IN THE UNITED STATES DISTRICT COURT

FOR THE WESTERN DISTRICT OF WISCONSIN

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CARNES COMPANY, INC.,

Plaintiff,

v.

PENN VENTILATION, INC.,
a Pennsylvania corporation,

Defendant.

OPINION AND ORDER

99-C-0650-C

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Plaintiff Carnes Company, Inc. has brought suit against defendant Penn Ventilation, Inc. for patent infringement. The case is before the court for a ruling on the construction of certain claims in plaintiff's patent, United States Patent No. 5,117,354, which discloses a system for the automated pricing and ordering of custom manufactured parts, such as those in the air handling equipment industry in which both parties operate.

Both plaintiff and defendant manufacture a variety of products that can be customized by changing certain features and adding special accessories to a base component. Both parties anticipate that each customer will specify different features and accessories so as to obtain the precise piece of equipment it needs in its business. Both parties sell the bulk of their products

through manufacturer's representatives, who are independent business people selling products for a number of different companies. Before the development of ordering systems such as those disclosed in the patent, it was the parties' practice to provide their representatives with written catalogues listing the features and accessories available for each particular product. However, ordering from the catalogue had a number of drawbacks. Clerical errors in the order forms were frequent because it was so easy to transpose a number for an accessory or to enter the number of a feature other than the desired one. Representatives were not always aware of particular features or accessories that might be available. Manufacturers found it difficult to keep representatives up to date on price changes and special pricing arrangements such as discounts to major customers or for large purchases.

The system disclosed in the patent automates the ordering procedure, reminds representatives of all the choices available on a particular product, does not allow a representative to order a feature incompatible with the base product and enables the manufacturer to keep pricing current and accurate. The system utilizes software that prepares a product identification code automatically, allowing a sales representative working from a laptop computer out in the field to prepare an order that is almost error proof and with which he can obtain a price quotation from the manufacturer in about an hour.

To operate the program, the representative enters into the program the alphanumeric

code of the base product. Automatically, a product identification code appears on the screen. The software then directs the representative through a series of questions or options; as the representative answers the questions or chooses an option, the default code changes automatically to reflect the choice. The software includes other options having to do with the nature of the submission (is it an order or simply a request for a bid, should the file be saved to disk, what format should be used for the order, etc.) that are not the subject of any dispute between the parties at this stage. Once the representative completes the order (or request for a bid), the software program sends the submission to the manufacturer, where a special program alerts the manufacturer of its arrival, allows for completion of the pricing information and sends it back to the representative.

The parties are at odds over the construction of four terms in claim 1 of the patent, which reads as follows, with the disputed terms shown in bold.

> 1. A method utilizing a computer with memory means and display means to prepare **product identification codes** for custom manufactured parts for which information and specification [sic], including physical description, for the parts are encoded in the product identification, the method comprising the steps of
>
> (a) displaying a product ID display to a user on the display means, the product ID display including a location for the **product identification code** and a plurality of display locations for product specifications which are encoded by the **product identification code**;
>
> (b) receiving from the user a plurality of characters representing the beginning of a **product identification code;**

(c) displaying on the display means a **completed default product identification code** including the received characters and also displaying the product specifications, including physical description, for the **completed default product identification code**;

(d) receiving from the user **changes** to the product specifications displayed for the completed default product identification code;

(e) the computer **changing** the **completed default product identification [code]** to an updated **product identification code** to incorporate any **changes** to the **product specifications** received from the user by incorporation of those **changes** into the displayed **product identification code**; and

(f) receiving from the user an indication that the **updated product identification code** is complete so that a **complete product identification code** for the desired product specifications is created without the user needing to understand the manner of encoding of the product specification in the **product identification code.**

Construction of the disputed terms begins with the language of the claim itself. See Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996); Markman v. Westview Instruments, Inc., 52 F.3d 967, 979 (Fed. Cir. 1995) aff'd, 517 U.S. 370 (1996). The correct claim construction is one that "stays true to the claim language and most naturally aligns with the patent's description of the invention" in the specification. Rentshaw PLC v. Marposs Societa Per Azioni, 158 F.3d 1243, 1250 (Fed. Cir. 1998). The specification serves an important role in arriving at the correct construction, because it is in the specification that the patentee provides a written description of the invention that allows a person of ordinary skill in the pertinent art to make and use the invention. See Markman, 52 F.3d at 979.

1. Product identification code and completed default product identification code

The two terms, "product identification code" and "default product identification code," are closely interrelated. The product identification code that first appears on the screen when the user chooses a particular base component, such as a roof vent, becomes the completed default product identification code when the user makes no changes to the standard features and options. The product identification code is the final version of the code after the user has made all of the available choices he or she wishes. Plaintiff takes the position that "product identification code" should be read as "a unique identifier for a particular product, a meaning that applies regardless of the length of the identifier or the immediate contiguousness of its subparts." Defendant's proposed construction is "a code consisting of a set of characters and embodying every product specification for an item; each of the characters in the code is always displayed as part of the code; and each of the characters represents information about a product specification for the item."

Stripped to its essentials, the real difference between the parties is whether both the completed default product identification code and the product identification code for any product must be a predetermined length and contain a character representing each feature and each option available on a particular base component, as defendant maintains. Plaintiff argues that the claim is not limited to such a code and that it applies as well to a code that does not

have a character for every feature or option but adds characters as the user chooses additional features or options. Under defendant's interpretation, the user would type in a short basic code for a ceiling fan. Automatically, the computer would generate a longer code incorporating a character representing every conceivable feature or option that the manufacturer is willing to provide for ceiling fans. In the initial form of the code that first appears on the screen, many of the characters in the code would convey the information to the manufacturer that the user is not choosing the particular feature or option for which those characters stand. For example, if the user wanted to order only the basic ceiling fan without the addition of down lights or fan cover and made choices only as to size, number of blades and horsepower, the characters in the default code that are the place holders for "additional lights" or "fan cover" would convey to the manufacturer that the user did not want those features. As the user chose certain features on the display screen, the code would change as the computer automatically replaced a default character with one indicating the feature chosen.

Although defendant makes a strong argument in support of its view of the correct construction of the patent terms, I conclude that the terms should not be read quite as defendant proposes. Nothing in either the claim language or the specification requires that the initial default product identification code must incorporate a character for every possible feature or option in the final, customized product, although the final product identification

code must incorporate a character for every customized feature that is part of the order. For those features that are standard, it would not be necessary to include a place marker character. If the user wanted the a fairly standard product, the representative would stick with the initial code. However, to the extent the representative chose accessories or changes in the basic features, the code would become longer with each choice. Thus, to use the example of a car, a "397-426-83-213" might connote a basic black Ford, two-door sedan, with airbags and built-in CD player, no automatic door locks and no other options, whereas "398-426B-83-213-202C-97D8-78-20A" might connote a red Ford, two-door hatchback, airbags, built-in CD player, automatic door locks, anti-lock brakes and wire wheels. In either example, the final product identification code would incorporate a character for every customized feature that is part of the order.

It makes sense for a manufacturer to include in the initial product identification code most, if not all, of the features and options subject to change so as to reduce the area of misunderstanding in any order. However, I do not read the patent claims or specification as requiring that it must do so.

A system in which the default product identification code gains or loses characters in the process of incorporating the choices made by the user is not beyond the boundaries of claim 1. It is not inconsistent with the language of the claim in which the inventors speak of a code "*in*

which information and specification[s], including physical description, for the parts are *encoded in* the product identification"; and an "updated product identification code" that *incorporates* the changes to the product specifications; *incorporating* changes "*into* the displayed product identification code"; and creating a "complete product identification code for the desired product specifications." "Incorporating" changes into a displayed product identification code does not rule out adding new elements. "Incorporate" is defined as "unite with, or introduce into a mass already formed." Webster's New International Dictionary 1260 (2d ed. 1958)

This construction is consistent with the specification as well. Starting at col. 6, ln. 30 to col. 7, ln. 61, the inventors describe a system in which the product identification code includes a "large number of digits," col. 6, lns. 46-47, containing "more information than just the style of product but contain[ing] imbedded codes indicating the actual size and finish of the goods to be manufactured." Col. 6, lns. 29-32. In the ensuing description of the program's operation, the inventors set out a system in which the product identification code begins as a lengthy number whose characters change as sales representatives make their choices among the different options available for the product as displayed on the screen. See col. 6, lns. 34-57. There is no indication that the code cannot change its length as the users make their choices.

I conclude that the term "product identification code" should be defined as a "unique identifier for a particular product that consists of a set of characters embodying every

specification for the product in which each of the characters represents information about a product specification for the item." The term "completed default product identification code" should be construed as "the product identification code having all the necessary identification for a particular product that is assumed by the computer to be complete unless given specific instructions to the contrary."

The initial code that appears on the screen when the user types in the base component of the order is complete in the sense that it contains all the information necessary to order the basic product and to inform the manufacturer exactly what is being ordered and what is not. If additional features are desired, the user makes the choices and the computer changes the default product identification code automatically to an "an updated product identification code to incorporate any changes to the product specifications received from the user." Claim 1, col. 12, lns. 16-18.

2. Changes

If the default product identification code includes a character for each and every feature and option, the choice of a non-standard feature or option will result in the replacement of the character for the standard feature for the custom one. If, however, the default code does not have a place marker character for a standard feature, then the choice of a custom feature will

result in the addition of a character to the default code. Figure 5 of the patent in issue suggests that the code may be built either by replacement of characters or by adding and deleting characters. The code displayed in the upper left of the screen includes characters for each of the features, with two exceptions: the wheel and the screen. Without adding any characters to customize either the wheel or the screen, the wheel would be the standard one and there would be no screen. See '354 Patent, Fig. 5.

I construe the term "changes" as "making different in some particular way, whether by replacement or addition."

3. Product specification

This term refers to "the information defining the particular product requested by the customer."

ORDER

IT IS ORDERED that the disputed terms in plaintiff Carnes Company's U.S. Patent No. 5,117,354 are construed as follows:

1. "Product identification code" means a "unique identifier for a particular product that consists of a set of characters embodying every specification for the product in which each of

the characters represents information about a product specification for the item."

2. "Completed default product identification code" means "the product identification code having all the necessary identification for a particular product that is assumed by the computer to be complete unless given specific instructions to the contrary."

3. "Changes" means "making different in some particular way, whether by replacement or addition."

4. "Product specification" means "the information defining the particular product requested by the customer."

Entered this 27th day of July, 2000.

BY THE COURT:

BARBARA B. CRABB
District Judge