

United States District Court,  
N.D. California.

**E-PASS TECHNOLOGIES, INC,**  
Plaintiff.

v.  
**3COM CORPORATION a/k/a 3Com, Inc. and Palm, Inc,**  
Defendant.

No. C-00-2255-DLJ

**Dec. 5, 2001.**

Patentee brought action against alleged infringer relating to patent on system for simplifying use of various cards, such as credit cards, check cards, and identity cards. In construing claims in patent, the District Court, Jensen, J., held that: (1) "electronic multi-function card" meant device having width and outer dimensions of standard credit card with embedded electronic circuit that allowed for conversion of card to form and function of at least two different single purpose cards, and (2) "data set" meant any collection of information representing particular single purpose card which was necessary to allow electronic multi-function card to act as substitute, in both form and function, for that particular single purpose card.

Ordered accordingly.

5,276,311. Construed.

Valerie C. West, Valerie C. West Law Offices, Los Angeles, CA, Stephen N. Weiss, Gregory J. Fleesler, Mark N. Parry, Kimberly, Klein, Moses & Singer LLP, New York City, for E-Pass Technologies, Inc.

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## **ORDER**

**JENSEN, District Judge.**

On October 26, 2001, the Court heard argument on the parties' proposed claim construction of United States Patent No. 5,276,311. Stephen Norman Weiss appeared on behalf of plaintiff. Morgan W. Tovey appeared on behalf of defendant. Having considered the arguments of counsel, the papers submitted, the applicable law, and the record in this case, the Court hereby **CONSTRUES THE CLAIMS** as follows.

### **I. BACKGROUND**

## ***A. Factual Background***

This is a patent infringement case involving a single patent covering a system for simplifying the use of various cards, such as credit cards, check cards, and identity cards. U.S. Patent No. 5,276,311 (the " '311 patent"), entitled "Method and Device for Simplifying the Use of a Plurality of Credit Cards, or the Like," describes a method and device for storing information from various individual cards in a single electronic multi-function card, allowing the user the convenience of having to carry only the single multi-function card on her person. All data stored is protected by a security code and can only be recalled by the user with this code when any particular stored card is required for a purchase or transaction.

## ***B. Legal Standard***

[1] [2] Patent infringement analysis consists of a two-step process. *See* *Cybor Corp. v. FAS Technologies, Inc.*, 138 F.3d 1448, 1454 (Fed.Cir.1998). In the first step, the court determines the appropriate scope and meaning of the patent in a process known as claim construction. *Id.* ( *citing* *Markman v. Westview Instruments Inc.* (Markman II), 517 U.S. 370, 371-73, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996)). The second step involves comparing the properly interpreted claim to the accused's device to determine whether infringement exists. *See* *Markman v. Westview Instruments Inc.*, (Markman I), 52 F.3d 967, 976 (Fed.Cir.1995). Claim interpretation is a question of law for the court to decide. *See* *Markman II*, 517 U.S. 370, 116 S.Ct. 1384.

[3] The scope and meaning of claim language is properly constructed through the use of intrinsic and extrinsic evidence. "The intrinsic evidence, and in some cases, the extrinsic evidence, can shed light on the meaning of the terms recited in the claim, either by confirming the ordinary meaning of claim terms or by providing special meaning for claim terms." *See* *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1248 (Fed.Cir.1998).

[4] [5] [6] Intrinsic evidence consists of the claims, the written specification for the patent, including any relevant drawings, and, if in evidence, the prosecution history. *See* *Wright Medical Technology, Inc. v. Osteonics Corp.*, 122 F.3d 1440, 1443 (Fed.Cir.1997). Extrinsic evidence is "that evidence which is external to the patent and file history, such as expert testimony, inventor testimony, dictionaries, and technical treatises and articles, [and] prior art." *Bell & Howell Document Management Prods. Co. v. Altek Sys.*, 132 F.3d 701, 706 n. 5 (Fed.Cir.1997). It is improper for a court to consider extrinsic evidence when the intrinsic evidence clearly construes the claim. *See* *Altek*, 132 F.3d at 706 n. 5 ( *citing* *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1584 (Fed.Cir.1996)); *Sextant Avionique, S.A. v. Analog Devices, Inc.*, 172 F.3d 817, 825-26 (Fed.Cir.1999).

### ***1. Intrinsic Evidence***

[7] [8] [9] The court first examines the intrinsic evidence to derive the meaning and scope of a claim. *See* *Markman I*, 52 F.3d at 976. The claim construction inquiry begins and ends in all cases with the actual words of the claim. *See* *Abtox Inc. v. Exitron Corp.*, 122 F.3d 1019, 1023 (Fed.Cir.1997); *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed.Cir.1996). These words are to be given their ordinary meaning to one experienced in the art, unless the patentee has assigned his own definition to them. *See* *York Prods., Inc. v. Central Tractor Farm & Family Ctr.*, 99 F.3d 1568, 1572 (Fed.Cir.1996). If the patentee has elected to be his own lexicographer, the particular meaning chosen must be stated in the specification "with reasonable clarity, deliberateness, and precision" before it can affect the claim. *Renishaw*, 158 F.3d at 1249 (quoting *In re Paulsen*, 30 F.3d 1475, 1480 (Fed.Cir.1994)). Also, the meaning of a claim term will be

construed to have the same interpretation in every claim unless there is a clear indication otherwise. *See Southwall Technologies Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1579 (Fed.Cir.1995).

[10] [11] [12] [13] [14] If questions remain after examining the claims themselves, the claim language is next read in light of the specification. *See Vitronics*, 90 F.3d at 1582; *Markman I*, 52 F.3d at 976. One may look to the written description to define a term already in a claim limitation, for a claim must be read in view of the specification of which it is a part. *See Renishaw*, 158 F.3d at 1248. "The claims are directed to the invention that is described in the specification; they do not have meaning removed from the context from which they arose." *Network, LLC v. Centraal Corp.*, 242 F.3d 1347, 1352 (Fed.Cir.2001). "Usually, [the specification] is dispositive; it is the single best guide to the meaning of a disputed term." *Vitronics*, 90 F.3d at 1582. However, if it is not necessary to rely on a limitation in the specification to interpret what the patentee meant by a particular term or phrase in a claim, that limitation is "extraneous" and cannot constrain the claim. *Renishaw*, 158 F.3d at 1249; *Hoganas AB v. Dresser Indus., Inc.*, 9 F.3d 948, 950 (Fed.Cir.1993). "A claim must explicitly recite a term in need of definition before a definition may enter the claim from the written description." *Renishaw*, 158 F.3d at 1248.

[15] [16] [17] Thirdly, if questions remain after assessing the claims in light of the specification, the Court may turn to the prosecution history. *See Vitronics*, 90 F.3d at 1582. The prosecution history contains the "undisputed public record of proceedings in the Patent and Trademark Office." *Markman I*, 52 F.3d at 980. This record reveals the patentee's understanding of the claim and terms within the claim at the time the patentee applied for the patent. *See id.* Any interpretation that is provided or disclaimed by the patentee during proceedings with the Patent and Trademark Office shapes the claim's scope. *See id.* at 1576; *Loctite Corp. v. Ultraseal, Ltd.*, 781 F.2d 861 (Fed.Cir.1985). "Claims may not be construed one way in order to obtain their allowance and in a different way against accused infringers." *Southwall*, 54 F.3d at 1576. If prior art exists in the prosecution history, the court may examine this material as intrinsic evidence. *See Vitronics*, 90 F.3d at 1582. Prior art is useful because it "gives clues as to what the claims do not cover." *Id.*

## ***2. Extrinsic Evidence***

[18] [19] Extrinsic evidence is "all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises." *Markman I*, 52 F.3d at 980. Generally, the proper meaning of a claim should be clear without the introduction of extrinsic evidence. *See Id.* at 986. However, when claim language is ambiguous, a court may rely on extrinsic evidence to assist its understanding of the claims. *See Vitronics*, 90 F.3d at 1582. Extrinsic evidence may not be used to vary or contradict the terms of the claims or the specification. *See id.*; *Vitronics*, 90 F.3d at 1584.

[20] [21] External sources may also be used to assist the court, which may not be familiar with the relevant terminology and lack the relevant technical expertise necessary to understand the claim terms. *See Markman I*, 52 F.3d at 986; *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1309 (Fed.Cir.1999). External sources can help the court "explain scientific principles, the meaning of technical terms, and terms of art that appear in the patent and the prosecution history." *Id.* The court may use technical treatises and dictionaries at any time to form a better understanding of the claim terms. *See Vitronics*, 90 F.3d at 1584 n. 6. But a dictionary definition may not be used if it contradicts the meaning of the term found in the patent documents. *See id.* Where there are several common meanings for a claim term expressed in a relevant dictionary, the court must rely on the patent disclosure "to point away from the improper meanings and toward the proper meaning." *Renishaw*, 158 F.3d at 1250.

[22] [23] [24] Expert testimony may assist the court in understanding "how a technician in the field, reading the patent, would understand the claims." *See* Markman I, 52 F.3d at 981. However, "where the patent documents are unambiguous, expert testimony regarding the meaning of a claim is entitled to no weight." Vitronics, 90 F.3d at 1584. The testimony of an inventor or an attorney regarding the meaning of a claim has no effect if it is not expressly stated in the patent document. *See* Vitronics, 90 F.3d 1576; *see also* Altek, 132 F.3d at 706. Prior art and technical treatises are preferred forms of extrinsic evidence over expert testimony. *See* Vitronics, 90 F.3d at 1584.

[25] If after consideration of the intrinsic evidence there remains doubt as to the exact meaning of the claim terms and it is necessary for a court to resort to extrinsic evidence, another claim construction canon comes into play. *Digital Biometrics, Inc. v. Identix, Inc.*, 149 F.3d 1335, 1344 (Fed.Cir.1998). When a claim can be interpreted broadly or narrowly, a court must adopt the narrow meaning when the intrinsic evidence supports such a finding and the broader definition "raises questions of enablement under 35 U.S.C. s. 112." *Id.* ( *citing* *Athletic Alternatives, Inc. v. Prince Mfg., Inc.*, 73 F.3d 1573, 1581 (Fed.Cir.1996)). This principle exists because the patentee has the burden to "particularly point out and distinctly claim the subject matter which the applicant regards as his invention," under 35 U.S.C. s. 112. *Id.*

## II. ANALYSIS

The parties dispute the meaning of several claim terms of the '311 patent. All of the disputed claim terms are in Claim 1, an independent method claim.

### 1. " *electronic multi-function card* "

[26] The Preamble to Claim 1 provides:

A method for enabling a user of an *electronic multi-function card* to select data from a plurality of data sources such as credit cards, check cards, customer cards, identity cards, documents, keys, access information and master keys ...

'311 patent, col. 10, lns. 54-58. The term "multi-function card" is used in every step of Claim 1, and is also found throughout the specification.

The parties' disagreement over the meaning of "electronic multi-function card" primarily concerns the size of the card. Plaintiff argues that an electronic multi-function card is a claim term that broadly means "a pocket sized electronic device containing an integrated electronic circuit." Joint Claim Construction Statement ("Joint Stmt.") at App. A, p. 1; Plaintiff's Opening Claim Construction Brief ("Pl.Op.") at 7. Defendants, on the other hand, construe the term to mean "a flat piece of plastic having the outer dimensions of a usual credit card with an embedded electronic circuit for converting the card to the form and function of at least two single-purpose cards." Joint Stmt. at App. A, p. 1; Defendants' Response Claim Construction Brief ("Def.Resp.") at 10.

Plaintiff argues that "electronic multi-function card" is not limited in size to a credit-card size device, but instead encompasses "pocket-sized" devices. Pl. Op. at 7-10. It contends that the "fundamental purpose" and "context" of the invention dictate such an interpretation, and that having a card that is the size of a "wallet or pocket item[ ]" accomplishes the object of the invention and carries out the patented method. *Id.* at 7-8, 10. Furthermore, plaintiff argues that defendants' use of the specification and extrinsic evidence (e.g., dictionaries) improperly limit the scope of the claim.

Defendants contest plaintiff's assertion that the multi-function card can be pocket-sized. They point out that the phrase "pocket size" is nowhere to be found in the patent. Def. Resp. at 15; *see also* '311 patent, generally. Defendants also argue that the claim must be construed in light of the specification and that the specification only contemplates a credit card-sized card. Id. at 8, 11. Furthermore, defendants contend, contrary to plaintiff's assertion, that the stated purpose of the invention can only be achieved where many credit card-sized cards are consolidated into one credit-card size card. Id. at 11-12. Defendant's argue that their position is supported by the prior art (i.e., "[a]ll the prior art references cited ... describe card-sized devices.") and confirmed by the extrinsic evidence (e.g. dictionary definitions). Id. at 13-16.

[27] The claim language itself does not provide much assistance. Rather, the claim merely refers to an "electronic multi-function card," without any surrounding language that modifies this term with regard to the size of the card. Since questions remain after examining the claim itself, the claim language is next read in light of the specification. *See Vitronics*, 90 F.3d at 1582; *Markman I*, 52 F.3d at 976.

The specification provides abundant support for defendants' position that a multi-function card has the dimensions of a standard credit card. First, the part of the specification entitled "Advantages of the Invention," states that:

Particular advantages are provided by the simple form of the electronic *multi-function card which has the outer dimensions of usual credit or check cards* and one or more display windows for displaying predetermined data sets ....

'311 patent, col. 3, lns. 17-21 (emphasis added). Furthermore, in addressing the technological feasibility of making a multi-function card, the specification provides:

[Converting the multi-function card into a single-purpose card] is comparatively simple since it is in fact easily possible, technologically, to accommodate even very extensive electronic storages *in a card-like very flat housing* having at least one or a plurality of display windows.

Id., col. 2, lns. 22-26. The specification further states that "[card-like very flat housing] has been practiced before in the form of so-called check-card calculators which perform simple calculation tasks and which only have a thickness *hardly larger* than that of usual checks or credit cards." Id., col. 2, lns. 26-30 (emphasis added). Together, these general specifications support the proposition that a multi-function card is flat with the outer dimensions of a credit card or check card, or, at the very most, a thickness "hardly larger" than that of usual credit or check cards.

Moreover, the word "card" is used over 280 times in the patent, and is used in either one of two ways. Sometimes "card" is used in reference to a "plurality of cards" or to specific "single-purpose" cards that people typically carry. *See, e.g., id.*, col. 1, ln. 63; col. 3, lns. 23-24. Other times "card" is used in reference to the "electronic multi-function card," which is the subject of the patent. In this use, "card" refers to the single card a person uses to replace the previous plurality of cards which have been transferred onto the single electronic multi-function card.

These usages of the word "card" raises two notable points. First, when "card" is used to refer to cards that have a single function which can be transferred onto the multi-function card, the examples of types of cards to be transferred are of credit card size. For instance, the patent is replete with references to "credit cards,"

"check cards," "customer cards," "telephone cards," "gasoline service station cards," "restaurant and department-store cards," "club cards," "drivers licenses," "time recording cards," and "identity cards." *See, e.g., Id.*, col. 1, lns. 13-14, 24-26; col. 4, ln. 14. What all of these cards have in common is that they are flat and generally the size of a usual credit card. In fact, there are no references in the patent to "cards" that are not flat and generally credit card size.

Second, if cards that will be transferred to the multi-function card are credit card-like in size, then it follows that the multi-function card is also intended to be credit card sized. Plaintiff emphasizes that

[t]he multi-function card is an electronic card or computer card which contains, in electronically stored form, not only the data of one card, but rather data sets of all cards held and used by a given person, it being possible without any problem, by simple external manipulations, to convert the multi-function card into a specific card virtually at the moment when the latter is needed.

Pl. Op. at 7 (citing '311 patent, col. 2, lns. 14-21). In other words, the specification describes a user being able to discard all the various individual credit card size cards she carries about, and in their place, substitute those cards with one similarly sized card. This comports with plaintiff's argument that the Court is to view the term "electronic multi-function card" in light of the "object of the invention," which includes having a multi-function card that operates as a particular single purpose card. Pl. Op. at 6, 11. If the Court is to give the word "card" consistent meaning, then this suggests that the various credit card-sized cards will be transferred on to a multi-function card, which is also credit card sized.

Defendants note, correctly, that the prosecution history supports the contention that "card" has the dimensions of a standard credit card. The abstract sections from all of the prior art references cited and considered in the prosecution history, except for one, appear to describe credit card-sized devices. *See* '311 patent, coverage; Decl. of Morgan W. Tovey, Ex. 28. The one invention that describes a "pocketsize" device does not refer to the device as a "card," but rather as a "portable pocketsize data carrier." *See* Ex. 28, U.S. Patent No. 4,859,837, abstract. Thus, all of the intrinsic evidence supports a definition of multi-function card that is flat and has the dimensions of a standard credit card.

The Court does not believe that interpreting the term "electronic multi-function card" requires the use of extrinsic evidence. However, even if taken into account, the extrinsic evidence only confirms the view that an electronic multi-function card is intended to have the size and dimensions of a standard credit card.

Of most significance is evidence showing that both credit cards and smart cards have had one standard size, as set forth in 1971 by the American National Standards Institute ("ANSI"). Def. Resp. at 5. The original 1971 ANSI standard established the dimensions of credit cards as having a length of 3.375 inches, a height of 2.2125 inches, and a thickness of 0.030 inches (with tolerances of (plus-or-minus sign)0.003 inches). Ex. 16, p. 8. The International Standards Committee ("ISO") followed suit, adopting the original ANSI dimensions as its own world standard for identification and financial transaction cards in 1985. Ex. 19, p. 1. When the ISO published its standard governing integrated circuit cards or smart cards, it also required smart cards to have the same dimensions as standard credit cards. Ex. 20, p. 1. These standards were in place long before Hennige filed his U.S. patent application. This evidence, combined with plaintiff's argument that the multi-function card serves as a "substitute" for a plurality of cards (hence implying that the multi-function card serves a similar use, *see* Pl. Op. at 7) leads to only one conclusion: for the multi-function card to substitute itself for a plurality of cards, the multi-function card would have to be similarly sized to the plurality of cards in order to be used in the United States or throughout the world. That size is the standard

credit card size.

In addition, there is the patentee's own deposition testimony. When asked "[why] is it important to you that [the device] would be the size of a credit card?," Hennige responded: "[b]ecause that was *my original idea to build a device the size of a credit card computer card* which contains all sorts information, all sorts data." Ex. 25 at p. 350 (emphasis added). Then, when asked "[i]s there any reasons why it's easier to carry around one card instead of 16 cards or eight cards?," Hennige answered: "[i]f I'm in a position *to combine a plurality of cards into one credit-card-size computer as defined in my patent*, I would have thought it's a lot easier, yes." Id. at p. 498 (emphasis added). These statements speak for themselves; clearly Hennige contemplated that the electronic multi-function card would be the size of a standard credit card.

Defendants have also submitted an "Inventor Disclosure Statement" that appears to have been provided to the German government in Hennige's application for a German patent. According to the certified English translation, Hennige states that "[c]redit cards, check cards, customer cards, etc. are coming into wider and wider use throughout the world." *See* Inventor Disclosure Statement as Translated ("Inv.Dis.Stmt."), EP0001. He then acknowledges that these cards "are in fact subject to a 'standard' with regard to their size and magnetic strip, but each card as a rule has only one function and one intended use ...." Id. (emphasis omitted). The most instructive statement comes next, wherein Hennige declares: "In my opinion, it is time to replace the variety of cards offered and most widely disseminated with one which, from the current viewpoint, can easily be produced with available technology." Id. (emphasis omitted). Not only do these statements indicate that Hennige contemplated converting several standard credit card size cards into one multi-function card, but the technology existed at the time the patent was filed to do just that. The Invention Disclosure Statement was submitted in 1989, 3 years before the U.S. patent application was filed. *See* Inv. Dis. Stmt. EP0011. This simply confirms what is already clear from the intrinsic evidence, that the multi-function card is the size of a standard credit card.

There is also the matter of common sense. At the *Markman* hearing, plaintiff's counsel acknowledged that (1) there is no such thing as a standard "pocket size," and (2) that if one loaded her present collection of single purpose cards onto the oversized card covered by the plaintiff's interpretation, she would not be able to buy gas or obtain cash at the ATM. An invention that requires one to carry one more card of irregular size may have some economic viability as a curiosity, but it can hardly be described as a device "for simplifying the use of ... credit cards." '311 patent, abstract.

As far as other definitional aspects of the electronic multi-function card are concerned, the parties are essentially in agreement. Plaintiff argues that the card contains an "integrated electronic circuit." Joint Stmt. at App. A, p. 1. Defendants are a bit more specific, describing the card as having an "embedded electronic circuit for converting the card to the form and function of at least two single-purpose cards." Id.

The proposed constructions raise two points. First, nowhere in the patent could the Court find the phrase "integrated electronic circuit." The preferred embodiment section does, however, refer to "the usual electronic circuit means which are regarded as standard today." '311 patent, col. 4, lns. 41-42. The term "electronic circuit" appears to be more appropriate than "integrated electronic circuit."

Second, the Court agrees with defendants' language which states: "... for converting the card to the form and function of at least two single-purpose cards." This description gives meaning to the word "multi-function" in the term "electronic multi-function card," and finds authority within the specification. For instance, in the "Advantages of the Invention" section, the specification states that:

The multi-function card is an electronic card or computer card which contains, in electronically stored form, not only the data of one card, but rather data sets of all cards held and used by a given person, it being possible without any problem, by simple external manipulations, *to convert the multi-function card into a specific card* virtually at the moment when the latter is needed.

'311 patent, col. 2, lns. 14-21 (emphasis added). The ability to "convert" itself is central to the meaning of "multi-function."

Finally, defendants argue in their reply brief that the card must be made of plastic. Def. Resp. at 12. This argument was abandoned at the *Markman* hearing.

Based on these considerations, the Court construes "electronic multi-function card" to mean "A device having the width and outer dimensions of a standard credit card with an embedded electronic circuit allowing for the conversion of the card to the form and function of at least two different single-purpose cards."

## 2. " data set "

[28] The term "data set" is used in four of the six steps enumerated in Claim 1. '311 patent, col. 10, ln. 59-col. 11, ln. 3. They are:

Step 1: "transferring a *data set* from each of the plurality of data sources to the multi-function card;"

Step 2: "storing said transferred *data set* from each of the plurality of data sources in the multi-function card;"

Step 5: "selecting with said activated multi-function card a select one of said *data sets*;" and

Step 6: "displaying on the multi-function card in at least one predetermined display area the data of said selected *data set*."

Id. While the claim language itself suggests that a "data set" is information derived from a single-purpose card, the parties offer differing constructions as to the *content of the information* needed to create a "data set." Plaintiff construes "data set" to mean "a collection of information representing a particular single purpose card, document, key or the like." Joint Stmt. at App. A, p. 2. Defendants, on the other hand, state that "[a] data set is any collection of information transferred from a data source." Id.

Plaintiff explains in the Joint Statement that

the collection of information is unique to that particular single purpose card, document, key or the like. The collection of information includes the logo of the issuer of that particular single purpose card, document, key or the like and other information to enable the electronic multi-function card to be converted to and operate as that particular single purpose card, document, key or the like.

Pl. Op. at 11. Defendants' construction differs, including "any collection of information transferred from a data source." Joint Stmt. at App. A, p. 2; *see infra* construction of "plurality of data sources," at 25-31.



Defendants dispute plaintiff's inclusion of items, such as a logo, as being a necessary part of a data set. Def. Resp. at 20-21. The correct construction of "data set" lies somewhere in between the parties' proposed constructions.

The specification itself provides guidance, stating that the electronic multi-function card

can be converted without any problem to different single-purpose cards by calling up other *data sets*, the card *reproducing in each case the special information* or logo of the issuing company or bank, the card number and the date of expiry, any stored photos or, if desired, other machine-readable data and the user's signature.

'311 patent, col. 3, lns. 26-32 (emphasis added). This description of what it means to pull up a data set clearly suggests that the composition of a data set will differ, depending on what information the single-purpose card contains. The specification recognizes that single-purpose cards contain "special information" that may differ from card to card. *Id.* Examples are provided, such as a logo, card number, date of expiry, photos, and the user's signature. *Id.*

The phrase "or, if desired" is critical to the construction of this term. *Id.* This phrase demonstrates that the list of components for a data set may contain some of the examples set forth, all of the examples, or others not listed. This view is confirmed by the extrinsic evidence. *See* Ex. 25, Hennige Dep. Tr., p. 389, ln. 16-p. 390, ln. 21 (in response to an inquiry regarding what constitutes a data set, Hennige answers that it would depend). In other words, the list provides neither a floor nor ceiling for the extent of information necessary to make up a data set.

The above quoted passage, taken in its entirety, suggests that in answering the question: what is a "data set?," the focus should be on the single-purpose card. That information which is necessary to effectuate a transaction using the single-purpose card is the "data set" that needs to be transferred to the electronic multi-function card in order for the multi-function card to be able to convert itself, in form and function, as a substitute for the single-purpose card. Any attempts to be more specific will result in either an under or over-inclusion of components.

Accordingly, the Court construes "data set" to mean "Any collection of information representing a particular single-purpose card which is necessary to allow the electronic multi-function card to act as a substitute, in both form and function, for that particular single-purpose card."

### **3. " plurality of data sources "**

[29] The preamble to Claim 1 states:

A method for enabling a user of an electronic multi-function card to select data from a *plurality of data sources* such as credit cards, check cards, customer cards, identity cards, documents, keys, access information and master keys ...

'311 patent, col. 10, lns. 54-58 (emphasis added). Plaintiff argues that "plurality of data sources" means "two or more different single purpose cards, documents, keys or the like." Joint Stmt. at Append. A, p. 3; Pl. Op. at 14. Defendants, on the other hand, construe the term to mean "at least two different *types* of single-purpose cards from the group of the following types: credit cards, check cards, customer cards, identity

cards, keys, access information, and master keys." Joint Stmt. at Append. A, p. 3 (emphasis added); Def. Resp. at 17.

There are a couple of differences in the parties' formulations. First, defendants' construction calls for two different "types" (or categories) of single-purpose cards, whereas plaintiff construes data sources to mean any two single purpose-cards (e.g. check card, gas card, etc.), regardless of whether they are the same type (or category) of card. Second, defendants seek to limit the category of cards that may qualify as a data source. In particular, defendants argue that plaintiff's inclusion of "documents" and "or the like" as data sources broaden the scope of this term beyond what was allowed when the patent was granted. Each of these issues will be addressed in turn.

**a. *Whether plurality of data sources means at least two different "types" of data sources.***

Defendants contend that "a plurality of data sources" must include at least two different "types" of data sources. Def. Resp. at 17. Defendants make clear that under this view, two credit cards, for instance, would not qualify as different types of data sources, but a credit card and an identification card would. *See id.* Plaintiff's proposed construction is closer to the mark.

Interestingly, the term "data source" is only found in the claims, not in the specification. As already cited, the preamble to Claim 1 sets forth examples of sources "such as credit cards, check cards, customer cards, identity cards, documents, keys, access information and master keys ..." '311 patent, col. 10, lns. 56-58. From this passage alone, one cannot discern with certainty whether a "plurality of data sources" means that the data sets must derive from at least two different categories of cards, or whether the unique data sets can come from the same category of cards (e.g., Visa and Master Card). However, nothing in the claim or specification limits "plurality of data sources" in a way that is consistent with defendant's proposed construction. Thus, it appears that one could transfer data sets from two different single-purpose cards, regardless of whether the data sets derive from the same category of cards.

This interpretation is also consistent with the Court's construction of "multi-function card," which the Court construes in significant agreement with *defendants'* proposed construction. Defendants proposed that a "multi-function card" will convert the card "to the form and function of at least two different single-purpose cards." Joint Stmt. at App. A, p. 1. That proposed construction says nothing that would require the single-purpose cards to derive from at least two different categories of cards. To be consistent with the Court's construction of multi-purpose card, plurality of data sources must be construed as two or more different single-purpose cards even if derived from the same category of cards.

Furthermore, the Court's previous construction of "data set" is also consistent with a construction of "data sources" that does not differentiate between categories of cards. Claim 1 sets forth the transferring and storing of data sets from each of a plurality of data sources. '311 patent, col. 10, lns. 59-62. Since a data set derives from a data source, and a data set is information from one single-purpose card, it follows that a data source must be a single-purpose card containing information that will be transferred as a data set.

[30] Defendants, however, argue that the prosecution history mandates that "plurality of data sources" mean different categories of cards. Def. Resp. at 17. As a general rule, the prosecution history cannot be used to broaden the ordinary meaning of the terms used in the claims and specification. *See Multiform Desiccants, Inc. v. Medzam Ltd.*, 133 F.3d 1473, 1478 (Fed.Cir.1998). In addition, the prosecution history is more consistent with plaintiff's construction. The Patent Examiner appears to have initially rejected the claim as

obvious in light of prior art (the Yoshida patent in particular) that disclosed the claimed invention using a plurality of financial transaction cards (i.e., all of the same category cards) as its data source. *See* Prosecution History of '311 patent, Office Action of Jan. 29, 1991, p. 2; Ex. 33. In response, Hennige distinguished the '311 patent claims from the Yoshida patent, stating:

Yoshida does not disclose or suggest transferring data to the IC card from *a plurality of different types of sources* such as credit cards, check cards, customer cards, documents and so forth having different associated data sets for storing the data on the IC card itself.

*Id.* (emphasis added). Based on Hennige's response, defendants define "plurality of sources" to mean "at least two types of single-purpose cards from the group of the following types ...." Joint Stmt. at App. A, p. 3. The Court rejects this interpretation, instead interpreting Hennige's response to mean that the multi-function card need only be capable of transferring data sets from at least two different categories of cards. Thus, the patented device need only be *capable* of transferring data sets from a plurality of data sources. So for example, where the first step in Claim 1 calls for "transferring a data set from each of the plurality of data sources to the multi-function card," this step is satisfied where the device is capable of transferring data sets from more than one category of cards. This interpretation is consistent with the prior discussion on the relationship between "plurality of sources" and "multi-function card."

**b. Whether "documents" can constitute a "data source"**

The word "documents" is used in the preamble of Claim 1 as an example of a type of data source. '311 patent, col. 10, ln. 57. Defendants correctly note that "documents" is not used anywhere in the specification and that the term may be broad and vague. Def. Resp. at 19. Nevertheless, the Court will not "read out" this term from the claim. Neither of the parties identified, in the Joint Statement, "documents" as a contested term requiring construction. Defendants are now attempting to bootstrap a construction of this term under the guise of the "plurality of data sources" construction. The claim language is clear: "documents" is a type of data source. '311 patent, col. 10, ln. 57.

**c. Whether "or the like" is included within the definition of "plurality of data sources"**

Plaintiff construes a "plurality of data sources" to mean "two or more different single purpose cards, documents, keys *or the like*." Joint Stmt. at App. A, p. 3 (emphasis added). As previously mentioned, Claim 1 describes a

method for enabling a user of an electronic multi-function card to select data from *a plurality of data sources such as credit cards, check cards, customer cards, identity cards, documents, keys, access information and master keys ...*

'311 patent, col. 10, lns. 54-58 (emphasis added). The "such as" language above indicates that the examples that follow represent a non-exhaustive list. The term "or the like" is not included, nor is it found anywhere else in Claim 1.

Furthermore, plaintiff's response brief fails to respond to defendant's argument that use of "or the like" is an invalid expansion of what it means to be a "data source." Since "or the like" is not in the claim itself, and the term "such as" already implies a non-exhaustive list, "or the like" will not be used in the claim construction.

Accordingly, the Court construes "plurality of data sources" to mean "Two or more different single-purpose cards, such as credit cards, check cards, customer cards, identity cards, documents, keys, access information and master keys, regardless of whether the single-purpose cards are from the same category or from different categories."

#### **4. " assigning a secret code to activate the multi-function card "**

[31] Step 3 of Claim 1 provides for "assigning a secret code to activate the multi-function card." '311 patent, col. 10, lns. 63-64. Plaintiff argues that this term should be construed as:

a step of the method recited in claim 1 that means selecting a code that must be entered before it is possible to activate the multi-function card. The activation enables the user to access the data set of a particular single purpose card, document, key or the like in order to convert the multi-function card in form and function to that particular single purpose card, document, key or the like.

Joint Stmt. at App. A, p. 4. Defendants, on the other hand, argue that the term should be construed as "inputting a code *through a separate electronic device* into the electronic multi-function code." Id. (emphasis added). The Court finds that a separate electronic device is not required by the patent.

##### **a. Separate Electronic Device to Assign Secret Code**

In the "Description of the Embodiments" section of the specification, the patent provides two examples for how a user assigns a secret code to the card. The first example describes the use of a "master unit." The user "determines a secret code which will be required later to activate the electronic multi-function card. This secret code is known to nobody else but the user and may be input in the electronic multi-function card, for example via the master unit." '311 patent, col. 6, lns. 56-61. The second example for how a user would assign a code is through the use of a personal computer. In this scenario, the user would "enter the secret code via the computer keyboard ...." Id., col. 9, lns. 6-8.

Defendants contend that because the specification also states that "[t]he secret code can be determined only if a master unit according to Fig. 3 is available, as only the master unit is provided with means for entering figures or alphanumerical information, as shown in Fig. 3," this means that *only* a master unit in the form of a unit designed for the multi-function card or a master unit in the form of a computer can be used to assign a secret code. '311 patent, col. 7, lns. 56-65; Def. Resp. at 21. Defendants' conclusion is overreaching.

The language that defendants rely upon to reach this conclusion appears under the "Description of the Embodiments" section, and follows the example of how the "master unit 15" is one example of how the user may assign a code. The specification then provides a second example of how a user could enter in the code through a computer keyboard. Thus, the language that defendants cite to imply that a master unit is the *only* means for assigning a code ("The secret code can be determined only if a master unit according to Fig. 3 is available ..."), is simply hypothesizing a situation where the master unit 15 is the unit being used, rather than another example like the computer keyboard. The patentee does not limit himself to one form of assigning the code over another.

Although the specification does provide two examples of how a user could assign a secret code, the language used makes it clear that these are just possibilities. The suggestion of using the master unit to assign the code says that the code may be input, "*for example*, via the master unit 15." '311 patent, col. 6, lns. 58-61 (emphasis added). This is non-exhaustive language. Likewise, the suggestion of using a computer

to assign a code is prefaced with the language "[i]n this case, too," thus making it clear that the computer is just another option for assigning the code, rather than the exclusive means for assigning the code. Id., col. 9, lns. 6-8.

It is true that the only two examples describing how a user would assign a secret code do require assignment via a separate electronic device; thus, the only examples comport with defendants' proposed construction. Nevertheless, the patent does not exclude the possibility of the user assigning the secret code through the multi-function card itself. In fact, the Claim 1 of the patent provides that the multi-function card will have a keyboard for *entering* in the secret code, '311 patent, col. 10, lns. 65-66, although the patent does not state that this same keyboard can be used for *assigning* the code. Again, the non-exhaustive language in the specification suggests to the Court that assigning a secret code can be done in more ways than described in the preferred embodiment, even including through the electronic multi-function card itself.

Looking to the prosecution history for further guidance is unavailing. The prosecution history cited by both parties merely indicate that a secret code "is assigned," and that the card remains inactive until this point. The prosecution history does not provide any insight as to *how* the user assigns the secret code.

[32] Furthermore, defendants cites no extrinsic evidence in support of their proposed construction. Defendants merely state that there is "possible inventor testimony" and "possible expert testimony" to support their construction, but do not submit such testimony. Joint Stmt. at App. C, p. 15. Defendants do, however, cite the Hennige Invention Disclosure Statement, which provides that "[o]ne can only be determine [sic] this PIN code if one has a master device." Inv. Dis. Stmt. at p. 10. This exclusive language contradicts the non-exclusive language of the patent; the patent states that the master device is just one example of how a user can enter in his identification code. Because the cited extrinsic evidence contradicts the language of the patent specification, this extrinsic evidence cannot be used to support defendants' proposed construction. *See Georgia-Pacific Corp. v. United States Gypsum Co.*, 195 F.3d 1322, 1332 (Fed.Cir.1999).

Based on this lack of extrinsic evidence, as well as a general disfavor of using Preferred Embodiment language to limit the construction of broader claim language, the Court construes "assigning a secret code to activate the multi-function card" as: "The user assigns a secret code by entering a code through a separate electronic device or through an alphanumeric keyboard or keypad on the card."

**5. " *entering said secret code into the multi-function card to activate the same.*"**

[33] Step 4 of Claim 1 provides for "entering said secret code into the multi-function card to activate the same." '311 patent, col. 10, lns. 65-66. Plaintiff argues that this term should be construed as

a step of the method recited in claim 1 that means manipulating the multi-function card in some manner to put the secret code assigned in the previous step into the multi-function card in order to activate it. The activation of the multi-function card enables access to the data set of a particular single purpose card, document, key or the like in order to convert the multi-function card in form and function to that particular single purpose card, document, key or the like.

Joint Stmt. at App. A, p. 5. Defendants argue that the Court should construe this term as "entering a code before the electronic multi-function card is turned on, and thus before the electronic multi-function card displays any information." Id. Thus, the primary dispute arises out of what "activated" means and at what

point the user enters the secret code.

The terms "to activate", "activated" or "activation" are used throughout the patent, but they are not specifically defined. The first mention states that the multi-function card will be "capable of differentiating between an activated and a non-activated, i.e. neutral, state." '311 patent, col. 2, lns. 12-14. "Neutral" is also a term which is not defined in the patent.

The term "activated" is also used to show that the card is activated when the card holder has entered a secret code. Id., col. 2, lns. 46-48. Perhaps the most specific definition of "activated" provided in the patent is the following:

when not activated, [the card] is a neutral electronic card and, when activated in a particular way, [it] will display the logo of the issuing institute, the holder's photo, his signature and other relevant data in a visible matter.... In the non-activated state, which is illustrated in Fig. 1a [sic, 1b] <sup>2</sup>, such a card may be regarded as a blank page ....

FN2. This reference to Figure 1a should be to Figure 1b. This is clear from the context. *See* CVI/Beta Ventures, Inc. v. Tura LP, 112 F.3d 1146, 1155 n. 5 (Fed.Cir.1997).

'311 patent, col. 4, lns. 39-40. The patent also provides that the user "has to activate the electronic multi-function card ... by entering his secret code and to decide thereafter which of the available individual cards is to be used." '311 patent, col. 7, lns. 10-13.

Moreover, the patent provides that the "first activation process" is during the initial loading of the multi-function card when the signature and photo become visible for the first time. Id., col. 8, lns. 17-22. Because the patent links the term "activation" to being able to see the signature and photo, and loading single cards onto the multi-function card, "activation," as the term is used in reference to the secret code, requires the state of being able to see, and therefore "access" these things. Simply put, data sets can not be accessed until the user enters in the secret code.

Defendants contend that the user enters the secret code before the multi-function card is turned on. In contrast, plaintiff argues that the secret code is entered to access the data, but the code is not entered before the user turns on the card's power. The patent does not speak to the issue of when the card's power is turned on and off. Instead, it simply provides that the card is not "activated" until the secret code is entered.

Thus, the Court adopts the following definition of "Entering said secret code into the multi-function card to activate the same": "The user activates the electronic multi-function-card by entering the secret code. 'Activated' means the point at which the user has entered in the secret code so that she is able to access a data set."

IT IS SO ORDERED

N.D.Cal.,2001.

E-Pass Technologies, Inc. v. 3Com Corp.

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