

United States District Court,
N.D. California.

KEYTRAK, INC,
Plaintiff.

v.

KEY REGISTER, L.L.C., Key Register Systems, Inc., and Key Management, Inc,
Defendants.

No. C 03-00870 WHA

Aug. 5, 2003.

Ana C. Davis, Kirk Watkins, Michael A. Cicero, Womble Carlyle Sandridge & Rice, PLLC, Atlanta, GA, Larry T. Harris, Martin C. Fliesler, Michael Robbins, Fliesler Dubb Meyer & Lovejoy, LLP, San Francisco, CA, for Plaintiff.

Brian D. Boydston, Sridavi Ganesan, Pick & Boydston LLP, Los Angeles, CA, Michael L. Glaser, Michael D. Murphy, Shughart Thomson & Kilroy P.C., Denver, CO, John C. Hope, Jr., Reno, NV, for Defendants.

CLAIM-CONSTRUCTION ORDER FOR UNITED STATES PATENT NO. 6,501,379

WILLIAM ALSUP, District Judge.

INTRODUCTION

This is the claim-construction order for United States Patent No. 6,501,379. Under *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 384-91 (1996), it is the duty of the Court to determine the meaning and scope of disputed claim language according to traditional claim-construction principles. A technology tutorial, a full round of briefing, and a *Markman* hearing preceded this order.

STATEMENT

Plaintiff is a corporation that designs, manufactures, and installs computerized key-control systems for use in the automotive-sales industry and other industries. The Key Register defendants develop, market, and support a competing automobile dealership security and control system known as the Key Register System. Defendant KMI is their northern California distributor.

The '379 patent, entitled "Object Carriers for an Object Control and Tracking System," is the sole patent in suit. The disclosed invention seeks to improve upon systems for tracking and controlling keys and other valuable objects. Plaintiff is asserting in the instant action seven of the patent's ten claims.

ANALYSIS

This order construes six disputed terms in the patent: "trackable object," "lower portion of a trackable object," "housing," "insertable," "programmed," and "electrically coupled." Each is addressed in turn.

1. "trackable object"

All of the claims of the patent contain the term "trackable object." Claim 1 is representative (emphasis added):

1. A key tracking and control system comprising:

a **trackable object** associated with each key to be tracked, each **trackable object** having a lower portion and an upper portion;

an openable drawer for removably receiving and storing a plurality of said trackable objects and the keys associated therewith;

said drawer having an array of internal sockets each configured to receive the lower portion of a **trackable object** with the upper portion of the **trackable object** being visible within said drawer;

a light emitting diode (LED) in each of said **trackable objects**, each LED, when lit, emitting light from the upper portion of its **trackable object**;

an addressable switch disposed in each of said **trackable objects** and having a ground port, a data port, and at least one input/output (I/O) port;

each addressable switch storing an identification code by which its **trackable object** can be identified;

at least three conductors on said lower portion of each **trackable object**, one of said conductors being electrically coupled to said ground port of said addressable switch, another one of said conductors being electrically coupled to said data port of said addressable switch, and a third one of said conductors being electrically coupled through said LED to said I/O port of said addressable switch;

at least three contacts associated with each socket, each contact engaging and making electrical connections with a corresponding conductor on a **trackable object** when the trackable object is received in said socket;

a controller;

a communications link connecting said controller to selected ones of the contacts of said sockets and thereby coupling said controller to the data ports of addressable switches within **trackable objects** disposed in said sockets;

said controller being programmed to generate a request and to broadcast said request over said communications link, said request including at least the identification code associated with one of said **trackable objects**;

each addressable switch setting its I/O port to activate said LED upon receipt from said controller of a request that includes the identification code of said addressable switch, said activated LED visually locating

the requested **trackable object** within said drawer.

Plaintiff advances the following construction of "trackable object:" an "item paired with a key, which allows the key to be located or tracked." Defendants contend that the term means "a rectangular box-shaped container storing items such as keys that, when connected to a circuit board, can be tracked or monitored."

This order holds that a "trackable object" is an object paired with a key to enable the key to be tracked. Defendants' proposed construction is unacceptable because Claim 4 makes clear that a container or box is but one form a trackable object may take:

4. A key tracking and control system as claimed in claim 1 and wherein said trackable objects comprise containers for containing keys to be tracked.

Although Claim 4 is not asserted in this action, it may be considered in the construction of other claims. *See Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed.Cir.1996). While defendants argue that the doctrine of claim differentiation cannot be used to broaden the scope of claims, that argument fails here. According to the Federal Circuit, claim differentiation, is "clearly applicable" when, as here, "there is a dispute over whether a limitation found in a dependent claim should be read into an independent claim, and that limitation is the only meaningful difference between the two claims." *Wenger Mfg., Inc. v. Coating Mach. Sys., Inc.*, 239 F.3d 1225, 1233 (Fed.Cir.2001).

2. "lower portion of a trackable object"

The term "lower portion of a trackable object" appears in Claim 1 (emphasis added):

1. A key tracking and control system comprising:

a trackable object associated with each key to be tracked, each trackable object having a lower portion and an upper portion;

an openable drawer for removably receiving and storing a plurality of said trackable objects and the keys associated therewith;

said drawer having an array of internal sockets each configured to receive the **lower portion of a trackable object** with the upper portion of the trackable object being visible within said drawer;

a light emitting diode (LED) in each of said trackable objects, each LED, when lit, emitting light from the upper portion of its trackable object;

an addressable switch disposed in each of said trackable objects and having a ground port, a data port, and at least one input/output (I/O) port;

each addressable switch storing an identification code by which its trackable object can be identified;

at least three conductors on said **lower portion of each trackable object**, one of said conductors being electrically coupled to said ground port of said addressable switch, another one of said conductors being electrically coupled to said data port of said addressable switch, and a third one of said conductors being

electrically coupled through said LED to said I/O port of said addressable switch;

at least three contacts associated with each socket, each contact engaging and making electrical connections with a corresponding conductor on a trackable object when the trackable object is received in said socket;

a controller;

a communications link connecting said controller to selected ones of the contacts of said sockets and thereby coupling said controller to the data ports of addressable switches within trackable objects disposed in said sockets;

said controller being programmed to generate a request and to broadcast said request over said communications link, said request including at least the identification code associated with one of said trackable objects;

each addressable switch setting its I/O port to activate said LED upon receipt from said controller of a request that includes the identification code of said addressable switch, said activated LED visually locating the requested trackable object within said drawer.

Plaintiff argues that "lower portion of a trackable object" means "the portion of the trackable object that goes into the drawer for storage and is not seen when the drawer is open." Defendants offer the following construction: "the bottom surface of the trackable object that goes into the drawer for storage and is not seen when the drawer is open."

This order holds that "lower portion of a trackable object" means the portion of the trackable object that goes into the drawer for storage and is not seen when the drawer is open. This definition is derived directly from Claim 1, which provides in relevant part:

said drawer having an array of internal sockets each configured to receive the lower portion of a trackable object with the upper portion of the trackable object being visible within said drawer;

See Vitronics, 90 F.3d at 1582 (noting that the starting point for construing patent claims is the language of the claims themselves). If the upper portion of the trackable object is that which is visible, it follows that the lower portion is that which is not visible, by virtue of having been received by an internal socket. In so holding, this order finds no merit in defendants' argument that because the top surface of the trackable object is visible in Figure 5, the lower portion of the trackable object must be limited to its bottom surface.

3. "housing"

The word "housing" appears in independent Claim 6, upon which several other claims depend (emphasis added):

6. A trackable object for use in a key tracking and control system wherein a storage unit has an array of sockets for removably receiving a plurality of said trackable objects, said trackable object comprising:

a **housing** having a bottom portion and a top portion;

an electronic circuit including an addressable switch, said electronic circuit being insertable into said **housing**;

a set of conductors electrically coupled to said electronic circuit and being positioned on said trackable object such that said conductors are disposed in a socket of said storage unit when said trackable object is received in the socket;

a light emitting diode (LED) in said trackable object, said LED being electrically coupled to said electronic circuit and being positioned to emit light from said top portion of said **housing** when lit by said electronic circuit;

said addressable switch having a ground port, a data port, and an I/O port and said set of electrical conductors including a first conductor electrically coupled to said ground port, a second conductor electrically coupled to said data port, and a third conductor electrically coupled through said LED to said I/O port.

Plaintiff contends that housing should be construed as "something that covers or protects, as a case or enclosure (as for a mechanical part or instrument)." Defendants, in turn, propose two alternative constructions: (1) "a rectangular box-shaped container adapted to house or store a ring of keys or other loose objects for tracking;" or (2) "having a bottom portion and a top portion-a rectangular box-shaped container with top and bottom panels or surfaces to allow loose objects to be stored within."

This order holds that "housing" means a protective case or container. This definition is derived from the dictionary definition proffered by plaintiff (Cicero Exh. B, *Merriam-Webster's Collegiate Dictionary* 887 (1998)). Its aptness is apparent from the language of Claim 6, which makes clear that the housing acts a protective case or container for an electronic circuit. The housing may take the form of a carrier that likewise acts as a protective case or container for the items to be tracked. This is evident from the embodiment illustrated in Figure 6, in which a circuit board is inserted into a pocket within the wall of a carrier shaped like a box. But while the housing *may* take the form of a carrier for items to be tracked, this order finds that it need not do so.

In so holding, the Court is mindful of the Federal Circuit's repeated admonition against importing into claims limitations that are described in the patent specification or that appear in the preferred embodiment. *See* *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1326 (Fed.Cir.2002); *Karlin Tech., Inc. v. Surgical Dynamics, Inc.*, 177 F.3d 968, 973 (Fed.Cir.1999). Claim terms are to be given "their ordinary and accustomed meanings unless the patentee demonstrated an intent to deviate from the ordinary and accustomed meaning of a claim term by characterizing the invention in the intrinsic record using words or expressions of manifest exclusion or restriction, representing a clear disavowal of claim scope." *Teleflex*, 299 F.3d at 1327; *see also* *Tex. Digital Sys., Inc. v. Telegenix, Inc.*, 308 F.3d 1193, 1203 (Fed.Cir.2002), *cert. denied*, 2003 WL 1889122 (U.S. May 27, 2003) ("If more than one dictionary definition is consistent with the use of the words in the intrinsic record, the claim terms may be construed to encompass all such consistent meanings.").

With respect to the term "housing," no "clear disavowal" can be found. The specification does not define housing. Indeed, the word never appears there. In contrast, the words "carrier" and "container" repeatedly refer to that which holds items, such as keys or jewelry, to be tracked. If, in the context of Claim 6, "housing" were intended to mean a "carrier" or "container" for such items, it seems that one of the latter

terms would have been used. The use of the new term "housing" strongly suggests that a different meaning was intended.

This order acknowledges that this holding represents a departure from that of the Court's May 8 order denying plaintiff's motion for a preliminary injunction. By now, the record has been more fully developed. For example, plaintiff has shown that prior to the issuance of the patent in suit, another patent, United States Patent No. 6,195,005, issued. The '005 patent is a parent of the patent in suit, and the two patents share the same specification. The '005 patent claims, among other things, a series of so-called "object carrier" assemblies. Because the '005 patent claims the object carrier invention, the Court no longer deems it necessary that, as a matter of claim construction, the term housing (or trackable object) in the '379 patent be limited to a carrier to contain items to be tracked. The emphasis on the carrier feature in the specification is understandable in light of the '005 patent claims. The carrier invention, however, is not the feature to which the claims of the '379 patent in suit are directed. Rather, the '379 patent is aimed at claiming other key-tracking-system enhancements, namely the incorporation of a light source into the trackable object. *Indeed, it is notable that all of the claims in the '379 patent refer to a light source.*

4. "insertable"

The word "insertable" also appears in Claim 6 (emphasis added):

6. A trackable object for use in a key tracking and control system wherein a storage unit has an array of sockets for removably receiving a plurality of said trackable objects, said trackable object comprising:

a housing having a bottom portion and a top portion;

an electronic circuit including an addressable switch, said electronic circuit being **insertable** into said housing;

a set of conductors electrically coupled to said electronic circuit and being positioned on said trackable object such that said conductors are disposed in a socket of said storage unit when said trackable object is received in the socket;

a light emitting diode (LED) in said trackable object, said LED being electrically coupled to said electronic circuit and being positioned to emit light from said top portion of said housing when lit by said electronic circuit;

said addressable switch having a ground port, a data port, and an I/O port and said set of electrical conductors including a first conductor electrically coupled to said ground port, a second conductor electrically coupled to said data port, and a third conductor electrically coupled through said LED to said I/O port.

According to plaintiff, "insertable" means capable of being received. Defendants, however, argue that "insertable" means "capable of being received and released or withdrawn."

This order holds that "insertable" means "capable of being received." This construction comports with the ordinary understanding of the term. Although defendants advance several arguments in favor of a limitation concerning release or withdrawal, none is persuasive.

First, defendants point to the use of the word "removable" within the specification (Col.6:1-3):

FIG. 6 is a perspective partially exploded view of the carrier of the embodiment of FIG. 5 illustrating the removable printed circuit board thereof.

Indeed, this characterization indicates that the circuit board in this embodiment is not only insertable in the housing but it also removable. However, it must be remembered that these figures depict only one embodiment of the disclosed invention. Time and time again, the Federal Circuit has made clear that specification language referring to one embodiment should not be used to limit the scope of claim language. *See Karlin Technology*, 177 F.3d at 973.

Second, defendants make much of the following use of the word displaced in the following excerpt from the specification (Col.11:1-4):

Referring now to FIG. 6, the carrier **81** is illustrated with its hinged front panel **92** (which may also be a sliding or other appropriate type of panel) open and with the circuit board **93** displaced from the pocket **108** of the carrier. Arrows **112** indicate insertion of the circuit board **93** into the pocket **108**.

This order does not take the use of the word displaced to mean that the circuit board must be removable. Rather, it appears that the circuit board is depicted as such for illustrative purposes, to show better what the circuit board looks like and how it is inserted into the housing. Similarly, that the circuit board is referred to as "lockable" in place does not mandate the adoption of defendants' proffered construction.

Finally, defendants' argument concerning the reprogrammability of the circuit board also fails. The various statements from the specification upon which defendants rely for this argument show only that various programming options are available. There is no discussion, however, of reprogramming circuits after they had been programmed in the first instance.

5. "programmed"

The word "programmed" appears in Claim 1 (emphasis added):

1. A key tracking and control system comprising:

a trackable object associated with each key to be tracked, each trackable object having a lower portion and an upper portion;

an openable drawer for removably receiving and storing a plurality of said trackable objects and the keys associated therewith;

said drawer having an array of internal sockets each configured to receive the lower portion of a trackable object with the upper portion of the trackable object being visible within said drawer;

a light emitting diode (LED) in each of said trackable objects, each LED, when lit, emitting light from the upper portion of its trackable object;

an addressable switch disposed in each of said trackable objects and having a ground port, a data port, and at least one input/output (I/O) port;

each addressable switch storing an identification code by which its trackable object can be identified;

at least three conductors on said lower portion of each trackable object, one of said conductors being electrically coupled to said ground port of said addressable switch, another one of said conductors being electrically coupled to said data port of said addressable switch, and a third one of said conductors being electrically coupled through said LED to said I/O port of said addressable switch;

at least three contacts associated with each socket, each contact engaging and making electrical connections with a corresponding conductor on a trackable object when the trackable object is received in said socket;

a controller;

a communications link connecting said controller to selected ones of the contacts of said sockets and thereby coupling said controller to the data ports of addressable switches within trackable objects disposed in said sockets;

said controller being **programmed** to generate a request and to broadcast said request over said communications link, said request including at least the identification code associated with one of said trackable objects;

each addressable switch setting its I/O port to activate said LED upon receipt from said controller of a request that includes the identification code of said addressable switch, said activated LED visually locating the requested trackable object within said drawer.

Plaintiff asserts that "programmed" means "instructed by software code." According to defendants, however, "programmed" means "given a prepared sequence of instructions." On reply, plaintiff stated that it accepts defendants' proposed definition of "programmed," on the condition that "it is understood that it is broad enough to include software."

This order holds that "programmed" means given a prepared sequence of instructions. Support for this construction can be found in the dictionary definitions of program and programming introduced by plaintiff. For example, one technical dictionary defines "programming" as: "Preparing a detailed sequence of operating instructions for a particular problem to be run on a digital computer" (Cicero Exh. G, *McGraw-Hill Dictionary of Scientific and Technical Terms* 1502 (4th ed.1989)). The Federal Circuit has endorsed the use of dictionaries and treatises for construing patent terms, noting that such reference materials "may be the most meaningful sources of information to aid judges." *Texas Digital*, 308 at 1203.

This order finds no reason to include the "by software code" limitation initially advocated by plaintiff. The above-quoted dictionary definition evidences ordinary meaning, and it includes no such limitation. Furthermore, there is no discussion of software in the patent itself. In light of these facts, inclusion of this limitation would be inappropriate.

6. "electrically coupled"

The term "electrically coupled" appears throughout the patent. The following excerpt from Claim 10 is representative (emphasis added):

10. A key tracking system comprising:

a plurality of trackable objects, each trackable object having a lower portion and an upper portion;

a storage unit for removably receiving and storing a plurality of said trackable objects;

said storage unit having an array of sockets configured to receive the lower portions of trackable objects with the upper portions of said trackable objects being visible in said storage unit;

an addressable switch in each of said trackable objects, each addressable switch storing an identification code by which its trackable object may be identified and having at least a ground terminal, a data terminal, and an input/output (I/O) terminal;

a light source in each of said trackable objects, each said light source being **electrically coupled** to said I/O terminal of said addressable switch and being positioned to emit light from the upper portion of its trackable object when lit to indicate visually the location of the trackable object within the storage unit;

a computer-based controller; and

a communications link coupling said controller to the data terminals of addressable switches within trackable objects disposed in sockets of said storage unit;

each of said addressable switches being adapted to set its I/O port to light its LED upon receipt from said controller via said communications link of a request that includes the Identification Code stored in the addressable switch.

Plaintiff argues that "electrically coupled" means "joined by electrical signals." Defendants, however, contend that the term means "directly connected such that electrical signals can flow between."

This order holds that components that are "electrically coupled" are connected such that electrical signals can flow between them. In the electrical context, "coupling" means the "association of two or more circuits or systems in such a way that power or signal information may be transferred from one to another" (Cicero Exh. K, *The IEEE Standard Dictionary of Electrical and Electronics Terms* 229 (6th ed.1997)).

Although defendants wish to impose the limitation that in order to be electrically coupled, components must be *directly* connected to one another, that limitation is without justification. Direct connection is not required by the above-quoted dictionary definition. Nor is it required by the patent specification. To the contrary, the use of this disputed term within the patent specification demonstrates that the electrical coupling of components may take place by way of intervening components. The following excerpts are illustrative (Col. 10:63-67; Col. 12:28-30):

contacts **97** are coupled through a data matrix or other appropriate communications buss to a remote computer-based controller as described in my prior U.S. patent for connecting the electronic components of the circuit board to the controller.

* * *

I/O 1 of the addressable switch **140** is coupled through an LED **141** and a current limiting resistor **142** to supply voltage V_{in} .

The specification thus fully supports the construction adopted herein.

CONCLUSION

The foregoing claim-construction ruling shall govern all subsequent proceedings herein.

IT IS SO ORDERED.

N.D.Cal.,2003.

Keytrak, Inc. v. Key Register, L.L.C.

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