United States District Court,
D. Minnesota.

DANE INDUSTRIES, INC,
Plaintiff.
v.
AMERITEK INDUSTRIES LLC, and Gary Hoonsbeen,
Defendants.

Civ. No. 03-3488 (PAM/JSM)

May 4, 2004.

Devan V. Padmanabhan, Gerald H. Sullivan, Paul J. Robbennolt, Todd R. Trumpold, Dorsey & Whitney LLP, Minneapolis, MN, for Plaintiff.

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MEMORANDUM AND ORDER

PAUL A. MAGNUSON**, District Judge.**

This matter is before the Court on Plaintiff's Motion to Adopt Construction of Disputed Claim Terms. Pursuant to Markman v. Westview Instruments, Inc., 517 U.S. 370 (1996), the Court held a hearing on this Motion on Tuesday, April 13, 2004.

BACKGROUND

This case involves patents for a shopping cart retrieval vehicle that picks up shopping carts in the parking lots of stores. Plaintiff Dane Industries, Inc. ("Dane") is the owner of two patents on the cart retrieval vehicles it manufactures: U.S. Patent Nos. 5,934,694 ("'694 patent") and 6,220,379 ("'379 patent"). Defendant Ameritek Industries, LLC ("Ameritek") manufactures a cart retrieval vehicle called the "Golden Retriever." Dane contends that the Golden Retriever infringes on Dane's patents.

Dane brought this lawsuit in June 2003 and sought a preliminary injunction against Ameritek's alleged infringement. This Court preliminarily construed three claims of the patents-in-suit, and denied Dane's Motion for Preliminary Injunction. Dane now seeks claim construction on those three claims and on nine additional claims. FN1

FN1. In the initial briefing on the claim construction Motion, there were fifteen patents at issue. However, Ameritek did not mention three of those fifteen claims in its responsive memorandum, and thus the Court assumes that only twelve claims are in dispute.

DISCUSSION

Patent claim construction is a matter of law exclusively for the Court. Markman v. Westview Instruments, Inc., 52 F.3d 967, 970-71 (Fed.Cir.1995) aff'd 517 U.S. 370 (1999). In construing terms, there is a "heavy presumption that a claim term carries its ordinary and customary meaning." CCS Fitness, Inc. v. Brunswick Corp., 288 F.3d 1359, 1366 (Fed.Cir.2002) (citations omitted). Proper claim construction requires an examination of the intrinsic evidence of record, including the claims of the patent language, the specifications, and the prosecution history. Vitronics Corp. v. Conceptronic Inc., 90 F.3d 1576, 1582 (Fed.Cir.1996).

Claim interpretation "begins with the language of the claim itself." Nat'l Recovery Tech., Inc. v. Magnetic Separation Sys., Inc., 166 F.3d 1190, 1195 (Fed.Cir.1999). Claim terms are given their ordinary meaning as understood by one of ordinary skill in the art, unless the inventors intended the terms to be construed differently. Hockerson-Halberstadt, Inc. v. Avia Group Int'l, Inc., 222 F.3d 951, 955 (Fed.Cir.2000). If the language of the claim remains genuinely ambiguous after consideration of the intrinsic evidence, then the court can examine extrinsic evidence. *Pitney Bowes, Inc. v. Hewlett-Packard Co.,* 182 F.3d 1290, 1308 (Fed.Cir.1999).

The Court will discuss each disputed claim element separately, including the claim construction urged by each party. Finally, the Court will set forth its claim construction.

I. '694 Claim terms

A. "Jaws" Element of Claims 1-3 and 8

Claim language: "two jaws protruding from the front plate, wherein said jaws operate to engage corresponding vertical frame members of the at least one wheeled cart"

Dane: two structures that resemble the jaws of an animal in form or action, such as a notched or forked part adapted for holding an object in place or one or both of the opposing parts of a tool that close to hold an object. These structures protrude from the front plate to secure, attach, interlock, fit together, or connect the vertical frame members of a shopping cart.

Ameritek: A "jaw" is a notched or forked part adapted for holding an object in place. A "wheeled cart" is a small vehicle having a frame and wheels. A "vertical frame member" is a vertically oriented rigid, slender structural part of the frame of the cart. "Engage" means to interlock. Each "jaw" must "engage" (i.e., interlock with) one of the "vertical frame members."

Discussion: Dane's revised proposed construction, which incorporates parts of Ameritek's construction, is the more logical construction. Ameritek's construction is unduly narrow in defining "engage" to mean only "interlock." The Court adopts the following construction:

Two structures that resemble the jaws of an animal in form or action, such as a notched or forked part adapted for holding an object in place or one or both of the opposing parts of a tool that close to hold an object. Each of these structures protrudes from the front plate and each secures, attaches, interlocks with, fits together with, or connects with the vertical frame members of a shopping cart.

B. Locking Means Element of Claims 1-3 and 8

Claim language: "locking means for locking the at least one wheeled cart to at least one of the jaws, wherein the locking means includes a moveable pin positionable across an open portion of the two jaws"

Dane: a moveable pin that is positionable across an open portion of one of the two jaws locks a wheeled cart to one of the jaws.

Ameritek: An "open portion" is the open end of the "jaw." A pin can be moved across the "open portion" of the "jaw" to prevent the "vertical frame member" of the "wheeled cart" from being removed from the "jaw"

Discussion: One of the disputes in this claim centers on whether the construction uses "an" open portion or "the" open portion. The use of "an" implies that there may be more than one open portion of the "jaw." The use of "the" implies that there is only one open portion. The language of the claim is clear that it is "an" open portion, not "the" open portion.

However, Ameritek is correct that the part of the shopping cart that is "locked" into a jaw must be the "vertical frame member." Dane argues that, because the claim language is not limited to the vertical frame member but rather provides only that "a wheeled cart" is locked, the Court must read the claim broadly and not include Ameritek's limitation. Dane's argument ignores the first disputed claim discussed above: that the jaws operate to engage the vertical rame members of the cart. "Proper claim construction ... demands interpretation of the entire claim in context, not a single element in isolation." Hockerson-Halberstadt, Inc. v. Converse Inc., 183 F.3d 1369, 1374 (Fed.Cir.1999). The Court therefore adopts the following construction:

a pin that can be moved across an open portion of one of the two jaws to prevent the vertical frame member of the wheeled cart from being removed from the jaw

II. '379 Claim terms

A. Controller Element of Claims 1-7, 10, 14, 15, and 27

Claim language: "a controller on the vehicle controlling vehicle movement in response to the operator signal, said controller comprising:"

Dane: the vehicle has at least one controller (a mechanism that regulates or controls the operation of a vehicle or other machine) to control the vehicle's movement in response to the operator signal by initiating, maintaining, and/or stopping motion

Ameritek: the "controller" is made up of a group of electrical circuits located on the vehicle that controls the vehicle movement in response to the operator signal

Discussion: This is the first of many disputed claims in which Ameritek contends that a certain device, whether a controller or a receiver or similar, is an electrical circuit or group of electrical circuits. Ameritek contends that in this claim the "controller" is made up of a signal receiver, a motor switching circuit, a motor interface circuit, a speed sensing circuit, and a speed regulating circuit. Therefore, according to Ameritek, the controller must be a group of electrical circuits. However, as Dane notes, Ameritek's own

definition of controller actually states that a controller is a device, not a circuit.

The Court agrees with Dane that a controller cannot be limited to a circuit or group of circuits. The Court adopts the following construction:

at least one mechanism or device located on the vehicle to control the vehicle's movement in response to the operator signal

C. Signal Receiver Element of Claims 1-7, 10, 14, 15, and 27

Claim language: "a signal receiver connected to the receiver, the signal receiver receiving the operator signal"

Dane: the signal receiver (an electrical circuit) of the controller that receives the operator signal

Ameritek: the "signal receiver" is an electrical circuit within the "controller" that receives the operator signal generated and transmitted by the remote control device

Discussion: The parties seem to be in general agreement on most of the construction of this element. They disagree on the final phrase of Ameritek's proposed construction, which requires that the signal be "generated and transmitted by the remote control device." Dane contends that this limitation is illogical, because an operator may operate the vehicle both from a remote control and from controls on the vehicle. Dane is correct that there is no limitation in the patent to support this portion of Ameritek's proposed construction. The Court therefore adopts the following construction:

the signal receiver is an electrical circuit connected to or within the controller that receives the operator signal

D. Motor Switching Circuit Element of Claims 1-7, 10, 14, 15, and 27

Claim language: "a motor switching circuit generating a motor interface signal in response to the operator signal"

Dane: the controller includes a circuit that in response to the operator signal will generate a motor interface signal

Ameritek: The "motor switching circuit" is an electrical circuit within the "controller" that generates a "motor interface signal" by performing a switching function in response to the operator signal from the "signal receiver." The "motor interface signal" is based on a target speed value contained in the operator signal.

Discussion: There are two things in dispute in this element. First, Ameritek contends that the motor switching circuit generates a signal by "performing a switching function." Next, Ameritek asserts that the signal generated must be based on the "target speed value."

1. *Switching function*

Dane argues that although a switching circuit may perform a switching function, a switching circuit may

also perform other functions. The language of the claim contains no limitation on the function of the motor switching circuit, and absent some indication in the intrinsic evidence that the switching circuit is limited to switching functions, the Court is unwilling to read such a limitation into the claim.

2. *Target Speed Value*

Ameritek contends that the patent defines operator signal to include a target speed value. Therefore, if the motor interface signal is generated in response to the operator signal, that motor interface signal must necessarily include the target speed value. Dane argues that, although the operator signal includes a target speed value, nothing in the claim requires that the motor interface signal be based on that target speed value.

The analysis of this term is complicated by the next disputed claim term, which requires that the motor interface signal cause the motor interface circuit to send power to the motor. There seems to be no dispute that the vehicles at issue can go at two or three speeds. Thus, it is logical that the signal includes either a "fast" or "slow" element, if that signal is eventually going to make the vehicle move. In the final analysis, this claim must include a target speed value. Otherwise, the operator signal performs no function. The Court adopts the following construction:

The motor switching circuit is an electrical circuit attached to or within the controller that generates a motor interface signal in response to the operator signal. The motor interface signal is based on a target speed value contained in the operator signal.

E. Motor Interface Circuit Element of Claims 1-7, 10, 14, 15, and 27

Claim language: "a motor interface circuit receiving the motor interface signal from the motor switching circuit and generating a drive signal to power the motor"

Dane: the controller includes a circuit that receives the motor interface signal from the motor switching circuit and generates a drive signal to power the motor

Ameritek: The "motor interface circuit" is an electrical circuit within the "controller" that interconnects the "motor switching circuit" and the motor. The "drive signal" is a signal based on the target speed value that provides electrical power to cause the motor to rotate.

Discussion: It seems that Dane's only dispute with Ameritek's proposed construction is the target speed value. The Court previously determined that the motor interface signal is based on a target speed value. Thus, the Court adopts the following construction:

The motor interface circuit is an electrical circuit connected to or within the controller that interconnects the motor switching circuit and the motor. The drive signal is a signal based on the target speed value that provides electrical power to the motor.

F. Speed Sensing Circuit Element of Claims 1-7, 10, 14, 15, and 27

Claim language: "a speed sensing circuit generating a present speed signal; and"

Dane: the controller includes a circuit that monitors the speed of the vehicle and generates a signal that corresponds to the speed of the vehicle

Ameritek: The "speed sensing circuit" is an electrical circuit within the "controller" that detects the rotational speed of the motor shaft and generates a "present sense signal"

Discussion: Dane takes issue with Ameritek limiting this claim to sensing the "rotational speed of the motor shaft." Ameritek contends that because the speed sensing circuit is connected to the tachometer disc which is in turn connected to the drive shaft, this claim must mean that the speed sensing circuit ultimately senses the rotation of the drive shaft. However, Ameritek's support for this argument comes from the specification, and as will be discussed more fully below, if the claim language is unambiguous, it is error to resort to the specification to limit the claim language. The Court finds that the claim language in this claim is unambiguous and will not look to the specification. The Court adopts the following construction:

the speed sensing circuit is an electrical circuit connected to or within the controller that monitors the speed of the vehicle and generates a signal that corresponds to the speed of the vehicle

G. Speed Regulating Circuit Element of Claims 1-7, 10, 14, 15, and 27

Claim language: "a speed regulating circuit coupled to the motor interface circuit, wherein the speed regulating circuit is operative to modify the drive signals in response to changes in the present speed signal such that the present speed signal approaches one of the at least one target speed, whereby the speed of the vehicle tends to be maintained substantially constant during the attachment and release of the one or more shopping carts or shopping cart trains coupled to the vehicle."

Dane: the controller includes a circuit that maintains a substantially constant speed to adjust for any changes in load

Ameritek: The "speed regulating circuit" is an electrical circuit within the "controller" that is electrically connected to the "motor interface circuit." The "speed regulating circuit" causes the "drive signal" to change based on the target speed value and the present speed signal such that the present speed will be close to or equal to the target speed. The changing of the "drive signal" by the "speed regulating circuit" causes the speed of the vehicle to be maintained substantially constant during the attachment and release of one or more shopping carts or shopping cart trains coupled to the vehicle.

Discussion: Dane does not dispute Ameritek's definition of "speed regulating circuit" but disputes the accuracy or necessity of the last sentence of Ameritek's proposed construction that requires maintaining speed during the attachment and release of carts. Dane contends that because the language regarding maintaining constant speed regardless of load is set forth in a "whereby" clause, that language adds nothing to the substance of the claim and should be disregarded in the construction of that claim. The case quoted by Dane in support of this proposition provides that a "whereby" clause that "merely states the result of the limitations in the claim" adds nothing to the substance of the claim. (Pl.'s Reply Mem. at 14 (quoting Texas Instruments Inc. v. United States Int'l Trade Comm'n, 988 F.2d 1165, 1172 (Fed.Cir.1993).) The language of the "whereby" clause at issue here does more than "merely state [ ] the result of the limitations in the claim," however. The clause "whereby the speed of the vehicle tends to be maintained substantially constant during the attachment and release of the one or more shopping carts or shopping cart trains coupled to the vehicle" describes the function that is taking place in this claim. This language must be included in the claim construction. The Court adopts the following construction:

The speed regulating circuit is an electrical circuit within the controller that is electrically connected to the motor interface circuit. The speed regulating circuit causes the drive signal to change based on the target speed value and the present speed signal such that the present speed signal will be close to or equal to the target speed value. The changing of the drive signal by the speed regulating circuit causes the speed of the vehicle to be maintained substantially constant during the attachment and release of one or more shopping carts or shopping cart trains coupled to the vehicle.

H. Brake Controller Element of Claims 1-7, 10, 14, 15, and 27

Claim language: "a brake controller operative to drive the electric motor in an opposite direction in response to the stop signal"

Dane: a controller (a mechanism that regulates or controls the operation of a vehicle or other machine) electrically brakes the motor by electrically creating a decelerating force (rotational force, i.e., negative torque) that drives or would be capable of driving the motor in the opposite direction (i.e., in the context of braking, slowing the motor down)

Ameritek: the "brake controller" is an electrical circuit that in response to a stop signal applies power to the motor to command the motor to rotate in an opposite direction

Discussion: This element was one of the disputed elements in Dane's Motion for a Preliminary Injunction. In the Order on that Motion, the Court found that this term meant that the motor must run in an opposite direction. (Nov. 24, 2003, Order at 5.) Dane now requests that the Court reconsider its earlier ruling, and the Court finds that such reconsideration is proper, especially in light of the very preliminary procedural posture of the previous Motion.

Dane argues that the concept involved in this claim element is "dynamic braking." The word "dynamic braking" does not appear in the language of the claim, however. According to Dane, the ordinary meaning of the claim terms "includes situations in which a force is exerted on the motor against the direction in which the motor is rotating." (Pl.'s Cl. Constr. Mem. at 11.)

Ameritek points out that the specification describes a process in which power is supplied to the motor to command the motor to rotate in the opposite direction. (Def.'s Cl. Constr. Mem. at 21.) Dane contends that Ameritek invites this Court to commit error by referencing the specification. It is true that the specification cannot be used to improperly limit the language of the claim. Comark Communications, Inc. v. Harris Corp., 156 F.3d 1182, 1186 (Fed.Cir.1998). It is also true, however, that the "specification may assist in resolving ambiguity where the ordinary and accustomed meaning of the words used in the claims lack sufficient clarity to permit the scope of the claim to be ascertained from the words alone." Teleflex, Inc. v. Ficosa N. Am. Corp., 299 F.3d 1313, 1325 (Fed.Cir.2002).

As the Court noted in its previous Order, the words "operative to drive the motor in an opposite direction" appear unambiguous. However, it is clear from the vociferous arguments of the parties that in fact the meaning of these words is far from clear. Indeed, Dane offers the testimony of an expert witness to explain this language, further indicating that the claim language is ambiguous. Thus, it is not error for the Court to examine the specification to resolve the ambiguity of the words. Teleflex, 299 F.3d at 1325.

Whether or not the patentee intended the scope of this claim to be limited to dynamic braking, the disputed

language was intended to describe a process by which power is applied to the motor that commands the motor to rotate in the opposite direction. Moreover, the construction advanced by Dane would seem to patent any sort of braking whatsoever, and as the Court noted at the hearing, a patentee may not patent the world. The Court adopts the following claim construction:

The brake controller is an electrical device or mechanism that in response to a stop signal applies power to the motor to command the motor to rotate in an opposite direction.

I. Speed Limit Filter Element of Claim 10

Claim language: "further comprising a speed limit filter for limiting the vehicle speed to a predetermined maximum speed"

Dane: a device or circuit prevents the vehicle from exceeding a predetermined maximum speed

Ameritek: the "speed limit filter" is an electrical circuit or device that separates electrical signals to cause vehicle speed to be limited to a predetermined maximum speed

Discussion: Dane contends that the phrase "that separates electrical signals" is incorrect in the context of this claim element. According to Dane, a filter in this context is a device that offers opposition to, or rejects, voltages or currents of certain frequencies, and offers little opposition to, or passes, voltages or currents of other frequencies. Ameritek's definition, although not as specific as Dane's, is consistent with Dane's. In order to reject certain frequencies and pass other frequencies, the filter must separate those frequencies. The Court adopts the following construction:

the speed limit filter is an electrical circuit or device that separates voltages or currents of certain frequencies from voltages or currents of other frequencies and offers opposition to, or rejects, voltages or currents of certain frequencies, and offers little opposition to, or passes, voltages or currents of other frequencies, to prevent the vehicle from exceeding a predetermined maximum speed

J. Variable Drive Signal Element of Claim 14

Claim language: "wherein the at least one remote control device further comprises a variable drive control device for generating and transmitting a variable drive signal, the variable drive signal including a plurality of voltage levels, each indicative of a target speed"

Dane: the remote control includes a device for generating and transmitting a variable drive signal at two or more voltage levels, each signal indicative of a set or predetermined speed value, such as "fast" or "slow"

Ameritek: the "remote control device" includes a device for generating and transmitting a signal that has multiple, different voltage levels, where each voltage level represents a different target speed

Discussion: The only dispute in this element is with respect to the "fast" and "slow." There is no mention of "fast" and "slow" in the claim itself, and no reason to read these terms into the claim. The Court adopts the following construction:

The remote control includes a device for generating and transmitting a signal that has multiple, different voltage levels, where each voltage level is indicative of a set or predetermined speed value.

K. Parking Brake Controller Element of Claim 20

Claim language: "wherein the parking brake controller operates the parking brake actuator using power modulation"

Dane: the parking brake controller activates and deactivates the parking brake by regulating power to it

Ameritek: the "parking brake controller" is an electrical circuit that operates the parking brake actuator by varying a characteristic of an electrical power wave that is supplied to the parking brake actuator

Discussion: The Court agrees with Dane that the phrase "varying a characteristic of an electrical power wave" is unnecessary and is likely to confuse a jury. The Court adopts the following construction:

The parking brake controller activates and deactivates the parking brake by regulating power to it.

CONCLUSION

Accordingly, for the foregoing reasons, and upon all of the files, records, and proceedings herein, **IT IS HEREBY ORDERED** that:

1. Plaintiff's Motion to Adopt Construction of Disputed Claim Terms (Clerk Doc. No. 42) is **GRANTED in part** and **DENIED in part;** and

2. The '694 patent and the '379 patent are construed as set forth in this Order.

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