

United States District Court,
N.D. Texas, Dallas Division.

ELK CORPORATION OF DALLAS,
Plaintiff.

v.
GAF BUILDING MATERIALS CORPORATION,
Defendant.

Elk Corporation of Dallas,
Plaintiff.

v.
GAF Building Materials Corporation, and Building Materials Corporation of America,
Defendants.

Civil Action Nos. 3:94-CV-0249-P, 3:94-CV-2607-P

Sept. 29, 1997.

ORDER RE: CONSTRUCTION OF PATENT CLAIMS

JORGE A. SOLIS, District Judge.

These cases are patent infringement suits filed by Elk Corporation of Dallas ("Elk") against GAP Building Materials Corporation ("GAF"). At issue in these suits are two patents issued to Elk, U.S. Patent No. 344,144 ("Design Patent" or "144 Patent") and U.S. Patent No. 5,369,929 ("Utility Patent" or "929 Patent"). Both patents pertain to a type of roofing shingle known as laminated roofing shingles. FN1 Elk claims that GAF infringed on its patents, and GAF asserts invalidity and unenforceability of the patents on numerous grounds,

FN1. Laminated shingles are shingles made up of two asphalt coated sheets. The top sheet, or layer, consists of a headlap portion (which is covered by the next higher row of shingles when installed on a roof) and a buttlap portion. The headlap is a solid asphalt sheet, and the buttlap is cut into a number of tabs or dragon teeth. The bottom sheet is referred to as the backer sheet or backer strip. It is attached to the underside of the top sheet by an adhesive and underlies the buttlap portion of the upper sheet so that portions of the backer sheet are visible through the tabs or dragon teeth in the top sheet.

I. Background

It is well established that a determination of patent infringement involves a two step analysis. The first step is to construe the patent claim to determine its scope and meaning. Second, the claim as properly construed must be compared to the accused device or process, *Carroll Touch, Inc. v. Electro Mechanical Systems, Inc.*, 15 F.3d 1573, 1576 (Fed.Cir.1993).

The Supreme Court, in *Markman, et al. v. Westview Instruments, Inc.*, 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996), held that construction of the scope and meaning of a patent is a question of law for the court to decide. In order to make a determination as to the scope and meaning of the patents in issue, the court may hear arguments and take in evidence as deemed necessary. In accordance with *Markman*, the court held a hearing on December 9 and 10, 1996 in order to hear evidence with respect to construction of the claims in the patents at issue.

As a preliminary matter, the parties take somewhat different approaches as to the type of evidence that is admissible and properly considered by the court in construing the patents. In construing patents, courts can consider both intrinsic and extrinsic evidence. *Vitronics Corp. v. Conceptorics, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir.1996) Intrinsic evidence is evidence contained in the records of the Patent & Trademark Office ("PTO") and consists of the claims in the patent, the specifications and the prosecution history. *Id.*; *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed.Cir.1995). Extrinsic evidence is evidence which is external to the patent file history. *Markman*, 52 F.3d at 980.

The claims in a patent must conform and agree with the invention as set forth in the remainder of the specifications. 37 C.F.R. Section 1.75(d)(1). Further, the terms and phrases used in the claims must be supported in the description of the specifications so that the meaning of the terms in the claims may be ascertainable by reference to the description. *Id.* Any technical term used in a patent document is interpreted as having the meaning that it would be given by persons experienced in the field of the invention, unless it is apparent from the patent and the prosecution history that the inventor used the term with a different meaning. *Vitronics*, 90 F.3d at 1582.

Claims must also be read in view of the specification, of which they are a part. *Markman*, 52 F.3d at 979. The specifications serve as a dictionary because they expressly define terms used in the claims and also may define terms by implication. *Vitronics*. 90 F.3d at 1582. The specifications must contain a written description of the invention which must be clear and complete enough to enable those of ordinary skill in the art to make and use the invention described. *Id.* Thus, the specifications are "always highly relevant" to determining the meaning of disputed claims, are usually dispositive, and are the "single best guide to the meaning of a disputed term," *Id.*

The public administrative record leading to issuance of a patent is referred to as the prosecution history, file history or the file wrapper. This public record is "of primary significance in understanding the claims," *Markman*, 52 F.3d at 980.

Taken together, these three sources of intrinsic evidence, that is the claims, specifications and file history, are "the most significant source of the legally operative meaning of disputed claim language." *Vitronics*, 90 F.3d at 1582.

Extrinsic evidence, which is external to the patent and file history, may include expert testimony, inventor testimony, dictionaries, and technical treatises and articles. *Vitronics*, 90 F.3d at 1584. Although technical treatises and dictionaries fall within the category of extrinsic evidence, as they are not a part of an integrated patent document, courts are free to consult such resources at any time in order to better understand the underlying technology and may also rely on dictionary definitions when construing claim terms, so long as the dictionary definition does not contradict any definition found in or ascertained by a reading of the patent documents. *Id.* at 1584, n. 6.

Prior art and, to a lesser extent, dictionaries are more objective and reliable guides in interpreting the meaning of a patent than expert testimony and also are accessible to the public in advance of litigation. In particular, opinion testimony on claim interpretation should be approached with caution as it is no better than opinion testimony on the meaning of a statute. *Id.* at 1584.

Another source of extrinsic guidance is prior art FN2 offered into evidence, which is an excellent guide to how a disputed term is used by those skilled in the art. In comparison to prior art, expert testimony may reflect only the opinion of a particular party's expert as to what a term means. *Id.* at 1584.

FN2. Note that prior art which is cited within the Patents is intrinsic evidence. *Id.* at 1583.

Elk advocates that the court should examine both intrinsic and extrinsic evidence in construing the Patents' claims. Elk suggests that the court should first look to the intrinsic evidence, but that the court may also consider extrinsic evidence in order to understand the patented technology.

GAF argues that the court should first examine the claims to determine scope and meaning and also examine the specifications for the limited purpose of determining if the patentee has assigned meanings to words used in the claims other than their plain or ordinary meanings. If, from this review, the court determines that the claims are unambiguous, then the court need not consider any other evidence. If there is an ambiguity in the claims themselves, then the court should first look to the specifications to resolve it. If an ambiguity still remains, then the court may look to the file history if offered into evidence by the patentee. With respect to extrinsic evidence, GAF asserts that while reliance on such evidence may be proper to help explain the meaning of ambiguous terms in the claims, such evidence is unnecessary in this case due to the nature of the technology involved.

The court finds that it may properly look to all of the intrinsic evidence in determining the scope and meaning of the claims in the patents. *Markman* as well as prior and subsequent case law make clear that the specifications and file history are very important in construing a patent's claims. *Markman*, 52 F.3d at 980 (file history is of "primary significance" in understanding the claims).FN3 In *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed.Cir.1996), the Federal Circuit stated:

FN3. The significance of the file history is illustrated by the fact that one cannot rely on an attorney opinion of non-infringement as a good faith defense to a charge of willful patent infringement if the attorney did not consult the file history of the patent for which infringement is charged prior to giving his opinion. *Datascope Corp. v. SMEC, Inc.*, 879 F.2d 820, 828 (Fed.Cir.1989).

It is well-settled that, in interpreting an asserted claim, the court should look first to the intrinsic evidence of record, *i.e.*, the patent itself, including the claims, the specifications and, if in evidence, the prosecution history. Such intrinsic evidence is the most significant source of the legally operative meaning of disputed claim language.

Accordingly, the court will examine all of the intrinsic evidence, the claims, specifications and file history, in order to construe the Patents' claims. However, the court cannot use the specifications or the file history to contradict, change, expand, diminish or vary the claims. *Markman*, 52 F.2d at 980. The court will rely on the extrinsic evidence presented to assist in determining the meaning of technical terms in the claims as well

as to aid the court to better understand the technology involved.

II. Construction of Claims

A. Utility Patent or '929 Patent

The Utility Patent is composed of four claims. Claim 1 is an independent claim, and claims 2, 3 and 4 are dependent claims. The dependent claims incorporate every element defined in the independent claim. Accordingly, the Court must construe the dependent claims in a manner that does not alter and is not different from the express limitations in claim 1. 37 C.F.R. Section 1.75. In construing disputed terms in the claims, the court examines the claims from the perspective of "what one of ordinary skill in the art at the time of the invention would have understood the term to mean," *Markman*, 52 F.3d at 986.

The court finds, and the parties do not dispute, that Claim 2 provides that the area of the first, second and third color striations on the backer sheet is one-third each. Further, the court finds that Claim 3 provides that the tabs may vary in color from tab to tab.

The parties, however, dispute the scope of the Utility Patent. That is, they dispute whether the Utility Patent covers only the novel feature of a laminated shingle or the entire shingle. Furthermore, the parties dispute several features of the Utility Patent such as color variation and the characteristics of the dragon teeth or tabs. A discussion of these disputed features is set forth below.

1. Novel Feature of Laminated Shingle Claimed

GAF maintains that the '929 Patent covers the entire shingle rather than what Elk now claims as the novel feature of its patent claim, that is the color striations on the backer sheet. Elk argues that laminated shingles are so well known to people in the roofing industry that a person skilled in the art would understand that the Utility Patent covers only the novel feature of a laminated shingle, not the entire shingle. The court agrees that a person of ordinary skill in the art of designing roofing shingles would understand that the patent claims only the novel feature, as described in the patent, as opposed to claiming the entire shingle.

Laminated shingles were well known and widely used in the industry by 1991. Since laminated shingles came into existence, the industry has sought to enhance the appearance of these shingles through efforts at creating an appearance or illusion of depth. The language of the claims themselves, as well as the language of the specifications, make clear that Elk is claiming, as the novel feature, color striations on the backer sheet for the purpose of creating an appearance or illusion of depth.

It would have been apparent to one skilled in the art that the drawings in the patent depict laminated shingles. The term "laminated shingles" is used in the title of the patent and throughout the specifications and claims. Additionally, the use of terms such as "headlap", "buttlap", "backer strip", "first sheet" and "second sheet", and "tab" and "dragon teeth" in the specifications and claims are clear references to laminated shingles to one skilled in the art. Further, the patent specifies in several places the importance of the striations on the backer sheet for the purpose of creating the appearance of depth. Thus, an examination of the drawings, the claims and specifications would have made it apparent to one skilled in the art that Elk was not attempting to claim the entire shingle in its patent application.

It is also apparent that the PTO examiner was aware of laminated shingles and was aware that the novel feature claimed by Elk was the addition of color striations to the backer sheet of a laminated shingle. In the reasons for allowance, the examiner noted that there were no "prior art laminated shingles" with color

striations on the backer sheet. The examiner further noted that prior art with respect to three tab shingles disclosed color striations, but the prior art "disclosed no motivation to combine" the features of a three tab shingle with a laminated shingle to achieve the results obtained by Elk in its invention.FN4 Based on the foregoing, the Court finds that the Utility Patent claims the novel feature of a laminated shingle, not the entire laminated shingle. Specifically, the Court finds that the Utility Patent claims as its novel feature the addition of color striations on the backer sheet of a laminated shingle.

FN4. Three tab shingles or strip shingles are asphalt shingles consisting of a single asphalt coated sheet.

2. Tabs or Dragon teeth

GAP maintains that claim 1 claims that the tabs or dragon teeth are all of the same color or color tonality. Presumably, since claim 3 specifically claims that the tabs have "different color contrasts from one another", GAF's position is that claim 3 should be disregarded since it conflicts with claim 1 to which it is dependent. The court, however, finds no conflict between claims 1 and 3. Claim 1 states that the color of the tabs is "relatively uniform throughout each tab". Col. 6, 1. 39-40. However, claim 1 is silent as to the color contrasts between the tabs. The specifications, however, provide that "[i]f desired, the relatively uniform color portions [of the tabs] may vary in contrast with respect to each other ...". Col. 2, 1. 20-22.

Reading claim 1 and claim 3 together in light of the specifications, the court finds that the tabs bear one uniform color within each tab. Col. 2, 1.29-30, col. 5, 1. 16-22 of '929 Patent. However, the tabs do not all have to be the same color tone. Col. 2, 1. 20-22; Col. 8, 1. 7-9.

3. Meaning of Striations

GAP argues that the term "striations" as used in the claims refers to the portions of the backer sheet visible between the tabs while Elk maintains that the term refers to the bands of color that run horizontally across the entire length of the backer sheet. Some of the language of claim 1 and of the specifications supports GAF's position, while other language supports Elk's position. For example, lines 50, 55 and 63 of column 6; line 13 of column 7; and lines 1 and 4 of column 8 use the plural, "striations", in a manner suggesting that the term refers to the area of the color bands visible between the tabs, in the valleys.FN5 However, lines 4 through 9 of column 4 and line 1 of column 7 of the Utility Patent use the term in a manner which suggests that "striations" refers to the continuous strips along the length of the backer sheet. Thus, there is an ambiguity regarding the meaning of the term "striations" in claim 1.

FN5. Valleys are the portions of the backer sheet visible between the tabs of the overlying buttlap portion of the top sheet.

In support of its position, Elk introduced deposition testimony of Alfredo Bondoc, a GAF employee, as a person skilled in the art of roofing shingles. Bondoc testified that he would interpret the claim and the specifications to mean that the striations run the length of the backer sheet, due to the manner in which asphalt shingles are made in color drops and the fact that asphalt shingles are uniformly covered in mineral granules.FN6 Further support for Elk's position is evidenced by Figures 6 and 7 of the Utility Patent in which ribbon-like continuous horizontal strips are shown on the backer sheet. Finally, the specifications provide that the tabs may have "a square, rectangular, trapezoidal, or any other desired geometric configuration" (Col.3, 1.36-38). However, if the tabs are not square or rectangles, then the visible area

between the tabs will not be rectangular in area. The fact, then, that claim 1 refers to striations that are "rectangular in area" supports Elk's position that "striations" must refer to the bands of color that run lengthwise along the backer sheet rather than to the visible areas between the tabs.

FN6. Dep. Alfredo Bondoc, pp. 170-172, 201-203 and 548-550.

Based on the patent as a whole and the testimony presented, the court finds that a person of ordinary skill in the art would understand that the reference to "striations" in the Utility Patent refers to the colored bands or strips underneath the tabs that run horizontally along the entire length of the backer sheet, not merely the across the portions of the strips which are visible between the tabs.

4. Shape of Tabs and Resulting Valleys

Elk argues that the shape of the tabs and the resulting valleys may vary depending on the shape, size and spacing of each tab. GAF maintains that, pursuant to claim 1, the tabs must be uniform in shape and size. GAP contends that the repeated reference to rectangles in claim 1 means that the dimensions of the tabs and dimensions of the valleys must be the same.

The language of claim 4 supports Elk's position that the size, shape and spacing of the tabs may vary. Claim 4 reads:

... dimensions of one of said tabs and the openings formed thereby differ from the dimensions of others of said tabs and the openings formed thereby.

The specifications are consistent with claim 4 and support Elk's position. Col. 3, l. 34-38, col. 6, l. 8-10 of '929 Patent.

The drawings illustrating the Utility Patent show trapezoidal teeth that are uniform in shape but not in size. The Court concluded above that the reference to "rectangular area" in claim 1 means the rectangular shape of the horizontal color bands along the length of the backer strip, not the visible valleys between the tabs. Accordingly, the Court agrees with Elk's contention that the tabs themselves are not required to be rectangular and do not have to be the same size.

Therefore, while the shape of the tabs may be of various geometric configurations, all of the tabs must be uniform in shape. Finally, the bottom edge of the tabs must line up with the bottom of the backer sheet.

5. Number of Striations

In the notice of rejection mailed by the Patent Office on May 10, 1994, the patent examiner states that the exact number of striations is not critical to the invention but is a matter of personal preference, (Office Action mailed May 10, 1994, p. 6) The Court agrees as the appearance of depth sought to be created by the claimed invention does not appear to depend on whether there are three or more striations. Additionally, the specifications provide that the number of striations may be varied to provide the desired appearance. Col. 2, l. 33-34, col. 4, l. 10-16 of '929 Patent. The Court thus finds that the Utility Patent may include three or more striations of color.FN7

FN7. The court acknowledges that claim 1 of the '929 Patent describes three striations on the backer sheet.

However, the specifications make clear, and the examiner agreed, that the exact number of striations is not critical to the claimed invention. What is critical is the presence of horizontal striations of color tonality going from dark to light on the backer sheet placed between tabs of relatively uniform color. Thus, the specifications do not enlarge or change the concept described in claim 1.

6. Color or Tonal Value of Striations

GAF contends that the striations on the backer sheet represent three different colors. Further, GAF maintains that even if the striations are of the same color family, no relative tonal values for the striations are claimed. Elk advances the position that the striations are composed of relative tonal values of the same color, running from dark, midway between dark and light, and light.

Claim 1 states that the three color striations on the backer sheet form a "color gradation". One definition of "gradation" is a gradual passing from one tint or shade to another, as in a painting. *Webster's Ninth New Collegiate Dictionary* 530 (1983). The Court is free to consult and rely on this dictionary definition. *Vitronics*, 90 F.3d at 1584, n. 6. The Court finds that the specifications teach that the color of the striations on the backer sheet consists of ranges of the same color due to repeated use of language such as "color gradient or gradation from light to dark" (emphasis added). Other language in the specifications suggests that the striations on the backer sheet are ranges of the same color. For example, the specifications state, "Contrast for purposes of this patent application is defined as the degree of difference in the tone or shading between areas of lightest and darkest color." Col. 4, 1.18-21 of '929 Patent.

The prosecution history is consistent with the specifications. It provides, "... the present shingles often use the same basic color of adjacent tabs and underlying shingles, with differing light and darkness of the color providing the appearance of shingle depth." Amendment dated July 8, 1994, page 6 of '929 Patent, Thus, the Court finds that the references to color in claim 1 mean relative tonal values of the same color, not different colors.

The Court also finds that the patent claims that the striation closest to the headlap is the darkest in tone, the middle striation is lighter and the striation along the bottom edge of the backer sheet is the lightest. However, the Court concludes that the patent does not claim any particular relative tonal values for the color striations other than dark at the upper edge, light on the leading or bottom edge, with the middle striation being a tonal value in between the light and dark tones. Col. 4, 1. 6-9. The patent further claims that the contrast in tones may be varied to create the desired appearance or illusion of depth. Col. 4, 1. 28-32.

B. Design Patent or '144 Patent

1. Novel Feature of Laminated Shingle Claimed

Because the '144 Patent is a design patent, the invention is primarily shown by drawings. The claim of the Design Patent states that it claims the "ornamental design for a laminated shingle, as shown and described." As with the Utility Patent, GAF maintains that the Design Patent covers an entire laminated shingle having a specific shape, dimension and configuration, not just the novel feature of a laminated shingle now claimed by Elk. GAF points out that Elk should have indicated the environmental structure or other portion of the Design Patent drawings which was not claimed as a novel feature of its invention. The Manual of Patent Examination Procedure ("MPEP"), provides that any unclaimed portion or environmental structure of an invention may be drawn with broken or phantom lines provided that the use of such broken or phantom

lines is explained.

Elk contends that the words of the Design Patent make clear that it covers only the novel features of a laminated shingle, not the whole shingle. For example, the amendment to the Design Patent dated September 13, 1993 states, "Applicants' design invention produces an enhanced ornamental appearance by a unique arrangement of color granules in three striations rather than modifying the physical structure of the shingles." Further, Bondoc testified that he probably would have understood that the Design Patent drawings showed a Bettoli-type laminated single if he had seen the Design Patent drawings prior to seeing the shingle.FN8 The court agrees that a person skilled in the art of roofing shingles would understand that the patent claims only the novel feature as opposed to claiming the entire shingle.

FN8. Dep. Alfredo Bondoc, pp. 232, 233, 237 and 238.

As noted in the discussion of the '929 patent, laminated shingles were well known and widely used in the industry by 1991. Since the existence of laminated shingles, the industry has sought to enhance their appearance through efforts at creating the appearance or illusion of depth. In its amendment to the application filed in September 1993, Elk identified the novel feature of its design as the addition of three striations rather than modifying the physical structure of the shingles. The amendment further provided that the "design uses increased contrast between three striations to produce the illusion of depth in a flat shingle." It is also apparent that the PTO examiner was aware of the claimed novel feature of the application even before the filing of the amendment. The examiner initially rejected the '144 application as obvious under Morgan, a laminated shingle, and Sadler, a shingle described by the examiner as teaching "horizontal strips spaced evenly, midway the face of the shingle ...". In the rejection, the examiner noted that the overall appearance of the shingle claimed in the '144 application was "substantially shown by the shingle of Morgan ...". The examiner noted it would have been obvious to one of ordinary skill in the art to modify the laminated shingle disclosed by Morgan by adding the horizontal strips taught by Sadler to obtain the claimed design. It is thus apparent that the examiner understood the application was not claiming the entire shingle and understood the claimed novel feature of the application. The court concludes that a person skilled in the art of roofing shingles would understand the '144 patent application to encompass only the novel feature of a laminated shingle rather than claiming the entire shingle.

2. Meaning of Stippling

GAF argues that the stippling, shown in the drawings of the '144 application, connotes texture, not different colors, or ranges of the same color, nor a gradual fading of the same color. Elk contends that the stippling shows a range of the same color progressing from light to dark.

GAF relies on the Guide for the Preparation of Patent Drawings ("GPPD"), Guide for Patent Draftsmen ("GPD"), Symbols for Draftsmen ("SD") and the MPEP to support its position. The GPPD indicates that color should be shown by means of shading using a specific drafting symbol pattern for each color. The limited number of references to "stippled" and "stippling" in the GPD suggest that stippling may be used as shading to show irregular or abrasive surfaces. The SD shows that stippling is conventionally used to show loose sand or adhesive. The SD provides that the collection of symbols is not exhaustive and other symbols may be used as long as they are clearly identified in the specifications and do not create confusion. GAF presented the testimony of an expert in the field of Patent Office procedure, Mr. Foley, who testified that a patentee was not, to his knowledge, permitted to use stippling or other symbols for any purpose other than

the purpose set forth in the written guidelines unless such purpose was disclosed. GAF charges that Elk failed to indicate that it sought to use stippling to show color in any way in the patent itself.

Mr. Dillon, the draftsman of the Patents, admitted that to the best of his knowledge he had never previously used stippling in any other drawing to show a color gradient. Mr. Dillon even used different cross hatching patterns to show color rather than stippling in two figures of the Utility Patent.

Elk argues that stippling is used by people of ordinary skill in the art of designing roofing shingles to show color value or tonality. Elk presented testimony regarding U.S. Patent No. 309,027 ("Noone") which shows darker and lighter coloration of the granules via stippling.FN9 The prosecution history clearly supports Elk's position that the stippling denotes color value. The amendment filed by Elk states that the "... invention produces an enhanced ornamental appearance by a unique arrangement of colored granules in three striations rather than modifying the physical structure of the shingles," Amendment dated September 13, 1993, page 3 of 144 Patent. Later, the amendment states "An important feature of Applicant's invention is providing contrasting striations of the same color." Amendment dated September 13, 1993, page 4 of ' 144 Patent.

FN9. Dep. Alfredo Bondoc, pp. 144-147.

The SD provides that a patentee is free to use whatever symbols it chooses in the claims of a design patent, as long as the meaning for such symbols is clearly defined where it deviates from conventional usage. 37 C.F.R. Section 1.84; GPD at p. 16. The Design Patent prosecution history makes repeated references which clearly put the world on notice that Elk intended for the stippling to show color, not texture. Even though Mr. Dillon has not used stippling to show color in other patent drawings, certainly other patent draftsmen have done so. *See, e.g.* U.S. Patent No. 2,036,329 ("Giles"). Finally, prior art references cited in the Design Patent discuss the utilization of color, not texture, to create depth. These prior art references support Elk's position that the stippling shown in the Design Patent shows color, not texture. The Court finds that the stippling shown in the Design Patent drawings represent color, not texture.

3. Headlap

GAF maintains that the headlap portion of the shingle is plain, flat and has a smooth surface with no granules and no texture or color. Elk claims that the headlap portion of the shingle forms no part of the claimed ornamental design because, like any other laminated shingle, the headlap portion is entirely functional and arbitrary in appearance and hidden from view. Further, Mr. Bondoc testified that all laminated shingles are uniformly covered in granules in order to cover the asphalt coating.FN10 It is apparently Elk's position that a person skilled in the art would understand that the headlap is covered in granules in order to cover the asphalt coating. GAF argues that if the headlap was not intended to be part of the novel feature of the invention, the claims should have been drawn to reflect this fact.

FN10. Dep. Alfredo Bondoc, pp. 53, 55-56 and 59.

In the initial rejection of the application, the patent examiner noted that the headlap portion of the shingle was not shaded. The examiner stated that flat surface shading was required to show the character of the surface and required Elk to amend its application in order to better reflect the character of the headlap's surface. Elk amended its application to comply with the examiner's request. Considering all of the evidence,

including the uncontradicted testimony of Mr. Bondoc that asphalt shingles are uniformly covered in granules, the Court finds that the headlap is uniformly covered in granules to cover the asphalt coating.

Additionally, the court agrees with Elk that the headlap forms no part of the claimed ornamental design. Thus, the court does not agree with GAF's argument that the '144 design patent claims six severely elongated rectangles along the bottom of the headlap.

4. Shape and color of tabs

The Court finds that the tabs on the buttlap portion are elongated trapezoids having the same shape and angles. However, the tabs do not all have to be the same size. The drawings in the application depict tabs which are all trapezoid shaped but which are not the same size. Further, each tab is of uniform color, but the tabs may vary in contrast of color from each other.

5. Appearance of backer strip

GAF asserts that an ordinary person or even a person skilled in the art would not be able to discern the appearance of the backer sheet from the Design Patent drawings. Elk's witness and employee, Mr. Kiik, who is skilled in the art of laminated roofing shingles, testified that a person familiar with laminated shingles would know that the granules on the backer strip were continuous. The court agrees. The Design Patent covers a laminated shingle. The term "laminated shingle" is well known in the industry and was known to the PTO examiner who examined the application, Bondoc, GAF's employee who is also skilled in the art of laminated roofing shingles, stated in his deposition testimony that asphalt shingles are uniformly covered in mineral granules. FN11 GAF did not contradict this evidence nor provide evidence that laminated shingles are made in some other manner. The court finds that the textured granules continue in strips along the backer sheet. In other words, granules are located underneath the tabs in addition being located in the valleys where the granules are visible.

FN11. Dep. Alfredo Bondoc, pp. 53, 55, 56, and 59.

SO ORDERED.

N.D.Tex.,1997.

Elk Corp. of Dallas v. GAF Bldg. Materials Corp.

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