


ANDREWS, U.S. DISTRICT JUDGE:

Plaintiff Carefusion 303, Inc. filed this patent infringement action against Defendant Hospira, Inc. on August 30, 2011. (D.I. 1). Carefusion alleges that Hospira infringes U.S. Patent No. 7,171,277 (“the ‘277 Patent”). (D.I. 1). The ‘277 Patent discloses improved systems and methods for controlling the delivery of medication to a patient. In particular, the ‘277 Patent discloses the automatic provision of infusion parameters to an infusion pump in order to accurately and efficiently configure the pump while minimizing human error. ‘277 Patent at (57). In one embodiment, parameters used to configure an infusion pump may be inputted into the system using, for example, a barcode scanner or keyboard. *See, e.g., id.* at col.13 l.63 - col.14 l.1. These parameters are then compared to information stored in the database. If the comparison satisfies a predetermined condition, parameters used to operated the pump are downloaded to a processor in operable communication with the pump, thus allowing a nurse to begin an infusion with minimal or no manual data entry. *See, e.g., id.* at Claims 1, 6. By reducing the number of steps that must be manually performed by the nurse, infusions may be performed more accurately and efficiently. *See id.* at col.2 ll.1-6; col.2 ll.60-65.

Presently before the Court is the matter of claim construction. Briefing on claim construction was completed on October 31, 2012, and the Court held a *Markman* hearing on November 19, 2012. Eleven terms are in dispute.

I. CLAIM CONSTRUCTION

Claim construction is a question of law. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 977-78 (Fed. Cir. 1995), *aff’d*, 517 U.S. 370, 388-90 (1996). When construing patent claims, a court considers the literal language of the claim, the patent specification and the

prosecution history. *Id.* at 979. Of these sources, 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.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-17 (Fed. Cir. 2005) (en banc) (citing *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). However, “[e]ven when the specification describes only a single embodiment, the claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using ‘words or expressions of manifest exclusion or restriction.’” *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004) (quoting *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1327 (Fed. Cir. 2002)).

A court may consider extrinsic evidence, including expert and inventor testimony, dictionaries and learned treatises, in order to assist it in understanding the underlying technology, the meaning of terms to one skilled in the art and how the invention works. *Phillips*, 415 F.3d at 1318-19; *see also Markman*, 52 F.3d at 979-80. However, extrinsic evidence is considered less reliable and less useful in claim construction than the patent and its prosecution history. *Phillips*, 415 F.3d at 1318-19 (discussing “flaws” inherent in extrinsic evidence and noting that extrinsic evidence “is unlikely to result in a reliable interpretation of a patent claim scope unless considered in the context of intrinsic evidence”).

In addition to these fundamental claim construction principles, a court should also interpret the language in a claim by applying the ordinary and accustomed meaning of the words in the claim. *Envirotech Corp. v. Al George, Inc.*, 730 F.2d 753, 759 (Fed. Cir. 1984). If the patent inventor clearly supplies a different meaning, however, then the claim should be interpreted according to the meaning supplied by the inventor. *Markman*, 52 F.3d at 980. If

possible, claims should be construed to uphold validity. *In re Yamamoto*, 740 F.2d 1569, 1571 (Fed. Cir. 1984).

A. Claim Terms with Agreed-Upon Claim Constructions

The parties agreed upon the constructions of the following terms in the '277 Patent: “a range of predetermined acceptable values,” “a memory in communication with a second processor,” “database of records,” and “stored records.” (D.I. 72 at 4-5; Markman Transcript at 87). The Court accepts the parties’ agreed-upon constructions for purposes of this litigation.

B. Claims in Dispute

1. “in operable communication with” (Claim 1)

Carefusion’s Proposed Construction:	“arranged in a manner capable of communicating with”
Hospira’s Proposed Construction:	A processor is in operable communication with a device if they are in communication with each other such that the processor is capable of operating the device.
Court’s Construction:	in working communication with

The term “in operable communication with” is construed to mean “in working communication with.” Claim 1 recites a “first processor in operable communication with the clinical device” and “a second processor in operable communication with the memory.” The court’s construction comports with the plain and ordinary meaning of “operable communication” in the context of the '277 Patent and asserted claim 1. The term “operable” means “capable of being used or operated.” *Webster’s II New College Dictionary* 767 (1995). Thus, “in operable communication with” means “in working communication with.”

Hospira’s proposed construction narrows the scope of this claim term by requiring that a processor in operable communication with a device actually operates the device. The claim does

not require that a processor actually operate any device with which it is in operable communication.

2. “input means . . . for input of information related to the delivery of medication to the first processor” (Claim 1)

<p>Carefusion’s Proposed Construction:</p>	<p>35 U.S.C. § 112 ¶6 Corresponding structure for input of information related to the delivery of medication to the first processor: “a bar code reader, keyboard, mouse, touch screen or other input device, and structural equivalents thereof”</p>
<p>Hospira’s Proposed Construction:</p>	<p>Function: Entry by a user of information related to the delivery of medication to the first processor. The corresponding structure disclosed in the specification is a keyboard, a bar code reader, a touch screen, or a mouse.</p>
<p>Court’s Construction:</p>	<p>Function: Input of information related to the delivery of medication to the first processor. Structure: A keyboard, a bar code reader, a touch screen, or a mouse.</p>

The term “input means . . . for input of information related to the delivery of medication to the first processor” is a means-plus-function claim. The claimed function is “input of information related to the delivery of medication to the first processor.” The corresponding structure is “a keyboard, bar code reader, a touch screen, or a mouse.” The claim identifies the function, which does not need further construction. Hospira’s construction improperly adds the element of a “user.” The claim does not recite a user.

With respect to the corresponding structure, the parties agree that it includes a keyboard, a bar code reader, a touch screen, or a mouse, but dispute whether the construction should also specify that it includes “structural equivalents thereof.” The reference to “equivalents” in § 112 ¶

6 is properly part of the jury instruction, not the claim construction. *See, e.g., Al-Site Corp. v. VSI Int'l, Inc.*, 174 F.3d 1308, 1319 (Fed. Cir. 1999) (discussing “equivalents thereof” language in jury instructions, not claim constructions). Putting the “structural equivalents” language in the claim construction will only serve to create confusion.

3. “operatively connected” (Claim 1)

Carefusion’s Proposed Construction:	“connected, directly or indirectly, in a manner capable of performing a designated function”
Hospira’s Proposed Construction:	Two devices are operatively connected if they are connected to each other and if the connection allows the performance of the recited function.
Court’s Construction:	Two devices are operatively connected if they are connected to each other such that the connection allows the performance of the recited function.

The term “operatively connected” is construed to mean that “two devices are operatively connected if they are connected to each other such that the connection allows the performance of the recited function.” The court’s construction adopts the plain and ordinary meaning of “operatively connected.” As the Federal Circuit stated in *Innova/Pure Water, Inc. v. Safari Water Filtration Sys.*, “[g]enerally speaking . . . [‘operatively connected’] means the claimed components must be connected in a way to perform a designated function.” 381 F.3d 1111, 1118 (Fed. Cir. 2004). The parties agree that “operatively connected” would include a wireless connection. (Markman Transcript at 68). Carefusion’s proposed construction, however, is confusing because it introduces two undefined terms – “directly connected” and “indirectly connected.” The term “connected” is used in its ordinary sense and need not be further construed.

4. “clinical device configuration parameters” (Claims 1 and 6)

Carefusion’s Proposed Construction:	“treatment parameters related to the delivery of medication by the clinical device”
Hospira’s Proposed Construction:	This term is not found in the written description and is not clearly distinguished from the terms “clinical device operating parameter[s]” and “clinical device parameter,” which are also not found in the description. The terms are insolubly ambiguous, not amenable to construction, and therefore are indefinite within the meaning of 35 U.S.C. § 112.
Court’s Construction:	treatment parameters related to the delivery of medication by the clinical device

The term “clinical device configuration parameters” is construed to mean “treatment parameters related to the delivery of medication by the clinical device.”¹ Claim 1 recites the “input of information related to the delivery of medication to the first processor, the information including clinical device configuration parameters.” Claim 6 recites “inputting information including clinical device configuration parameters related to the delivery of medication to a first processor.” The claimed invention relates to the controlled delivery of medication to treat a patient. In addition, the specification includes numerous references to the entry and use of parameters in treating patients through the delivery of medication. *See, e.g.*, ‘277 Patent at (57) (“Features include the automatic provision of infusion parameters to pumps for accurate and efficient configuration of the pump”); *id.* at col.2 ll.1-6 (describing the problems with manual transfer of “parameters for configuring an infusion pump to dispense medication”); *id.* at col.12 l.64 to col.13 l.24 (describing “treatment parameters” related to the delivery of medication that

¹ The Court’s construction of this term at this stage of the litigation does not preclude Hospira from raising in the future an argument that the term is indefinite.

are represented by a barcode label affixed to a drug container). The court’s construction is consistent with the specification, the context of claims 1 and 6, and the plain and ordinary meaning of the term.

5. “means for communicating information related to the delivery of medication to the patient between the first and second processors” (Claim 1)

<p>Carefusion’s Proposed Construction:</p>	<p>35 U.S.C. § 112 ¶6 Corresponding structure for communicating information related to the delivery of medication to the patient between the first and second processors: “thin net cabling, Ethernet cabling, radiofrequency transmitters and receivers, one or more local area networks, and structural equivalents thereof.”</p>
<p>Hospira’s Proposed Construction:</p>	<p>Function: Sending messages from the first processor to the second processor or vice versa. The messages include information related to the delivery of medication to the patient.</p> <p>The corresponding structure disclosed in the specification is a local area network 50 comprising a thin net or ethernet cabling.</p>
<p>Court’s Construction:</p>	<p>Function: Communicating information related to the delivery of medication to the patient between the first and second processors.</p> <p>Structure: Thin net cabling, Ethernet cabling, and radiofrequency transmitters and receivers.</p>

The term “means for communicating information related to the delivery of medication to the patient between the first and second processors” is a means-plus-function claim. The function is “communicating information related to the delivery of medication to the patient between the first and second processors.” The corresponding structure is “thin net cabling,

Ethernet cabling, and radiofrequency transmitters and receivers.” The claim identifies the function, which does not need further construction. Hospira’s proposed construction is improperly narrow in that it specifies the direction of communication.

The parties agree that the corresponding structure includes a local area network that includes thin net cabling and ethernet cabling. The parties, however, dispute whether the specification also discloses a wireless network. The specification expressly and repeatedly describes the use of radiofrequency (RF) transmitters and receivers to implement a wireless network for data communication. *See, e.g.*, ‘277 Patent at col.3 ll.43-50; *id.* at col.15 ll.22-48. Thus, one of ordinary skill in the art would have understood that the corresponding structure includes a wireless network.

The parties also dispute whether the corresponding structure includes “one or more local area networks.” Carefusion asserts that “[o]ne of ordinary skill in the art would have understood [the] disclosure to include other wired . . . networks,” (D.I. 72 at 37) citing to several passages from the specification. *See, e.g.*, ‘277 Patent at col.6 ll.39-41 (“Additionally, access to administration records of the hospital’s administration system 40 is available through the network 5.”); *id.* at col.7 ll.40-43 (“In another embodiment, the physician accesses the pharmacy management system 20 through a dedicated terminal or through the care management system 30 via the network 5 . . .”); *id.* at col.5 ll.19-21; Figures 1-3, 13-15. In response, Hospira asserts that “there is nothing in the specification that clearly links . . . multiple networks as performing the claimed function.” (D.I. 72 at 38). Hospira also asserts that the parts of the specification to which Carefusion cites only identify a single network. (*Id.* at 39).

The function specified is communicating between the first and second processors. This

communication is illustrated in Figure 2 of the patent, where the first processor (bedside CPU 80) communicates with the second processor (pharmacy CPU 60) over the local area network 50. '277 Patent at Figure 2. The specification recites “[a] local area network 50, comprising a thin net, or ethernet cabling.” *Id.* at col.5 ll.40-41. Carefusion points to nothing in the '277 Patent disclosing a structure for communicating that is made up of multiple networks. Accordingly, the court does not construe this term to include more than one local area network.

For the reasons already discussed, the court’s construction also does not include “structural equivalents thereof.”

6. “[parameter] input into the first processor is compared to the records stored in the memory” (Claim 1)

Carefusion’s Proposed Construction:	“at least one parameter entered into the first processor is compared to the records stored in memory”
Hospira’s Proposed Construction:	a value entered into the first processor through the input means is compared to the records stored in memory
Court’s Construction:	at least one parameter inputted into the first processor is compared to the records stored in memory

The term “[parameter] input into the first processor is compared to the records stored in the memory” is construed to mean “at least one parameter inputted into the first processor is compared to the records stored in memory.” Claim 1 recites “wherein at least one clinical device configuration parameter related to the delivery of medication input into the first processor is compared to the records stored in the memory.” The plain and ordinary meaning of this claim term is sufficiently clear. Hospira’s proposed construction improperly narrows the scope of this

claim by adding the limiting “through the input means.”

7. **“downloads clinical device operating parameters to the first processor . . . if the comparison of the inputted at least one clinical device configuration parameters and the stored records satisfies a predetermined condition.”** (Claim 1)

Carefusion’s Proposed Construction:	“downloads clinical device operating parameters to the first processor . . . if the comparison of the inputted at least one clinical device configuration parameter and the stored records satisfies a predetermined condition”
Hospira’s Proposed Construction:	Clinical device operating parameters are downloaded to the first processor depending on the outcome of a comparison between (1) at least one clinical device configuration parameter input into the first processor through the input means and (2) the records stored in the database of records. The download occurs if the outcome of the comparison satisfies a predetermined condition.
Court’s Construction:	downloads clinical device operating parameters to the first processor . . . if the comparison of the inputted at least one clinical device configuration parameter and the stored records satisfies a predetermined condition

The term “downloads clinical device operating parameters to the first processor . . . if the comparison of the inputted at least one clinical device configuration parameters and the stored records satisfies a predetermined condition” is construed to mean “downloads clinical device operating parameters to the first processor . . . if the comparison of the inputted at least one clinical device configuration parameter and the stored records satisfies a predetermined condition.” Claim 1 recites that “the second processor downloads clinical device operating

parameters to the first processor to program and operate the clinical device in accordance with the downloaded operating parameters if the comparison of the inputted at least one clinical device configuration parameters and the stored records satisfies a predetermined condition.” The claim language is sufficiently clear that construction is not required. Hospira’s construction does not improve clarity, and the only substantive difference is the addition of the limitation “through the input means,” which again is an unjustified narrowing.

8. “clinical device operating parameter[s]” (Claims 1 and 6)

Carefusion’s Proposed Construction:	“treatment parameters for operating the clinical device”
Hospira’s Proposed Construction:	This term is not found in the written description and is not clearly distinguished from the terms “clinical device configuration parameter” and “clinical device parameter,” which are also not found in the description. The terms are insolubly ambiguous, not amenable to construction, and therefore are indefinite within the meaning of 35 U.S.C. § 112.
Court’s Construction:	treatment parameters for operating the clinical device

The term “clinical device operating parameter[s]” is construed to mean “treatment parameters for operating the clinical device.”² Claim 1 recites that “the second processor downloads clinical device operating parameters to the first processor to program and operate the clinical device in accordance with the downloaded operating parameters.” Claim 6 recites “downloading clinical device operating parameters from the second processor to the first

² As with the term “clinical device configuration parameters,” the Court’s construction of this term at this stage of the litigation does not preclude Hospira from raising in the future an argument that the term is indefinite.

processor to program and operate a clinical device in accordance with the downloaded operating parameters.” The context of claims 1 and 6 clarifies the meaning of this term. The specification also includes numerous references to treatment parameters for operating the clinical device and further clarifies the meaning of this term. *See, e.g.*, ‘277 Patent at col.2 ll.60-65; *id.* at col.7 ll.29-39; *id.* at col.14 ll.7-27. Thus, the court’s construction is consistent with the specification, the context of claims 1 and 6, and the plain and ordinary meaning of the term.

9. “inputting information . . . to a first processor” (Claim 6)

Carefusion’s Proposed Construction:	“entering data . . . to a first processor”
Hospira’s Proposed Construction:	Entering information into a first processor by a user.
Court’s Construction:	Entering information into a first processor

The term “inputting information . . . to a first processor” is construed to mean “entering information into a first processor.” This construction is consistent with the plain and ordinary meaning of “inputting.” Hospira asserts that the construction requires entry of the information “by a user” and cites to the specification, which refers to the entry of information by a caregiver and disclosing only user-operable input devices. (D.I. 72 at 59). Although information may be entered by a user, Hospira’s proposed construction suggests that the information must be entered directly into a first processor by a user. There is no support for importing such a limitation into Claim 6. For example, the entered information may first pass through an intermediary device, such as a server, before arriving at the first processor.

10. “clinical device parameter” (Claim 6)

Carefusion’s Proposed Construction:	“treatment parameter related to the delivery of medication by the clinical device”
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Hospira's Proposed Construction:	This term is not found in the written description and is not clearly distinguished from the terms "clinical device operating parameter[s]" and "clinical device configuration parameter," and which are also not found in the description. The terms are insolubly ambiguous, not amenable to construction, and therefore are indefinite within the meaning of 35 U.S.C. § 112.
Court's Construction:	treatment parameter related to the delivery of medication by the clinical device

The term "clinical device parameter" is construed to mean "treatment parameter related to the delivery of medication by the clinical device."³ Claim 6 recites "inputting information including clinical device configuration parameters related to the delivery of medication," "comparing at least one inputted clinical device parameter with the records including the predetermined acceptable ranges of clinical device configuration parameters," and downloading information "if the comparison of the at least one inputted clinical device configuration parameter and the stored records satisfies a predetermined condition." The court's construction is consistent with the court's construction of "clinical device configuration parameters." The context of the claim makes clear that "clinical device parameter" refers back to "clinical device configuration parameter," and that the terms therefore have the same meaning.

11. **"downloading clinical device operating parameters from the second processor to the first processor . . . if the comparison of the at least one inputted clinical device configuration parameter and the stored records satisfies a predetermined condition"** (Claim 6)

³ As with the terms "clinical device configuration parameters" and "clinical device configuration parameter," the Court's construction of this term at this stage of the litigation does not preclude Hospira from raising in the future an argument that the term is indefinite.

Carefusion's Proposed Construction:	"downloading clinical device operating parameters from the second processor to the first processor . . . if the comparison of the at least one inputted clinical device configuration parameter and the stored records satisfies a predetermined condition"
Hospira's Proposed Construction:	Downloading clinical device operating parameters from the second processor to the first processor depending on the outcome of a comparison between (1) at least one clinical device configuration parameter input into the first processor by the user and (2) the records stored in the database of records. The download occurs if the outcome of the comparison satisfies a predetermined condition.
Court's Construction:	downloading clinical device operating parameters from the second processor to the first processor . . . if the comparison of the at least one inputted clinical device configuration parameter and the stored records satisfies a predetermined condition

The term "downloading clinical device operating parameters from the second processor to the first processor . . . if the comparison of the at least one inputted clinical device configuration parameter and the stored records satisfies a predetermined condition" is construed to mean "downloading clinical device operating parameters from the second processor to the first processor . . . if the comparison of the at least one inputted clinical device configuration parameter and the stored records satisfies a predetermined condition." This construction is consistent with the court's construction of the term "downloads clinical device operating parameters to the first processor . . . if the comparison of the inputted at least one clinical device configuration parameters and the stored records satisfies a predetermined condition," which is recited in Claim 1. Hospira's proposed construction does not improve clarity and adds the

unjustified limitation of “by the user.”

The claim language shall be construed as set forth above.