

United States District Court,  
W.D. Washington, at Seattle.

**Howard H. BOBRY and Virtual RS Corporation,**  
Plaintiff(s).

v.

**ESSELTE AB, et al,**  
Defendant(s).

No. C03-0318P

**Aug. 10, 2004.**

Christopher Cavallar Mason, Jeffrey Alan Smyth, Shaunta Marie Knibb, Smyth & Mason, Seattle, WA, for  
Plaintiffs.

Bruce E. Black, David K. Tellekson, Eric A. Prager, Heather C. Wilde, Katherine J. Drakos, Lee Goldberg,  
Robert L. Jacobson, Thomas R. Marquis, Darby & Darby, Seattle, WA, for Defendants.

### **ORDER ON CLAIM CONSTRUCTION**

**MARSHA J. PECHMAN, District Judge.**

This matter comes before the Court on a claim construction hearing wherein the parties requested construction of four claim terms in Plaintiff Howard Bobry's United States Patent No. 5,634,730 ("the '730 Patent"). ( *See* Dkt. Nos. 132 and 135). Having reviewed the papers and pleadings submitted by the parties, and having heard testimony and oral argument on the issues, the Court hereby issues the following constructions for the disputed claims terms:

1. "Electronic control means" has a dual *function*: 1) to control the printer using an algorithm to compensate for printed image distortion caused by movement of the printer within the housing during a printing sequence; and 2) to control the printer to print selected indicia on the medium during the printing sequence in response to information from the actuator. The *structures* associated with this function include: 1) a microprocessor and related circuitry, together with an appropriate algorithm or algorithms that compensate for distortion caused by movement of the printer within the housing, and which control the printer to print selected indicia, 2) a system clock, 3) a power supply, 4) one or more memories, and 5) an actuator switch.
2. "Self contained" means "capable of operation without requiring external inputs and/or controls."
3. "Single housing" means "one and only one housing or casing."
4. "Autonomously" means "functioning independently without control by others."

## BACKGROUND

Plaintiffs Howard Bobry and Virtual RS Corporation brought this action against Esselte Corporation and related companies, DYMO Corporation, and Mr. Martin Gibbs alleging patent infringement, misappropriation of trade secrets, violations of the Washington Consumer Protection Act ("WCPA"), and breach of contract arising out of defendants' manufacture, distribution, illegal use, and sale of products developed by Plaintiffs. Specifically, Plaintiffs allege that defendants have misappropriated trade secrets and violated provisions of a contract between the parties regarding use of a product called the "The Stamper (TM)," a hand-held printer, which was invented by plaintiff Bobry. Plaintiffs also allege that defendants' use of the product constitutes infringement of their patent, United States Patent No. 5,634,730. ("the '730 patent"). Finally, plaintiffs assert that defendants' actions constitute unfair business practices in violation of the WCPA.

A relatively small portion of this case involves a claim of patent infringement by Plaintiffs. Specifically, Plaintiffs claim that Defendants manufactured or imported a product that infringes Claim 56 of Bobry's reexamined patent. During the reexamination process, several claims were modified, adding further clarifying or limiting language, while other claims were outright canceled. Claim 56 was *added* during the reexamination, representing a straightforward combination of former Claim 13 and former dependent Claim 50.

The text of Claim 56 reads:

56. A hand-held and *self contained* electronic printing device for printing indicia on a medium, comprising:

a *single housing* that is manually held stationary against a surface of the medium during a printing sequence;

a printer disposed in said single housing capable of printing indicia in any selectable pattern on the medium during said printing sequence; an actuator for initiating said printing sequence;

and electronic control means disposed in said single housing and having a memory that electronically stores the indicia to be printed;

said *electronic control means* controlling said printer using an algorithm to compensate for printed image distortion caused by movement of the printer within the housing during a printing sequence and responsive to said actuator for controlling the printer to print selected indicia on the medium during said printing sequence;

the printing device *autonomously executing* each entire printing sequence after each printing sequence is initiated.

(emphasis added, indicating contested language).

### A. Claim Construction Analysis

In interpreting patents, intrinsic evidence is considered first, including 1) the claim language itself, 2) the written specification disclosing the best mode embodiment, and 3) the prosecution history of the patent. *Vitronics Corp. v. Conceptoronic, Inc.*, 90 F.3d 1576, 1582 (Fed.Cir.1996). Claims construction always

begins with the language of the claims. *Phonometrics, Inc. v. Northern Telecom Inc.*, 133 F.3d 1459, 1464 (Fed.Cir.1998).

The claim language defines the invention. Claim language is first given its ordinary meaning as viewed by one of ordinary skill in the art. *Johnson Worldwide Assocs. Inc. v. Zebco Corp.*, 175 F.3d 985, 989 (Fed.Cir.1999). The strong presumption in favor of using the ordinary meaning of terms is overcome in two situations: 1) where a patentee is his own lexicographer, giving meaning to terms that differs from their ordinary usage by defining terms in the specification or prosecution history, *Vitronics*, 90 F.3d at 1582, or 2) where a claim term "deprives the claim of clarity such that there is no means by which the scope of the claim may be ascertained from the language used." *Bell Atlantic Network Servs. Inc. v. Covad Comm'n's Group, Inc.*, 262 F.3d 1258, 1268 (Fed.Cir.2001) (internal quotations omitted).

For further interpretation of claim language, the Court turns to the specification, which must disclose the best mode embodiment of the invention. The claim language is to be read "in view of" the specification. "The specification is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term." *Vitronics*, 90 F.3d at 1582. On the other hand, the Court must not import limitations from the specification. "It is well established that the preferred embodiment does not limit broader claims that are supported by the written description." *Toro Co. v. White Consol. Indus. Inc.*, 199 F.3d 1295, 1301 (Fed.Cir.1999).

The prosecution history may also be used to interpret claim language. Here, limitations may be imported when the patentee re-defined a term or made arguments interpreting claim language during the prosecution process in an effort to get the patent issued. "The prosecution history is considered to determine whether or not there were any express representations made in obtaining the patent regarding the scope and meaning of the claims." *Bell Atlantic*, 262 F.3d at 1268.

If the claims can not be given clear meaning through interpretation of intrinsic evidence, extrinsic evidence such as treatises and expert testimony, may be considered. *Id.* at 1268-69.

### ***B. Means-Plus-Function Analysis***

The parties request construction of a term that is a "means-plus-function" claim. The Patent Act, 35 U.S.C. s. 112 para. 6 provides:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

The statute therefore allows an inventor to claim an invention by reference to the performed function without identifying in the claim language the precise structure, material, or acts that would carry out that function. *IMS Technology, Inc. v. Haas Automation, Inc.*, 206 F.3d 1422, 1429-30 (Fed.Cir.2000). This type of claim element necessarily relies much more heavily on what is described in the specification than other types of claims, and can be limited by it. A claim that actually uses the word "means" will invoke a rebuttable presumption that Section 112 para. 6 applies. *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1369 (Fed.Cir.2002). Whether the presumption is rebutted depends on whether the claim term, when properly construed, invokes sufficient structure to "avoid the ambit of s. 112 para. 6." *Personalized Media*

Communications, LLC, v. Int'l Trade Comm'n, 161 F.3d 696, 704 (Fed.Cir.1998), *see also*, Cole v. Kimberly Clark Corp., 102 F.3d 524, 531 (Fed.Cir.1996) (concluding that "perforation means" was not a means plus function limitation where the claim contained a detailed recitation of its structure).

Proper construction of a means plus function limitation requires the court to first identify the *function* recited in the claim language, then to determine what *structures* have been "disclosed in the specification that correspond to the means for performing that function." Epcon Gas Systems, Inc. v. Bauer Compressors, Inc., 279 F.3d 1022, 1032 (Fed.Cir.2002). In order to be covered by the claim language, a structure disclosed in the specification must be clearly linked or associated with, either in the specification or the prosecution history, the function recited in the claim. *Id.* However, the court cannot "import functional limitations that are not recited in the claim, or structural limitations from the written description that are unnecessary to perform the claimed function." Wenger Manuf., Inc., v. Coating Machinery Sys., Inc., 239 F.3d 1225, 1233 (Fed.Cir.2001). Only after the terms are properly construed does the two-step infringement analysis begin. The finder of fact must first determine whether the accused device or method performs the identical function to the one recited in the claim, and second whether the accused device "uses the same structure, materials, or acts found in the specification, or their equivalents." IMS Technology, 206 F.3d at 1430. In the instant case, the Court is only concerned presently with the identification of function and structure.

### ***C. Claim Construction of the '730 Patent***

#### **1. " *electronic control means* "**

The parties agree that this is a "means plus function" claim. This means that the only task for the Court to do in claim construction analysis is to identify the function as defined by the claim language, and the corresponding structure, material or acts disclosed in the specification.

*Function:* Plaintiffs assert that the function of the "electronic control means" should be "the use of predetermined instructions (e.g., a program or software) by the control means to make allowances for movement of the printer within the housing during a printing sequence, so as to more faithfully reproduce the desired image." Defendants contend that the function is appropriately defined by the phrase used in the claim: "controlling said printer using an algorithm to compensate for printed image distortion during a printing sequence." However, Defendants do not include the remainder of this clause, which reads "and responsive to said actuator for controlling the printer to print selected indicia on the medium during said printing sequence."

The Court finds that the "electronic control means" has two functions, both of which come directly from the claim language: 1) to control the printer using an algorithm to compensate for printed image distortion caused by movement of the printer within the housing during a printing sequence; and 2) to control the printer to print selected indicia on the medium during the printing sequence in response to information from the actuator.

*Structure:* Plaintiffs argue that the corresponding structures that carry out the function of the electronic control means are 1) a microprocessor using an encoder or command signal feedback to monitor printhead motion and velocity, 2) a system clock, 3) a power supply, 4) one or more memories, and 5) an actuator switch. Defendants define the "structure" as "electronic control circuitry (microprocessor and related electronics) and algorithm to map dot coordinates to a new set of coordinates which compensate for printed image distortion caused by movement of the printer within the housing, the angular projection of ink droplets and variation in the distance of the print head from the medium."

The Court adopts Plaintiffs' proposed structures in greatest part. The structures that carry out the function of controlling the printer to compensate for distortion and print selected indicia on a medium are 1) a microprocessor and related circuitry, 2) a system clock, 3) a power supply, 4) one or more memories, and 5) an actuator switch. In addition, the Court finds that an algorithm is an essential element of the structural components that carry out the desired function. In this case, the microprocessor must have an appropriate algorithm that corrects for distortion and that controls print head movement. The prosecution history clearly indicates that distortion compensation was essential to patentability. (Wilde Decl. Ex. H at 5). However, the Court does not find that any particular algorithm is required, so long as the algorithm or algorithms accomplish the functions of compensating for printed image distortion caused by movement of the printer within the housing, and controlling the printer to print selected indicia.

The relevant portion of the specification begins with a discussion of a particular embodiment of the disclosed invention involving a particular type of print head. ('730 Patent, Col. 9, lns. 8-20). The specification then goes on to describe a particular type of distortion that can result from use of that print head, and a method of compensating for that particular distortion. ( *Id.*, Col.9, ln.21-Col.10, ln.53). The specification then states, however, that "[a]n combination of a symmetrical or non-symmetrical print head, sweeping about a parallel or non-parallel axis, may be used, *with the appropriate compensation made for the various projection angles of ink from the nozzles as set forth above.*" ( *Id.*, Col.10, lns.61-65). This makes clear that the algorithm will depend on the particular print head used.

Defendants attempt to import further functional limitations into the type of algorithm that can be included, stating that the electronic control means must compensate for distortion caused by 1) movement of the printer within the housing, 2) the angular projection of ink droplets, and 3) variation in the distance of the print head from the medium. Yet only the first of these functional limitations is included in the claim language. As stated above, the court cannot "import functional limitations that are not recited in the claim, or structural limitations from the written description that are unnecessary to perform the claimed function." *Wenger Manuf., Inc., v. Coating Machinery Sys., Inc.*, 239 F.3d 1225, 1233 (Fed.Cir.2001). The Court considers compensation for angular projection of ink droplets and compensation for variation in the distance from the medium to be further functional limitations that are not included in the claim language. Therefore, while an algorithm must be included in the structural components of the "electronic control means," it must simply be an algorithm that compensates for distortion "caused by movement of the printer within the housing during a printing sequence." That algorithm, or another algorithm, must also accomplish the function of controlling the printer to print the selected indicia.

## **2. " self contained "**

Plaintiff argues that this claim term should be interpreted to mean: "Capable of operation without requiring external inputs and/or controls, such as a computer." Defendants, on the other hand, assert that this term means: "Constituting a complete and independent device in and of itself without any dependence on anything external to that device for continued multiple use operation."

The Court adopts Plaintiffs' proposed construction, with minor modifications. The Court first looks to the plain meaning of the claim term within the context of the claim language as a whole. Here, the claim term appears in the phrase "hand-held and self contained electronic printing device for printing indicia on a medium." The plain meaning of this language is that the described device can operate without continuous input or controls. For example, there need not be any cord connecting the device to a control pad or

computer while the device is in operation.

Plaintiff's interpretation is supported by both the specification and the prosecution history. The specification indicates that "A significant feature of this apparatus is that it is a completely self contained unit that can be manually operated in an autonomous manner *without an external connection*." '730 Patent, Col. 2, lns. 51-54 (emphasis added). The prosecution history indicates that Bobry argued that the present invention was an improvement over other devices, such as those described in the *Supora* and *Brekka*, which disclosed printers with external control mechanisms. (Wilde Decl. Ex. P at 7). A cursory review of those patents demonstrates that Bobry's argument is correct-the printers disclosed in those patents are clearly attached by cords to a control device. ( *See* U.S. Patents 4,089,262 and 4,377,741). This argument was sufficient to convince the patent examiner that the claim should issue.

Defendant offers only unsupported references to the "printing arts," that are not even bolstered by extrinsic expert opinion evidence. The Court therefore disregards Defendants' arguments about "printing during a first use," external power supplies, and "capping or cleaning device" within the housing.

The Court modifies only slightly the language proposed by Plaintiffs. "Self contained," as indicated by the claim language, the specification and the prosecution history, means "capable of operation without requiring external inputs and/or controls." The Court makes no reference by example to "a computer," as proposed by Plaintiffs. A construction is not made simpler or more understandable by providing an example. That is a matter for infringement analysis.

### **3. " *single housing* "**

Defendant's propose "one and only one rigid casing." Plaintiffs do not cover this term in their opening brief, but respond by stating that Defendant's proposed construction unnecessarily limits the term.

The Court finds that the proper construction of this claim term to be "one and only one housing or casing." There is nothing in the claim language that states that the housing has to be rigid, so this limitation should not be read into the claim language from the specification, as defendants would have the Court do. The specification refers to the housing as a "preferably a rigid structure." Yet this language does not indicate that it must be rigid-in fact the word "preferably" indicates that it doesn't have to be. The limitation "single," however, must be read to mean "one and only one." This is consistent with the prior construction of the term "self-contained"-that the device is not attached to some other box or housed device that controls it.

### **4. " *autonomously* "**

Defendants propose a construction of "acting independently or having the freedom to do so." They attempt to distinguish this from "self contained" by arguing that autonomous operation can be independent without control from outside influence, while "self contained" must have no control whatsoever.

Plaintiffs propose the dictionary definition "functioning independently without control by others." The Court adopts this construction. In the context of the claim language, the Court views this language to be mandatory rather than permissive. The entire phrase is "the printing device *autonomously executing* each entire printing sequence after each printing sequence is initiated." The only logical reading of this limitation is that the printing device *must* execute each entire printing sequence autonomously, without any outside control, after each printing sequence is initiated. Defendants proposed language "or having the freedom to do so" does not comport with the seemingly mandatory nature of this claim term.

## CONCLUSION

The disputed terms are construed as follows:

1. "Electronic control means" is a "means plus function" claim term that has a dual *function*:

1) to control the printer using an algorithm to compensate for printed image distortion caused by movement of the printer within the housing during a printing sequence; and 2) to control the printer to print selected indicia on the medium during the printing sequence in response to information from the actuator. The *structures* associated with this function include: 1) a microprocessor and related circuitry, together with an appropriate algorithm or algorithms that compensate for distortion caused by movement of the printer within the housing, and which control the printer to print selected indicia, 2) a system clock, 3) a power supply, 4) one or more memories, and 5) an actuator switch.

2. "Self contained" means "capable of operation without requiring external inputs and/or controls."

3. "Single housing" means "one and only one housing or casing."

4. "Autonomously" means "functioning independently without control by others." The Clerk is directed to send copies of this order to all counsel of record.

W.D.Wash.,2004.

Bobry v. Esselte AB

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