 2, wherein the upper portion of the synthetic ribbons are *fibrillated* into individual strands of a width in the range between 1.0 to 5.0 mm.

STANDARD OF REVIEW

Patent infringement is determined through a two-step analysis. *Markman*, 52 F.3d at 976. The first step is claim construction, which entails determining the meaning and scope of the patent claim terms alleged to be infringed. *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1247 (Fed.Cir.1998). The second step involves comparing the construed claims to the allegedly infringing device. *Id.* Claim construction is a matter of law and is to be decided by the court. *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1454 (Fed.Cir.1998); *Markman*, 52 F.3d at 981. It is this first step of claim construction that is at issue here.FN3

FN3. Accordingly, the Court finds it unnecessary to address numerous contentions of SCG related to the doctrine of equivalents or other issues related only to infringement.

[1] [2] [3] Claims must be construed in the manner that they would be understood by a person of ordinary skill in the art as of the time of invention. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed.Cir.2005); *Alloc, Inc. v. ITC*, 342 F.3d 1361, 1368 (Fed.Cir.2003). Although the structure of the allegedly infringing device is not relevant to claim construction, the parties' contentions regarding the allegedly infringing device may help to frame the issues. *See Wilson Sporting Goods Co. v. Hillerich & Bradsby Co.*, 442 F.3d 1322, 1326-27 (Fed.Cir.2006) (explaining that "knowledge of that [accused] product or process provides meaningful context for ... claim construction"); *Jurgens v. McKasy*, 927 F.2d 1552, 1560 (Fed.Cir.1991) (explaining that "a claim is construed without regard to the accused product"). The three main sources for claim construction are the claims themselves, the written specification of which the claims are a part, and the prosecution history or file wrapper representing the back-and-forth discussion between the inventor and the Patent and Trademark Office ("PTO"). *Markman*, 52 F.3d at 979-80. These are collectively referred to as the intrinsic record of the patent. *Chimie v. PPG Indus. Inc.*, 402 F.3d 1371, 1377 (Fed.Cir.2005). Other evidence of claim meaning such as inventor testimony, expert testimony, and lay or technical dictionary definitions is referred to as extrinsic evidence. *Phillips*, 415 F.3d at 1317. Extrinsic evidence is to be given less weight than intrinsic evidence and cannot contradict a claim definition from the intrinsic record. *Id.* at 1318-19; *see also C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 861 (Fed.Cir.2004) (explaining "that the intrinsic record is the primary source for determining claim meaning").

[4] [5] Claims delimit the patent owner's right to exclude. *Bell Comm. Research, Inc. v. Vitalink Comm.*

Corp., 55 F.3d 615, 619 (Fed.Cir.1995); Markman, 52 F.3d at 980. Claims terms are to be given their ordinary meaning to a person of ordinary skill in the art. Hockerson-Halberstadt, Inc. v. Avia Group Int'l, Inc., 222 F.3d 951, 955 (Fed.Cir.2000). Put another way, the court in interpreting the claims must attempt to do so through the eyes of a person of ordinary skill in the art. Phillips, 415 F.3d at 1312-13; Ferguson Beauregard/Logic Controls v. Mega Systems, LLC, 350 F.3d 1327, 1338 (Fed.Cir.2003). This perspective colors the ordinary meaning standard in that the claims should not be read in a vacuum-intrinsic and extrinsic evidence may sometimes be necessary to understand the meaning in the art. *See* Phillips, 415 F.3d at 1313 ("Importantly, the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification."); Renishaw, 158 F.3d at 1250 ("Ultimately, the interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim."); Hockerson-Halberstadt, 222 F.3d at 955 ("The claim term's ordinary and accustomed meaning initially serves as a default meaning because the patentee may act as a lexicographer and ascribe a different, or modified, meaning to the term."). Claim terms must be evaluated in the context of the claim as a whole, and should be compared to similar terms in other claims. Phillips, 415 F.3d at 1314. For example, where a dependent claim narrows a term from an earlier claim, one can generally assume that the term from the earlier claim has a broader scope than the narrowed claim term. Phillips, 415 F.3d at 1315; Liebel-Flarsheim Co. v. Medrad, Inc., 358 F.3d 898, 910 (Fed.Cir.2004); Tandon Corp. v. ITC, 831 F.2d 1017, 1024 (Fed.Cir.1987).

[6] [7] [8] [9] The specification is the descriptive part of the patent of which the claims are a part. Phillips, 415 F.3d at 1315. "It is ... entirely appropriate for a court, when conducting claim construction, to rely heavily on the written description for guidance as to the meaning of the claims." Phillips, 415 F.3d at 1317. In discussing the specification, many courts note the oft-cited and sometimes contradictory claim construction canons that: "(a) one may not read a limitation into a claim from the written description, but (b) one may look to the written description to define a term already in a claim limitation, for a claim must be read in view of the specification of which it is a part." Renishaw, 158 F.3d at 1248. However, the canons are generally reconcilable. First, although it is often stated that a patentee may be his own lexicographer, "a claim must explicitly recite a term in need of definition before a definition may enter the claim from the written description." Renishaw, 158 F.3d at 1243. Second, problems often arise in the context of courts reading a preferred embodiment into a claim. Phillips, 415 F.3d at 1323; *see also* Electro Medical Sys., S.A. v. Cooper Life Sciences, 34 F.3d 1048, 1054 (Fed.Cir.1994) (explaining that "particular embodiments appearing in a specification will not be read into the claims when the claim language is broader than such embodiments"). This problem can be avoided by recognizing that broad claim language should not be narrowed by reading a preferred embodiment into the claim unless it is clear from the specification that the preferred embodiment is intended to be strictly coextensive with the claims. FN4 Phillips, 415 F.3d at 1323; *see also* C.R. Bard Inc. v. U.S. Surgical Corp., 388 F.3d 858, 864 (Fed.Cir.2004) (explaining that "[s]tatements that describe the invention as a whole, rather than statements that describe only preferred embodiments, are more likely to support a limiting definition of a claim term"). "Where a specification does not *require* a limitation, that limitation should not be read from the specification into the claims." E.I du Pont de Nemours & Co. v. Phillips Petroleum Co., 849 F.2d 1430, 1433 (Fed.Cir.1988) (quoting Specialty Composites v. Cabot Corp., 845 F.2d 981, 987 (Fed.Cir.1988) (emphasis in original)).

FN4. Examples of cases where the Federal Circuit has read an embodiment from the specification into a claim definition follow this rule. Either the specification was very clear that the embodiment was the only embodiment, the specification otherwise described the embodiment as being the invention as whole, or the specification disclaimed certain requested structures. *See* Nystrom v. TREX Co., 424 F.3d 1136, 1145

(Fed.Cir.2005) (finding nothing to support a broader definition than that provided in the specification); *Microsoft Corp. v. Multi-Tech Sys., Inc.*, 357 F.3d 1340, 1348 (Fed.Cir.2004) (finding that the "specification ... leads to the 'inescapable conclusion' " that the limitation is required in the claims); *Alloc, Inc. v. ITC*, 342 F.3d 1361, 1370 (Fed.Cir.2003) (holding that "the specification as a whole leads to the inescapable conclusion that the claimed invention must include [the limitation] in every embodiment"); *SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1345 (Fed.Cir.2001) (finding that "the written description makes clear" that the claim term is limited to the stated embodiment); *Wang Labs., Inc. v. America Online, Inc.*, 197 F.3d 1377, 1383 (Fed.Cir.1999) (explaining that "when the 'preferred embodiment' is described as the invention itself, the claims are not entitled to a scope broader than that embodiment"); *O.I. Corp. v. Tekmar Co.*, 115 F.3d 1576, 1581 (Fed.Cir.1997) (explaining that the "passage" structures contemplated by the specification were described in a certain way and the specification distinguished over prior art as having a "passage" different from that described in the specification).

[10] The prosecution history is also relevant to claim construction as part of the intrinsic record. *Phillips*, 415 F.3d at 1317. For example, an inventor may disclaim a particular claim construction during prosecution before the PTO. *Avia Group*, 222 F.3d at 956. However, prosecution history is often ambiguous, *Inverness Medical Switzerland v. Warner Lambert Co.*, 309 F.3d 1373, 1382 (Fed.Cir.2002), and courts should take care in limiting claims based on the prosecution history. *Phillips*, 415 F.3d at 1317. The prosecution history of a parent application may apply with equal force to a later patent that contains the same claim limitation. *Elkay Mfg. Co. v. Ebc Co.*, 192 F.3d 973, 979 (Fed.Cir.1999).

[11] Finally, extrinsic evidence may be useful to claim construction in some instances. *Phillips*, 415 F.3d at 1317. As the Court already explained, this evidence is entitled to less weight than intrinsic evidence. Nonetheless, extrinsic evidence such as technical dictionaries or treatises in particular may be useful to understanding a technology as well as understanding the perspective of a person with ordinary skill in the art. *Phillips*, 415 F.3d at 1318. Testimony may be used to explain the technology and what was claimed, but is ultimately of minimal relevance and cannot change an otherwise clear meaning of a claim term. *Voice Techs. Group, Inc. v. VMC Sys., Inc.*, 164 F.3d 605, 615 (Fed.Cir.1999).

DISCUSSION

As may have been noted from the listing of the disputed patent terms above, the claims at issue from the '689 and '752 patents are very similar. The main differences are between the independent claims (claim 1) of each patent which concern the description of the infill layer. In claim 1 of the '689 patent the infill layer is further defined by reference to not only a top course and a bottom course, but also through a "wherein" clause that provides details regarding the claimed ribbon. The '752 patent, on the other hand, claims the ribbon only in general terms but provides more detail regarding the bottom course of hard and resilient particles as having a "substantially identical size distribution." With these differences in mind, the Court will address the disputed claim terms in the order in which they arise in the '689 and '752 patents. Unless specifically stated below, the Court's claim construction applies to those terms as they appear in both patents.FN5

FN5. SCG generally protests that FieldTurf changed its construction of a number of the claim terms between March 26, 2007 and April 16, 2007. However, the Court finds that SCG had ample time to understand and respond to FieldTurf's revised proposals.

1. Ribbon

FieldTurf's Proposed Construction: "A synthetic ribbon representing a grass blade."

SCG's Proposed Construction: "Flat brushed split sheet having slits placed across the width of the sheet along the longitudinal axis of the sheet."

The Court's Claim Construction: "A synthetic structure representing a grass blade"

Both parties point to the specification as supporting their claim construction. FieldTurf notes numerous instances where a ribbon is generally described as "synthetic ribbons representing grass blades" or similar phrases. *E.g.*, '689 patent 1 :32-33; 3:51-52; 4:13-14; 4:20-21; 5:7-10. FN6 SCG points to a number of points in the description where ribbons are "brushed" or "split" with "slits" along a "longitudinal" axis. *E.g.*, '689 patent 5 :29-32; 8:22-25.

FN6. Because the specifications for the patents-in-suit are essentially the same, the Court will simply refer to the '689 patent. The numerical references are to the column (*e.g.*, column 1) and lines (*e.g.*, lines 32-33) where the referenced text appears.

FieldTurf accuses SCG of improperly reading the preferred embodiment of the specification into the claim. Indeed, the text cited by SCG explicitly refers to a "preferred" method of processing the ribbon. SCG responds by citing *Watts v. XL Sys., Inc.*, 232 F.3d 877, 883 (Fed.Cir.2000), for the proposition that "[w]here '[t]he specification only describes one method' of achieving an element of the claim, 'the specification actually limits the invention to structures that utilize [that method,]' even if a person of ordinary skill in the art would be aware of other methods for achieving the claim element." Doc. 59, pp. 49-50.

SCG's selective quotation misstates the holding of *Watts*. It is true that the *Watts* court noted that "[t]he specification only describes one method" for achieving a desired sealing connection through misaligned taper angles. *Watts*, 232 F.3d at 883. But that was not why the *Watts* Court found that the specification limited the invention to structures that utilize the method, as SCG contends. Rather, the *Watts* court pointed to other text of the specification as follows: "*Moreover*, the specification actually limits the invention to structures that utilize misaligned taper angles, *stating that* 'the present invention utilizes [the varying taper angle] feature.'" *Watts*, 232 F.3d at 883 (emphasis added, brackets in original). In other words, in addition to describing a single embodiment, the *Watts* patentee *also* stated that the embodiment was *the* invention. SCG points to no such text in the FieldTurf patents, and in fact, the patents state that the "ribbons can be manufactured" in a certain manner in a "preferred" embodiment. FN7 '689 patent, 8:22-23.

FN7. This analysis is entirely consistent with the Court's earlier discussion of the issue of reading an embodiment from the specification into the claims. In *Watts*, it was clear from the specification that the preferred embodiment was intended to be strictly coextensive with the claims. *Phillips*, 415 F.3d at 1323. As explained in *C.R. Bard and Wang*, the *Watts* patentee also described the preferred embodiment as the invention as a whole. *C.R. Bard*, 388 F.3d at 864; *Wang*, 197 F.3d at 1383.

[12] Accordingly, the Court generally agrees with FieldTurf's proposed claim construction of a ribbon.

However, instead of using the word ribbon in the claim construction of ribbon, the Court will simply use the generic term structure as follows: "A synthetic structure representing a grass blade." The Court also notes that this is a generic definition of the term ribbon. As in claim 1 of the '689 patent, "a synthetic structure representing a grass blade" may be further defined within the claim as being "longitudinally intermittently slit in a predetermined pattern of slits" and other limitations stated within the particular claim.FN8

FN8. In its reply, FieldTurf points to the doctrine of claim differentiation, by which courts generally avoid claim construction of an independent claim that would render a dependent claim superfluous. LG Elecs., Inc. v. Bizcom Elecs., Inc., 453 F.3d 1364, 1372 (Fed.Cir.2006); Comark Communs. v. Harris Corp., 156 F.3d 1182 (Fed.Cir.1998). Although it is not entirely clear how this doctrine would apply to claims without a dependency relationship-i.e., claim 1 of the '689 patent and claim 1 of the '752 patent-as FieldTurf contends, the general point is well taken. Claim 1 of the '689 patent actually does provide specific structure (intermittent slits that are "laterally linked", etc.) while the '752 patent does not. Other related claims may always be considered during claim construction and it would make sense that one patent of a divisional would claim a specific ribbon structure while the other has the generic ribbon and is focused on the details of the infill layers.

2. Layer

FieldTurf's Proposed Construction: "Distinct, substantially continuous layer of particulate material"

SCG's Proposed Construction: "Distinct, continuous, separate and uniform covering of material of a depth determined before the covering is applied across an entire covered area."

The Court's Claim Construction: "Distinct, substantially continuous covering of particulate material"

FieldTurf believes that layer is a term that a jury can understand without the aid of the Court's claim construction, but will accept a "distinct, substantially continuous layer of particulate material." SCG notes that the specification uses the term "layer" interchangeably with the term "course." The Court agrees that the terms are occasionally used in this manner, *see* ' 689 patent, 8:10-20, but fails to see the relevance in the context of the claims. The claims clearly claim a single infill layer "further including" or "comprising" a top course and a bottom course. This is fully supported in the specification. *E.g.*, '689 patent, 9:6-12; 9:57-58.

SCG thus refers the Court to its argument regarding the term "course." As the Court will explain below, SCG's proposed construction improperly attempts to import limitations that do not even appear in the specification or that are merely a preferred embodiment or possible method to manufacture a "course." Rather, a layer is a general term in the specification that refers to the particulate material that fills in the space between the ribbons. FN9 ' 689 patent, 5:10-12.

FN9. SCG also lists a number of patents and summarily states that they are extrinsic evidence that a layer must have their definition of a "distinct, continuous, separate and uniform covering of material of a depth determined before the covering is applied across an entire covered area." Not only is this extrinsic evidence to be given limited weight in any event, but SCG makes no attempt to tie the patents to the patents-in-suit and does not cite to any portion of the specification as supporting its construction. As with SCG's argument regarding the "course" below, there appears to be no actual language in the specifications of the cited references to support SCG's construction but the Court is supposed to perceive that two-dimensional pictures require the proffered language.

[13] With respect to the portions of the parties' claim constructions that are in substantial agreement, the Court will adopt a "Distinct, substantially continuous covering of particulate material." Because a layer can be defined as two layers or courses, '689 patent, 8:10-21, it makes sense that layers would be "distinct." As it is the particulate matter that serves as the infill for an artificial surface, '689 patent, 9:33-56, it also is a reasonable construction to include the term of a "covering" and for the covering to be "substantially continuous." The Court also agrees with FieldTurf that the modifier "substantially" continuous is appropriate, since the layer is constructed of particles, which, by their nature, are unlikely to form an entirely continuous surface. '689 patent, 7:63-8:9; 11:45-12:5; 12:13-19.

3. Disposed interstitially

FieldTurf's Proposed Construction: "Located between"

SCG's Proposed Construction: "Placed into unoccupied spaces"

The Court's Claim Construction: "Located between"

[14] It is the infill layer that is "disposed interstitially" between ribbons in the claims. FieldTurf points to the specification, which describes a "unique infill layer of two graded courses of particulate material disposed interstitially between the upstanding ribbons" and "[d]isposed interstitially between the upstanding ribbons 2 upon the upper surface 1 is an infill layer 3 of particulate matter." '689 patent, 5:10-21; 9:48-56. FieldTurf argues that these passages support its claim construction of "disposed interstitially" as requiring a structural relationship (i.e., relative location) as opposed to the active meaning proposed by SCG.

The only portion of the specification cited by SCG to support its claim construction, '689 patent, 9:48-50, does not say anything that would equate "disposed interstitially" with actively placing the infill layer into unoccupied spaces. Indeed, where the FieldTurf patent describes the active steps in manufacturing the turf it did so explicitly. *See* '689 patent, 10:33-34 ("After the mixed lower infill layer is laid a substantially pure rubber particulate material is placed as a resilient top layer).

FieldTurf chose to write its claims as product claims, and those claims define the invention by its structure. *Hazani v. ITC*, 126 F.3d 1473, (Fed.Cir.1997) (explaining that a claim is properly characterized as a product claim where the "limitation, read in context, describes the product more by its structure than by the process used to obtain it"). Accordingly, unless there is something in the claim language that quite clearly demonstrates that method steps are claimed, courts decline to read method steps into the claims. *Vanguard Prods. Corp. v. Parker Hannifin Corp.*, 234 F.3d 1370, 1372 (Fed.Cir.2000) (explaining that "[t]he method of manufacture, even when cited as advantageous, does not itself convert product claims into claims limited to a particular process"). Similarly, there is nothing to indicate that these claims at issue are product-by-process claims, FN10 wherein a product (here the synthetic grass assembly) is claimed by the process used to manufacture that product (i.e., placing a first course between ribbons, placing a second course between ribbons). The claim is easily defined and understood through structural language. *SmithKline Beecham Corp. v. Apotex Corp.*, 439 F.3d 1312, 1315 (Fed.Cir.2006) (explaining that "[t]he purpose of product-by-process claims is to allow inventors to claim an otherwise patentable product that resists definition by other than the process by which it is made").

FN10. "A product-by-process claim is 'one in which the product is defined at least in part in terms of the

method or process by which it is made.' " SmithKline Beecham Corp. v. Apotex Corp., 439 F.3d 1312, 1315 (Fed.Cir.2006) (quoting Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 158, 109 S.Ct. 971, 103 L.Ed.2d 118 (1989)).

What is really at issue with this claim term, and a number of claim terms that follow, is a premature attempt by SCG to have the court decide certain infringement issues. As the Court noted above, the ultimate conclusion of infringement or noninfringement is a two-step process. The only part of that process at issue here is claim construction. Nonetheless, SCG is seeking a construction which requires the layer or courses of the claims to be placed or installed at a particular time. The reason is apparent from the following arguments which are repeated a number of times:

FieldTurf further admits that the invention is limited to artificial turfs having "resistance to particle displacement." Column 7, lines 42-47. In other words, where the resilient granules or the hard granules migrate and are *not resistant* to particle displacement, the artificial turf *does not* and *cannot* infringe the patent. Migrating or displaced granules are not "placed" by SCG. Migrating or displaced granules are placed by whatever forces (e.g.weather, gravity, wear) cause the granules to migrate or become displaced. *Displaced* granules are not, and cannot be, placed granules.

Doc. 59, p. 27.

Simply put, the claims themselves do not support a claim construction as method claims, in which placing of layers or courses could be required elements. The manner or order of construction of artificial turf is not the issue for a product claim-the physical relationship of the structural components is the issue. The Court acknowledges that this issue is likely to come up in a future *infringement* analysis *if* an SCG artificial turf is demonstrated to infringe the claimed structure and *if* that infringing structure is the result of a change over time-i.e., the SCG structure would not infringe as installed. But as SCG's brief acknowledges, that is an *infringement* issue. FN11 Doc. 59, p. 27 ("Though SCG denies infringement in the case at bar, defendants are never responsible for infringement as a result of changes that occur over time."). The Court declines to opine on infringement issues at this time.

FN11. That the this is an infringement issue is also supported by the cases cited by SCG. For example, Elyria Nat'l Rubber Heel Co. v. I.T.S. Rubber Co. explained that "normally, the monopoly is to be judged at the time of the sale." 263 F. 979, 981 (6th Cir.1920); *see also* Stash, Inc. v. Palmgard Int'l, Inc., 937 F.Supp. 531, 537 (D.Md.1996) (explaining that "where the alleged infringement ... occurs, if at all, only over a period of some time, such action does not constitute infringement").

4. Course FN12

FN12. FieldTurf presented the claim construction of "course" as integral to each of the two courses described in the claim. Because its proffered definition for course is consistent, the Court will address "course" independently.

FieldTurf's Proposed Construction: "Relatively distinct, substantially continuous layer"

SCG's Proposed Construction: "Distinct, continuous, separate and uniform covering of material of a depth

determined before the covering is applied across an entire area"

The Court's Claim Construction: "Relatively distinct, substantially continuous layer"

SCG argues that its construction of a "course" "is taken directly from FieldTurf's own Specification." It then makes three references to the specification. The first describes "[a] unique infill layer of two graded courses of particulate matter disposed interstitially between the upstanding ribbons upon the upper surface of the backing and at a depth less than the length of the ribbons." '689 patent, 5:10-15. The second reference is to point to Figure 1 and describe that figure as showing "a distinct, continuous, separate and uniform covering of material of a depth determined before the covering is applied across an entire covered area." In support of this description, SCG explains that "[t]here are no breaks or gaps in the bottom course 5 or the top course 6[.]" "[t]here are no peaks in the bottom course 5 or the top course 6[.]" and "there are no valleys in the bottom course 5 or the top course 6." The third reference to the specification notes that it contains the words "resistance to particle displacement" and uses this language to support its argument that particles that migrate to form a course after installation cannot infringe the patent.

The Court will address the third argument first. As the Court explained above, the issue of migrating particles or the time of infringement is an infringement issue, not a claim construction issue.FN13

FN13. In any event, SCG's argument with respect to the excerpted language appears to be misleading. A more complete quotation states that there is a "degree of resistance to particle displacement in the mixed bottom course" '689 patent, 7:44-45. As is explained in great detail earlier in the specification, the mixed bottom course may have a similar size, size distribution and shape such that there is little migration within that layer. '689 patent, 7:11-32. However, the bottom course particles may be smaller than the top course particles such that they can migrate from the top course. '689 patent, 7:63-8:9.

[15] Moving to the second argument, the Court declines to import SCG's characterization of the drawings, unsupported by the specification, into the claims. Rather, the specification appears to disclose two courses with some level of particle movement between the courses. '689 patent, 5:40-47; 7:63-8:9. "The invention recognizes that the granular infill is a dynamic system" and "accommodates such dynamic activity in a number of ways." '689 patent, 5:32-39. These descriptions thus support FieldTurf's proposal of a "*relatively distinct, substantially continuous layer.*" FN14 They also demonstrate that SCG's attempts to import "separate" and "uniform" from its characterization of the drawings is improper absent some citation to supporting language.

FN14. The Court recognizes that a course is "relatively distinct" while a layer is simply "distinct." In the context of the claims, where the layer includes all of the particulate matter, but the top and bottom course do not, this distinction makes sense and is supported by the specification.

The first argument is the only one that references relevant specification language. However, the only portion of the proposed definition arguably supported is the concept "of a depth determined before the covering is applied across an entire covered area." However, the "depth" reference in the specification is actually referring to the entire layer depth, not a course depth. Moreover, to the extent a depth is determined in the specification it is defined by a maximum value of less than the length of the ribbons, not a specific "depth determined before the covering is applied across an entire covered area." Finally, with respect to the layer,

there is no need to include language regarding the layer depth in the claim as the claims in the patents-in-suit explicitly state that the layer depth is less than the ribbon length.

5. Intermixed

FieldTurf's Proposed Construction: "Mixed"

SCG's Proposed Construction: "Thoroughly mixed together"

The Court's Claim Construction: "Intermixed"

[16] The Court believes that it is unnecessary to provide further definition to "intermixed." It properly conveys the concept, described in the specification and claims, of a bottom course with both hard and resilient particles mixed together. '689 patent, 7:7-8; 9:58-59; 10:33. SCG relies entirely on its characterization of Figure 1 as depicting a bottom course 5 that is "completely homogeneous, with no variations, gaps, or other breaks." First, this description of Figure 1 is not accurate. Rather, the bottom course 5 appears to have significant variations and randomness throughout. Moreover, SCG fails to point to anything in the specification that requires a completely homogeneous bottom course with no variations, gaps, or other breaks.FN15

FN15. Although it is not entirely clear how "thoroughly mixed together" differs from "mixed" or "intermixed," it is apparent that SCG interprets it to be something approaching "completely homogeneous, with no variations, gaps, or other breaks."

6. Disposed upon

FieldTurf's Proposed Construction: "Located on"

SCG's Proposed Construction: "Installed or put into place on top of-[this term may not be construed to cover particle locations or distributions which migrate after installation]"

The Court's Claim Construction: "Located on"

[17] Disposed upon is essentially the same as disposed interstitially, and as such, the Court adopts the same analysis as above, wherein disposed refers to a location, not a method of placing something. With respect to SCG's various arguments, the Court recognizes that the patents-in-suit disclose a method of manufacturing the artificial turf. However, they also disclose a structure and it is that structure (or product) that is claimed. SCG's various arguments for reading the method elements into the claim because they are disclosed in the specification again fail, because there is nothing to indicate that the preferred method of manufacture must be read in the claim or has been defined as the claim as a whole. Once again, the Court also recognizes SCG's noninfringement argument that an artificial turf constructed without the claimed structure may not infringe the patents-in-suit. But that is an infringement issue that may require significant factual details regarding the accused products.

7. Substantially exclusively

FieldTurf's Proposed Construction: "almost entirely"

SCG's Proposed Construction: "entirely"

The Court's Claim Construction: "almost entirely"

"Substantially exclusively" is used in claim 1 to describe the composition of resilient particles in the top course. Fieldturf points out that the same language is used in the specification, '689 patent, 10:20-21, and cites authority to the effect that "substantially" is a common term of approximation used in patent claims. *E.g.*, *Verve, LLC v. Crane Cams, Inc.*, 311 F.3d 1116, 1120 (Fed.Cir.2002).

[18] SCG does not point to anything in the specification that would support a definition of entirely, and instead acknowledges that substantially exclusively is used in the specification. '689 patent, 10:20-21. It then points to two dependent claims in each patent FN16 which state that "particle sizes of 80% by weight of hard granules and resilient granules in the bottom course are distributed in a range spanning" a particular screen mesh standard. '689 patent, cl. 8-9; '752 patent, cl. 9-10. It then posits that "[s]ince the top course is 'substantially exclusively of resilient rubber granules' it must contain at least greater than 80 percent resilient rubber granules." However, the quoted claim language has nothing to do with a particular percentage of resilient granules being in the bottom course, but rather the percentage by weight of both hard and resilient granules being distributed in a particular size range in the bottom course. The cited claims are simply not relevant to the amount of resilient granules in the top course.

FN16. SCG draws the court's attention to claims 7 and 8, but neither patent has the described limitation in claims 7 and 8. Rather the described limitation is in claims 8 and 9 of the '689 patent and claim 9 and 10 of the '752 patent.

SCG next argues that "[n]o jury would be assisted by FieldTurf's proposed claim construction(s)" and that "[i]t is beyond the ken of reason to understand how a jury would use FieldTurf's definitions of 'predominantly' or 'almost entirely' to measure whether a layer includes a certain type of granules." However, as the Court noted above, FieldTurf correctly points out that the Court of Appeals for the Federal Circuit allows language of approximation. Accordingly, this latter argument is without merit.

8. Intermittently slit

FieldTurf's Proposed Construction: Ordinary and customary meaning, *i.e.*, "openings/cuts in the ribbons in an intermittent pattern"

SCG's Proposed Construction: "Reduced into smaller widths by creating openings in a sheet by splitting with a brush"

The Court's Claim Construction: "Openings or cuts in the ribbons in an intermittent pattern."

[19] Fieldturf notes that the intermittent slits are supported in the specification as conforming to their ordinary meaning, *i.e.*, "openings or cuts in the ribbons in an intermittent pattern." The Court agrees that the cited passages do support just such a structure. '689 patent, 5:15-16; 5:21-23; 8:23-25. SCG points to the same general portions of the specification and notes the procedure of brushing the ribbons along the slits. However, importing the brushing into the claim definition for the slits fails for two reasons. First, as the Court explained earlier, neither the specification nor the claims support importing the method of manufacturing into the claimed structure as to this element. Second, while the specification describes brushing the slits, it does so to "open a lower portion of the ribbons and extend the slits." '689 patent, 5:23-24. The reduction to a smaller width incorporated into SCG's proposed construction is not to create slits but

is such that "[t]he ribbons are longitudinally split by the brushing action along the slits into several free-standing strands of a thinner width resembling grass blades." '689 patent, 5:26-31. In other words, SCG wants to import a manufacturing operation performed on the slits to create the free-standing strands of thinner width into the definition of the slits. This is not proper. Accordingly, the Court adopts FieldTurf's proposed construction of "openings or cuts in the ribbons in an intermittent pattern."

9. *Predetermined pattern of slits*

FieldTurf's Proposed Construction: "An arrangement of openings, cuts"

SCG's Proposed Construction: "An arrangement of longitudinal openings placed according to a plan established before the longitudinal openings are created"

SCG's Proposed Construction of "pattern of slits": "An arrangement of openings along a longitudinal axis before the arrangement is produced"

SCG's Proposed Construction of "predetermined": "According to a prior plan"

SCG's Proposed Construction of "slit": "Opening formed by slicing a frayed sheet along a longitudinal axis"

The Court's Claim Construction: "An arrangement of openings or cuts according to a prior plan"

[20] The various SCG constructions of "predetermined pattern of slits," "pattern of slits," "slit" and "predetermined" all boil down to the overall concept of a predetermined pattern of slits as "an arrangement of longitudinal openings placed according to a plan established before the longitudinal openings are created." FieldTurf essentially omits the "predetermined" aspect of the claim in its definition, dismissing it with the general argument that "predetermined" improperly places a temporal aspect into the claim and that it is lacking support in the specification. However, the "predetermined" limitation is in the claims because FieldTurf put it there. It cannot now complain that predetermined requires the "pattern of slits" to be "predetermined." The Court also finds that SCG's proposed construction of predetermined as "according to a prior plan" is appropriate. The Court of Appeals for the Federal Circuit has given predetermined a similar meaning. *Planet Bingo, LLC v. GameTech Int'l*, 472 F.3d 1338, 1344 (Fed.Cir.2006) (holding that a "predetermined winning combination" for a game requires a "winning combination before the game begins"); *Pause Tech. LLC v. TiVo Inc.*, 419 F.3d 1326, 1335 (Fed.Cir.2005) (holding that "the district court properly construed 'time interval of predetermined duration' to mean that the duration of the time interval for recording signals into the buffer memory must be fixed prior to operation"); *Koito Mfg. Co. v. Turn-Key-Tech, LLC*, 381 F.3d 1142, 1150 (Fed.Cir.2004) (explaining that predetermined "connotes an element of forethought and planning"). However, the Court declines to adopt SCG's proposed definition for a "predetermined pattern of slits" because it includes unnecessary and redundant language such as longitudinal, which is set out earlier in the same claim phrase. Accordingly, the Court construes a "predetermined pattern of slits" as "an arrangement of openings or cuts according to a prior plan".

10. *Free-standing strands*

FieldTurf's Proposed Construction: "Portions of the ribbons protruding above the infill"

SCG's Proposed Construction: "A strip of sheet that is divided from an adjoining strip of sheet not attached to or supported by something else"

SCG's Proposed Construction of "free standing": "Protruding without lateral support"

The Court's Claim Construction: "Strands capable of protruding without lateral support"

[21] Looking first to the context of the claim, there is "an upper portion of the ribbons extending above the infill layer and longitudinally split into individual free-standing strands of a selected width to represent grass blades...." The specification explains that "[o]nce all the infill is installed, the upper portion of the ribbons extending above the infill layer are brushed aggressively" such that "[t]he ribbons are longitudinally split by the brushing action along the slits into several individual free-standing strands of a thinner width resembling grass blades." '689 patent, 5:26-31. Both the context of the claim language and the almost identical language from the specification demonstrate that FieldTurf's proposed construction is lacking. Both the claims and specification already state that a portion of the ribbon protrudes above the infill. To give the full phrase "free-standing strands" that same meaning would render the earlier language superfluous. However, FieldTurf makes a better point in its alternative argument that freestanding strand need not be further defined. Particularly with respect to the "strand," it is simply a shorthand for a particular portion of the ribbon-the "upper portion of the ribbons extending above the infill layer and longitudinally split [and] of a selected width to represent grass blades"-and further definition seems unnecessary. Although it is at least arguable that "free-standing" is similarly without need of further explanation, based on the parties' arguments it may be helpful to a jury to state that free-standing means "capable of protruding without lateral support." The claim already provides that the strands are "individual" so "free standing" should provide something more. However, and particularly in light of the specification and invention as a whole, the Court believes that "protruding without lateral support" improperly imports a concept that the strands are wholly isolated from one another. The Court disagrees that the strands must be isolated and thus believes that that the "capable of" language is necessary. Accordingly, the Court construes "free standing strands" as "strands capable of protruding without lateral support."

11. Selected width

FieldTurf's Proposed Construction: "Each of the grass blades having a preselected width"

SCG's Proposed Construction: "Width determined by dividing a ribbon and making it narrower"

The Court's Claim Construction: "a selected width narrower than the ribbon"

[22] FieldTurf argues that selected width need not be construed, but if it is, that "each of the grass blades having a preselected width" is appropriate. In its brief, SCG does not appear to quarrel with the preselected aspect of FieldTurf's construction, but rather it seeks to make clear that the selected width must be narrower than the "ribbon." FieldTurf objects to SCG's definition on several bases, including that it improperly attempts to invoke process steps and that there is no basis for bringing "narrower" into the claim. The Court agrees with FieldTurf on the former objection. Even if the concept of "narrower" is to be included, it should be included in a structural definition, such as a "width narrower than the ribbon." Whether to include the "narrower" concept in the claim definition is a more difficult issue. On the one hand, the claim does not say narrower, it says a "selected width." On the other hand, the selected width is necessarily no greater than a ribbon width, since the strands are "split" portions of the ribbon that sit above the infill. Thus, from the claim language itself it is clear that the "selected width" of the "strands" would have to be narrower than the ribbon. This construction is not imported from the specification, but inherent in the claimed structure. This construction is also supported by the specification, which explains that the "ribbons are longitudinally *split* ... along the slits into several individual free-standing strands of a *thinner* width resembling grass blades." '689 patent, 5:28-31 (emphasis added). That "selected" is used instead of "thinner" cannot change the fact

that a strand split from a slit ribbon is necessarily thinner than that ribbon. Although it is clear from the claim language, because the matter is obviously in dispute the Court finds it appropriate to explain that the selected width must be thinner than the ribbon. Finally, neither "determined" or "preselected" appear to impart any more meaning than "selected." Accordingly, the Court construes a selected width as "a selected width narrower than the ribbon."

12. Laterally linked strands

FieldTurf's Proposed Construction: "The slit portions of the ribbons are attached to each other by relatively laterally oriented sections"

SCG's Proposed Construction: "Distinct flat brushed split sheet having slits placed across the width of the sheet, the slits being located along a longitudinal axis of the sheet and being connected at the sides of each other"

The Court's Claim Construction: "Strands that are connected at the sides"

[23] The first part of SCG's proposed definition is based on its claim that "strand" is synonymous with "ribbon" and thus strand should have the same claim construction as "ribbon." The claim language in which this instance of "strand" occurs states as follows: "a lower portion of the ribbons having slits extended open forming laterally linked strands disposed in a lattice structure enmeshing the surrounding particulate material." The specification describes "brushing ... to open a lower portion of the ribbons and extend the slits open forming laterally linked strands disposed in a lattice structure enmeshing the surrounding particulate infill." '689 patent, 5:23-26. Clearly the strand is a part of the ribbon but it is not synonymous with ribbon. Rather it is adequately defined within the claim and needs no further explanation.FN17 With respect to "laterally linked," the Court does not perceive a significant difference in this portion of the parties' definitions. Because "connected at the sides" conveys the concept without repeating the word "laterally," the Court finds that overall construction of "laterally linked strands" is "strands that are connected at the sides."

FN17. Similarly, the Court finds FieldTurf's "slit portions of the ribbons" to be redundant of the rest of the claim.

13. Selected minimum distance

FieldTurf's Proposed Construction: "Space determined not to exceed a specific amount of space"

SCG's Proposed Construction: "Space determined not to exceed a specific amount of space that is predictable and reproducible and not densely packed together"

The Court's Claim Construction: "Space determined not to exceed a specific amount of space"

The "selected minimum distance" language appears in claim 10 of the '689 patent, which reads as follows: "A synthetic grass assembly according to claim 1, wherein the synthetic ribbons are disposed in rows spaced apart a selected minimum distance." The only dispute is whether the distance must be "predictable and reproducible and not densely packed together." SCG pulls this language from the following excerpt from the "Background of the Art" portion of the specification:

Therefore the combined structure of upstanding ribbons and loose particulate infill must be balanced or

optimized to provide a desirable playing surface. When the ribbons are densely packed together, the cleats cannot release properly, but when the ribbons are spaced too far apart, adequate traction and stability is not available. Due to the high cost of artificial grass installations, and risk of injury to highly skilled and highly paid athletes, a predictable and reproducible artificial grass performance is required.

'689 patent, 4:27-35.

The portion of the specification that refers to a "selected minimum distance" reads as follows:

The synthetic ribbons are preferably disposed in rows spaced apart a selected minimum distance "W". Depending on the firmness desired and the degree of freedom required for cleats to rotate for various sports, the spacing "W/F can vary between 2.25 inches and 0.625 inches. A closer spacing provides firmer support for the infill 3 whereas a wider spacing permits easier rotation of embedded cleats.

'689 patent, 12:6-12.

[24] The Court agrees with FieldTurf that SCG is attempting to improperly import statements from the specification into the claims. First, the "predictable and reproducible" language has little or no relation to the "selected minimum distance" claim limitation. Whatever the purpose of the "selected minimum distance," that purpose is met so long as the ribbons are spaced apart more than that minimum. Second, it is clear from the specification that "not densely" depends on the end use of the turf. Adding this to the claim construction would not serve to help the jury but would instead cause confusion. Third, even if "not densely" were appropriate claim language it is also clear from the specification that it is not a correct limitation for selected minimum distance. There are some applications where firmness will be desired and thus the "selected minimum distance" will be densely packed together.

Accordingly, the Court construes "selected minimum distance" as a "space determined not to exceed a specific amount of space."

14. *Fibers*

FieldTurf's Proposed Construction: "Synthetic ribbons fabricated from polypropylene, polyethylene, nylon and plastic"

SCG's Proposed Construction: "Chemical compositions such as polypropylene, polyethylene, nylon and plastic used to make strips of sheet"

The Court's Claim Construction: "Material"

[25] Claim 17 reads as follows: "A synthetic grass assembly according to claim 1, wherein the synthetic ribbons are fibers selected from the group consisting polypropylene, polyethylene, nylon and plastic." The term "fibers" is used in the "Background of the Art" section of the specification to refer generally to the materials used to simulate grass on an artificial playing surface. '689 patent, 3:56-4:26. In other words, a ribbon is one type of fiber that allows a granular infill between the fiber. '689 patent, 4:13-26; 11:3-8. FieldTurf's proposed construction is therefore more appropriate, except that it is redundant to include "synthetic ribbon" in the construction or to state that the fiber is "from the group consisting of polypropylene, polyethylene, nylon and plastic." Accordingly, the Court will construe "fiber" as a "material."

15. Fibrillated

FieldTurf's Proposed Construction: "To split apart ribbon ends or portions of ribbon"

SCG's Proposed Construction: "Splitting or fraying a flat sheet with a brush"

The Court's Claim Construction: "Split or frayed"

[26] Claim 18 of the '689 patent states as follows: "A synthetic grass assembly according to claim 1, wherein the upper portion of the synthetic ribbons are fibrillated into individual strands of a width in the range between 1.0 to 15.0 mm." The dispute over fibrillated is actually fairly minor. Both SCG in its claim construction and FieldTurf in its claim construction and brief agree that fibrillated means to "split or fray." As for the remainder of FieldTurf's claim construction, it is not incorrect but it is duplicative of the remainder of the claim language. Thus, the only dispute is whether to include "a flat sheet with a brush" in the claim construction. The Court declines to do so. First, this is a dependent claim and the ribbons have already been defined. There is simply no reason to reinsert SCG's "flat sheet" argument into this dependent claim. Second, the reason a flat sheet is in the claim is because SCG wishes to import a method of manufacture-brushing a flat sheet-into a structurally-defined product claim. As with a number of other claim terms discussed above, SCG fails to provide any proper support for doing so. Accordingly, the Court construes "fibrillated" as "split or frayed."

16. Substantially identical size distribution

FieldTurf's Proposed Construction: "The sizes of the particles of hard and resilient granules in the intermixed bottom course having a range spanning a numerical difference of 40 screen mesh standard"

SCG's Proposed Construction: "An arrangement of particles such that the graphic line for hard particles and the graphic line for resilient particles are superimposed on each other on a conventional soil laboratory sieve analysis"

SCG's Proposed Construction of "Size distribution": "Frequency of occurrence of particles having a given physical magnitude"

The Court's Claim Construction: "80% by weight of hard and resilient granules in the bottom course distributed in a range spanning a numerical difference of no more than 40 screen mesh standard."

The only appearance of "substantially identical size distribution" in the claims of the patents-in-suit is in the '752 patent. Claim 1 of the '752 patent includes the following claim language related to the bottom course: "a bottom course of intermixed hard and resilient granules of substantially identical size distribution, disposed upon the top surface of the backing...." FieldTurf first claims that "substantially identical size distribution" should be submitted to the jury without further explanation because it can be understood according to its ordinary meaning. As an alternative, it states that it would find "the sizes of the particles of hard and resilient granules in the intermixed bottom course having a range spanning a numerical difference of 40 screen mesh standard" to be acceptable.

SCG responds by seeking separate definitions for "size distribution" and "substantially identical size distribution." It points to a portion of the specification that generally discusses the "size distribution" as supporting its definition of "frequency of occurrence of particles having a given physical magnitude." '752 patent, 6:9-19. SCG also defines the full phrase "substantially identical size distribution" as "[a]n

arrangement of particles such that the graphic line for hard particles and the graphic line for resilient particles are superimposed on each other on a conventional soil laboratory sieve analysis." '752 patent, 6:13-23.

[27] As a first point, the Court finds it appropriate to define "substantially identical size distribution" and to do so for the whole claim term. As the Court noted earlier, a patentee may be his own lexicographer. Here the specification states the following:

By "substantially identical" size distribution it is meant that when the bottom infill layer is analysed through conventional soil laboratory sieve analysis, and graphically presented on a standard sieve analysis semi-logarithmic graph (y-axis showing 0-100 percent passing the sieve size or smaller by weight and x-axis showing sieve/particle size logarithmically) the line for hard particles and the line for resilient particles are ideally superimposed on each other to a substantial extent. Therefore the hard and resilient particles have substantially equal particle sizes and the distribution of sizes is substantially the same.

'752 patent, 6:13-23. Shortly thereafter, the '752 specification states that:

Applying this practice to the invention, numerically or scientifically defined, where the particle sizes of 80% by weight of hard and resilient granules in the bottom course are distributed in a range spanning a numerical difference of 40 screen mesh standard, the particle size distribution is considered substantially identical or very well sorted.

'752 patent, 6:34-39.

Considering the specification as a whole, the Court finds that the proper construction of "substantially identical size distribution" is "80% by weight of hard and resilient granules in the bottom course distributed in a range spanning a numerical difference of no more than 40 screen mesh standard." The Court prefers this over a construction based on comparison of the "graphic lines" of the particles because it provides certainty. It is difficult to objectively ascertain whether lines are "ideally superimposed" and thus, as the specification acknowledges, such a measurement is "by nature an imprecise 'rough and ready' measure" '752 patent, 6:24-25. This is the reason why the 80% by weight, 40 screen mesh standard is proposed in the specification. '752 patent, 6:24-33. Finally, the Court's definition clarifies that the 40 screen mesh standard is a maximum, as is clear from the specification language that lower screen mesh distributions such as 20 are preferred. '752 patent, 6:40-52.

CONCLUSION

For the foregoing reasons, the Court construes the disputed claim terms as follows:

Ribbon: "A synthetic structure representing a grass blade"

Layer: "Distinct, substantially continuous covering of particulate material"

Disposed interstitially: "Located between"

Course: "Relatively distinct, substantially continuous layer"

Intermixed: "Intermixed"

Disposed upon: "Located on"

Substantially exclusively: "almost entirely"

Intermittently slit: "Openings or cuts in the ribbons in an intermittent pattern."

Predetermined pattern of slits: "An arrangement of openings or cuts according to a prior plan"

Free-standing strands: "Strands capable of protruding without lateral support"

Selected width: "A selected width narrower than the ribbon"

Laterally linked strands: "Strands that are connected at the sides"

Selected minimum distance: "Space determined not to exceed a specific amount of space"

Fibers: "Material"

Fibrillated: "Split or frayed"

Substantially identical size distribution: "80% by weight of hard and resilient granules in the bottom course distributed in a range spanning a numerical difference of no more than 40 screen mesh standard."

IT IS SO ORDERED.

N.D.Ohio,2007.

FieldTurf USA, Inc. v. Sports Const. Group LLC

Produced by Sans Paper, LLC.