

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WISCONSIN

COMPUTER DOCKING STATION CORPORATION,

Plaintiff,

v.

DELL, INC.; GATEWAY, INC; TOSHIBA
AMERICA, INC.; and TOSHIBA AMERICA
INFORMATION SYSTEMS, INC.,

Defendants.

OPINION AND ORDER

06-C-32-C

This is a civil action for patent infringement. Plaintiff Computer Docking Station Corporation owns United States Patent No. 5,187,645 (the '645 patent), which discloses a portable computer with a docking connector and a method of connecting the computer to multiple peripheral devices through the docking connector. Plaintiff contends that certain portable computers and docking stations manufactured by defendants Dell, Inc., Gateway, Inc., Toshiba America, Inc. and Toshiba America Information Systems, Inc. infringe claims 17-20, 22, 24 and 26-28 of the '645 patent. Defendants have asserted a variety of counterclaims, including invalidity and unenforceability. Jurisdiction is present. 28 U.S.C. § 1338(a).

The case is presently before the court for a ruling on the construction of certain claims in the '645 patent following a hearing on claim construction held on July 28, 2006. The parties have agreed to constructions for five terms in the patent, which I will adopt. The parties disagree on the construction to be given to five other terms or phrases.

OPINION

A. General Principles of Claim Construction

Infringement analysis begins with construction of the claims in issue. Vitronics Corp. v. Conceptiontronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996); Markman v. Westview Instruments, Inc., 52 F.3d 967, 979 (Fed. Cir. 1995), aff'd, 517 U.S. 370 (1996). The task of claim construction is to define the boundaries that mark a particular patent's claims, so as to determine where the owner's claim begins and ends. It is a legal determination to be made by the court. Vitronics, 90 F.3d at 1582. The court's obligation in construing a patent claim is "to accord a claim the meaning it would have to a person of ordinary skill in the art at the time of the invention." Innova/Pure Water, Inc. v. Safari Water Filtration Systems, Inc., 381 F.3d 1111, 1116 (Fed. Cir. 2004).

"It is well-settled that, in interpreting an asserted claim, the court should look first to the intrinsic evidence of record, i.e., the patent itself, including the claims, the specification and, if in evidence, the prosecution history." Vitronics, 90 F.3d at 1582.

Construction of the disputed terms begins with the language of the claims themselves. Generally, “all terms in a patent claim are to be given their plain, ordinary and accustomed meaning to one of ordinary skill in the relevant art.” Rexnord Corp. v. Laitram Corp., 274 F.3d 1336, 1342 (Fed. Cir. 2001). “[T]he person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification.” Phillips v. AWH Corp., 415 F.3d 1303, 1313 (Fed. Cir. 2005). A court need not limit itself to examination of the disputed terms in isolation but may consider other asserted and unasserted claims, which “can also be valuable sources of enlightenment as to the meaning of a claim term.” Id. at 1314. However, where the meaning of a claim term is readily apparent, “claim construction . . . involves little more than the application of the widely accepted meaning of commonly understood words.” Id.

In many instances, a court must proceed beyond the bare language of the claims and examine the patent specification. The specification serves an important role in arriving at the correct claim construction, because it is in the specification that the patentee provides a written description of the invention that allows a person of ordinary skill in the pertinent art to make and use the invention. Markman, 52 F.3d at 979. The specification is helpful because it may “reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess,” Phillips, 415 F.3d 1316, or indicate that “the

patentee has disclaimed subject matter or has otherwise limited the scope of the claims.” Rexnord, 274 F.3d at 1343. The general relationship between the claims and the specification is defined by two claim construction canons: “(a) one may not read a limitation into a claim from the written description, but (b) 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.” Renishaw, PLC v. Marposs Societa’ per Azioni, 158 F.3d 1243, 1248 (Fed. Cir. 1998); see also SciMed Life Systems, Inc. v. Advanced Cardiovascular Systems, Inc., 242 F.3d 1337, 1344 (Fed. Cir. 2001) (“the written description can provide guidance as to the meaning of the claims, thereby dictating the manner in which the claims are to be construed, even if the guidance is not provided in explicit definitional format”).

After considering the claim language and the specification, a court may consider the final piece of intrinsic evidence, the patent’s prosecution history. Vitronics, 90 F.3d at 1582. “[T]he prosecution history provides evidence of how the [Patent and Trademark Office] and the inventor understood the patent,” Phillips, 415 F.3d at 1317, and “statements made during the prosecution of a patent may affect the scope of the invention.” Rexnord, 274 F.3d at 1343. The doctrine of prosecution disclaimer provides that a patent’s prosecution history can be used to limit the scope of a claim if “the applicant took a position before the [Patent and Trademark Office] that would lead a competitor to believe that the applicant had disavowed coverage of the relevant subject matter.” Schwing GmbH v.

Putzmeister Aktiengesellschaft, 305 F.3d 1318, 1324 (Fed. Cir. 2002); see also Southwall Technologies, Inc. v. Cardinal IG Co., 54 F.3d 1570, 1576 (Fed. Cir. 1995) (“The prosecution history limits the interpretation of claim terms so as to exclude any interpretation that was disclaimed during prosecution.”). Application of the doctrine may result in a claim term’s being interpreted more narrowly than its plain meaning would otherwise permit. SciMed Life Systems, 242 F.3d at 1341.

B. Claims at Issue

The ‘645 patent contains 28 claims. Claims 1, 14, 17, 20 and 28 are independent. The parties’ arguments focus on independent claims 17, 20 and 28. For ease of reference, I have set out the text of these independent claims below.

1. Claim 17

In a portable computer, a method of interfacing a microprocessor with a plurality of computer peripheral devices comprising the steps of:

- a) containing the microprocessor within a housing;
- b) providing on the housing a plurality of computer-peripheral-device-specific connectors in electrical communication with the microprocessor such that each of said plurality of computer-peripheral-device-specific connectors provides a computer-peripheral-device-specific data link to said microprocessor, said connectors for connecting the microprocessor to specific computer peripheral devices and being mounted on the housing; and
- c) providing another single connector on the housing, said single connector comprising a set of pins, said set further comprising a plurality of subsets of

computer-peripheral-device-specific pins being in electrical communication with said microprocessor such that one of each of said subsets of computer-peripheral-device-specific pins provides the same computer-peripheral-device-specific data link as said each of said plurality of computer-peripheral-device-specific connectors, said single connector for making all connections from the microprocessor to said specific computer peripheral devices

- d) providing a docking connection means having an additional connector;
- e) supporting the housing of the microprocessor in position relative to said docking connection means so that the single connector on the housing is coupled with said additional connector provided in the docking connection means; and
- f) making connections between said docking connection means and said peripheral devices.

2. Claim 20

A portable computer microprocessing system comprising:

- a) a microprocessor for processing instructions;
- b) a housing containing the microprocessor;
- c) a plurality of computer-peripheral-device-specific connectors in electrical communication with the microprocessor such that each of said plurality of computer-peripheral-device-specific connectors provides a computer-peripheral-device-specific data link to said microprocessor, said connectors for connecting the microprocessor to specific computer peripheral devices and being mounted on the housing; and
- d) another single connector on the housing, said single connector comprising a set of pins, said set further comprising a plurality of subsets of computer-peripheral-device-specific pins being in electrical communication with said microprocessor such that one of each of said subsets of computer-peripheral-device-specific pins provides the same computer-peripheral-device-specific data link as said each of said plurality of computer-peripheral-device-specific connectors, said single connector for making all connections from the microprocessor to said specific computer peripheral devices; and
- e) a docking connection means in which the housing rests for connecting the microprocessor with computer peripheral devices, said docking connection

means comprising a single connector which mates with the single connector on the housing.

3. Claim 28

A portable computer comprising:

- a) a microprocessor for processing instructions;
- b) a housing containing the microprocessor;
- c) a plurality of computer-peripheral-device-specific connectors in electrical communication with the microprocessor such that each of said plurality of computer-peripheral-device-specific connectors provides a computer-peripheral-device-specific data link to said microprocessors, said connectors for connecting the microprocessor to specific computer peripheral devices and being mounted on the housing; and
- d) another single connector on the housing, said single connector comprising a set of pins, said set further comprising a plurality of subsets of computer-peripheral-device-specific pins being in electrical communication with said microprocessor such that one of each of said subsets of computer-peripheral-device-specific pins provides the same computer-peripheral-device-specific data link as said each of said plurality of computer-peripheral-device-specific connectors, said single connector for making all connections from the microprocessor to said specific computer peripheral devices.

C. Construction of Undisputed Terms

The parties agree on the meanings to be given the following terms in the '645 patent: "plurality," "peripheral device," "electrical communication," "mounted on" and "pins." Therefore, I will adopt the constructions they have agreed to. The constructions apply to the terms as they are used in independent claims 17, 20 and 28 and in the asserted

dependent claims. The word “plurality” means “more than one.” The term “peripheral device” means “an external device that is capable of connecting to, and is capable of being controlled by, a computer.” The term “electrical communication” means “the flow of information occurs via an electrical signal.” The term “mounted on” means “attached to.” The word “pins” means “leads.”

D. Construction of Disputed Terms

1. Laptop exclusion

Defendants contend that the ‘645 patent should be construed not to cover laptop computers, which they define as computers that contain a built-in keyboard and display. (At the claims construction hearing, defendants explained that a keyboard or display is “built-in” when it cannot be detached from the computer.) According to defendants, Ergo Computing, Inc., which is listed as the assignee of the ‘645 patent, developed a line of “brick-style” computers and compatible docking stations in the late 1980s. “Ergo’s brick-style computer was distinct from laptop computers in that it did not have a built-in keyboard or display monitor, although it had several ports to which a user could connect a monitor, a keyboard, and other peripheral devices, such as a printer.” Dfts.’ Opening Br., dkt. #86, at 1-2. Defendants argue that the court should construe the phrase “portable computer,” which appears in independent claims 17 and 28, and the phrase “portable computer

microprocessing system,” which appears in independent claim 20, to mean “a computer without a built-in display or keyboard that is capable of being carried or moved about.” In addition, defendants argue that the phrase “a housing containing the microprocessor,” which appears in claims 20 and 28, should be construed to mean “an enclosure, without a built-in display or keyboard, that contains a microprocessor” and the phrase “containing the microprocessor within the housing,” which appears in claim 17, should be construed to mean “enclosing the microprocessor within an enclosure that does not have a built-in display or keyboard.”

Defendants contend that their proposed constructions are supported by the ‘645 patent’s specification and prosecution history and by several pieces of extrinsic evidence. With regard to the specification, they note that every “embodiment of the invention described in the specification is a computer without a built-in display or keyboard.” Dfts.’ Opening Br., dkt. #86, at 5. Also, the inventors distinguished laptop computers from “microcomputers” in the specification, ‘645 pat., col. 1, lns. 15-20, and repeatedly described their system as a microcomputer. *Id.* at col. 2, lns. 64-66; col. 7, lns. 23-24. Among the pieces of extrinsic evidence cited by defendants are (1) Ergo’s 1990 product catalog; (2) a May 21, 1990 press release from Ergo in which it states that its brick computer “has desktop power and true portability without the limitations of laptop displays and keyboards”; and (3) a June 10, 1990 article from the Boston Globe that described Ergo’s computer in the

following terms: “you buy one Brick and haul just the brains of the computer around, keeping a full-sized monitor and keyboard at each site.” Aff. of Vito Canuso, dkt. #87, Exhs. B, G and H.

The crux of defendants’ argument is that the applicants disclaimed coverage of laptop computers during prosecution of the ‘645 patent. In their briefs and at the claims construction hearing, defendants focused on a June 15, 1992 response written by the applicants to the Patent and Trademark Office after the patent examiner had rejected the ‘645 application. Defendants contend that the applicants distinguished their invention from laptop computers in this response to overcome the examiner’s rejection of their claims in light of U.S. Patent 5,030,128, issued to Herron.

Plaintiff opposes defendants’ proposed constructions. It argues that the word “portable,” as used in the terms “portable computer” and “portable computer microprocessing system,” has a commonly understood meaning that should be applied to the claims. Therefore, the phrases require no further construction. Alternatively, if the court decides that the phrases need further construction, plaintiff suggests that the court construe them to mean “a computer that is capable of being easily carried or transported.” Plt.’s Opening Br., dkt. #84, at 3. Plaintiff argues that this construction is supported by the specification, in which the inventors use the terms “portable” and “portability” to “describe the ease with which something is carried or transported.” Id. at 7. It makes the same

argument with respect to the phrases “housing containing the microprocessor” and “containing the microprocessor within a housing,” stating that these phrases require no construction beyond application of the plain and ordinary meanings of the words used. If the court determines that further construction is required, plaintiff proposes that the word “housing” be construed to mean “an enclosing structure.” Accordingly, “housing containing the microprocessor” would mean “an enclosing structure containing the microprocessor” and “containing the microprocessor within a housing” would mean “containing the microprocessor within an enclosing structure.” Id. at 9.

Plaintiff objects to a construction of the claims that excludes laptop computers on the ground that such a limitation is not found anywhere in the claims of the ‘645 patent. It argues that defendants are attempting to import a limitation into the claims that is inconsistent with their plain language. Playtex Products, Inc. v. Procter & Gamble Co., 400 F.3d 901, 906 (Fed. Cir. 2005) (“The court must take care in its analysis, when locating in the written description the context for a disputed term, not to import a limitation from that written description.”). Plaintiff contends further that defendants’ proposed construction would exclude from the claims a preferred embodiment shown in figure 13 of the ‘645 patent. Vitronics, 90 F.3d at 1583 (claim construction that excludes preferred embodiment is “rarely, if ever, correct and would require highly persuasive evidentiary support”). Also, plaintiff contends that the extrinsic evidence concerning Ergo’s brick-style computer is

irrelevant to claim construction. Finally, plaintiff argues that the evidence of disclaimer in the prosecution history is insufficient to warrant application of that doctrine.

It is well established that “a patentee may limit the meaning of a claim term by making a clear and unmistakable disavowal of scope during prosecution.” Purdue Pharma L.P. v. Endo Pharmaceuticals, Inc., 438 F.3d 1123, 1136 (Fed. Cir. 2006). Examining prosecution history for instances of disclaimer insures that claims “are not construed one way in order to obtain their allowance and in a different way against accused infringers.” Chimie v. PPG Industries, Inc., 402 F.3d 1371, 1384 (Fed. Cir. 2005). Holding an applicant to his representations during prosecution does not alter the scope of what the applicant has claimed as his invention. Rather, it protects the right of competitors to rely on those representations to guide their own conduct. Seachange International, Inc. v. C-COR, Inc., 413 F.3d 1361, 1372 (Fed. Cir. 2005).

Prosecution disclaimer is not to be employed “where the alleged disavowal of claim scope is ambiguous.” Omega Engineering, Inc. v. Raytek Corp., 334 F.3d 1314, 1324 (Fed. Cir. 2003). For example, if statements in the prosecution history are susceptible to more than one reasonable interpretation, disclaimer will not lie. Northern Telecom Ltd. v. Samsung Electronics Co., Ltd., 215 F.3d 1281, 1294-95 (Fed. Cir. 2000). “But where the patentee has unequivocally disavowed a certain meaning to obtain his patent, the doctrine of prosecutorial disclaimer attaches and narrows the ordinary meaning of the claim

congruent with the scope of the surrender.” Omega Engineering, 334 F.3d at 1324.

SciMed Life Systems, 242 F.3d 1337, presents an example of the clarity needed before a patent holder will be held to have disclaimed subject matter. That case involved patents covering certain features of balloon dilatation catheters, which are used in angioplasty. The court of appeals concluded that the asserted claims were limited to catheters that used a coaxial lumen configuration, in which one lumen is contained inside the other, and did not cover catheters that featured a dual lumen configuration in which “the two lumens are positioned side-by-side.” Id. at 1339. The court looked to the patents’ common specification and determined that the applicants had made a clear disavowal of the side-by-side configuration. It noted that the applicants had described the lumen structure as coaxial in the abstract of each of the patents. Id. at 1342. Also, the applicants had highlighted the disadvantages of dual lumens in discussing the prior art and had described their “invention” as having a coaxial lumen. Id. at 1342-43. Finally, the court highlighted a statement in the specification in which the applicants indicated that the coaxial lumen structure was used in “all embodiments of the presented invention contemplated and disclosed therein.” Id. at 1343.

The present case is distinguishable from SciMed Life Systems because the ‘645 patent’s prosecution history and specification do not contain a simple, explicit statement that all embodiments of the claimed invention exclude laptop computers. Nonetheless, I am

convinced that the specification and prosecution history support the conclusion that the applicants clearly and unmistakably disclaimed laptop computers. There is compelling evidence in both the prosecution history and the specification that the portable microprocessing system claimed in the '645 patent is distinguishable from a laptop computer and that the applicants emphasized differences between the two in order to overcome the patent examiner's objections to their original application. Therefore, application of the prosecution disclaimer doctrine is appropriate.

As originally filed, the '645 application contained 26 claims. On December 13, 1991, the Patent and Trademark Office issued an office action rejecting all of the claims. *Aff. of Vito Canuso*, dkt. #87, Exh. J. The patent examiner rejected claims 1, 3, 4, 6, 11, 13, 14, 20, 21, 23 and 24 as anticipated by the Herron patent, which claims a docking module that "facilitates conversions of a portable computer between a lap-top mode of operation and a desk-top mode of operation" by connecting the computer to peripheral devices. *Id.* at Exh. K ('128 pat.), Abstract. The examiner concluded that the claims were anticipated by Herron because the patent disclosed a "portable microprocessor system with a docking connection means" and taught "the steps of using the docking connection means including the ejector which pushes the docking connection means away from the housing when disconnecting the docking connection means from the housing." *Id.* at Exh. J, at 4.

The applicants wrote a response to the office action, dated June 15, 1992, in which

they attempted to distinguish their invention from Herron. Aff. of Vito Canuso, dkt. #87, Exh. F. The contents of this response indicate that the applicants did not contemplate laptop computers as part of their invention. They began by describing their “invention” as

a portable microprocessing system with a microcomputer contained within a housing. As is typical of such systems, the microprocessor interfaces with several peripheral devices including a keyboard, display, modem, serial and parallel port devices, a power source, etc. The Applicants’ system provides *all of the interfaces for these devices* at a set of interface connectors on the rear bezel of the housing.

Id. at 13 (emphasis added). In this excerpt, the applicants distinguish their invention, a portable microprocessing system, from the peripheral devices with which it interacts. A keyboard and display are listed as peripheral devices. Moreover, the applicants indicate that the interfaces for the devices are located at the rear of the housing. This shows that the applicants were not contemplating a system that contained a built-in keyboard and display.

After describing the single connector on the housing and the function of the docking connection means, the applicants highlighted the advantages of their invention and juxtaposed them against the limitations that laptops contained at the time:

The Applicants’ system therefore provides an extremely powerful utility. A full-sized microprocessor with large memory capacity is made completely portable. The processing unit housing or “brick” can be easily removed from one system and transported in a briefcase to another system. Rather than requiring a portable display and keyboard, the present invention concentrates on portability of an exceptionally large memory capacity in hard disk drive. . . . For the same sized unit as a conventional lap-top computer, the invention does require that peripherals be made available at each location, a requirement

that would lead one away from the present invention. However, even that requirement can be an advantage over lap-top computers in that higher quality peripherals will more likely be used since they need not be transported. Thus, lap-top machines make concessions in memory, display and other areas in favor of portability. The Applicants' system, on the other hand, is a portable full service microprocessing system which concedes portability of peripherals.

Id. at 14-15. Here, the applicants narrow the focus of their invention to a "large memory capacity in hard disk drive" that is portable. It is the microprocessor that is portable, not the peripherals. Again, the applicants contrast their invention to keyboards and displays, which are categorized as peripheral devices. They state that their invention *requires* the user to provide peripherals wherever he uses the system. They state that their system "concedes portability of peripherals," which I construe as a disclaimer of portable peripherals. Perhaps most important, the applicants distinguish their system from laptop computers specifically, noting that their system captures the portability of laptop computers without making sacrifices in "memory, display and other areas."

Finally, the applicants make the following remarks to distinguish their invention from Herron:

The Herron reference discloses a docking module which is latched to the rear of a lap-top computer. The computer and docking module rest on a desk top.

* * *

The Herron system does not allow a microprocessor having state-of-the-art memory capacity and other capabilities to interface to a full-service processing system as does the Applicants' system. The Herron system allows a lap-top

computer with its own flat panel display and keyboard to interface to other peripheral devices. This lap-top computer does not possess utilities and functionalities comparable to those of the Applicants' system.

* * *

Also, the computer in Herron is not oriented vertically as in the Applicants' system. It would make no sense to do so with the Herron lap-top with its attached keyboard and display.

Id. at 16-17. The applicants distinguished their system from Herron because the laptop machine did not have the "state-of-the-art" memory capacity of their system and because a user would not be able to use a laptop machine that was held vertically in the docking station.

The specification of the '645 patent reinforces the distinction between the claimed invention and laptop machines. In setting out the background for their invention, the applicants divide computer systems into a four-tiered hierarchy according to their size and processing abilities: mainframe systems, "mini-computer systems," microcomputer systems, "often referred to as personal computers," and laptop computers. '645 pat., col. 1, lns. 7-22. The applicants describe their invention as a portable microcomputer repeatedly throughout the specification. In the abstract, the applicants describe their invention as a "microcomputer system," which "includes a microprocessor and a housing for holding the microprocessor." This characterization is repeated in the section entitled "Summary of the Invention," where the applicants state that "present invention concerns a portable

microprocessor system having a microprocessor for processing instructions and a main housing for housing the microprocessor.” Id. at col. 1, lns. 24-27.

Also, various figures in the patent are described as versions of the applicants’ microcomputer system. Id. at col. 2, lns. 39-40, 64-66; col. 3, lns. 1-3. As in the June 15 response, the applicants distinguish their system from peripheral devices such as a keyboard and display by describing the devices as “options available with the system.” Id. at col. 2, lns. 8-10. Admittedly, the inventors do not explicitly disclaim laptop computers in the specification. But the distinctions drawn between laptop machines and their invention in the specification reinforce the disclaimer made in the June 15 response.

Plaintiff argues that the June 15 response does not contain a clear and unmistakable disavowal of laptop computers. Plaintiff acknowledges that the applicants highlighted differences between laptop computers and their system in the June 15 response. However, it notes that the applicants listed several novel features of their invention to distinguish it from Herron and other pieces of prior art and indicated that each of the amended independent claims incorporated “at least one of these novel features.” Aff. of Vito Canuso, dkt. #87, Exh. F, at 16. In other words, if there was a disclaimer of laptops, the applicants did not state that it applied to all of the independent claims.

This argument does not comport with the language of the independent claims. If, as plaintiff contends, not all of the independent claims exclude laptops, one would expect to

find an explicit limitation excluding laptop computers somewhere in the language of the independent claims. This language would alert the reader to which independent claim or claims excluded laptops. However, none of the independent claims contain this exclusionary language. There is only one way to incorporate the laptop disclaimer into the patent. That is to infer that it is inherent in the terms “portable computer” and “portable computer microprocessing system.” One of these terms appears in the preamble of each of the independent claims. Therefore, the laptop disclaimer applies to all of the claims of the ‘645 patent.

If these terms are not construed to exclude laptops, claims 1 and 14 would not make any sense because they both disclose a portable computer microprocessing system that includes “a support holding the housing in a vertical position.” ‘645 pat., col. 8, ln. 55; col. 9, ln. 65. Laptop computers are not designed to be used while the housing is held vertically and it would be inappropriate to construe the term “portable computer microprocessing system” to exclude laptops as it appears in claims 1 and 14 but not as it appears in independent claim 20. Phillips, 415 F.3d at 1314 (“claim terms are normally used consistently throughout the patent”).

Plaintiff argues next that language in the specification argues against a laptop exclusion. It notes that the applicants included a statement indicating that the claims were not to be interpreted narrowly to cover only the embodiments discussed in the patent:

While the invention has been particularly shown and described with reference to preferred embodiments thereof, it will be understood by those skilled in the art that various changes in form and detail may be made without departing from the spirit and scope of the invention as defined in the appended claims.

‘645 pat., col. 8, lns. 12-17. This vague statement is insufficient to overcome the more specific statements made in the June 15 response distinguishing the claimed invention from laptop computers. Moreover, the Court of Appeals for the Federal Circuit has found that statements of disclaimer in prosecution history can limit the scope of patent claims even where the disclaimer excludes a preferred embodiment from coverage or conflicts with statements in the specification. In Rheox, Inc. v. RMT, Inc., 276 F.3d 1319 (Fed. Cir. 2002), the court of appeals upheld a construction of a patent for a method of remediating lead from soil that excluded a chemical compound known as “monocalcium orthophosphate” or “triple superphosphate” even though that compound was listed in the patent’s specification as a preferred embodiment. The court examined the prosecution history and noted that the applicants had included triple superphosphate in their original claims but had deleted references to the compound in subsequent amendments to distinguish their invention from the prior art. Id. at 1326-27. Although the court recognized that a claim construction that excludes a preferred embodiment is rarely appropriate, it considered the specific disclaimers made in the prosecution history paramount and persuasive enough to adopt the limiting construction. Id. at 1327. The present case is similar to Rheox in that

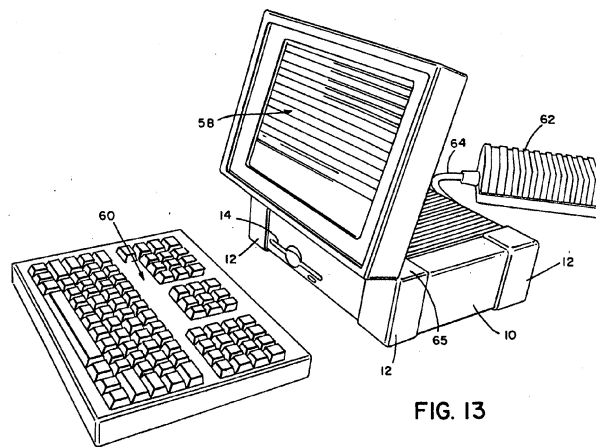
the statements made by the applicants in the June 15 response emphasizing the advantages of their invention over laptop computers are controlling over the language in the specification indicating that “changes in form and detail may be made without departing from the spirit and scope of the invention.” ‘645 pat., col. 8, lns. 15-17.

Plaintiff contends further that claims 1, 9 and 10 prove that there was no disclaimer. Claim 1, an independent claim, contains the phrase “portable computer microprocessing system.” Claims 9 and 10, which are dependent on claim 1, require connectors for a keyboard and visual display on the system’s housing. ‘845 pat., col. 9, lns. 13-19. According to the doctrine of claim differentiation, claim 1 does not contain the limitations disclosed in claims 9 and 10. Therefore, plaintiff argues, because the housing in claim 1 may not have connectors for a keyboard and display, those peripherals must be built into the system. Accordingly, claim 1 would encompass laptop systems as defendants have defined them.

The doctrine of claim differentiation is only a “presumption that an independent claim should not be construed as requiring a limitation added by a dependent claim.” Curtiss-Wright Flow Control Corp. v. Velan, Inc., 438 F.3d 1374, 1380 (Fed. Cir. 2006). This presumption cannot be used to broaden claims beyond their proper scope. Kraft Foods, Inc. v. International Trading Co., 203 F.3d 1362, 1368 (Fed. Cir. 2000) (quoting Multiform Desiccants Inc. v. Medzam, Ltd., 133 F.3d 1473, 1480 (Fed. Cir. 1998)). Moreover, it can be overcome by statements of disclaimer in the prosecution history.

Fantasy Sports Properties, Inc. v. Sportsline.com, Inc., 287 F.3d 1108, 1115 (Fed. Cir. 2002); Kraft Foods, 203 F.3d at 1367-69. Such is the case here. The applicants disclaimed laptop computers in the course of prosecution. This disclaimer trumps the presumption that the “portable computer microprocessing system” in claim 1 does not have connectors for a keyboard and visual display.

Plaintiff argues that defendants’ construction excludes from the claims the embodiment shown in figure 13 of the ‘645 patent. SanDisk Corp. v. Memorex Products, Inc., 415 F.3d 1278, 1285 (Fed. Cir. 2005) (quoting Vitronics, 90 F.3d at 1583) (“claim construction that excludes preferred embodiment is “rarely, if ever, correct.””).



Plaintiff contends that this figure shows an embodiment of the invention that includes a keyboard and display. Plaintiff is correct, but figure 13 does not depict a “laptop” computer as defendants have defined that term. The keyboard and display in figure 13 are detachable from the housing. Under defendants’ proposed construction, laptops are defined as computers with built-in displays and keyboards. Defendants defined “built-in” to mean that the display and keyboard could not be detached from the computer. In contrast, the keyboard and display in figure 13 are described as being “coupled” to the microcomputer system. ‘645 pat., col. 7, lns. 23-24. Figure 14 shows the connector and thumbscrews used to connect and disconnect the display from the housing. Both the keyboard and display in figure 13 are detachable from the housing. Accordingly, the embodiment in figure 13 is not excluded by defendants’ proposed construction.

Finally, plaintiff argues that defendants’ construction “ignores the fact that each of the claims is either a ‘system *comprising*’ certain steps . . . or a ‘method . . . *comprising* [certain] steps.” Plt.’s Opening Br., dkt. #84, at 9-10 (emphasis in original). The word “comprising” “is inclusive or open-ended and does not exclude addition, unrecited elements or method steps.” Georgia-Pacific Corp. v. United States Gypsum Co., 195 F.3d 1322, 1327 (Fed. Cir. 1999). Therefore, plaintiff argues, the claims could cover a housing that contains a keyboard or monitor. This argument is not persuasive. As defendants note, use of the word “comprising” does not overcome the applicants’ disclaimer of laptops during prosecution.

Spectrum International, Inc. v. Sterilite Corp., 164 F.3d 1372, 1380 (Fed. Cir. 1998) (“‘Comprising’ is not a weasel word with which to abrogate claim limitations.”).

In conclusion, I agree with defendants that the claims in the ‘645 patent asserted in this case should be construed not to cover laptop computers. Accordingly, I will adopt defendants’ proposed construction of the terms “portable computer” and “portable computer microprocessing system.” As used in the ‘645 patent, the terms will be construed to refer to “a computer without a built-in display or keyboard that is capable of being moved or carried about.” In light of this conclusion, I agree with plaintiff that incorporating the “lack of built-in display or keyboard” limitation to the phrases “a housing containing the microprocessor” and “containing the microprocessor within the housing” would be needlessly duplicative. Therefore, I will not adopt this proposed construction.

2. “Another single connector on the housing, said single connector comprising a set of pins, said set further comprising a plurality of subsets of computer-peripheral-device-specific pins being in electrical communication with said microprocessor such that one of each of said subsets of computer-peripheral-device-specific pins provides the same computer-peripheral-device-specific data link as said each of said plurality of computer-peripheral-device-specific connectors, said single connector for making all connections from the microprocessor to said specific computer peripheral devices”

For ease of reference, I will adopt the parties' convention and refer to this phrase as the "long phrase." The long phrase appears in independent claims 17(c), 20(d) and 28(d) of the '645 patent. The parties raise four construction issues concerning it. I will start with the dispute that was resolved at the claims construction hearing.

At the hearing, the parties agreed that the claims of the '645 patent establish two paths through which the microprocessor may communicate with peripheral devices. First, the devices may be connected to the microprocessor through their corresponding individual connectors, which are mounted on the housing. Second, the devices may be connected to the microprocessor through a docking connector, which mates with a single connector found on the housing. At the hearing, plaintiff stated that it was under the impression that defendants' construction of the long phrase required the connections between the microprocessor and the peripheral devices to pass through the single connector, even when the peripheral devices were connected to the microprocessor through their individual connectors. Trans., dkt. #101, at 53. As a result, when the peripheral devices are connected to the microprocessor through the individual connectors, the claims would be infringed only when the signals to each peripheral device passed from the microprocessor to the single connector and then from the single connector to the individual connectors. Defendants stated that this was not their position. Id.

The remaining three disputes concerning the long phrase are as follows. First,

defendants contend that a portion of the long phrase is indefinite under 35 U.S.C. § 112. Second, defendants argue that another section of the long phrase, “said single connector for making all connections from the microprocessor to said computer peripheral devices,” should be construed to require that “all individual peripheral devices connections on the housing that connect to the microprocessor also pass through the single connector.” Dfts.’ Opening Br., dkt. #86, at 10. Third, defendants contend that this section should be construed to require that “the microprocessor directly drives all peripheral devices, either through the housing’s individual connectors or through the single connector.” Id.

a. Indefiniteness

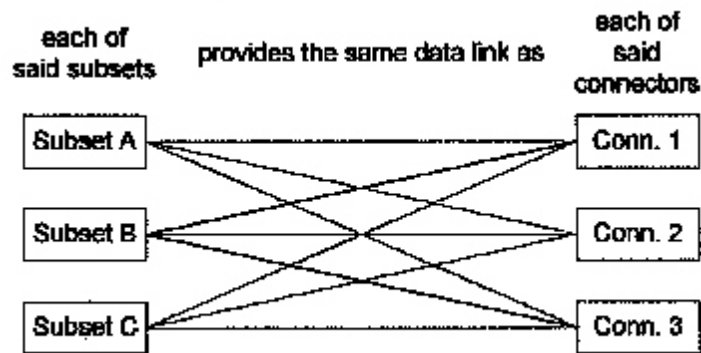
Defendants contend that a portion of the long phrase, “one of each of said subsets of computer-peripheral-device-specific pins provides the same computer-peripheral-device-specific data link as said each of said plurality of computer-peripheral-device-specific connectors,” is indefinite under 35 U.S.C. § 112. Defendants argue that this portion is indefinite because it is subject to more than one reasonable interpretation. Plaintiff contends that defendants have failed to carry their burden on this point. In addition, they argue that the portion is not indefinite, citing a construction provided by the applicants in the prosecution history. I agree with plaintiff that defendants have not shown that the portion is indefinite. I am persuaded that the applicants’ intent was to establish a one-to-

one ratio between the subsets of pins on the single connector and the plurality of individual connectors. In other words, each subset of pins on the single connector provides the same computer-peripheral-device-specific data link as one of the individual connectors.

Section 112, ¶ 6 requires that a patent's specification have "one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention." "The legal standard for definiteness is whether a claim reasonably appraises those of skill in the art of its scope." In re Warmerdam, 33 F.3d 1354, 1360 (Fed. Cir. 1994). This standard is satisfied if "one skilled in the art would understand the bounds of the claim when read in light of specification." Exxon Research & Engineering Co. v. United States, 265 F.3d 1371, 1375 (Fed. Cir. 2001); see also Marley Mouldings Ltd. v. Mikron Industries, Inc., 417 F.3d 1356, 1359 (Fed. Cir. 2005). Absolute clarity is not required; rather, indefiniteness is present only when "a claim is insolubly ambiguous, and no narrowing construction can properly be adopted." Exxon Research, 265 F.3d at 1375; see also Datamize, LLC v. Plumtree Software, Inc., 417 F.3d 1342, 1347 (Fed. Cir. 2005). A claim is not indefinite merely because it is subject to more than one reasonable interpretation. Exxon Research, 265 F.3d at 1375. Because issued patents are entitled to a presumption of validity, indefiniteness must be shown by clear and convincing evidence. Datamize, 417 F.3d at 1347-48.

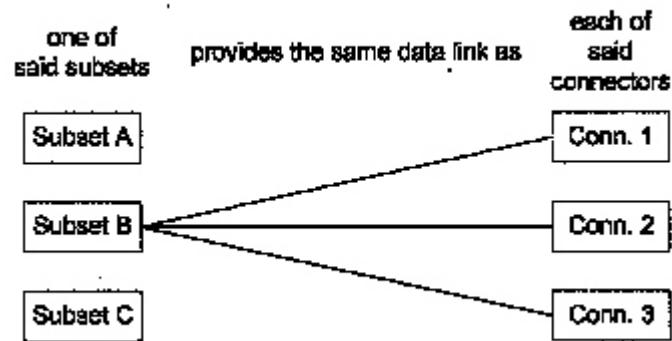
At the claims construction hearing, defendants focused their indefiniteness argument

on the words at the beginning of the portion of the long phrase at issue, “one of each of.” According to defendants, the words “one of” and “each of” do not make sense when they are placed together. Therefore, defendants contend, the court must ignore either “one of” or “each of” to arrive at a coherent construction. If the words “one of” are read out, the portion becomes “each of said subsets of computer-peripheral-device-specific pins provides the same computer-peripheral-device-specific data link as said each of said plurality of computer-peripheral-device-specific connectors.” Under this reading, each of the subsets of pins on the single connector would have to provide the same data links as each of the individual connectors. Defendants provide the following illustration for this construction.



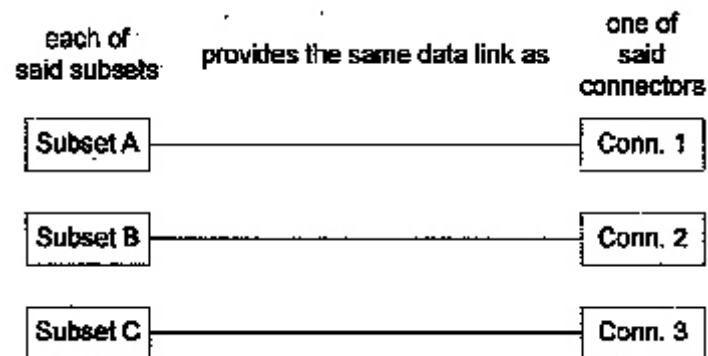
Dfts.’ Opening Br., dkt. #86, at 25. On the other hand, if the words “each of” are read out, the portion becomes “one of said subsets of computer-peripheral-device-specific pins provides the same computer-peripheral-device-specific data link as said each of said plurality of computer-peripheral-device-specific connectors.” Under this reading, the claims would

require one subset of pins on the single connector to provide the same data links as all of the individual connectors. Defendants illustrate this reading as follows:



Id.

Defendants proposed several other possible interpretations in their brief, including one in which the long phrase is construed to “require that each subset of pins provides the same data link as one of the connectors.” Id. at 26. Defendants provided the following illustration for that interpretation.



Id.

Plaintiff contends that this last construction is the correct construction. It notes that the applicants advanced this construction during prosecution of the '645 patent. Specifically, in a supplemental amendment dated July 21, 1992, the applicants amended claims 17 and 20 by adding the long phrase in its entirety to both claims. (The long phrase was already included in claim 28.) The applicants made the following remarks to explain their amendments:

The Applicants' system also provides a separate single connector which allows peripheral devices to communicate with the microprocessor. The connector consists of a set of pins which consists of subsets of pins, *each subset being specific to a single computer peripheral device.*

Aff. of Vito Canuso, dkt. #87, exh. N, at 11 (emphasis added).

Plaintiff has the better of this argument. In determining whether a claim is indefinite, it is appropriate to consult the specification and prosecution history. Datamize, 417 F.3d at 1348. In this case, the specification does not discuss the correlation between the subsets of pins on the single connector and the individual connectors. However, the July 21 amendment indicates that each subset of pins corresponds to one peripheral device, and by implication, that device's individual connector. At a minimum, this indicates that the phrase "one of each of said subsets of computer-peripheral-device-specific pins provides the same computer-peripheral-device-specific data link as said each of said plurality of computer-

peripheral-device-specific connectors” is subject to a narrowing construction and therefore is not “insolubly ambiguous.” Exxon Research, 265 F.3d at 1375. Accordingly, I conclude that the phrase is not indefinite under 35 U.S.C. § 112 ¶ 2.

b. “All connections” limitation

Defendants argue that a portion of the long phrase, “said single connector for making all connections from the microprocessor to said computer peripheral devices,” should be construed to require that all connections on the housing pass through the single connector. In other words, the single connector must provide a connection to each peripheral device that could be connected to the microprocessor through an individual connector on the housing. At the hearing, the parties agreed that the practical effect of defendants’ proposed construction is that all of the connections on the housing must be replicated on the docking station. Trans., dkt. #101, at 54-55.

Plaintiff argues that the section should be construed to require “that there be a ‘plurality’ of individual connectors and that the single connector is only required to replicate those connectors which comprise that ‘plurality.’” Plt.’s Reply Br., dkt. #98, at 13. Under plaintiff’s proposed construction, the claims would be infringed by a computer that had three individual connectors on its housing and a single connector that replicated only two of those connectors because two constitutes a plurality of the connectors on the housing. Plaintiff

argues that the words “said computer peripheral devices” at the end of the portion refer to “a plurality of computer-peripheral-device-specific connectors,” which appears in claims 17(b), 20(c) and 28(c).

I will adopt defendants’ proposed construction because it is the most natural reading of the claim language and because it is supported by the specification and prosecution history.

Beginning with the claim language, the section at issue indicates that the function of the single connector is to make “all connections from the microprocessor to said specific computer peripheral devices.” Plaintiff’s proposed construction would read out the word “all” and replace it with “a plurality of.” Plaintiff is correct that the claims require a plurality of individual connectors on the housing but its argument goes off the rails when it transfers that “plurality” to the number of connections that must pass through the single connector. In all of the independent claims, the single connector makes all of the connections from the microprocessor to the peripheral devices. Accordingly, all of the connections that pass through the individual connectors on the housing pass through the single connector as well.

The specification provides further support for defendants’ proposed construction. Repeatedly, the applicants describe the single connector as making all of the connections between the peripheral devices and the microprocessor. ‘645 pat., Abstract (“The use of the docking connector allows all peripheral connections to be realized through a single

connector.”); col. 1, lns. 29-31 (“A docking connector allows all peripheral connections to be realized through a single connector.”). Moreover, the applicants stated that the advantage of their invention is that it allows the user to connect and disconnect his computer to peripheral devices by connecting and disconnecting a single connector. The peripheral devices are connected through the connectors on either the docking station itself or on a “peripheral connection port” that is connected to the docking station. Id. at col. 4, lns. 47-51. Nowhere in the specification is an embodiment discussed in which some of the peripheral devices are connected to the microprocessor through the single connector while others are connected through their corresponding individual connectors on the housing.

Finally, defendants’ proposed construction is supported by the prosecution history, specifically the June 15 response and the notice of allowability. The patent examiner rejected the applicants’ original application in light of the patent issued to Herron, which disclosed a docking module in which each individual connector on the housing mates with a corresponding connector on the docking module. The peripheral devices connect to the mates on the docking module and the connections pass from the microprocessor through the individual connectors and through the mates on the docking module to the peripheral devices. In the June 15 response, the applicants distinguished their system from Herron in part by noting that “[a]ll of the interface connections from all of the device interfaces are provided at [the] single connector.” Aff. of Vito Canuso, dkt. #87, exh. F, at 13. One of

the reasons given by the patent examiner for allowing the claims was that the prior art did not disclose a computer microprocessing system that has a plurality of individual connectors and a single connector “such that all connections between specific computer peripheral devices and the microprocessor can be made through either the plurality of connectors or the single connectors.” Notice of Allowability, *Aff. of Vito Canuso*, *dk. #87*, *exh. O*, at 3.

In sum, the evidence indicates that the claims in the ‘645 patent require all of the connectors on the housing to be replicated in the single connector. Therefore, I will adopt defendants’ proposed construction of the phrase “said single connector for making all connections from the microprocessor to said specific computer peripheral devices.” That phrase will be construed to require that all individual peripheral device connections on the housing that connect to the microprocessor also pass through the single connector.

c. “Directly drives” limitation

Defendants invoke the doctrine of prosecution disclaimer as support for their argument that the phrase “said single connector for making all connections from the microprocessor to said computer peripheral devices” should be construed to require that the microprocessor “directly drive” the peripheral devices, whether they are connected to the microprocessor through the individual connectors or through the single connector. Defendants contend that, in the June 15 response, the applicants distinguished their

invention from other systems that connected to peripheral devices through a single connector on a docking device on the ground that those systems connected the microprocessor to the peripheral devices through a system bus:

There are other lap-top systems which dock via a single connector, but these systems only implement the system bus on the docking connector. Therefore, in order to drive the peripheral devices, it is necessary for the docking device to emulate the peripheral device drivers in order to drive the devices. The Applicants' system on the other hand, provides access to the actual device interfaces themselves as an alternative to the individual peripheral connectors. The device drivers within the microprocessor housing drive the peripheral devices, either through the individual connectors or through the docking device.

Aff. of Vito Canuso, dkt. #87, exh. F, at 15.

Plaintiff cites the same excerpt from the June 15 response in support of a similar limitation. Plaintiff argues that the section of the long phrase requiring each subset of pins on the single connector to provide the “same computer-peripheral-device-specific data link” as the individual connectors “means that the data link between the microprocessor and the peripherals through the single connector is identical to the data link between the microprocessor and the peripherals through the plurality of individual connectors.” Plt.’s Opening Br., dkt. #84, at 13. When peripheral devices are connected to the microprocessor, either through the individual connectors or the single connector, data links are established between the microprocessor and the devices. Plaintiff argues that the “same data link” limitation in the long phrase means that the signal from the microprocessor is not changed

or processed by the docking device. Instead, the single connector on the docking device acts as a passive conduit for the signal.

At the claims construction hearing, the parties suggested that the “directly drives” limitation and the “same data link” limitation were different ways of stating the same limitation. Trans., dkt. #101, at 60-61, 71. I agree that the proposed constructions address the same limitation. Defendants’ contention that the claims require the microprocessor to directly drive the peripheral devices whether they are connected to the microprocessor through the individual connectors or the single connector is captured in the language of the long phrase that requires each of the subsets of pins on the single connector to provide the same “computer-peripheral-device-specific data link” as one of the individual connectors. Accordingly, it is unnecessary to construe the phrase “said single connector for making all connections from the microprocessor to said computer peripheral devices” to include defendants’ “directly drives” limitation.

4. “Supporting the housing of the microprocessor in position relative to said docking connection means so that the single connector on the housing is coupled with said additional connection provided in the docking connection means”

Independent claim 17 is a method claim directed at interfacing a microprocessor with a plurality of peripheral devices. Subpart (e) of independent claim 17 recites the step of

“supporting the housing of the microprocessor in position relative to said docking connection means so that the single connector on the housing is coupled with said additional connector provided in the docking connection means.” ‘645 pat., col. 10, lns. 35-39. Plaintiff argues that this phrase should be construed according to the ordinary meaning of the words used: the housing is supported and the single connector on the housing couples or mates with the connector on the docking module. Plt.’s Opening Br., dkt. #84, at 15.

Defendants contend that claim 17 should be construed to require that the docking connection means holds the portable computer in a vertical position. They argue that subpart (e) of claim 17 should be construed as “supporting the housing of the microprocessor in a vertical position relative to the docking connector.” Dfts.’ Opening Br., dkt. #86, at 18. In support of their construction defendants turn again to the prosecution history. They contend that the applicants waived any claim to a physical orientation of the housing other than vertical in order to obtain the ‘645 patent. Plaintiff contends that this construction is inappropriate because it ignores the plain language of claim 17 and violates the doctrine of claim differentiation. Plaintiff notes that independent claims 1 and 14 contain a vertical orientation limitation but independent claim 17 does not. Defendants contend that claim differentiation is inapplicable because claim 17 has a different scope from claims 1 and 14 because claim 17 is a method claim whereas claims 1 and 14 are apparatus claims.

I start with the language of the claims. Subpart (e) of claim 17 requires that the

housing of the microprocessor be supported such that the single connector on the housing couples with the connector on the docking connection means. As defendants concede, there is no explicit language in claim 17 requiring the housing to be held in a vertical position relative to the docking connection means. In contrast, claims 1 and 14 require “a support holding the housing in a vertical position.” ‘645 pat., col. 8, ln. 55; col. 9, ln. 65.

Turning to the prosecution history, defendants note correctly that, in the June 15, 1992 response to the patent examiner, the applicants distinguished their system from the patent issued to Herron in part by emphasizing that

the microprocessor housing drops into the docking module in such a manner as to permit the two connectors to mate. The docking module also has a support which holds the housing in a vertical or upright position to keep the connectors mated. It is simply the weight of the housing pressing down on the docking module which maintains the connection.

Aff. of Vito Canuso, dkt. #87, exh. F, at 14. The applicants trumpeted the vertical orientation of the housing as an advantage because it reduced “the footprint of the system on the desk top. Id. at 15. In contrast, the Herron patent disclosed a docking module “which is latched to the rear of a lap-top computer. The computer and docking module both rest on a desk top.” Id. at 16. Thus, “the computer in Herron is not oriented vertically as in the Applicants’ system.” Id. at 17.

It is clear that the vertical orientation of the housing when resting in the docking module was one of the novel features of the applicants’ system. However, as I noted in

discussing the laptop exclusion, the applicants made it clear in the June 15 response that they were not incorporating all of the novel features of their invention into every independent claim in the patent. Instead, they stated only that each independent claim contained at least one point of novelty. Id. at 16. In the case of the laptop exclusion, it is not obvious which of the independent claims contain the exclusion because none of the independent claims contain language explicitly excluding laptop computers. Therefore, the only way to incorporate the limitation into the patent is to infer that it is inherent in the terms “portable computer” and “portable computer microprocessing system.”

The situation is different with respect to the vertical orientation limitation, however. I need not infer that that limitation is inherent in all of the independent claims because the applicants indicated clearly which of the independent claims contain this novel feature. Claims 1 and 14 require “a support holding the housing in a vertical position.” Claims 17 and 20 do not contain this limitation. Therefore, defendants are not persuasive when they argue that of the prosecution history supports the importation of a vertical orientation limitation into claim 17.

Defendants do not concede the point easily. They argue that where an applicant makes statements during the course of prosecution that limit the scope of his invention as opposed to specific embodiments thereof or claims in his patent, those statements apply to all of the claims in the patent. For support, they cite Digital Biometrics, Inc. v. Identix, Inc.,

149 F.3d 1335 (Fed. Cir. 1998). That case concerned a patented method for capturing, storing and displaying fingerprint images. At issue in that case was the claim term “slice data.” The defendant argued that this term should be construed to mean data with an “active area” while the plaintiff argued that a “slice” encompassed more than an “active area.” Id. at 1346. The court of appeals adopted the defendant’s construction. It noted that the word “slice” was used “synonymously with ‘active area’ in two instances in the written description.” Id. Also, the court looked to the prosecution history. In response to a rejection by the patent examiner, the applicants in Digital Biometrics added the word “slice” to one of their claims and distinguished their invention from prior art by Ruell with the following remarks:

Unlike the applicants’ claimed invention, there is no provision for generating the composite array as a function of overlapping image portions of the finger. Similarly, Ruell does not teach a system which identifies *active portions* of the image which are representative of the fingerprint features as a mathematical function of the stored data, and generates the composite array as a mathematical function of the data representative of the identified *active portions*.

Id. at 1347 (emphasis in original). Instead of limiting these remarks to the claims in which the term “active area” appeared, the applicants had made them with respect to all of the claims that had been rejected. Accordingly, the court of appeals held that the limiting construction in the remarks applied to all of the claims that had been rejected. Id.; see also Honeywell International, Inc. v. ITT Industries, Inc., 452 F.3d 1312, 1318 (Fed. Cir. 2006)

(limiting term “fuel injection system component” to fuel filter in part because patentees had referred to “invention” as fuel filter at four points in specification).

At the claims construction hearing in this case, defendants argued that the present case was analogous to Digital Biometrics because in both cases the applicants discussed distinguishing characteristics of their inventions, not specific claims or embodiments thereof. This is true up to a point. Although the applicants for the ‘645 patent discussed their “system” as having a docking module that held the housing in a vertical position in the June 15 response, they also made it clear that all of the points of novelty highlighted in the response were not present in all of the independent claims. The prosecution history is useful in determining how the applicants and the patent examiner understood the claims, Phillips, 415 F.3d at 1317, but it is inappropriate to import a limitation from the prosecution history into a claim whose language will not support that limitation. Sofamor Danek Group, Inc. v. De-Puy-Motech, Inc., 74 F.3d 1216, 1220 (Fed. Cir. 1996).

Accordingly, I will adopt plaintiff’s proposed construction of the phrase “supporting the housing of the microprocessor in position relative to said docking connection means so that the single connector on the housing is coupled with said additional connection provided in the docking connection means.” That phrase will be construed to mean that the housing is supported and the single connector on the housing couples or mates with the connector on the docking module.

5. “A docking connection means in which the housing rests for connecting the microprocessor with computer peripheral devices”

Independent claim 20, subpart (e) requires the portable computer microprocessing system disclosed in the preamble of claim 20 to have “a docking connection means in which the housing rests for connecting the microprocessor with computer peripheral devices, said docking connection means comprising a single connector which mates with the single connector on the housing.” ‘645 pat., col. 11, lns. 9-13. The parties raise two disputes concerning the portion of this phrase that precedes the comma. First, defendants contend that the phrase should be construed to require that the docking connection means support the housing in a vertical position. Second, although the parties agree that the phrase is a means-plus-function limitation under 35 U.S.C. § 112, ¶ 6, they disagree about the wording of the claimed function and the identification of the corresponding structure.

For the reasons discussed in the part D(4) of this opinion, I will not adopt defendants’ proposed construction of claim 20, subpart (e), requiring the docking connection means to support the housing in a vertical position. In addition to the reasons stated in part D(4), I note that claim 21, which depends on claim 20, adds the additional limitation of “a support for holding the housing in a vertical position such that the weight of the housing maintains the connections to the connector.” ‘645 pat., col. 11, lns. 15-17. “[T]he presence

of a dependent claim that adds a particular limitation raises a presumption that the limitation in question is not found in the independent claim.” Liebel-Flarsheim Co. v. Medrad, Inc., 358 F.3d 898, 910 (Fed. Cir. 2004). This presumption is “especially strong when the limitation in dispute is the only meaningful difference between an independent and dependent claim, and one party is urging that the limitation in the dependent claim should be read into the independent claim.” Sunrace Roots Enterprise Co., Ltd. v. SRAM Corp., 336 F.3d 1298, 1303 (Fed. Cir. 2003) (citing Ecolab Inc. v. Paraclipse, Inc., 285 F.3d 1362, 1375 (Fed. Cir. 2002)).

Turning to the second dispute, 35 U.S.C. § 112, ¶ 6 provides that 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.” Construction of a means-plus-function limitation proceeds in two steps: identification of the claimed function and identification of the structure necessary to perform that function as disclosed in the specification. Applied Medical Resources Corp. v. United States Surgical Corp., 448 F.3d 1324, 1332 (Fed. Cir. 2006); Altiris, Inc. v. Symantec Corp., 318 F.3d 1363, 1375 (Fed. Cir. 2003).

a. Claimed function

“The function of a means-plus-function claim must be construed to include the limitations contained in the claim language.” Lockheed Martin Corp. v. Space Systems/Loral, Inc., 324 F.3d 1308, 1319 (Fed. Cir. 2003). A court may not limit the claimed function or broaden it by ignoring limitations in the claim language. Id. The parties disagree about whether the phrase “in which the housing rests” should be included as part of the claimed function. Plaintiff contends that the claimed function is identified by the words that follow the word “for” in the phrase: connecting the microprocessor with the computer peripheral devices. Defendants contend that the “in which the housing rests” limitation should be included in the claimed function. Thus, the claimed function should be “connecting the microprocessor with computer peripheral devices using a structure in which the housing rests.”

Defendants cite Lockheed Martin in support of their argument, but that case is distinguishable. The patent at issue in Lockheed Martin concerned an apparatus and method for steering a satellite. A means-plus-function claim in the patent read in part as follows: “means for rotating said wheel in accordance with a predetermined rate schedule which varies sinusoidally over the orbit at the orbital frequency of the satellite whereby the attitude of said satellite is offset . . .” Id. at 1315. The district court held that the claimed function was “rotating said wheel.” The court of appeals rejected this construction because it “improperly broaden[ed] the scope of the claimed function by ‘reading out’ the limitations

contained in the claim language.” Id. at 1319. The court of appeals held that the claimed function was “properly identified” as including all of the words between “for” and “whereby”: “rotating said wheel in accordance with a predetermined rate schedule which varies sinusoidally over the orbit at the orbital frequency of the satellite.” Id.

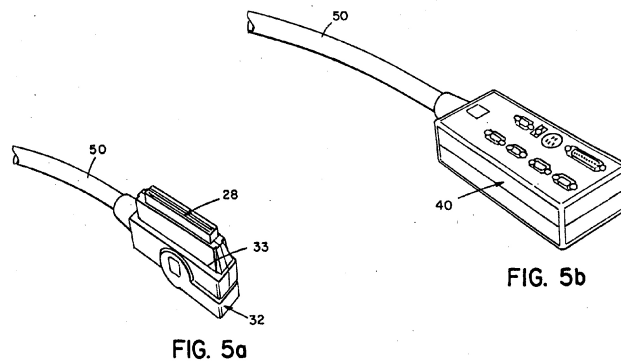
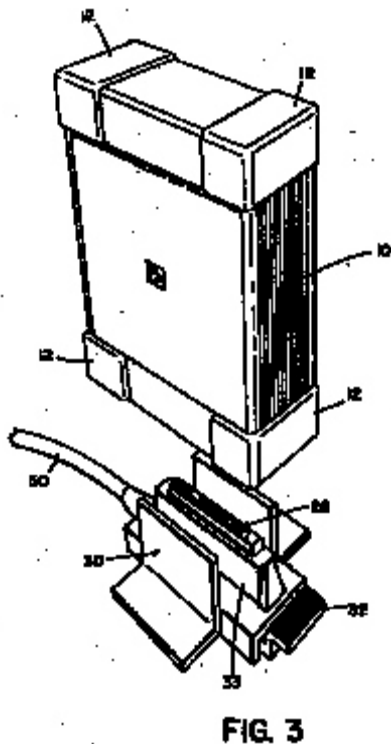
The present case is distinguishable from Lockheed Martin because the phrase “in which the housing rests” is not a functional limitation. In Lockheed Martin, the portion of the claim not included in the claimed function by the district court limited the function of “rotating the wheel” to rotating it “in accordance with a predetermined rate schedule which varies sinusoidally over the orbit at the orbital frequency of the satellite.” In the present case, “in which the housing rests” does not expand or limit the function of the docking connection means, which is to connect the microprocessor to the peripheral devices. Therefore, I will adopt plaintiff’s proposed construction of the claimed function. The claimed function is “connecting the microprocessor to the computer peripheral devices.”

b. Corresponding structure

A structure disclosed in the specification corresponds to the claimed function “only if the specification or the prosecution history clearly links or associates that structure to the function recited in the claim.” B. Braun Medical, Inc. v. Abbott Laboratories, 124 F.3d 1419, 1424 (Fed. Cir. 1997). “In other words, the structure must be necessary to perform

the claimed function.” Omega Engineering, 334 F.3d at 1322 (citing Northrop Grumman Corp. v. Intel Corp., 325 F.3d 1346, 1352 (Fed. Cir. 2003)). “Features that do not perform the recited function do not constitute corresponding structure and thus do not serve as claim limitations.” Northrup Grumman, 325 F.3d at 1352.

Plaintiff defines the corresponding structure as a device having a connector which is the reciprocal of the single housing connector and is capable of mating with the single connector and having at least one individual connector capable of connecting to a peripheral device. It contends that this structure is described in the specification at col. 1, lns. 38-55 and col. 4, lns. 7-21, 35-64 and is illustrated in figures 3, 5a and 5b of the ‘645 patent, which are reproduced below.



According to defendants, the corresponding structures are found in figure 3 (cradle 30 and docking connector 28) and figure 18 (guides 206 and 208 and connector 210). Figure 18 is reproduced below.

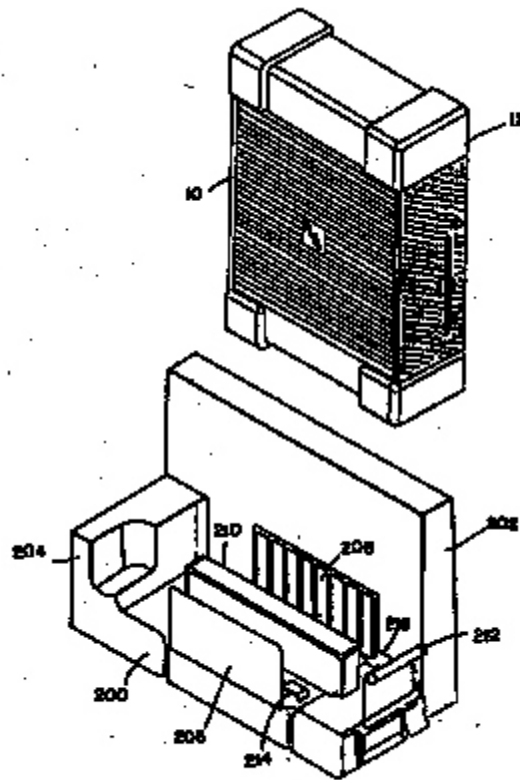


FIG. 18

Docking connector 28 in figure 3 is a corresponding structure, as are figures 5a, 5b and the connector 210 in figure 18. The specification indicates that each is necessary to connect the microprocessor to the peripheral devices. '645 pat., col. 3, lns. 60-62 ("all connections to the peripherals are realized through the single connection of the docking

connector 28”); col. 4, lns. 38-51 (discussing figures 5a and 5b); col. 7, ln. 67- col. 8, ln. 2 (discussing connector 210 in figure 18). Cradle 30 in figure 3 and guides 206 and 208 are not corresponding structures because they are not necessary to perform the claimed function.

This does not mean that the cradle and guides are irrelevant to a proper construction of claim 20(e), however. There remains to be considered the structural limitation “in which the housing rests.” As noted above, this limitation applies to the docking connection means. It would be improper to construe claim 20(e) in a way that did not incorporate this structural limitation. Section 112, ¶ 6 states that an “element in a claim for a combination may be expressed as a means or step for performing a specified function.” It does not preclude a claim that contains a means-plus-function limitation from containing other limitations. That is the situation in claim 20(e), which consists of two limitations: a means-plus-function limitation and an additional structural limitation on the docking connection means. To infringe claim 20(e), a docking connection means must satisfy both limitations. It must perform the function of connecting the microprocessor to the peripheral devices and it must be configured so that the housing containing the microprocessor rests in it. Accordingly, a docking connection means similar to that depicted in figure 5a would not infringe claim 20(e) because it does not contain the structural limitation. The specification confirms this, noting that the “alternative embodiment of the docking connector 28 that is not coupled to the cradle 30 (FIG. 5a) . . . does not support the main housing 10; rather, the

main housing 10 remains free-standing, and the connection is made by bringing the docking connector to the main housing 10.” ‘645 pat., col. 4, lns. 38-45.

ORDER

IT IS ORDERED that the claims of plaintiff Computer Docking Station Corporation’s U.S. Patent No. 5,187,645 are construed as follows:

1. The term “plurality” means more than one;
2. The term “peripheral device” refers to an external device that is capable of connecting to, and is capable of being controlled by, a computer;
3. The term “electrical communication” means that the flow of information occurs via an electrical signal;
4. The term “mounted on” means attached to;
5. The term “pins” means leads;
6. The terms “portable computer” and “portable computer microprocessor system” means “a computer without a built-in display or keyboard that is capable of being moved or carried about”;
7. The phrase “said single connector for making all connections from the microprocessor to said computer peripheral devices” requires that all connections on the housing pass through the single connector;

8. The phrases “supporting the housing of the microprocessor in position relative to said docking connection means so that the single connector on the housing is coupled with said additional connection provided in the docking connection means,” which appears in claim 17, and “a docking connection means in which the housing rests for connecting the microprocessor with computer peripheral devices,” which appears in claim 20, do not require that the docking connection means hold the housing in a vertical position; and

9. The phrase “a docking connection means in which the housing rests for connecting the microprocessor with computer peripheral devices,” which appears in claim 20, contains a means-plus-function limitation under 35 U.S.C. § 112, ¶ 6 and a structural limitation on the docking connection means. The claimed function is “connecting the microprocessor with computer peripheral devices” and the corresponding structures are figures 5a, 5b, docking connector 28 in figure 3 and the connector 210 in figure 18. The docking connection means must also be configured so that the housing rests in it.

Entered this 16th day of August, 2006.

BY THE COURT:
/s/
BARBARA B. CRABB
District Judge