

United States District Court,
D. Minnesota.

ALLAN BLOCK CORPORATION,
Plaintiff.

v.

COUNTY MATERIALS CORP. and Champaign Concrete Company, Inc,
Defendants.

Civil No. 05-2879 (JNE/JJG)

April 26, 2007.

Background: Owner of patents for concrete block for retaining walls and for a method of forming concrete retaining wall block sued a materials company for infringement and breach of contract. The parties requested construction of disputed claim terms.

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

- (1) the phrase "normal to," as used within the patent for concrete block for retaining walls, required that two surfaces meet to form a right angle, and
- (2) the phrase "substantially equal," as used within the second patent, did not require a strict numerical limitation on the relationship between a lip height and a recess depth.

Ordered accordingly.

4,909,010, 5,484,236. Construed.

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Gary A. Ahrens, Esq., Milwaukee, WI, and John C. Scheller, Esq., Michael Best & Friedrich LLP, Madison, WI, for Defendant County Materials Corp.

Frank S. Farrell, Jr., Esq., F S Farrell, LLC, Edina, MN, for Defendant Champaign Concrete Company, Inc.

ORDER

ERICKSEN, District Judge.

Allan Block Corporation brought this action against County Materials Corp. and Champaign Concrete

Company, Inc., alleging claims of patent infringement and breach of contract. FN1 The case is before the Court on the parties' request for construction of disputed claim terms pursuant to *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996).

FN1. Claims against Champaign Concrete Company, Inc., have been dismissed.

I. BACKGROUND

Allan Block owns the patent rights to U.S. Patent Nos. 4,909,010 ('010 Patent) and 5,484,236 ('236 Patent). The '010 Patent is entitled "Concrete Block for Retaining Walls" and the '236 Patent is entitled "Method of Forming Concrete Retaining Wall Block." Allan Block alleges that County Materials' blocks infringe several claims of the '010 and '236 Patents.

II. DISCUSSION

A. Claim construction principles

[1] [2] [3] [4] [5] [6] [7] [8] [9] Patent claim construction is a matter of law for the court. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 970-71 (Fed.Cir.1995), *aff'd*, 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996). Proper claim construction requires an examination of the intrinsic evidence of the record, including the claims, the specification, and, if in evidence, the prosecution history. *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed.Cir.1996). The starting point for claim construction is a review of the words of the claims themselves. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed.Cir.2005) (en banc), *cert. denied*, 546 U.S. 1170, 126 S.Ct. 1332, 164 L.Ed.2d 49 (2006); *Vitronics*, 90 F.3d at 1582 ("First, we look to the words of the claims themselves, both asserted and nonasserted, to define the scope of the patented invention."). The words of a claim are generally given their ordinary and customary meaning—the meaning that the term would have to a person of ordinary skill in the art at the time of the invention. *Phillips*, 415 F.3d at 1312-13. "[T]he 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." *Id.* In some cases, the ordinary and customary meaning is readily apparent; and in such cases, general purpose dictionaries may be helpful. *Id.* at 1314. The claims must be read in view of the specification, which is always highly relevant to claim construction. *Id.* at 1315. The specification may provide a special definition given to a claim term or a disavowal of claim scope by the inventor. *Id.* at 1316. The court may not, however, import limitations found only in the specification. *Id.* at 1323; *Electro Med. Sys. v. Cooper Life Scis., Inc.*, 34 F.3d 1048, 1054 (Fed.Cir.1994). The court should also consider the patent's prosecution history, which provides evidence of how the United States Patent and Trademark Office and the inventor understood the patent. *Phillips*, 415 F.3d at 1317. The court, in its discretion, may also consider extrinsic evidence, though it is less reliable than intrinsic evidence. *Id.* at 1317-18. In most situations, however, intrinsic evidence will resolve any ambiguity in a disputed term, and it is improper to rely on extrinsic evidence when intrinsic evidence does so. *Vitronics*, 90 F.3d at 1583.

B. The patents-in-suit

1. The '010 Patent

[10] Claim 1 of the '010 Patent reads as follows:

1. A concrete block for use in construction of retaining walls and the like, said block including:

a. bottom, top, rear, side and frontal surfaces,

b. said bottom, rear and side surfaces being generally planar and arranged generally normal to one another;

c. said top including a first support area defined over a predetermined area of said top for the support of additional blocks, a vertically extending shoulder adjacent said frontal surface of said block and extending entirely therealong to provide a continuous block positioning member in close association to said frontal surface and a second top surface at the uppermost end of said extending shoulder;

d. said frontal surface defining a lower vertical portion normal to said bottom and an upper, rearwardly inclined portion extending from said vertical portion terminating at said second top surface;

e. said support area and said vertical shoulder providing a locating surface to receive an additional vertically positioned block thereon wherein the additional block is positioned rearwardly from the front surface of the receiving and supporting block whereby a wall of tiers of such blocks extend rearwardly and upwardly from a support surface.

The phrase "said frontal surface defining a lower vertical portion normal to said bottom" appears in claim 1(d) of the '010 Patent. Allan Block asserts that "normal to" is commonly understood and needs no further construction. To the extent that construction is warranted, Allan Block urges the Court to adopt the following meaning:

The lower portion of the front surface must be normal to the bottom surface of the block, meaning that the plane of the lower portion must make an angle with the plane of the bottom surface that is approximately 90 (deg.). The lower portion need not abut the bottom surface in order for the lower portion to be normal to the bottom surface.

County Materials asserts that this phrase should be construed as "the frontal surface has a lower vertical portion which is normal to (*i.e.*, intersects to form a right angle with) the bottom surface."

The Court determines that the ordinary meaning of the disputed language is readily apparent. Claim 1 recites bottom, top, rear, side and frontal surfaces; said bottom, rear and side surfaces being generally planar and arranged generally normal to one another. Further, the claim language requires that the block have a lower vertical portion of the frontal surface that is "normal to" the bottom surface. The parties agree, at least in part, that "normal" means "forming a right angle" or "right-angled." The parties dispute whether the language "normal to" also requires the surfaces to abut. The Court notes that by definition an "angle" is formed by two lines extending from the same point. *See Merriam-Webster's Collegiate Dictionary* 44 (10th ed.2001). Because the claim language expressly requires that the lower vertical portion of the frontal surface form a right angle with (be normal to) the bottom surface, the two surfaces necessarily meet. Or in other words, the surfaces must abut. *See id.* at 5 ("**abut ... 1:** to touch along a border or with a projecting part ... **2a:** to terminate at a point of contact").

The specification supports a construction of "normal to" that requires the surfaces to abut. First, throughout the specification, the lower vertical portion of the frontal surface and the bottom surface are consistently depicted as meeting to form a right angle. For example, FIGS. 1, 4, 6, and 7, illustrate views of the block

wherein the frontal and bottom surfaces abut to form a right angle. The specification also contrasts two different embodiments of the concrete block, one where the end (side) surfaces and the front surface are "in normal arrangement" to each other (forming a right angle), and a second embodiment where the end (side) surfaces "converge inwardly" (forming an acute angle). FN2 The specification provides:

FN2. The "normal" arrangement allows for the construction of a straight retaining wall. The "converged" arrangement allows for the construction of a curved retaining wall.

The block **10** is generally rectangular in shape and of a predetermined height and, as best illustrated in the side elevation of FIG. 4 includes a bottom surface **15**, a rear side **16**, a frontal surface consisting of a rearwardly and upwardly directed portion **17a** and a vertical portion **17b** and end surfaces **18-19** in normal arrangement to the frontal surface **17b** or which may be angularly arranged thereto as will be further described with consideration of form **12**.

'010 Patent, col. 3, ll. 48-56.

In order to form a curved front surface the sides **18-19** may be directed to converge inwardly as illustrated by the dotted line configuration, designated **12** in FIG. 3. Obviously this same modification could be provided to include sides **18-19** which would converge in a forward direction such that curvilinear effects of both convex and concave design would be attainable. This requires a slight modification from the normal side elements in the straight line arrangement.

Id. at col. 5, ll. 14-22. Allan Block argues that the above-cited portions of the specification demonstrate that "normal" is used only to refer to the angle formed by the two surface's planes and does not bear on whether the surfaces abut. The Court disagrees. First, the specification does not mention the surface's planes; instead, the specification discusses the relationship between the surfaces themselves. Second, both embodiments are depicted as having end (side) surfaces that meet with or abut the front surface. In one embodiment, the surfaces meet to form a right angle; in the other, the surfaces meet to form an acute angle. That both embodiments require the abutment of the end (side) and front surfaces is consistent with the definition of angle, which, as discussed above, requires that the surfaces meet.

The Court next looks to the prosecution history. Allan Block relies on the Hegle patent, U.S. Patent No. 4,512,685, which was cited during the prosecution of the '010 Patent. Figure 3A of the Hegle patent shows a "ledge-forming surface" that is "approximately perpendicular" to a "front face," with a separate "bevel surface" in between the "ledge-forming surface" and "front face" that prevents those two surfaces from touching. While the prosecution history of the '010 Patent illustrates that surfaces that are "perpendicular" need not necessarily abut, the Hegle patent does not use the term "normal to." Thus, consideration of the Hegle patent does not change the ordinary and customary meaning of "normal to" as used in the '010 Patent.

Consistent with the claim language, the specification, and the prosecution history, the Court concludes that the ordinary and customary meaning of "normal to" as used in claim 1 of the '010 Patent requires that two surfaces meet to form a right angle. Accordingly, the Court construes "said frontal surface defining a lower vertical portion normal to said bottom" as follows: "the frontal surface has a lower vertical portion which is normal to (*i.e.*, abuts to form a right angle with) the bottom surface."

2. *The '236 Patent*

[11] Claims 1 and 16 of the '236 Patent read as follows:

1. A method of creating a construction block adapted to form retaining walls or the like, comprising the steps of:

(a) forming a member having a major upper surface and a major lower surface and a plurality of edges, said upper major surface having a ridge extending laterally across a midsection thereof between an opposed pair of said edges with said ridges extending upwardly and away from said upper major surface by a predetermined first dimension, said lower major surface having a notch extending laterally across a midsection thereof between said opposed pair of edges with said notch extending upwardly from said lower major surface by a dimension substantially equal to said predetermined first dimension, wherein said laterally extending ridge is parallel to and disposed vertically above said laterally extending notch; and

(b) splitting said member along a center of both said ridge and said notch to define a pair of said construction blocks, wherein each said construction block has rough textured front surface defined by splitting the member in half, a recess extending laterally thereunder, and a lip extending laterally thereover wherein the height of said lip is substantially equal to the depth of said recess.

16. The method of creating a construction block adapted to form retaining walls or the like comprising the steps of:

(a) preparing a mold box for receiving raw concrete with the mold box having opposed front and rear walls and opposed side walls and with the opposed lateral side walls having parallelly disposed horizontally aligned rectangular core bar receiving openings formed along the lower edges thereof;

(b) inserting an elongated rectangular core bar within said mold box extending between said parallelly disposed horizontally aligned openings for forming a notch;

(c) loading raw concrete within said mold box while forming cores within said raw concrete along a vertical axis normal to the axis of said core bar to form a member having a major upper surface and major lower surface and a plurality of edges, said major upper surface formed with a ridge; and

(d) splitting said member along a center of both said ridge and said notch to define a pair of said construction blocks, wherein each said construction block has rough textured front surface defined by splitting the member in half, a recess extending laterally thereunder, and a lip extending laterally thereover wherein the height of said lip is substantially equal to the depth of said recess.

The phrase "wherein the height of said lip is substantially equal to the depth of said recess" appears in claims 1(b) and 16(d) of the '236 Patent. Allan Block asserts that "substantially equal" is a commonly understood term and needs no further construction. To the extent that construction is warranted, Allan Block urges the following meaning: "The height of the block's lip must be equal to, or within some amount of deviation from, the depth of the block's recess. This limitation does not impose a strict numerical boundary on the relationship between the lip height and the recess depth." Allan Block further argues that whether the height of the block's lip is "within some deviation from" the depth of the block's recess presents a question of fact. County Materials contends that the phrase means that "the height of the lip must be substantially equal to the depth of the recess," wherein "substantially equal" means "equal to one another within 1/16th of an inch."

Claims 1 and 16 of the '236 Patent require, in part, that the block be created so that the dimensions of the lip

and the recess are such that "the height of said lip is substantially equal to the depth of said recess." The parties agree that the term "substantially" is a word of approximation, commonly used in patent claims to avoid a strict numerical boundary to a specified parameter. *See* Anchor Wall Sys., Inc. v. Rockwood Retaining Walls, Inc., 340 F.3d 1298, 1310-11 (Fed.Cir.2003) ("[T]he ordinary meaning of the phrase 'generally parallel' envisions some amount of deviation from exactly parallel."); *see also* Playtex Prods., Inc. v. Procter & Gamble Co., 400 F.3d 901, 907 (Fed.Cir.2005). Here, "substantially" modifies the term "equal," thus allowing some amount of deviation from exactly equal. Nothing in the claim language requires a numerical limitation on the amount of deviation allowed.

The specification does not provide a special definition for the term "substantially" or the phrase "substantially equal." Nor does the specification place a strict numerical boundary on the relationship between the lip height and the recess depth. Instead, the specification provides a more general description of the relationship between, and the function of, the lip and the recess:

The back surface **52** of each lip **34** is smooth and vertical with respect to the upper major surface of block **40**. Similarly, the vertical surface **54** of recess **48** is smooth as well and in combination with surface **52** provides for a tight fitting wall system and fast installation.

'236 Patent, col. 5, ll. 56-61.

The width "W" of core bar **20** directly corresponds to this setback "A" defined when the blocks **40** are stacked, where front surface **54** of each recess **48** is securely abutted against the back surface **52** of the corresponding lip **34** of the block disposed thereunder.

Id. at col. 6, ll. 40-45.

When the blocks **70** are stacked such as shown in FIGS. 5 and 6, the tapered surfaces **74** and **78** of the corresponding recesses **76** and ridges **72**, respectively, are conforming and abut one another.

Id. at col. 6, ll. 57-60.

The preferred method invention disclosed realizes retaining wall blocks with an upper forward lip and a lower front recess which provides creating a sound structure which is not susceptible to shifting once embedded in an embankment. Thus, shifting of the retaining wall blocks once integrated into a retaining wall is inhibited.

Id. at col. 7, ll. 19-24.

The Court looks next to the prosecution history. County Materials argues that because the "substantially equal" limitation was added during the prosecution of the '236 Patent, it should allow for no more than some very minimal deviation from "perfectly or exactly equal" and that it should be construed as "equal to one another within 1/16th of an inch." The Court disagrees. Although the "substantially equal" limitation was added during the patent's prosecution, nothing in the '236 Patent or statements made during its prosecution specifies a numerical limitation on the permissible deviation between the lip height and the recess depth. County Materials offers no evidence from the prosecution history supporting the imposition of the strict plus-or-minus 1/16th inch limitation. Instead, County Materials relies on extrinsic evidence, such as industry standards, expert testimony, and Allan Block's production standards to support its argument that the

lip height and the recess depth must be "equal to one another within 1/16th of an inch." The Court declines to consider this evidence, however, because the intrinsic evidence does not support construing "substantially equal" to require a strict numerical limitation on the relationship between the lip height and the recess depth. FN3 *See* Playtex, 400 F.3d at 909.

FN3. Even if the Court were to consider County Materials' extrinsic evidence, the Court would reach the same result. The ASTM Industry Standards relied on allow for a permissible deviation of 1/8th inch for a block's *overall* dimensions for width, height, and length. Moreover, while Allan Block's production control standards require that each block used in a particular project vary by no more than 1/16th inch, it refers to a block's overall height. There is no evidence that either of these standards apply to the height of the lip or the depth of the recess.

Consistent with the claim language, the specification, and the prosecution history, the Court determines that the claim language creates no ambiguity and has a readily understood meaning. Accordingly, the Court declines to construe the phrase "wherein the height of said lip is substantially equal to the depth of said recess."

III. CONCLUSION

Based on the files, records, and proceedings herein, and for the reasons stated above, IT IS ORDERED THAT the disputed claim terms are construed as set forth in this Order.

D.Minn.,2007.

Allan Block Corp. v. County Materials Corp.

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