

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

INVENTIO AG, : CIVIL ACTION
 : NO. 08-874-ER
Plaintiff, :
 :
v. :
 :
THYSSENKRUPP ELEVATOR :
AMERICAS CORPORATION, :
et al., :
 :
Defendants. :

M E M O R A N D U M

EDUARDO C. ROBRENO, J.

June 14, 2010

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I. INTRODUCTION

Plaintiff Inventio AG ("Inventio" or "Plaintiff") brought the instant action against Defendants ThyssenKrupp Elevator Americas Corp., ThyssenKrupp Elevator Corp., and ThyssenKrupp Manufacturing Incorporated (collectively referred to as "ThyssenKrupp" or "Defendants") for patent infringement. The two patents in controversy are as follows: (1) United States Patent No. 6,892,861, entitled "Destination Call Control for Modernizing Elevator Installation" ("`861 Patent"); and (2) United States Patent No. 6,935,465, entitled "Method for Modernization of an Elevator Installation" ("`465 Patent," together with the `861 Patent, the "Patents-in-Suit"). Defendants assert counterclaims of non-infringement and invalidity with respect to both the `861 Patent and the `465 Patent.

The Patents-in-Suit are designed to restore and upgrade an existing conventional elevator system and its components to a "destination call control" elevator system. This process creates increased efficiency of elevator traffic by eliminating multiple elevator destination stops and elevator car overcrowding.

The parties briefed their respective positions on claim construction, and the Court conducted a Markman hearing on the

disputed terms. Following the Markman hearing, the Court provided the parties with an opportunity to submit supplemental briefing on claim construction. This Memorandum provides constructions of the disputed terms.

II. BACKGROUND

In general, the Patents-in-Suit involve "destination call control" technology for elevators, which replaces the traditional common elevator up-down style. The up-down elevator control operates by a passenger first calling the elevator through an up-down button on the respective floor, and then selecting the desired destination floor upon entering the elevator car. The computerized elevator control then moves the car to the selected floor.

The destination call control system replaces the up-down buttons with a telephone style key-pad, through which the passenger first selects the desired destination floor from the keypad-button and the computerized elevator control selects the fastest elevator to transport the passenger to the destination floor. The passenger then proceeds to the designated elevator, and the computerized elevator control moves the elevator car to the previously selected floor without the need for the passenger to push an additional button upon entering the elevator car. Users operate the floor terminals at the time an elevator is requested, either by entering the destination floor on a keypad

or carrying a device with a recognizable identification code, which then generates a "destination call report" for the elevator. This report includes both the boarding floor and the destination floor for each respective passenger. Simply put, the modernization process which is at the heart of the Patents-in-Suit streamlines the passenger's use of an elevator by compressing a two-step process of calling an elevator and selecting a destination floor into a single step.

The "modernization" process for elevators essentially involves replacing outdated components to increase elevator efficiency. The system for modernization contemplated by the Patents-in-Suit constitutes a type of "retro-fitting" in which the modernization device is integrated into the existing elevator components in order to increase the efficiency of the modernization process. The modernization system comprised by the Patents-in-Suit includes the installation of new floor terminals (buttons pushed to call an elevator), a computing unit, and a modernizing device. In essence, this modernization process constitutes a type of "patch" which allows the conventional elevator system to operate as a "destination dispatch" system without the need to replace the entire existing elevator system.

The purpose of the technology encompassed by the Patents-in-Suit is to manage elevator traffic flow in order to transport passengers to their destinations more quickly and with

less crowding than the conventional elevator system. This technology optimizes the relevant elevator traffic patterns in order to streamline the calling and dispatching of elevator cars. In particular, this "modernization" system allows for the updating of the conventional elevator system economically while allowing the elevator installations to function even during the modernization process.

At the core of their dispute, the parties have a very different understanding as to the scope of the technology covered by the Patents-in-Suit. Therefore, the parties have presented a number of disputed claim terms for the Court to construe through these Markman proceedings.

III. CLAIM CONSTRUCTION

Plaintiff asserts that Defendants have infringed claims 1, 2, 3, and 10 of the '465 Patent and claims 1, 2, 3, and 11 of the '861 Patent. The claims of the Patents-in-Suit are substantially similar, and any relevant textual differences are discussed herein. The full text of the claims allegedly infringed are as follows:

A. '465 Patent, Claim 1

1. A method of modernizing an elevator installation having at least one elevator controlled by at least one elevator control by way of at least one call report, comprising:

- a. installing at least one floor terminal at each floor served by an elevator control for

at least one of the input of destination call reports and for recognition of identification codes of users;

- b. installing at least one computing unit and connecting the at least one computing unit to said floor terminals for at least one of evaluating the destination call reports and association of destination floors with recognized once of the identification codes and for the output of at least one destination signal; and
- c. installing at least one modernizing device and connecting the at least one modernizing device to said floor terminals and said at least one computing unit for reading the destination signal, for converting the destination signal into at least one call report and for controlling the elevator control by way of the call report.

(`465 Patent, col. 11:6-25.)

B. `465 Patent, Claim 2

2. The method according to claim 1 wherein said step c. is performed by interrupting at least one existing electrical floor call transmitter line between at least one floor call transmitter and the elevator control and connecting the elevator control by an electrical line with said modernizing device.

(Id. col. 11:26-31.)

C. `465 Patent, Claim 3

3. The method according to claim 1 wherein said step c. is performed by interrupting at least one existing car call transmitter line between at least one car call transmitter and the elevator control and connecting the elevator control by an electrical line with said modernizing device.

(Id. col. 11:32-36.)

D. `465 Patent, Claim 10

10. The method according to claim 1 including performing said steps a. through c. for each elevator car and

associated elevator control of an elevator installation in succession whereby the elevator installation is modernized in a modular manner.

(Id. col. 11:63-67.)

E. '861 Patent, Claim 1

1. A device for temporarily operating an elevator installation during modernization, the elevator installation having at least one elevator, and at least one elevator control for controlling the elevator in response to call reports generated by hail call transmitters and car call transmitters, comprising:

a modernizing device temporarily connected to the elevator control controlling the elevator in response to the call reports, the elevator control being disconnected from the hail call transmitters and the car call transmitters of the elevator installation; and at least one computing unit connected to said modernizing device for generating at least one destination signal to said modernizing device, said modernizing device converting said destination signal into a call report and generating said call report to the elevator control for issuing said at least one call report.

('861 Patent, col. 11:6-21.)

F. '861 Patent, Claim 2

2. The device according to claim 1 wherein said modernizing device has at least one output connected with at least one floor call transmitter line input of the elevator control for issuing said at least one call report.

(Id. col. 11:22-25.)

G. '861 Patent, Claim 3

3. The device according to claim 1 wherein said modernizing device has at least one output connected with at least one car call transmitter line input of the elevator control for issuing said at least one call report.

(Id. col. 11:26-29.)

H. '861 Patent, Claim 11

11. A system for modernizing an elevator installation having at least one elevator and an elevator control for controlling the at least one elevator control by a call report, comprising:

a floor terminal for each floor of a building served by an elevator, each said floor terminal being operative for at least one of input of destination call reports and recognition of identification codes of passengers;

a computing unit connected to said floor terminals for evaluating said destination call reports and for association of destination floors with recognized ones of said identification codes, said computing unit generating a destination signal for one of the destination floors associated with one of the recognized identification codes; and

a modernizing device connected to said computing unit and temporarily connected to the elevator control, said modernizing device reading said destination signal and converting said destination signal into a call report for use by the elevator control in controlling the elevator.

(Id. col. 12:32-53.)

IV. LEGAL PRINCIPLES OF CLAIM CONSTRUCTION

A court's analysis of patent infringement is comprised of a well-established two-step process: (1) the meaning of disputed claims are construed; and (2) the allegedly infringing device is compared to the claims as construed. Markman v. Westview Instruments, Inc., 52 F.3d 967, 976 (Fed. Cir. 1995), aff'd, 517 U.S. 370 (1996); Wavetronix LLC v. EIS Elec. Integrated Sys., 573 F.3d 1343, 1354 (Fed. Cir. 2009). With

respect to the first step, “[t]he purpose of claim construction is to determine the meaning and scope of the patent claims that the plaintiff alleges have been infringed.” Every Penny Counts, Inc. v. Am. Express Co., 563 F.3d 1378, 1382 (Fed. Cir. 2009) (citing O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co., 521 F.3d 1351, 1360 (Fed. Cir. 2008)).

It is axiomatic that the claims define the scope of the patent. Phillips v. AWH Corp., 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (internal citations omitted); see also Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc., 381 F.3d 1111, 1115 (Fed. Cir. 2004); Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996). Therefore, the Court must first look to the words of the claims themselves in order to ascertain their meaning. Vitronics Corp., 90 F.3d at 1582; see also Renishaw PLC v. Marposs Societa' per Azioni, 158 F.3d 1243, 1248 (Fed. Cir. 1998) (“[T]he claims define the scope of the right to exclude; the claim construction inquiry, therefore, begins and ends in all cases with the actual words of the claim”).

A. Plain and ordinary meaning

Claim terms must be initially interpreted according to their ordinary and customary meaning. Genzyme Corp. v. Transkaryotic Therapies, Inc., 346 F.3d 1094, 1106 (Fed. Cir. 2003). Undefined claim terms are to be given an ordinary and

customary meaning "as understood by a person of ordinary skill in the art at the time of the invention." Gemtron Corp. v. Saint-Gobain Corp., 572 F.3d 1371, 1378 (Fed. Cir. 2009). As explained by the Federal Circuit:

[b]ecause the meaning of a claim term as understood by persons of skill in the art is often not immediately apparent, and because patentees frequently use terms idiosyncratically, the court looks to "those sources available to the public that show what a person of skill in the art would have understood disputed claim language to mean," including the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art."

Phillips, 415 F.3d at 1314 (quoting Innova, 381 F.3d at 1116).

B. Intrinsic evidence

Where a court cannot properly construe a claim based on the plain meaning, it is necessary to examine the intrinsic record of the claims, which includes the specification and the prosecution history. Masco Corp. v. United States, 303 F.3d 1316, 1324 (Fed. Cir. 2002) (citing Vitronics Corp., 90 F.3d at 1582) (holding such intrinsic evidence to be "the most significant source of the legally operative meaning of disputed claim language"). The specification contains a written description of the invention which must be clear and complete enough to enable those of ordinary skill in the art to make and use it, thus the specification provides necessary context for understanding the claims, and "is always highly relevant to the

claim construction analysis." Phillips, 415 F.3d at 1315 (quoting Vitronics Corp., 90 F.3d at 1582). Therefore, a patentee can act as his own lexicographer in the patent specification by defining a term with particularity that already has an ordinary meaning to a person of skill in the art. Merck & Co., Inc. v. Teva Pharma. USA, Inc., 395 F.3d 1364, 1370 (Fed. Cir. 2005) (internal citation omitted); Phillips, 415 F.3d at 1321 ("[T]he specification 'acts as a dictionary when it expressly defines terms used in the claims'" (quoting Vitronics Corp., 90 F.3d at 1582). "When consulting the specification to clarify the meaning of claim terms, courts must take care not to import limitations into the claims from the specification." Abbott Labs. v. Sandoz, Inc., 566 F.3d 1282, 1288 (Fed. Cir. 2009). Limitations contained in the specification should be applied judiciously and courts should refrain from restricting broader claim language to a single embodiment described in the specification "unless the patentee has demonstrated a clear intention to limit the claim scope using 'words or expressions of manifest exclusion or restriction.'" Id. (quoting Liebel-Flarsheim Co. v. Medrad, Inc., 358 F.3d 898, 906 (Fed. Cir. 2004)); see also Bell At. Network Servs., Inc. v. Covad Commc'ns. Group, Inc., 262 F.3d 1258, 1271 (Fed. Cir. 2001) ("[W]hen a patentee uses a claim term throughout the entire patent specification, in a manner consistent with only a single

meaning, he has defined that term 'by implication.'" (quoting Vitronics Corp., 90 F.3d at 1582).

Along with the specification, the prosecution history is "intrinsic evidence" of the meaning of the claims because it "provides evidence of how the [United States Patent & Trademark Office (PTO)] and the inventor understood the patent." Phillips, 415 F.3d at 1317. The prosecution history is comprised of the original application, communications between the patent applicant and the patent examiner, changes to the patent application, prior art cited during the patent examination, and other pertinent documents. See Rheox, Inc. v. Entact, Inc., 276 F.3d 1319, 1326 (Fed. Cir. 2002) (noting that the totality of the prosecution history includes "amendments to claims and arguments made to overcome or distinguish references.") (citing Elkay Mfg. Co. v. Ebco Mfg. Co., 192 F.3d 973, 979 (Fed. Cir. 1999)). "Although often producing ambiguities occasioned by ongoing negotiations between the inventor and the PTO, 'the prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be.'" Abbott Labs., 566 F.3d at 1288 (quoting Phillips, 415 F.3d at 1317). Statements made during prosecution can serve to disavow the scope of the patent, but only in situations where the

disclaimer is unambiguous. See id.; Computer Docking Station Corp. v. Dell, Inc., 519 F.3d 1366, 1374 (Fed. Cir. 2008) (“[A] patentee may limit the meaning of a claim term by making a clear and unmistakable disavowal of scope during prosecution.”) (quoting Purdue Pharma L.P. v. Endo Pharms., Inc., 438 F.3d 1123, 1136 (Fed. Cir. 2006)); Southwall Tech., 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.”) (citations omitted).

C. Extrinsic evidence

Beyond the claim language itself and the intrinsic record, a court is permitted to rely on extrinsic evidence, consisting of “all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises.” Markman, 52 F.3d at 980. Extrinsic evidence is to be used to aid in the Court’s interpretation of the claim language, but “not for the purpose of varying or contradicting the terms of the claim.” Id. (internal citation omitted); see Phillips, 415 F.3d at 317 (extrinsic evidence is “less significant than the intrinsic record”).

D. Means-plus-function format

A patent may describe a particular element in a “means-plus-function” format, meaning that the claim describes what the

particular element does (its function) rather than how it is made (its structure). See 35 U.S.C. § 112, ¶6.¹ If the means-plus-function format is adopted, that element is construed to cover the "corresponding structure, material or acts described in the specification." Id. This is designed to prevent a patent applicant from simply defining a term by its function, without also providing the structure or process that performs this function. Blackboard, Inc. v. Desire2Learn, Inc., 574 F.3d 1371, 1383 (Fed. Cir. 2009) (a mean-plus function claim is "essentially a black box that performs a recited function. But how it does so is left undisclosed.")

Where a claim term does not use the specific phrase "means," a rebuttable presumption is triggered that § 112, ¶ 6 does not apply. Lighting World, Inc. v. Birchwood Lighting, Inc., 382 F.3d 1354, 1358 (Fed. Cir. 2004) (internal citation omitted). This presumption is "not readily overcome" and the party seeking to rebut the presumption must show that the "claim

¹ The full text of section 112, paragraph 6 is as follows:

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.

Id.

term fails to recite sufficiently definite structure for performing that function." Id. (internal quotation marks and citation omitted).

If the Court determines that § 112 applies, the following two-step approach is employed to determine the means-plus-function limitation: (1) the claimed function must be identified in keeping with claim language and limitations expressly recited in the claims; and (2) the corresponding structures must be ascertained in the written description which perform those functions. Omega Eng'g., Inc. v. Raytek Corp., 334 F.3d 1314, 1322 (Fed. Cir. 2003); Fresenius USA, Inc. v. Baxter Int'l, Inc., 582 F.3d 1288, 1299 (Fed. Cir. 2009) ("It is firmly established in our precedent that a structural analysis is required when means-plus-function limitations are at issue; a functional analysis alone will not suffice.") (internal citation omitted).

V. TERM CONSTRUCTION

A. Undisputed Claim Terms

The parties do not dispute the meaning of the following terms:

| Claim Term | Parties' Undisputed Construction |
|------------------------------|---|
| "car call transmitter" ('465 | "a device with an input located in an elevator car that permits entry of a destination floor" |

| | |
|--|--|
| Patent, claim 3) | |
| "destination call report" (`465 Patent, claim 3) | "a data signal providing passenger conveying information that identifies the boarding floor and the destination floor" |

B. Disputed Claim Terms²

The following sets forth the claims which are disputed
by the parties.

| Claim Term | Plaintiff's Proposed Construction | Defendants' Proposed Construction |
|---|---|---|
| "modernized"/ "modernizing" (`861 Patent, claims 1, 2, 3, and 11); (`465 Patent, claims 1, 2, 3, and 10) | "exchanging at least one old component for at least one newer component" | "a more or less complete exchange of components in an elevator installation. This would include replacement of all the elevator components, including the elevator car, the elevator drive, the conveying cable, and the elevator control" |

In construing this term, both Plaintiff and Defendants
rely upon the specification of the `465 Patent,³ which states:

If after such a length of time a general overhaul of
the elevator installation is needed, the components
of the elevator installation are often old in terms
of technology, which obliges a more or less complete

² The parties have not proposed identical terms for
construction in these Markman proceedings. To the extent that
the parties have proposed overlapping, although not identical,
claim terms, the Court will address these claims together.

³ Defendants actually cite to the specification for the
'861 Patent; however, the relevant language in these patents is
identical and has no bearing on construction of this claim.

exchange of components. Such an exchange of components of an elevator installation is termed a "modernization" in the following. The modernization is often carried out in staggered time, wherein control units and elevator cars are modernized in a first stage, drives are modernized in the machine room in a further stage, and floor call transmitters are modernized at the individual floors in a final stage.

('465 Patent, col. 1:12-22.) Defendants seize on the language "a more or less complete exchange of components," and also cite to another portion of the specification which states that "at least one elevator 10, 10' is substantially completely modernized in each method step." (Id. col. 10:54-59.) Defendants argue that this language taken together indicates that Plaintiff meant to define "modernization" as a complete exchange of components that is performed through various steps, rather than merely a partial process in which only certain components are replaced.

Plaintiff counters that the specification further describes "modernization" to include "in one method step, the drive is modernized, the conveying cable of the elevator is modernized, the elevator control of this elevator is modernized" (Id. col. 3:49-54.) Plaintiff argues that this language indicates "modernization" occurs in stages such that it can include both: (1) the exchange of some components of an elevator installation; or (2) the exchange of individual components of an elevator installation. Plaintiff further cites language describing the modernization process as a "more or less complete

exchange of components" (id. col. 1:11-14); and that an "elevator is substantially completely modernized" (id. col. 10:58-59); to indicate that a total replacement of components is not required.

The Court concludes that Defendants' interpretation is more consistent with the principles of claim construction since the specification implies a type of complete modernization process. A patent's specification is recognized by the Federal Circuit as strong evidence of a claim's meaning even where this meaning arises by implication. See Phillips, 415 F.3d at 1321 (stating that the "specification 'acts as a dictionary when it expressly defines terms used in the claims or when it defines terms by implication.'") (quoting Vitronics, 90 F.3d at 1582); Irdeto Access, Inc. v. Echostar Satellite Corp., 383 F.3d 1295, 1300 (Fed. Cir. 2004) ("Even when guidance is not provided in explicit definitional format, the specification may define claim terms by implication such that the meaning may be found in or ascertained by a reading of the patent documents.") (internal citation omitted).

The specification clearly states that "[i]f after such a length of time a general overhaul of the elevator installation is needed, the components of the elevator installation are often old in terms of technology, which obliges a more or less complete exchange of components. Such an exchange of components of an elevator installation is termed a 'modernization' in the

following." ('465 Patent, col. 1:12-18) (emphasis added). The specification essentially defines the term "modernization" by characterizing it as a "general overhaul" of an elevator system which requires "a more or less complete modernization," both of which are more consistent with Defendants' proposed construction. Furthermore, the use of the adjective "complete" to describe the modernization process belies Plaintiff's proposed interpretation that only one old component needs to be replaced in order to modernize the elevator system.

Defendants' proposed construction, however, goes too far in adding the language that "modernization" would necessarily "include replacement of all the elevator components." The qualifying language "more or less" in describing the exchange of components forecloses the argument that each and every component needs to be replaced in order to complete the modernization process. Thus, Defendants' proposed construction oversteps the definitional limitations in the specification.

Therefore, the Court will adopt Defendants' proposed construction in part, and define the term "modernized" and/or "modernizing" as "a more or less complete exchange of components in an elevator installation." The Court concludes that this definition is most consistent with the specification as it incorporates the exact language used in the specification itself. See Phillips, 415 F.3d at 1321 (explaining that the specification

is the "single best guide to the meaning of a disputed term", and it "acts as a dictionary when it expressly defines terms used in the claims or when it defines terms by implication" (internal quotation marks and citation omitted).

| Claim Term | Plaintiff's Proposed Construction | Defendants' Proposed Construction |
|---|---|--|
| "modernizing device" ('861 Patent, claims 1, 2, 3, and 11); ('465 Patent, claims 1, 2, and 3) | "a device that interfaces between, and exchanges information between, a computing unit and an elevator control" | This claim term cannot be construed and renders all claims that use or incorporate this term indefinite. |

Defendants' position is that this term is a mean-plus-function claim term and it is indefinite because the specification fails to identify the structure of this modernizing device. Defendants contend that Plaintiff failed to define the physical and structural components of the "device" that is the subject of the Patents-in-Suit, and that since the term "device" does not include a definite structure, it should be construed as the equivalent of a "means," which requires particularized treatment under § 112, ¶ 6. See Ma. Inst. of Tech. v. Abacus Software, 462 F.3d 1344, 1354 (Fed. Cir. 2006) (noting that "[t]he generic terms 'mechanism,' 'means,' 'element,' and 'device,' typically do not connote sufficiently definite structure [to avoid means-plus-function treatment]") (emphasis

added).

Plaintiff responds that the term "modernizing device" does not qualify for means-plus-function treatment pursuant to § 112, ¶ 6. Plaintiff relies upon the presumption against this requirement when the claim does not use the word "means" in the claim language itself. See Lighting World, 382 F.3d at 1358. Furthermore, Plaintiff contends that the modernizing device is described with a sufficient physical structure to avoid this treatment because it includes a physical converter, a physical signal generator, a physical signal receiver, and may also include a data memory and processor. Plaintiff argues that these are all physical components that are connected to the overall system of the modernizing device, and therefore a sufficient structure is disclosed to avoid treatment as a means-plus-function limitation.

Furthermore, Plaintiff argues that the physical structure provided in the Patents-in-Suit connotes a definite structure to a person of ordinary skill in the art. Plaintiff asserts that the specification describes the modernizing device as including "at least one converter 361," "at least one signal generator 362," and "at least one signal receiver 363," such that an ordinarily skilled person would be able to practice the application of the recited modernizing device based upon the structure and functionality of these components. Therefore, the

parties' dispute centers on whether means-plus-function treatment is appropriate.

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." 35 U.S.C. § 112(6). Section 112, ¶ 6 applies only to "purely functional limitations that do not provide the structure that performs the recited function." Depuy Spine, Inc. v. Medtronic Sofamor Danek, Inc., 469 F.3d 1005, 1023 (Fed. Cir. 2006) (internal quotation marks and citation omitted). In order to determine whether a term is subject to means-plus-function treatment, the Court is to consider the phrasing of that claim element. The use of the word "means" creates a rebuttable presumption that a claim is employing means-plus-function language. Id. The absence of the word "means" creates a contrary presumption. The presumption against means-plus-function treatment "can be rebutted 'by showing that the claim term element recite[s] a function without reciting sufficient structure for performing that function." Id. (citing Watts v. XL Sys., Inc., 232 F.3d 877, 880 (Fed. Cir. 2000) (alteration in original)).

First, the Court finds that the presumption against means-plus-function treatment applies as the term "modernizing device" does not use the term "means." York Prods., Inc. v. Central Tractor, 99 F.3d 1568, 1574 (Fed. Cir. 1996) ("In determining whether to apply the statutory procedures of [§ 112, ¶ 6], the use of the word 'means' triggers a presumption that the inventor used this term advisedly to invoke the statutory mandates for means-plus-function clauses.").

Second, the Court concludes that the presumption is overcome here because the claim language fails to recite sufficient structure for performing the recited function. Cf. Apex Inc. v. Raritan Computer, Inc., 325 F.3d 1364, 1373 (2d Cir. 2003). In order to overcome this presumption, Defendants must demonstrate that "the claim term fails to 'recite sufficiently definite structure' or else recites 'function without reciting sufficient structure for performing that function.'" CCS Fitness, Inc. v. Brunswick Corp., 288 F.3d 1359, 1369 (Fed. Cir. 2002) (quoting Watts, 232 F.3d at 880).

Here, the presumption is overcome as Defendants have shown that the claim term recites a function without providing a sufficient structure for performing that function. As Defendants have noted, the claim language itself only refers to the "modernizing device" without providing any corresponding structure which performs this modernizing function. Plaintiff

concedes that it can point to nothing in the claim language itself which recites the structure for the "modernizing device." Instead, Plaintiff relies only on the language in the specification to supports its construction. Plaintiff, however, has not provided authority for the proposition that courts may ignore the claim language entirely and look solely to the specification in order to rebut the presumption against means-plus-function treatment.⁴ Cf. Altiris, Inc. v. Symantec Corp.,

⁴ Plaintiff cites to several cases which generally provide that a court may look beyond the claim language when construing the meaning of means-plus-function claims. See Cole v. Kimberly-Clark Corp., 102 F.3d 524, 531 (Fed. Cir. 1996) (pronouncing that the court "decide[s] on an element-by-element basis, based upon the patent and its prosecution history, whether § 112, ¶ 6 applies," but looking to the claim language to determine whether "perforation means . . . for tearing" required means-plus-function treatment); Personalized Media Communications, LLC v. Int'l Trade Com'n, 161 F.3d 696, 703-04 (Fed. Cir. 1998) (noting that "[t]hese presumptions can be rebutted if the evidence intrinsic to the patent and any relevant extrinsic evidence so warrant," but emphasizing that "the focus remains on whether the claim as properly construed recites sufficiently definite structure to avoid the ambit of § 112, ¶ 6"); Lighting World, 382 F.3d at 1360 (noting that dictionary definitions can be consulted in order to determine whether the term is understood in "common parlance or by persons of skill in the pertinent art to designate structure"); Linear Tech. Corp. v. Impala Linear Corp., 379 F.3d 1311, 1319-20 (Fed. Cir. 2004) (technical dictionary makes clear that "circuit" is structural in order to demonstrate that term was understood by person of ordinary skill in the art to avoid means-plus-function treatment); CCS Fitness, 288 F.3d at 1369 (same). However, none of the cases cited by Plaintiff, and no case uncovered by the Court's independent research, found that courts can look only to the description in the specification and find that sufficient structure existed to rebut means-plus-function treatment where the claim language itself provides no structural description.

318 F.3d 1363, 1376 (Fed. Cir. 2003) (noting that in cases where the Federal Circuit has found that sufficient structure exists to uphold the presumption against means-plus-function treatment, the claim language itself provided sufficient physical structure to perform the claimed function) (citing Envirco Corp. v. Clestra Cleanroom, Inc., 209 F.3d 1360, 1365 (Fed. Cir. 2000) (holding sufficient structure was recited where the limitation was "second baffle means" because it used the word "baffle" (a physical structure) and the claim "described the particular structure of this particular baffle"); Rodime PLC v. Seagate Tech., Inc., 174 F.3d 1294, 1303-04 (Fed. Cir. 1999) (holding a claim recited sufficient structure where the limitation was "positioning means" and the claim "provid[ed] a list of the structure underlying the means"); Verizon Cal., Inc. v. Ronald A. Katz Tech. Licensing, P.A., 326 F. Supp. 2d 1060, 1106 (C.D. Cal. 2003) (looking to the claim language to determine whether sufficient structure exists)). Here, as the claim language provides no physical structure used to perform the "modernizing" function, § 112, ¶ 6 applies.

Once a claim is defined in means-plus-function form, its scope is limited to particular structures or acts disclosed within the patent application's disclosure section and equivalents thereof. See In re Donaldson Co., 16 F.3d 1189, 1195 (Fed. Cir. 1994) (en banc) ("[I]f one employs means-plus-function

language in a claim, one must set forth in the specification an adequate disclosure showing what is meant by that language. If an applicant fails to set forth an adequate disclosure, the applicant has in effect failed to particularly point out and distinctly claim the invention as required by the second paragraph of section 112."). Having concluded that § 112 applies, the Court must now determine the appropriate means-plus-function limitation by: (1) identifying the claimed function in keeping with the claim language and limitations expressly recited in the claims; and (2) determining the corresponding structures in the written description which performs those functions. See Omega Eng'g., 334 F.3d at 1322. A means-plus-function clause fails for indefiniteness where a person of ordinary skill in the art would be unable to recognize the structure provided in the specification and associate it with the corresponding function in the claim. See Atmel Corp. v. Info. Storage Devices, Inc., 198 F.3d 1374, 1381-82 (Fed. Cir. 1999) (recognizing that a means-plus-function claim fails for indefiniteness where the corresponding structure of the claimed limitation is not disclosed); In re Dossel, 115 F.3d 942, 946 (Fed. Cir. 1997). Thus, in order for the Court to find that a means-plus-function claim is valid under § 112, the corresponding structure of the limitation "must be disclosed in the written description in such a manner that one skilled in the art will know and understand

what structure corresponds to the means limitation." Atmel, 198 F.3d at 1382.

First, the Court looks to the claim language to determine the claimed function for the "modernizing device." See JYW Enters., Inc. v. Interact Accessories, Inc., 424 F.3d 1324, 1330 (Fed. Cir. 2005) ("Determining a claimed function and identifying structure corresponding to that function involve distinct, albeit related, steps that must occur in a particular order."). Based on the claim language, the Court finds the claimed function of the "modernizing device" is as follows: (1) controlling the elevator in response to call reports ('861 Patent, claim 1; '465 Patent, claim 1); (2) converting the destination signal into a call report ('861 Patent, claim 1, '465 Patent, claim 1); (3) issuing the call report to the elevator control for controlling the elevator ('861 Patent, claim 1); (4) reading the destination signal ('861 Patent, claim 11); and (5) controlling the elevator control by way of a call report ('465 Patent, claim 1).

Second, the Court finds that the means-plus-function limitation fails for indefiniteness as it does not disclose a corresponding structure to this claimed function. As previously explained, § 112, ¶ 6 requires some disclosure of structure in the specification corresponding to the claimed means. "[W]hile it is true that the patentee need not disclose details of structures

well known in the art, the specification must nonetheless disclose some structure.” Default Proof Credit Card Sys., Inc. v. Home Depot U.S.A., Inc., 412 F.3d 1291, 1302 (Fed. Cir. 2005); see also Med. Instrumentation and Diagnostics Corp. v. Elekta AB, 344 F.3d 1205, 1211 (Fed. Cir. 2003) (“If the specification is not clear as to the structure that the patentee intends to correspond to the claimed function, then the patentee has not paid [the price for use of the convenience of broad claiming afforded by § 112, ¶ 6] but is rather attempting to claim in functional terms unbounded by any reference to structure in the specification. Such is impermissible under the statute.”). The focus of the Court’s inquiry is whether one of skill in the relevant art would understand the specification itself to disclose the necessary structure. Biomedino, LLC v. Waters Techs. Corp., 490 F.3d 946, 950-51 (Fed. Cir. 2007) (citation omitted).

Plaintiff argues that sufficient structure exists because the specification includes a drawing set forth in Figure 3 which demonstrates that the computing unit interfaces and exchanges information with the modernizing device via the data bus that connects the devices. (See Pl.’s Markman Brief 5.) The modernizing device is depicted in Figure 3 of the ‘861 Patent, which is reproduced below.

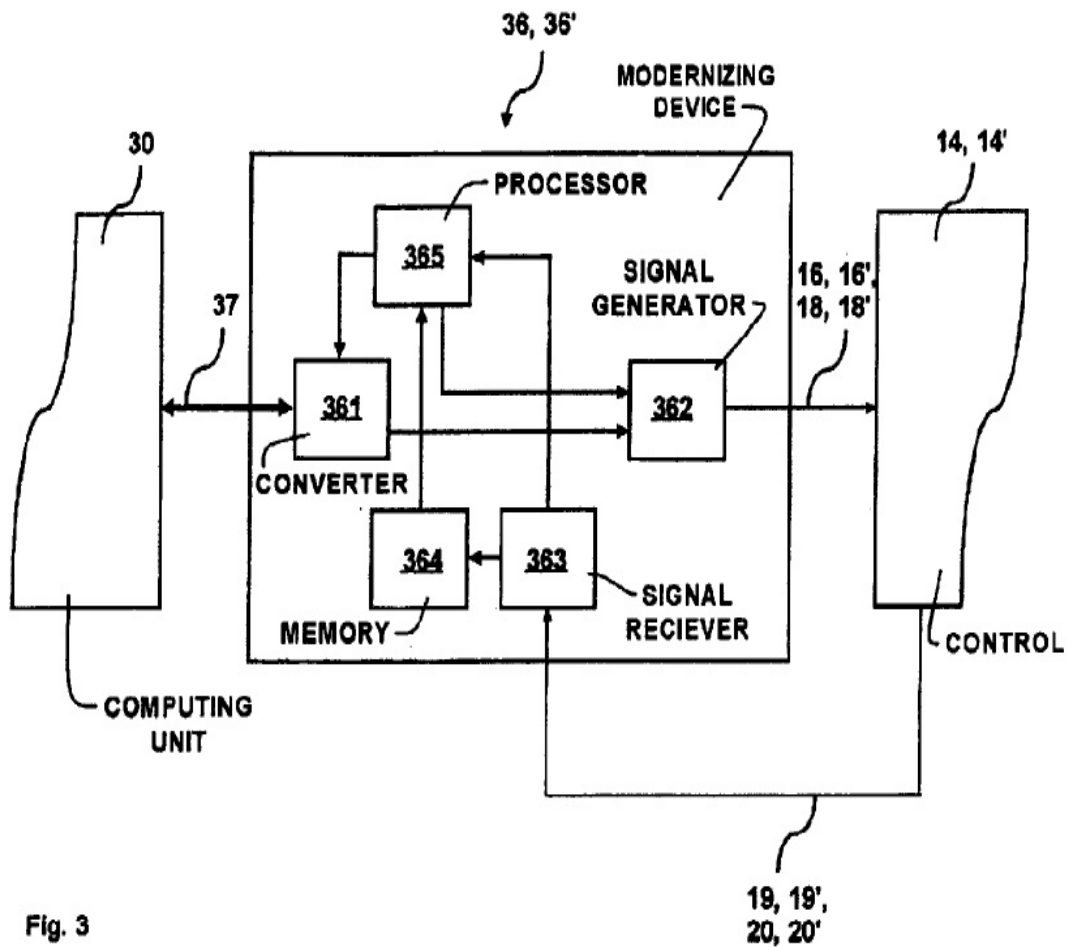


Fig. 3

Plaintiff contends that Figure 3 depicts the relationship between the computing unit and the modernizing device with double arrows in order to indicate that information is relayed back and forth between the components. Similarly, Plaintiff argues that Figure 3 depicts an arrow which shows that the information flows between the modernizing device and the elevator control. Therefore, Plaintiff asserts that Figure 3 provides sufficient detail for a person ordinarily skilled in the

art to reconstruct the disclosed structure.

The Court disagrees. Figure 3 provides only a generic and rudimentary depiction of the components that make up the modernizing device. It provides no detail as to how these components are physically connected and interact in order to perform the "modernizing" function claimed. See Cardiac Pacemakers, Inc. v. St. Jude Med., Inc., 296 F.3d 1106, 1113 (Fed. Cir. 2002) ("In order to qualify as corresponding, the structure must not only perform the claimed function, but the specification must clearly associate the structure with performance of the function."); Tech. Licensing Corp. v. Videotek, Inc., 545 F.3d 1316, 1338 (Fed. Cir. 2008) ("The question is not whether one of skill in the art would be capable of implementing a structure to perform the function, but whether that person would understand the written description itself to disclose such a structure.") (citing Biomedino, 490 F.3d at 953).

Plaintiff further argues that the specification of the '465 Patent describes the "modernizing device" in sufficient detail to enable a person of ordinary skill in the art to practice it because the specification states that the modernizing device includes: "at least one converter 361;" (2) "at least one signal generator 362;" and (3) "at least one signal receiver 363." ('465 Patent, col. 7:55-59; id. col. 7:66-8:56.) Plaintiff contends that because these components were generally

commercially available, the detailed description of the structure of the modernizing device would have enabled a person of ordinary skill in the art to practice the recited modernizing device.

Again, however, the description relied upon by Plaintiff in the specification relates only to the components which comprise the modernizing device but does not explain the exact structure of these components.⁵ See Cardiac Pacemakers, 296 F.3d at 1119 (noting that in order for the corresponding structure to be sufficient, it "must include all structure that actually performs the recited function"). Importantly, Plaintiff cites to no evidence, such as expert testimony, in support of its argument that a person of ordinary skill would have understood the disclosure in the specification as providing instruction on how to reconstruct these components in order to perform the "modernizing" function claimed by the Patents-in-Suit. See Med. Instrumentation, 344 F.3d at 1212 (explaining that expert testimony that a software programmer with ordinary skill in the pertinent art would be aware of programs that could be used to perform the recited function was insufficient and that the correct inquiry was to "look at the disclosure of the patent and

⁵ As Defendants point out, the specification describes the function that these components perform, but does not explain the internal structure of these components to instruct someone ordinarily skilled in the art to reconstruct the device, i.e., element "A" is connected to element "B" and element "B" is connected to element "C."

determine if one of skill in the art would have understood that disclosure to encompass software for digital-to-digital conversion and been able to implement such a program, not simply whether one of skill in the art would have been able to write such a software program"). As the Federal Circuit explained in Blackboard:

That ordinarily skilled artisans could carry out the recited function in a variety of ways is precisely why claims written in "means-plus-function" form must disclose the particular structure that is used to perform the recited function. By failing to describe the means by which the access control manager will create an access control list, Blackboard has attempted to capture any possible means for achieving that end. Section 112, paragraph 6, is intended to prevent such pure functional claiming.

574 F.3d at 1386.

Therefore, the Court concludes that the specification fails to disclose structure corresponding to the "modernizing" function that is sufficient to avoid indefiniteness.

| Claim Term | Plaintiff's Proposed Construction | Defendants' Proposed Construction |
|--|-----------------------------------|---|
| "a device for temporarily operating an elevator installation during modernization" | N/A | "the device is used while an elevator installation is undergoing a more or less complete exchange of components, and is removed then the modernization process is complete" |
| "a system for modernizing an elevator" | N/A | "a system used in connection with an elevator installation undergoing a more or less" |

| | | |
|--|------------|--|
| <p>installation"</p> <p>"a method for modernizing an elevator installation"</p> <p>('861 Patent, claims 1, and 11); ('465 Patent, claim 1)</p> | <p>N/A</p> | <p>complete exchange of components"</p> <p>"a method used in connection with an elevator installation undergoing a more or less complete exchange of components"</p> |
|--|------------|--|

Defendants argue that each of these claims need to be construed in light of the preamble phrase "modernizing." See Catalina Marketing Int'l, Inc. v. Coolsavings.com, Inc., 289 F.3d 801, 808 (Fed. Cir. 2002) ("In general, a preamble limits the invention if it recites essential structure or steps, or if it is 'necessary to give life, meaning, and vitality' to the claim.") (quoting Pitney Bowes, Inc. v. Hewlett-Packard Co., 182 F.3d 1298, 1305 (Fed. Cir. 1999)). Defendants contend that the phrase "modernizing" limits the claim terms to a very specific and limited type of process. Defendants argue that it is appropriate to construe the "modernizing" preamble as a limitation because it is an important fundamental characteristic of the patents and because it serves to distinguish it from prior art. See id.

Defendants contend that because the terms "modernization" and/or "modernizing" are used profusely

throughout the patents, these numerous references clearly indicate that the type of device contemplated by the patents is limited only to the specific application of "modernization." See Poly-America, L.P. v. GSE Lining Tech., Inc., 383 F.3d 1303, 1309-10 (Fed. Cir. 2004) (finding that the preamble "blown-film" constituted a claim limitation because it was an important and fundamental characteristic of the claimed invention where the preamble phrase was used repeatedly throughout the patents, including in the title, the summary of the invention, and the claims themselves). Defendants note that the Patents-in-Suit are replete with references to "modernization," such that it should be construed as a preamble limitation to these claims.

"Whether to treat a preamble as a limitation is a determination resolved only on review of the entire[] . . . patent to gain an understanding of what the inventors actually invented and intended to encompass by the claim." Corning Glass Works v. Sumitomo Elec. U.S.A., Inc., 868 F.2d 1251, 1257 (Fed. Cir. 1989). "No litmus test defines when a preamble limits claim scope." Catalina Marketing, 289 F.3d at 808. Although a preamble is construed as a claim limitation if it is "necessary to give life, meaning, and vitality" to the claim; it is not construed as limiting "where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention." Poly-

America, 383 F.3d at 1309-10 (internal quotation marks and citations omitted).

The Court agrees with Defendants that the prevalence of the use of the term "modernization" as a preamble throughout the Patents-in-Suit renders it a fundamental characteristic of the invention, such that it must be construed as a claim limitation. Relying upon the rationale of Poly-America, where the term "modernization" is employed repetitively throughout all aspects of the claims and specification, the Court concludes that this was intended as a "fundamental characteristic" of the patents and should be construed as a substantive claim limitation. See id.; see also Gen. Elec. Co. v. Nintendo Co., Ltd., 179 F.3d 1350, 1361-62 (Fed. Cir. 1999) (where the specification made clear that the invention was a mode of display of binary data on a raster scanned display device rather than all display devices, the preamble language "displaying a pattern on a raster scanned display device by mapping bits" was a claim limitation).

Therefore, the Court will adopt Defendants' proposed construction of the terms set forth above.

| Claim Term | Plaintiff's Proposed Construction | Defendants' Proposed Construction |
|--|--|--|
| "elevator installation" ('861 Patent, claims 1 and | "a group of elevators that convey users in a building where the elevators are controlled by at least | "the entire group of associated elevators that convey passengers in a building, each elevator being controlled by an elevator control" |

| | | |
|-------------------------------------|-----------------------|--|
| 11); ('465 Patent, claims 1 and 10) | one elevator control" | |
|-------------------------------------|-----------------------|--|

The term "elevator installation" is recited in Claim 1 of each of the Patents-in-Suit. In order to construe this claim, the Court will look first to the language of the claim itself, and then to the existing intrinsic evidence where the definition is not clearly stated in the claim itself.

The parties dispute whether this claim requires only one elevator control for the group of elevators or that each elevator be controlled by its own elevator control. The relevant claim language explicitly recites an elevator installation as "having at least one elevator and at least one elevator control for controlling the elevator in response to call reports." ('861 Patent, col. 11:7-10). Importantly, the claim language provides that the "elevator installation" includes an elevator control for "controlling the elevator." The singular form used by the claim language suggests that one elevator control is necessary for each elevator. Thus, as the claim language itself is at least ambiguous as to whether a separate elevator control is required for each elevator, the Court will review the available intrinsic evidence to resolve the ambiguity. See Teleflex, Inc. v. Ficos N. Am. Corp., 299 F.3d 1313, 1325 (Fed. Cir. 2002) ("The specification may assist in resolving ambiguity where the

ordinary and accustomed meaning of the words used in the claims lack sufficient clarity to permit the scope of the claim to be ascertained from the words alone.”)

Turning to the specification, the Background Section to the '465 Patent states that “[t]he elevator installation consists of a group of elevators that convey passengers in a building, where each elevator is controlled by an elevator control.” (‘465 Patent, col. 1:24-26.) (emphasis added). This phrasing is more consistent with Defendants’ proposed interpretation that each elevator is controlled by its own elevator control. See Bell At. Network, 262 F.3d at 1271 (“[W]hen a patentee uses a claim term throughout the entire patent specification, in a manner consistent with only a single meaning, he has defined that term ‘by implication.’”) (quoting Vitronics Corp., 90 F.3d at 1582). Accordingly, the Court concludes that “elevator installation” means “a group of elevators that convey passengers in a building, where each elevator is controlled by an elevator control.”⁶

⁶ Defendants contend that the term “elevator installation” should be defined as the “entire group of associated elevators” since the entire elevator installation is to be modernized together. (See Defs.’ Opening Markman Br. 39.) Defendants provide no citation in support of such an argument, and the Court refuses to read such a limitation into the claim where it is not contained in either the claim itself or the corresponding specification.

| Claim Term | Plaintiff's Proposed Construction | Defendants' Proposed Construction |
|--|--|--|
| "elevator control" ('861 Patent claims, 1, 2, 3, and 11); ('465 Patent claims 1, 2, 3, and 10) | "a device for controlling the operation at least one elevator" | "an existing device that controls the operation of the elevator - the identical elevator control that was in place before modernization" |

The critical distinction between the proposed constructions submitted by Plaintiff and Defendants is whether the "elevator control" must be "existing," i.e., "the identical elevator control that was in place before modernization." Defendants' position is that the Patents-in-Suit contemplate that the elevator control itself is not replaced as part of the modernization process, rather the same elevator control is re-used during modernization. Defendants rely upon the prosecution history to the Patents-in-Suit, in which Plaintiff submitted amendments to the specification in order to distinguish its patents from prior art. These amendments state

The present invention, in contrast, is a modernizing device that is temporarily connected to an existing elevator installation (such as that shown in Fig. 1) having an elevator control that operates in response to call reports generated from hall call transmitters and car call transmitters. The modernizing device, a computing unit and floor terminals are temporarily connected to the existing elevator control for generating destination calls and converting the destination calls into call reports that can be used by the existing elevator control to operate the elevator during modernization. Once modernization of

the elevator installation is complete, the modernizing device is removed.

Neither the Sirag Jr. patent nor Schuster patent shows or suggests the claimed modernizing device that is temporarily connected to an existing elevator control wherein destination call reports are generated and converted to call reports that can be used to continue to operate the existing elevator control during modernization.

(Defendants' Opening Markman Br. Appx. 116) (emphasis added). The "Sirag Jr." patent referenced above "shows a permanent elevator control with software for controlling car allocation in an elevator installation via destination call control." (Id. at 115.) The "Schuster" patent referenced above "shows a permanent elevator control that provides for user input of operating program modifications." (Id.)

Defendants rely upon this language in arguing that the Patents-in-Suit require re-use of the existing elevator control, such that new or modified controls are outside the scope of the patents. In order for statements in the prosecution history to limit a claim, the disavowal must be unambiguous. See Abbott Labs., 566 F.3d at 1288. Here, the amended submission to the PTO cited by Defendants makes clear that the Patents-in-Suit relate to an "existing" elevator control. Therefore, the Court finds that Defendants' limitation is proper based on Plaintiff's attempt to distinguish the Patents-in-Suit from the "Sirag Jr." and "Schuster" prior art. See Seachange Int'l, Inc. v. C-COR, Inc., 413 F.3d 1361, 1372-73 (Fed. Cir. 2005) ("Where an

applicant argues that a claim possesses a feature that the prior art does not possess in order to overcome a prior art rejection, the argument may serve to narrow the scope of otherwise broad claim language.").

Furthermore, Defendants cite to the following two instances in which Plaintiff described the Patents-in-Suit with respect to an "existing" elevator control:

- (1) The device reads the destination signal, converts it into at least one call report and controls an **existing** elevator control by the call report.

('465 Patent, Abstract) (emphasis added).

- (2) In the present case, the **existing** elevator control 14, 14' is controlled by the computing unit 30 indirectly by way of the modernizing device 36, 36'.

(Id., col. 7:35-38.) (emphasis added).

These references support the construction that the elevator control contemplated by the Patents-in-Suit must already be in place prior to the modernization process, thereby precluding any new or modified elevator controls from being encompassed by the Patents-in-Suit.

Plaintiff appears to concede the point that the elevator control must be "existing" in its brief submitted for the Markman hearing. (See Pl.'s Opening Markman Brief 2) ("The computing unit executes the destination dispatch algorithm, assigns elevators to particular passengers, and controls the **existing elevator control equipment** via the modernizing

devices.") (emphasis added); (id. 4) ("The destination signals are received by the modernizing devices 36, which in turn instruct **existing elevator controls** 14 to execute the appropriate instructions") (emphasis added); (id. 5) ("These call reports may then be issued to **existing elevator control** 14 by signal generator 362 over, for example, a plurality of electrical lines.") (emphasis added).

Based upon the prosecution history and implied definition provided by the abstract and specification, the Court concludes that the term "elevator control" means "an existing device that controls the operation of the elevator - the identical elevator control that was in place before modernization."

| Claim Term | Plaintiff's Proposed Construction | Defendants' Proposed Construction |
|---|--|--|
| "call report" ('861 Patent, 861 claims 1, 2, 3 and 11); ('465 Patent claim 1) | "a signal providing passenger conveying information" | The claim term is too ambiguous to be construed. |

Plaintiff argues that its definition is supported by the specification describing call reports in the context of users operating elevator cars in which a first call report can "indicate a conveying destination (upwards or downwards) or a boarding floor" and a second call report indicates a "destination

floor." ('465 Patent col. 4:59-67.) Plaintiff further argues that another embodiment of a "call report" is a "destination call report," which is defined in the specification as including "data regarding not only the boarding floor, but also the destination floor." (Id. col. 6:18-19.).

Defendants counter that the term "call report" is invalid based on its ambiguity. Defendants emphasize that, at a minimum, the construction of "call report" must include some limitation concerning it to use for controlling the elevator control.

With respect to Defendants' indefiniteness argument, the issues before the Court with respect to this term are whether it is indefinite, and if not, what its proper construction should be. "If the meaning of the claim is discernible, even though the task may be formidable and the conclusion may be one over which reasonable persons will disagree, [the Federal Circuit has] held the claim sufficiently clear to avoid invalidity on indefiniteness grounds." Exxon Res. & Eng'g Co. v. United States, 265 F.3d 1371, 1375 (Fed. Cir. 2001). "A claim will be found indefinite only if it is insolubly ambiguous, and no narrowing construction can properly be adopted" Praxair, Inc. v. ATMI, Inc., 543 F.3d 1306, 1319 (Fed. Cir. 2008) (internal quotation marks and citation omitted). In contrast, a claim term is definite if it can be given any reasonable meaning.

See Young v. Lumenis, Inc., 492 F.3d 1336, 1346 (Fed. Cir. 2007) (citing Datamize, LLC v. Plumtree Software, Inc., 417 F.3d 1342, 1347 (Fed. Cir. 2005)).

A reasonable meaning for the term "call report" can be derived from the specification. As cited by Plaintiff above, the specification describes a "call report" to be "for example, analog electrical signals of defined current strength, voltage, frequency, period, etc." ('465 Patent, col. 5:37-40.) The specification further provides that a "call report" includes both a "boarding floor" and a "destination floor" for a passenger. (See id. col. 4:59-67; id. col. 6:18-19.). Based on these descriptions, the Court finds that the term "call reports" is not ambiguous as its meaning could be discerned by a person of ordinary skill in the art.

Despite rejecting Defendants' indefiniteness argument, the Court recognizes that Defendants present a valid limitation that the term "call report" should be restricted to information "used to control the elevator control." The express words of the claims themselves are clear that "call reports" are generated in order to be used by the elevator control. (See '861 Patent, col. 12:33-34) ("having at least one elevator and an elevator control for controlling the at least one elevator by a call report"); (id. col. 12:51-52) ("converting said destination signal into a call report for use by the elevator control in controlling the

elevator”); (‘465 Patent, col. 11:7-8) (“having at least one elevator control by way of at least one call report”); (id. col. 11:23-25) (“for converting the destination signal into at least one call report and for controlling the elevator control by way of the call report”). In these references, “call reports” are explicitly described as being used by the elevator control in performing its function. In light of this limiting language contained in the claims themselves, the Court concludes that the term “call report” means “a signal providing passenger conveying information used to control the elevator control.”

| Claim Term | Plaintiff’s Proposed Construction | Defendants’ Proposed Construction |
|--|---|-----------------------------------|
| “floor terminal” (‘861 Patent claim 11); (‘465 Patent claim 1) | “a device for allowing a user to provide a destination floor or an identification code” | N/A |

In support of its proposed construction, Plaintiff cites directly to the specification for the Patents-in-Suit. The specification provides that “the destination call control comprises at least one floor terminal that is mounted at a floor. A passenger inputs a destination call at the floor terminal or an identification code of the passenger is recognized at the floor terminal.” (‘861 Patent, col. 2:8-12; ‘465 Patent, col. 2:10-

14.) Therefore, the "floor terminal" is described in terms of accepting a destination call through either manual input from a passenger or the recognition of an identification code from a passenger.

The specification is consistent with language of the claims themselves and serves to supplement the meaning provided in the claims. Accordingly, the Court will adopt Plaintiff's proposed construction that "floor terminal" means "a device for allowing a user to provide a destination floor or an identification code."

| Claim Term | Plaintiff's Proposed Construction | Defendants' Proposed Construction |
|--|-----------------------------------|-----------------------------------|
| "at least one of [A] and [B]" ('861 Patent, claim 1); ('465 Patent, claim 1) | "[A] or [B]" | See below. |

| Claim Term | Plaintiff's Proposed Construction | Defendants' Proposed Construction |
|---|--|---|
| "floor terminal . . . operative for at least one input of destination call reports and recognition of | "operative for input of destination call reports or recognition of identification codes of passengers" | To the extent these claim terms can be construed, the floor terminal must perform <u>both</u> the functions of inputting destination call reports <u>and</u> recognizing identification codes; and the computing unit must perform <u>both</u> the functions of evaluating destination call |

| | | |
|---|---|--|
| <p>identification codes of passengers"</p> <p>('861 Patent, claim 11)</p> <p>"floor terminal . . . for at least one of the input of destination call reports and for recognition of identification codes of users"</p> <p>('465 Patent, claim 1)</p> <p>"computing unit . . . for at least one of evaluating the destination call reports and association of destination floors with recognized ones of the identification codes"</p> <p>('465 Patent, claim 1)</p> | <p>"for the input of destination call reports or for recognition of identification codes of users"</p> <p>"for evaluating the destination call reports or for association of destination floors with recognized ones of the identification codes"</p> | <p>reports <u>and</u> associating destination floors with recognized identification codes.</p> |
|---|---|--|

Here, the parties have not submitted identical terms, however, the terms sought to be defined are similar. More

importantly, the Court's interpretation of these terms will produce a single result - namely, these terms will be construed either in the disjunctive or the conjunctive.

Plaintiff argues in favor of the disjunctive interpretation on the basis that the specification does not disclose a single embodiment in which both of the stated functions are required and application of the conjunctive formulation does not make grammatical sense. Plaintiff concedes that the prosecution history indicates that the original submission to the PTO stated a claim for "installing at least one floor terminal at each floor served by an elevator controlled by an elevator control for the input of destination call reports or for recognition of identification codes of users." (Pl.'s Opening Markman Br. 20) (emphasis added). The Patent Examiner rejected Inventio's original claims as indefinite because the "or" terminology made the claim alternative. (See Defs.' Opening Markman Br. Appx. 278.) Plaintiff amended its claim to include language of "at least one of [A] and [B]" in order to overcome this rejection for indefiniteness. (See id. 267, 271.) (emphasis added). Plaintiff argues that this amendment was not intended to substantively narrow the scope of its claim, but rather it was intended merely to overcome the Patent Examiner's formalistic objection to the use of the term "or."

Plaintiff further contends that the specification for

the '465 Patent supports the disjunctive formulation.

Specifically, Plaintiff cites to the following statements:

- The floor terminals . . . each comprise at least one manual input means . . . for input of a destination call report or at least one recognition device . . . for the recognition of at least one identification code. ('465 Patent, col. 6:8-10.)

- A user inputs, at a boarding floor, a destination call report by way of the manual input means . . . or the user carries the identification 10 transmitter . . . and communicates an identification code to the recognition device. (Id. col. 8:7-14.)

- The floor terminal . . . communicates to the computing unit 30 by way of the data bus 37 a conveying signal corresponding with the destination call report or an identification signal corresponding with a recognized identification code. (Id. col. 8:15-19.)

- The computing unit 30 executes at least one computer program product for the evaluation of destination call reports or for the association of recognized identification 30 codes with destination floors. (Id. col. 6:27-30.)

- The computing unit 30 executes the computer program product and ascertains at least one conveying result for the conveying signal or for the identification signal. (Id. col. 8:20-23.)

Plaintiff posits that these statements clearly convey that the functions performed with respect to the call reports and identification codes are exclusive of one another, and therefore this language militates in favor of applying the disjunctive construction.

Plaintiff distinguishes the instant case from the decision of the Federal Circuit in Superguide Corp. v. Directtv Enterprises, Inc., 358 F.3d 870, 885-888 (Fed. Cir. 2004), in which the court held that the phrase "at least one of" modified each component of the qualified list enumerated in the patent. Superguide involved patents for interactive electronic television programming guides and the "at least one of" language addressed different categories of program information (e.g., start time, end time) that needed to be included for an online television system. Id. at 885. In Superguide, the Federal Circuit determined that the "plain and ordinary meaning" of the phrase "at least one of [A], [B], [C], and [D]" is the conjunctive formulation, and that there is a rebuttable presumption that the plain and ordinary meaning should apply. Id. at 886-87. The court concluded that nothing existed in the patent specification that served to rebut the presumption, and relied upon the fact that under the particular patent embodiment, a value had to be assigned for each category in the list. Id. at 886-87.

Plaintiff argues that the presumption for application

of the plain meaning is rebutted in this circumstance because every embodiment disclosed in the '465 Patent's specification indicates that only one of the enumerated requirements (i.e., call reports or identification codes) needs to be present.

Similarly, Plaintiff contends that if the conjunctive formulation adopted in Superguide is applied here, it would not make grammatical sense based on the linguistic structure of the instant claims. Plaintiff emphasizes that unlike Superguide, in which there could conceivably be more than one entry within each enumerated category, the Patents-in-Suit do not refer to different categories but are independent types of action that cannot occur simultaneously. In other words, Superguide addressed a television system that allowed a user to input a start time, end time, and program type into the system, whereas, the Patents-in-Suit would only allow for a user to manually input a destination call report or have one automatically generated by an identification code at a single time, i.e., the use of one method would render the other superfluous for that passenger. Plaintiff argues that applying the "at least" language to each clause would create an absurd grammatical result, and therefore, the disjunctive formulation is appropriate here. See Joao v. Sleepy Hollow Bank, 348 F. Supp. 2d 120, 124 (S.D.N.Y. 2004) (analyzing the phrase, "wherein the banking transaction is at least one of a clearing transaction, a check clearing

transaction, an account charging transaction, and a charge-back transaction," and concluding that because a single banking transaction cannot be all four, a conjunctive reading would be nonsensical).⁷

Defendants counter that the prosecution history indicates an express renunciation of the interpretation that Plaintiff now seeks to apply. Defendants argue that the conjunctive interpretation is more consistent with the scope of the Patents-in-Suit. Defendants emphasize that the language cited by Plaintiff in the specification contemplates that the floor terminal or computing unit must be able to accomplish both of the enumerated functions. In other words, Defendants do not contest Plaintiff's point that the individual actions of a manual input and the recognition of an identification code are mutually exclusive with respect to an individual passenger (i.e., the elevator would not perform more than one function for a passenger at a given time). Rather, Defendants argue that both functions must be available to a particular passenger. Defendants stress this point by noting that in practical terms, an elevator system

⁷ Certain courts that have addressed the holding in Superguide have found that it does not dictate a bright-line rule, but rather the phrase "at least one of" must be read in light of the specification to ensure an appropriate grammatical result. See Rowe Int'l Corp. v. Ecast, Inc., 500 F. Supp. 2d 891, 909 (N.D. Ill. 2007); Joao, 348 F. Supp. 2d at 124; Power-One, Inc. v. Artesyn Techs., Inc., No. 05-463, 2007 WL 896093, at *14 (E.D. Tex. Mar. 22, 2007).

could not be limited to recognition of identification codes alone because this would only permit a passenger to travel to the pre-determined floor associated with that identification code.

The court in Automotive Technologies Int'l v. BMW of N. Am., No. 01-71700, 2004 WL 5465964, at *10 (E.D. Mich. Mar. 31, 2004), addressed a similar argument. There, the court addressed the means for mounting a vehicle sensor "onto at least one of a side door of the vehicle and a side of the vehicle between the centers of the front and rear wheels." Id. The court rejected the plaintiff's argument that the term "and" could be interpreted in the disjunctive. Id. at *11. Instead, the court determined that the plain meaning militated in favor of interpreting the language as requiring that the sensor "must be capable of being mounted on one of the side doors of the vehicle and one of the sides of the vehicle." Id. The court concluded that this language did not require that the sensor be mounted at both locations at the same time, but only that the sensor have the capability to be mounted at either location. Id. Similarly here, Defendants argue that the Patents-in-Suit need not perform both functions simultaneously, but rather that the device be capable of performing both functions when required.

In light of the existing case authority, the Court disagrees with Plaintiff's arguments on both grounds. First, the Court rejects Plaintiff's contention that it intended only a

formalistic amendment when it changed the claim language from "or" to "and" to overcome the Patent Examiner's indefiniteness rejection. Plaintiff's reliance merely on its subjective intent that it did not intend a substantive change by submitting the altered language is inapposite. See Seachange, 413 F.3d at 1375 ("Courts must 'view [] the prosecution history not for . . . applicant's subjective intent, but as an official record that is created in the knowledge that its audience is not only the patent examining officials and the applicant, but the interested public.'") (quoting Biogen, Inc. v. Berlex Labs., Inc., 318 F.3d 1132, 1139 (Fed. Cir. 2003)); Markman, 52 F.3d at 985 ("The subjective intent of the inventor when he used a particular term is of little or no probative weight in determining the scope of a claim (except as documented in the prosecution history)"). There is nothing from the face of the prosecution history itself to indicate that the change submitted by Plaintiff should be construed merely as formalistic rather than substantive. Without a more detailed explanation as to the basis for submitting the altered claim language to the PTO, the prosecution history indicates that Plaintiff has waived the disjunctive interpretation it now seeks to assert.

Even if the Court accepted Plaintiff's contention that the claim amendment in the prosecution history did not serve to limit the scope of the claims, the Court disagrees with

Plaintiff's construction of the disputed claim language. In accordance with the teachings in Superguide, the Court concludes that Plaintiff has presented insufficient evidence in the record to rebut the presumption that the disjunctive construction was intended for the Patents-in-Suit. It is true that the statements in the specification cited by Plaintiff indicate that a passenger would utilize only a manual call report or identification code at a single time, however, these statements are not inconsistent with the construction that the Patents-in-Suit must still be capable of performing both functions.

The Court recognizes that the stated functions pertaining to call reports and identification codes in the above-referenced claims are mutually exclusive, meaning that only one is capable of being performed at a given time. This fact alone, however, does not lead to a grammatically absurd result. The critical distinction for purposes of this case is between the performance of both functions simultaneously and the capability to perform both functions. The Court finds that this conjunctive construction is most consistent with the language and scope of the Patents-in-Suit.⁸

⁸ The conjunctive interpretation is particularly compelling in this case because, as Defendants point out, applying the disjunctive construction would create an incongruous result because the elevator system using only identification codes would not let a passenger travel to a destination floor other than that pre-determined floor associated with that passenger's identification code.

| Claim Term | Plaintiff's Proposed Construction | Defendants' Proposed Construction |
|--|--|--|
| "identification code[s]" ('861 Patent, claim 11); ('465 Patent, claim 1) | "a code used to identify a particular passenger" | "a code that unambiguously identifies each individual passenger and is associated with that passenger's destination floor" |

The dispute between the parties with respect to this term is whether the "identification code" must also include information about the passenger's destination floor. Plaintiff posits that the identification code need not necessarily identify a particular destination floor and relies on the fact that a floor terminal may include a "recognition device" that serves to recognize the identification code. The function of the recognition device is described in the specification as follows:

[T]he user carries the identification transmitter . . . and communicates an identification code to the recognition device . . . of the floor terminal . . . which identification code is recognized by the recognition device.

('465 Patent col. 8:9-14.) When the recognition device recognizes an identification code, it communicates to the computing unit an identification signal corresponding with the recognized identification code, whereby the computing unit then "assigns a predetermined destination floor to [the] identified passenger[]" based on the identification signal. (Id. col. 8:15-19; id. col. 2:30-34.) Therefore, Plaintiff argues that it is

actually the computing unit that assigns the destination floor to a particular identification code, and that the association between the passenger and the destination floor is not inherent in the "identification code" itself.

Defendants respond that a particular passenger is unambiguously identified with an "identification code" by way of a "user profile." Defendants cite to the following language in the specification describing "user profiles" generated by identification codes:

This user profile is unambiguously identifiable by way of an identification address. Exactly one identification code exists for each identification address. For example, an identification address is able to be exactly associated with an identification code when the identification address and identification code are identical.

('861 Patent, col. 6:61-67.) Defendants contend that based upon this generated user profile, an identification code unambiguously identifies both the individual passenger and the passenger's destination floor.

As no plain and ordinary meaning can be discerned from the claim itself, the Court will look to intrinsic evidence, specifically the specification, in order to construe this claim. The Court finds that the cited language from the specification concerning "user profiles" indicates that an identification address is inherently associated with an identification code, such that it should be read as a claim limitation.

Furthermore, while Plaintiff's proposed construction may be technically accurate, Defendants' proposed construction comports with a common-sense reading of how the term "identification code" would be understood by a person skilled in the art, in that the identity of the passenger is irrelevant to the functioning of the elevator system unless the destination floor is also communicated. In other words, the only purpose of the recognition of the identity of the passenger is to determine the appropriate destination floor for the elevator, such that merely identifying the passenger is immaterial in terms of the functioning of the elevator system. See Lisle Corp. v. A.J. Mfg. Co., 398 F.3d 1306, 1313-14 (Fed. Cir. 2005) (rejecting plaintiff's "hyper-technical reading" of a claim limitation and instead relying on the specification to "attain a common-sense meaning of that claim limitation"). When read in the context of the entire Patents-in-Suit, including the specification, the Court concludes that the term "identification code" means "a code that identifies each individual passenger and is associated with that passenger's destination floor."

| Claim Term | Plaintiff's Proposed Construction | Defendants' Proposed Construction |
|---|-----------------------------------|---|
| "recognition of identification codes of passengers" ('861 Patent, claim 11); | N/A | "the passenger identification codes are associated with each individual passenger's identity as well as that passenger's destination floor" |

| | | |
|----------------------------|--|--|
| ('465 Patent, claim 1) | | |
|----------------------------|--|--|

Defendants note that the Patents-in-Suit fail to establish the meaning of the term "recognition" as it relates to identification codes. Plaintiff has provided no counter-definition of the term "recognition" as it relates to identification codes.

The Court finds that the definition of the term "recognition" cannot be discerned from the plain meaning of the claim language or the specification. Therefore, it is appropriate to look to extrinsic evidence to inform the meaning of "recognition." See generally Phillips, 415 F.3d at 1318 (noting that dictionaries, and in particular technical dictionaries, "have been properly recognized as among the many tools that can assist the court in determining the meaning of particular terminology to those of skill in the art of the invention"); Alloc, Inc. v. Int'l Trade Comm'n, 342 F.3d 1361, 1368 (Fed. Cir. 2003) ("Dictionaries and scientific treatises may also help supply the pertinent context and usage for claim construction.") (citations omitted). The McGraw-Hill Dictionary of Scientific and Technical Terms defines "recognition" as "[t]he act or process of identifying (or associating) an input with one of a set of possible known alternatives, as in character recognition and pattern recognition." McGraw-Hill Dictionary of

Scientific and Technical Terms 1761 (6th ed. 2003). This meaning controls “unless the intrinsic evidence clearly redefines the claim term so as to put one reasonably skilled in the relevant art on notice that [the patent applicant] intended to assign the term a different meaning.” Union Carbide Chemicals & Plastics Tech. Corp. v. Shell Oil Co., 308 F.3d 1167, 1177 (Fed. Cir. 2002) (citation omitted).

The Court finds that this dictionary definition of recognition, meaning “identifying” or “associating,” is consistent with the available intrinsic evidence as explained above. Therefore, the Court concludes that “recognition of identification codes of passengers” means “the passenger identification codes are associated with each individual passenger’s identity as well as that passenger’s destination floor.”

| Claim Term | Plaintiff’s Proposed Construction | Defendants’ Proposed Construction |
|--|--|--|
| “computing unit” (’861 Patent, claims 1 and 11); (’465 Patent, claim 1) | “a data processor capable of executing a computer program, for example, for evaluating destination call reports or for associating identification codes with destination floors” | This claim term cannot be construed and renders all claims that use or incorporate this term indefinite, and ultimately invalid. |

As a threshold matter, the parties dispute whether the term “computing unit” is subject to means-plus-function treatment. Plaintiff argues that the term “computing unit” does

not qualify as a means-plus-function limitation under § 112, ¶ 6. First, Plaintiff notes that the absence of the term "means" triggers a presumption against application of § 112, paragraph 6. See Lighting World, 382 F.3d at 1328. Second, Plaintiff cites to LG Elec., Inc. v. Bizcom Elec., Inc., 453 F.3d 1364 (Fed. Cir. 2006), overruled on other grounds by, Quanta Computer, Inc. v. LG Elec., Inc., 128 S. Ct. 2109 (2008), in support of its argument that the term "computing unit" is not subject to § 112. In LG Electronics, the Federal Circuit held that the term "control unit" was subject to the presumption against means-plus-function treatment and held that the presumption was not overcome because the claim itself "provide[d] sufficient structure, namely 'a CPU and a partitioned memory system,' for performing the stated function, 'controlling the communication unit.'" Id. at 1373. Plaintiff contends that the description of the term "computing unit" as being a "commercially available personal computer or workstation," and "includ[ing] at least one processor and at least one data memory," is sufficient to determine that "computing unit" is not a means-plus-function limitation. Plaintiff argues that these descriptions in the specification contain sufficient structure for the term "computing unit" to preclude application of § 112, ¶ 6.

Defendants respond that the means-plus-function treatment applies to "computing unit" because the claims provide

no structure other than to describe the relevant function. Defendants emphasize that the following descriptions of the "computing unit" relate strictly to the functions which the "computer program product" performs as executed by the "computing unit":

- (1) evaluates destination call reports;
- (2) associates recognized identification codes;
- (3) records an input time of each destination call report with a statement of the boarding floor as well as the desired destination floor;
- (4) compares the distance between the boarding floor and the actual position of the elevator car;
- (5) computes the distance between the boarding floor and the destination floor;
- (6) considers the actual user presence and computes possible intermediate stops;
- (7) performs an optimization and ascertains for each destination call report a conveying result, denoting the most favorable elevator for conveying the passenger;
- (8) records a recognition time of a recognized identification code;
- (9) compares a recognized identification code with the identification address of stored user profiles;
- (10) records the destination floor.

(See Defs.' Opening Markman Br. 20-21.) Defendants contend that only the functions performed are described in the Patents-in-Suit and that no explanation is provided as to the structure that performs the recited functions, thereby triggering application of § 112, ¶ 6.

Defendants also distinguish LG Electronics on the ground that in that case the claim itself provided a sufficient and definite structure, i.e., a CPU and a partitioned memory system, whereas here the claims themselves lack any analogous

description of the structure of the "computing unit."

The Court concludes that the presumption against means-plus-function treatment applies as the term "computing unit" does not use the term "means," see York Prods., 99 F.3d 1568 at 1574, however, this presumption is overcome because the claim language itself does not provide sufficient structure to perform the recited function. See Apex, 325 F.3d at 1373. Again, Plaintiff cites only to the language in the specification, rather than the claim language itself, as describing the structure for the function of the "computing unit."

The Court agrees with Defendants that the instant case is distinguishable from LG Electronics. In LG Electronics, the Federal Circuit found that "control unit" was not a means-plus-function limitation because "[t]he claim itself provide[d] sufficient structure, namely 'a CPU and a partitioned memory system,' for performing the stated function, 'controlling the communication unit.'" 453 F.3d at 1372. Unlike LG Electronics, Plaintiff here concedes that nothing in the claim language itself provides the corresponding structure, rather Plaintiff relies on the description provided in the specification. As explained above, in determining whether the means-plus-function presumption is overcome, courts look to the language of the claims themselves to discern whether sufficient structure is provided. See Altiris, 318 F.3d at 1376 (collecting cases). Thus, the Court

finds that because the presumption has been overcome and that the claim language itself does not recite sufficient structure to perform the claimed function, means-plus-function treatment is warranted.

Having determined that means-plus-function treatment is appropriate here, the Court must examine the specification in order to: (1) identify the claimed function; and (2) determine the corresponding structure in the written description which performs that function. See Omega Eng'g., 334 F.3d at 1322.

As to the first question, the Court has identified the function of the "computing unit" as follows: (1) generating a destination signal to the modernizing device ('861 Patent, claim 1); (2) evaluating the destination call reports ('861 Patent, claim 11); (3) associating destination floors with recognized identification codes ('861 Patent, claim 11; 465 Patent, claim 1); and (4) outputting a destination signal for one of the destination floors associated with one of the identification codes. ('861 Patent, claim 11; '465 Patent, claim 1).

As to the second question, the Court finds that the means-plus-function limitation is indefinite as the required corresponding structure is not disclosed for the claimed function. The Federal Circuit has established that computer-implemented inventions with means-plus-function claiming are subject to a specific test - the particular structure disclosed

in the specification must be more than a general purpose computer microprocessor. See Aristocrat Techs. Austl. Pty Ltd. v. Int'l Game Tech., 521 F.3d 1328, 1333 (Fed. Cir. 2008) ("Aristocrat II") (for cases involving functional claims concerning computer-implemented inventions, the Federal Circuit has "consistently required that the structure disclosed in the specification be more than simply a general purpose computer or microprocessor"). More specifically, "[i]n a means-plus-function claim in which the disclosed structure is a computer, or microprocessor, programmed to carry out an algorithm, the disclosed structure is not the general purpose computer, but rather the special purpose computer programmed to perform the disclosed algorithm." WMS Gaming, Inc. v. Int'l Game Tech., 184 F.3d 1339, 1349 (Fed. Cir. 1999). In other words, it is insufficient for the patentee to merely point to a "computer" or "microprocessor," rather it is necessary that the particular algorithms that carry out the claimed function be disclosed in order to fulfill the "structure" requirement under § 112, ¶ 6.⁹

Here, the specification provides that the computing unit may be "for example, a commercially available personal computer or a workstation," which may "include[] at least one processor and at least one data memory." ('465 Patent, col. 6:20-

⁹ An algorithm consists of a specified series of instructions intended to be implemented as a computer program.

24.) The specification further states that the computing unit is capable of "execut[ing] at least one computer program product for the evaluation of destination call reports or for the association of recognized identification codes with destination floors."

(Id. col. 6:27-30.) Furthermore, the explanation of "computer program product" contained in the specification recites only the functionality of the "computer program product," e.g., explaining that the "computer program product" receives destination call reports and/or identification codes, converts identification codes into destination floors, and performs optimization algorithms to assign an elevator car to each user. (Id. col. 6:35-7:50.)

Importantly, however, neither the "computer program product" nor the underlying algorithm used to perform the optimization process is disclosed in the specification. See Harris Corp. v. Ericsson Inc., 417 F.3d 1241, 1253 (Fed. Cir. 2005) ("A computer-implemented means-plus-function term is limited to the corresponding structure disclosed in the specification and equivalents thereof, and the corresponding structure is the algorithm."). Plaintiff contends that a sufficient algorithm is disclosed in the specification because the "optimization" algorithms performed by the "computer program product" to determine the most favorable elevator for conveying each user were well-known in the art at the time of the filing,

citing to U.S. Patent No. 4,718,520 (providing a description of a computer algorithm for performing destination dispatch optimizations).¹⁰ The Federal Circuit, albeit in an unpublished decision, recently addressed a similar argument in Encyclopaedia Britannica, Inc. v. Alpine Electronics, Inc., 355 F. App'x 389 (Fed. Cir. 2009).

In Encyclopaedia Britannica, the Federal Circuit rejected the patentee's argument that the specification disclosed sufficient corresponding structure for a computer-based means-plus-function element because a person of ordinary skill in the art would recognize that the specification inherently discloses a class of algorithms for retrieving the necessary information from a database on a general purpose computer. Id. at 393. The court emphasized that a contention that sufficient corresponding structure was present when the specification implicitly disclosed to a person of ordinary skill in the art a class of algorithms is not supported by existing case law. Id. at 394. Instead, the court explained that a patent "must explicitly disclose an

¹⁰ Importantly, Plaintiff has failed to cite to any evidence, including expert testimony, other than the preexisting patent in support of its argument that a person of ordinary skill in the art would understand the optimization process claimed by the computing unit. Cf. AllVoice Computing PLC v. Nuance Communications, Inc., 504 F.3d 1236, 1245-46 (Fed. Cir. 2007) (relying on expert testimony explaining the scope of the algorithm expressly disclosed in patent in order to give meaning to the claim terms and finding that sufficient structure existed from the perspective of "an ordinarily skilled artisan").

algorithm in the specification for performing the claimed function for a computer-implemented invention to have sufficient corresponding structure" for the claimed limitation. Id. at 394. Furthermore, the Federal Circuit, citing Aristocrat II, rejected the patentee's alternative argument that the specification need not disclose any algorithm where the computer function being performed is well known. Id. at 395. Based on the patentee's failure to disclose an underlying algorithm, the court found that the patent was indefinite. Id. at 396.

Although Encyclopaedia Britannica is not binding, the Court finds it to be a well-reasoned opinion and will adopt it for purposes of resolving the issue before the Court. The Court finds that Plaintiff has failed to demonstrate that the specification describes the term "computing unit" with sufficient structure in order to avoid indefiniteness. The Patents-in-Suit are devoid of any disclosure as to the algorithm used by the computing unit vis-a-vis the "computer program product" to perform the "optimization" function. The absence of an underlying algorithm is fatal to Plaintiff's proposed construction. Therefore, the Court finds that the term "computing unit" is indefinite for failure to set forth sufficient algorithmic structure associated with the contested means-plus-function clauses.

| Claim Term | Plaintiff's Proposed Construction | Defendants' Proposed Construction |
|--|---|---|
| "destination signal" ('861 Patent, claims 1 and 11) ('465 Patent, claim 1) | "a data signal providing passenger conveying information that identifies the boarding floor and/or the destination floor" | The claim term is indefinite and cannot be construed. |

Plaintiff's position is that the specification supports a construction of "destination signal" as a signal that directs movement of the elevator car to a boarding and destination floor. Plaintiff cites the following language in support:

The control signal comprises at least one first destination signal which is communicated by way of the data bus 37 to the device 36, 36'. According to this first destination signal the device 36, 36' issues by way of an electrical line a first call report to the elevator control 14, 14'. According to this first call report the elevator control 14, 14' controls the drive 12, 12' and moves the elevator car 11, 11' to the boarding floor. After the elevator car 11, 11' has reached the boarding floor, the user boards the elevator car. The control signal comprises at least one second signal which is communicated by way of the data bus 37 to the device, 36, 36'. According to this second destination signal the device 36, 36' issues a second call report to the elevator control, 14, 14' by way of an electrical line. According to this second call report the elevator control 14, 14' controls the drive 12, 12' and moves the elevator car 11, 11' from the boarding floor to the destination floor.

('465 Patent, col. 8:33-53.) Plaintiff contends that reading the term "destination signal" in the context of this specification makes clear that it constitutes a signal conveying data as to

boarding and destination floors.

Defendants respond that the language relied upon by Plaintiff relates to two distinct destination signals, one which is associated with the boarding floor and one which is associated with the destination floor. Defendants contend that the term "destination call reports" (which the parties agree means "a data signal providing passenger conveying information that identifies the boarding floor and the destination floor") requires both the boarding and destination floor, and therefore, a destination signal would necessarily require both the boarding floor and the destination floor. Because the language of the specification cited by Plaintiff contemplates two distinct destination signals, then either the boarding floor or destination floor information is missing from the term "destination signal," therefore Defendants assert the claim is rendered indefinite.

Defendants argue that the claim language itself describes a "destination signal" as an output from the computing unit, ('465 Patent, col. 11:17-18);¹¹ which the modernization

¹¹ The full text cited provides:

[I]nstalling at least one computing unit and connecting the at least one computing unit to said floor terminals for at least one of evaluating the destination call reports and association of destination floors with recognized once of the identification codes and **for the output of at least one destination signal.**

(Id.) (emphasis added).

device reads and converts the destination signal into a call report. (Id. col. 11:19-25.)¹² Defendants contend that the definition is limited by this basic description and therefore does not contain any explanation of what information the signal contains. Thus, the term is too indefinite and cannot be construed.

The Court disagrees with Defendants' indefiniteness argument. Where the meaning of a claim is discernible, even if reasonable persons may disagree over the conclusions, the claim is sufficiently clear to be deemed definite. Power-One, Inc. v. Artesyn Techs., Inc., 599 F.3d 1343, 1350 (Fed. Cir. 2010) (citation omitted). The specification cited above clearly implies that the signal that is the output from the computing unit and converted into a call report contains the boarding and/or destination floor information for a particular passenger. Plaintiff's proposed construction, although not derived from the plain language of the claims themselves, is supplemented by the meaning provided in the specification. Accordingly, the Court

¹² The full text cited provides:

[I]nstalling at least one modernizing device and connecting the at least one modernizing device to said floor terminals and said at least one computing unit for reading the destination signal, **for converting the destination signal into at least one call report and for controlling the elevator control by way of the call report.**

(Id.) (emphasis added).

will adopt Plaintiff's proposed construction that "destination signal" means "a data signal providing passenger conveying information that identifies the boarding floor and/or the destination floor."

| Claim Term | Plaintiff's Proposed Construction | Defendants' Proposed Construction |
|---|--|--|
| <p>"interrupting at least one existing electrical floor call transmitter line between at least one floor call transmitter and the elevator control"</p> <p>('465 Patent, claim 2)</p> | <p>"causing the elevator control to stop operating based on an input from at least one floor call transmitter"</p> | <p>"the floor call transmitters (conventional up-down elevator buttons on each floor) that existed prior to modernization are not connected to the elevator control"</p> |

| Claim Term | Plaintiff's Proposed Construction | Defendants' Proposed Construction |
|--|---|--|
| <p>"interrupting at least one existing car call transmitter line between at least one car call transmitter and the elevator control"</p> <p>('465 Patent, claim 3)</p> | <p>"causing the elevator control to cease operating based on an input from at least one car call transmitter"</p> | <p>"the car call transmitters (conventional numbered floor buttons in the elevator car) that existed prior to modernization are not connected to the elevator control"</p> |

| Claim Term | Plaintiff's Proposed Construction | Defendants' Proposed Construction |
|---|--|---|
| <p>"the elevator control being disconnected from the hall call transmitters and the car call transmitters of the elevator installation"</p> <p>('861 Patent, claim 1)</p> | <p>"the elevator control not operating based on an input from the hall call transmitters or the car call transmitters"</p> | <p>"all of the car call transmitters (the conventional numbered floor buttons in the elevator car) and all of the hall call transmitters (whatever they may be) are not connected to the elevator control."</p> |

The crux of the parties' dispute as to the construction of these related terms is the meaning of the terms "interrupting" and "disconnecting," and whether these terms require a physical disconnection. Plaintiff's position is that "interrupting" and "disconnecting" do not require a physical disconnection but instead require only that the functions of the device stop operating, whereas Defendants' construction requires a physical disconnection of the relevant components.

First, Plaintiff argues that "interrupting" of the existing floor call transmitter line from the elevator control does not mean a physical disconnection, but is merely a switch from the elevator control being controlled by the traditional floor call transmitter to the new computing unit and modernizing device. Therefore, Plaintiff contends that the concept of

"interrupting" relates to a means of stopping the elevator control from operating in order to upgrade to the computing unit and modernizing device.

Plaintiff cites to the following language from the specification in support of its interpretation:

[T]he existing electrical floor call transmitter line 16, 16' to the floor call transmitter . . . or the existing car call transmitter line 18, 18' to the car call transmitter 13, 13' **is interrupted** at the input of the elevator control 14, 14'.

('465 Patent, col. 10:28-33.) (emphasis added). Plaintiff argues that this "interruption" merely requires that the elevator control stop operating based on output from the traditional floor call transmitter.

Second, Plaintiff argues that although the term "disconnected" is not defined in the specification, it is analogous to the term "interrupting." Plaintiff reiterates its argument that this disconnection limitation is intended to stop the elevator control from operating based on output from the traditional transmitters in order to effectuate a changeover so that it is controlled by the computing unit via the modernizing device. Thus, Plaintiff contends that only a "functional" or "operational" disconnection is contemplated, rather than a physical disconnection.

Defendants respond that the Patents-in-Suit contemplate that the floor call transmitters are physically disconnected from

the elevator control in order for a new connection by way of an electrical line with an output device. Defendants argue that a physical disconnection is directed because the floor call transmitters and car call transmitters are completely removed upon installation of the new connection. Defendants cite to the following language contained in the specification in support of its construction:

[T]he existing electrical car call transmitter line 18, 18' to the car call transmitter 13, 13' is interrupted at the input of the elevator control 14, 14' and **this input of the elevator control is instead, connected** by way of an electrical line with an output of the [modernizing] device 36, 36'

('465 Patent, col. 10:31-35.) (emphasis added). Defendants contend that this language indicates that a physical disconnection occurs with respect to the elevator control and that this interpretation is supported by the fact that the floor call transmitters are removed subsequent to the "interruption."

Similarly, Defendants argue that the ordinary meaning of the term "disconnected" directs that it be interpreted as meaning physically disconnected. Defendants note that the specification explains that after the car call transmitter line is "interrupted," the "input of the elevator control is, instead, connected by way of an electrical line with an output of the [modernizing] device." (Id. col. 10:28-35.) Defendants argue that this description contemplates a physical severance of the lines.

Plaintiff's interpretation attempts to limit the meaning of the terms "interruption" and "disconnected" in a way that does not comport with the natural reading of the words in light of the specification. The fact that the Patents-in-Suit, through the specifications, clearly contemplate connecting the input of the elevator control with a separate electrical line connected to the modernizing device indicates that the previous connection with the floor call transmitter line would be physically severed, rather than merely disabled. Therefore, the Court will adopt Defendants' proposed construction that the terms "interrupting" and "disconnected" require a physical disconnection as this meaning is more consistent with the context of the specification.

| Claim Term | Plaintiff's Proposed Construction | Defendants' Proposed Construction |
|---|--|---|
| "existing electrical floor call transmitter line" ('465 Patent, claim 2) | "a line that provides a floor call input to an elevator control" | "an electrical line that connected the floor call transmitter to the elevator control prior to modernization" |

| Claim Term | Plaintiff's Proposed Construction | Defendants' Proposed Construction |
|--------------------------------------|--|--|
| "existing car call transmitter line" | "a line that provides a car call input to an elevator control" | "an electrical line that prior to modernization connected a car call transmitter to the elevator control. This existing line is interrupted and reconnected to |

| | | |
|------------------------|--|--|
| ('465 Patent, claim 3) | | the modernizing device during modernization" |
|------------------------|--|--|

| Claim Term | Plaintiff's Proposed Construction | Defendants' Proposed Construction |
|---|-----------------------------------|--|
| "floor call transmitter line input" ('861 Patent claim 2) | N/A | "an input to the elevator control that formerly was connected to a floor call transmitter line, but is now connected to an output from the modernizing device" |

| Claim Term | Plaintiff's Proposed Construction | Defendants' Proposed Construction |
|---|-----------------------------------|---|
| "car call transmitter line input" ('861 Patent claim 3) | N/A | "an input to the elevator control that formerly connected a car call transmitter to an input of the elevator control" |

Although the parties do not purport to construe identical terms, the arguments submitted by both parties with respect to these corresponding claims essentially are identical, and therefore combined for purposes of this Memorandum.

Plaintiff argues that its interpretation of the term "existing electrical floor call transmitter line" is supported by the specification, which describes an embodiment wherein the existing floor call transmitter line is an electrical line connecting the floor call transmitter and the elevator control, and communicates information to the elevator control. The

specification provides the following:

[T]he floor call transmitters . . . are each connected by way of at least one electrical floor call transmitter line 16, 16' with at least one input of the respective elevator control 14, 14' and thus this connection enables communication of the first call report to the associated one of the elevator controls.

('465 Patent, col. 5:7-12.)

Plaintiff further argues that the embodiment described in the specification refers to the existing floor transmitter as a hard electrical wire, but does not limit the line to hard wire only and could potentially include a wireless line between the car call transmitter and the elevator control.

Plaintiff reiterates these arguments with respect to the "car call transmitter line." Plaintiff relies upon the corresponding language in the specification relating to car call transmitters, which states that:

[T]he car call transmitters 13, 13' are each connected by way of at least one electrical car call transmitter line 16, 16' with at least one input of the respective elevator control 14, 14' and thus this connection enables communication of the second call report to the associated one of the elevator controls.

(Id. col. 5:13-18.) Similarly, Plaintiff argues that nothing in the Patents-in-Suit limits the scope of a "car call transmitter line" to a hard wire electrical conductor, and that the scope of this term encompasses a wireless line.

Defendants contest Plaintiff's definition to the extent

that it does not address the qualifier that the line is "existing," i.e., meaning that it is an electrical line that existed prior to modernization. Further, Defendants argue that because the electrical floor call transmitter line and car call transmitter line are disconnected as part of the modernization process, they are incapable (under the plain terms of the Patents-in-Suit) to provide any input to the elevator control. Thus, Defendants posit that the fact that they are incapable of providing input clearly undermines Plaintiff's construction. Lastly, Defendants contest Plaintiff's characterization that either type of "transmitter line" could also include a wireless line, on the ground that it seeks to improperly broaden the term. Defendants note that nothing in the Patents-in-Suit suggests that the term "transmitter line" was intended to include any type of "wireless" connection and that an attempt to reserve the right to extend the definition to this type of line is impermissible.

The Court agrees with Defendants' position. First, as the word "existing" is in the language of the claims themselves, this indicates that both the "electrical floor call transmitter line" and "car call transmitter line" were in place prior to the modernization process. Second, the Court finds that the language of the Patents-in-Suit provides that the floor call transmitters are removed during the modernization process, such that these transmitters do not provide input to the elevator control after

the interruption occurs. Third, the Court agrees with Defendants that nothing in the Patents-in-Suit suggests that these lines include a "wireless line." Therefore, it is inappropriate to extend the scope of the Patents-in-Suit to such an embodiment where there is no indication from the patents themselves.

Thus, the Court finds that "existing electrical floor call transmitter line" means "an electrical line that connected the floor call transmitter to the elevator control prior to modernization," and that "existing car call transmitter line" means "an electrical line that prior to modernization connected a car call transmitter to the elevator control. This existing line is interrupted and reconnected to the modernizing device during modernization."

Furthermore, with respect to the related terms "floor call transmitter line input" and "car call transmitter line input," Defendants cite directly to the specification in support of their proposed claim constructions. In general, a floor call transmitter is a device used to call an elevator to the passenger's boarding floor. The patent specification provides that prior to modernization, "the floor call transmitters . . . are each connected by way of at least one electrical floor call transmitter line 16, 16' with at least one input of the respective elevator control 14, 14' and thus this connection enables communication of the first call report to the associated

one of the elevator controls." ('861 Patent, col. 5:1-12.) In the process of modernization, "the existing electrical floor call transmitter line 16,16' to the floor call transmitter . . . or the existing electrical car call transmitter line 18, 18' to the car call transmitter 13, 13' is interrupted at the input of the elevator control 14, 14' and this input of the electrical control is, instead, connected by way of an electrical line with an output of the [modernizing] device." (Id. col. 10:29-36.)

Plaintiff does not submit a competing interpretation as to this specific claim, however, the construction of this claim intersects with the construction of the term "existing electrical floor call transmitter line."

Defendants' construction of these claims is consonant with the exact language of the specification itself. Phillips, 415 F.3d at 1315 (characterizing the specification as the "concordance for the claims," and noting that the specification serves to "'describe the manner and process of making and using' the patented invention") (quoting Autogiro Co. of Am. v. United States, 384 F.2d 391, 397-98 (Ct. Cl. 1967)). Therefore, the Court will adopt Defendants' proposed construction of these terms. The Court finds that "floor call transmitter line input" means "an input to the elevator control that formerly was connected to a floor call transmitter line, but is now connected to an output from the modernizing device," and that "car call

transmitter line input" means "an input to the elevator control that formerly connected a car call transmitter to an input of the elevator control."

| Claim Term | Plaintiff's Proposed Construction | Defendants' Proposed Construction |
|---|---|---|
| "hall call transmitters" ('861 Patent, claim 1) | "a device with an input located at a floor which permits a user to request an elevator" | This claim is indefinite and cannot be construed. |

Plaintiff concedes that the term "hall call transmitter" is not defined explicitly by the Patents-in-Suit, such that its meaning should be derived by the plain and ordinary meaning of what a person of ordinary skill in the art would understand the term to mean. According to Plaintiff, a person of ordinary skill would understand that the term "hall call transmitter" and "floor call transmitter" can be used interchangeably on the basis that these components perform essentially the same function.

Defendants argue that Plaintiff fails to cite to anything in the patents to indicate that these two terms were intended to be interpreted interchangeably. Defendants assert that Plaintiff used the term "floor call" and "car all" at different points in the Patents-in-Suit, and that this indicates a different meaning was intended by this differing terminology. Likewise, Defendants argue that the difference in terminology

prevents the term "hall call" and "floor call" from being interpreted synonymously. See Innova, 381 F.3d at 115 (finding that use of the terms "connected" and "associated" would not be interpreted synonymously because "when an applicant uses different terms in a claim it is permissible to infer that he intended his choice of different terms to reflect a differentiation in the meaning of those terms"). Defendants contend that because Plaintiff fails to provide any definition for "hall call transmitter," other than reference the "floor call transmitter," this term is ambiguous and invalid.

It is true that Plaintiff cannot point to anything in the Patents-in-Suit to indicate that "floor call" and "hall call" were intended to be interpreted interchangeably. It appears, however, that the basic functions of a "floor call transmitter" and "hall call transmitter" are so similar that a person of ordinary skill in the art would understand them to perform the same functions. The Patents-in-Suit make clear that a "floor call transmitter" is used by a passenger to communicate a request for an elevator to the elevator control. The following excerpts describe the function of "floor call transmitters":

- For example, the floor call transmitters . . . are each connected by way of at least one electrical floor call transmitter line . . . with at least one input of the respective elevator control . . . and thus this connection enables

communication of the first call report to the associated one of the elevator controls. ('861 Patent, col. 5:7-12.)

- The elevator installation 1 is operated by users outside the elevator cars 11, 11 by way of at least one floor call transmitter . . . which is arranged, for example, at an associated one of the doors . . . near the elevator installation 1 and which has at least one input means for the input of a first call report. For example, at each of the floors . . . a respective one of the first floor call transmitters . . . is arranged near the floor door of the first elevator 10 and at each of the floors a respective one of the second floor call transmitters . . . is arranged near the floor door of the second elevator 10'. (Id. col. 4:48-58.)

- A user actuates one of the floor call transmitters . . . at a boarding floor. (Id. col. 5:43-44.)

Based on these excerpts, the function of a "floor call transmitter" would be apparent to a person of ordinary skill in the art. Thus, it is necessary to determine whether an ordinary person skilled in the art would understand the term "hall call transmitter" to have an interchangeable meaning with "floor call transmitter." In support of its argument that "hall call transmitter" would be understood by a person in the industry to have the same meaning as "floor call transmitter" Plaintiff cites to the following excerpts from the technical treatise The

Vertical Transportation Handbook:

- In destination-based group systems a passenger enters a desired final destination in the hall prior to entering the elevator, rather than pressing an up or down hall call button. George Strakosch, *The Vertical Transportation Handbook* 162 (3d ed. 1998).

- An example is the ability to "lock out" individual car calls or hall calls, preventing access to the elevator from a given floor, or to prevent access to a given floor from the case, or both. In relay logic controllers, it is necessary to install key switches for each car call/hall call push-button to effect the same lockouts.

Id. 133.

These excerpts demonstrate that the term "hall call" was a common industry term and that this term relates to a device through which a passenger requests an elevator through an input located at a particular floor.

Furthermore, Plaintiff cites to the deposition testimony of Defendants' 30(b)(6) designee, David Vallee, which provides:

- Q. Okay. What's a hall call?
- A. It's a button in the hoist -- or in the lobby.
- Q. Okay. And these are terms that are used within ThyssenKrupp?
- A. Pretty much industry terms.

(Dep. Tr. David Vallee, 35:19-24.) This further supports

Plaintiff's argument that the term "hall call" was understood by an ordinary person skilled in the art.

Based on the sources set forth above, the Court rejects Defendants argument that "hall call transmitter" is indefinite and cannot be construed. See Power-One, 599 F.3d at 1350 (noting that "a claim is not indefinite merely because it poses a difficult issue of claim construction"). Rather, the Court accepts Plaintiff's argument that "hall call transmitter" would be understood by a person of ordinary skill in the art to have the same meaning as "floor call transmitter." Thus, the Court finds that "hall call transmitter" means "a device with an input located at a floor which permits a user to request an elevator."

As an additional matter, however, the Court must address Defendants' argument that the term "hall call transmitter" is invalid because the certificate of correction ("Certificate of Correction") utilized by Plaintiff in adding this term was impermissible. Here, the term "hall call transmitter" was not part of the original Patents-in-Suit, rather the claim initially included the term "hail call transmitter." Plaintiff filed a Certificate of Correction amending the term "hail" to "hall."

Certificates of correction are limited to correcting typographical or clerical mistakes and are not permitted to add "new matter" to the patent. See 35 U.S.C. § 255 (allowing the

PTO to issue a certificate of correction "if the correction does not involve such changes in the patent as would constitute new matter or would require re-examination"). Defendants argue that because there is no evidence that the original term "hail call transmitter" was a typographical error, the Certificate of Correction should be invalidated as impermissibly broadening the claim.

Two elements are required to invalidate a certificate of correction for impermissibly broadening a claim: (1) the corrected claims are broader than the original claims; and (2) the presence of the clerical or typographical error, or how to correct that error, is not clearly evident to one of skill in the art. Superior Fireplace Co. v. Majestic Prod. Co., 270 F.3d 1358, 1373 (Fed. Cir. 2001); Cent. Admixture Pharm. Services, Inc. v. Advanced Cardiac Solutions, P.C., 482 F.3d 1347, 1353 (Fed. Cir. 2007). Under Superior Fireplace, the first issue of whether the corrected claim is broader than the original claim is a question of law. See Cent. Admixture, 482 F.3d at 1353 (holding the "first element [of Superior Fireplace] poses a question of law, since the correct scope and meaning of a claim is an issue for the court to decide"). In the comparing the "old" uncorrected version with the "new" corrected version, the Court finds that the amended claim is broader than the original claim. In light of the fact that neither party has offered a

meaning for the term "hail call" supported by the record, this term is indefinite. Therefore, as the uncorrected version would be indefinite whereas the corrected version has a discernible meaning, as described above, the corrected claim is broader than the uncorrected claim. See Advanced Tech. Incubator, Inc. v. Sharp Corp., No. 07-468, 2009 WL 4670942, at*5 (E.D. Tex. Sept. 18, 2009) (finding that where old version of claim was invalid for indefiniteness but the new version of the claim had a valid construction, the first element of Superior Fireplace was satisfied).

"The second element, whether the error and its correction would both be clearly evident to one of skill in the art, has been treated as a factual question." Cent. Admixture, 482 F.3d at 1354 (citations omitted). The Federal Circuit has enumerated three categories into which an error may fall under this second element: (1) "mistakes [that] are immediately apparent and leave no doubt as to what the mistake is," such as a blatant misspelling; (2) typographical mistakes not apparent to the reader, such as a word that is spelled correctly and logically fits within the context of a sentence; and (3) where it is apparent that a mistake has been made but it is not clear as to what the exact mistake is. Superior Fireplace, 270 F.3d at 1370.

Here, the Court finds that the typographical error of

spelling "hall" as "hail" falls into the first category of mistakes from Superior Fireplace. As explained above, the term "hall call" constituted a standard industry term whose meaning would be apparent to a person of ordinary skill in the art. "Since an error of the first category makes its own correction known to one of skill in the art, those errors do not raise serious public notice problems and can properly be corrected via a § 255 certificate." Cent. Admixture, 482 F.3d at 1354. Therefore, the Court rejects Defendants' argument that the Certificate of Correction impermissibly broadens the disputed claim.

| Claim Term | Plaintiff's Proposed Construction | Defendants' Proposed Construction |
|---|---|--|
| "in a modular manner" ('465 Patent, claim 10) | "using standardized units or components designed for easy assembly or flexible use" | See below. |

| Claim Term | Plaintiff's Proposed Construction | Defendants' Proposed Construction |
|---|--|--|
| "in succession" ('465 Patent, claim 10) | "in a modular manner" | See below. |

| Claim Term | Plaintiff's Proposed Construction | Defendants' Proposed Construction |
|-------------------|--|--|
| "performing" | See above. | "The steps (a) through (c) of |

| | | |
|--|--|---|
| <p>said steps a. through c. [of claim 1] for each elevator car and associated elevator control of an elevator installation in succession whereby the elevator installation is modernized in a modular manner"</p> <p>('465 Patent, claim 10)</p> | | <p>claim 1 are performed one after the other such that each elevator is completely modernized before modernization of the next elevator commences. Accordingly, this language requires installation of the floor terminal (step (a)), followed by installation of the computing unit (step b)), followed by installation of the modernizing device (step (c))."</p> |
|--|--|---|

While these terms are not identical, they are sufficiently related such that the Court will address them together for purposes of consistency and judicial efficiency.

First, Plaintiff argues that term "in succession" should be construed as "in a modular manner." Plaintiff cites to the language of the claim itself which provides that the modernization process is to be performed "in succession whereby the elevator installation is modernized in a modular manner." ('465 Patent, col. 11:65-67.) Plaintiff contends that the claim language itself directs that the term "modular manner" is to be read in conjunction with the term "in succession."

Second, Plaintiff argues that the construction of the

term "in a modular manner" is informed directly by the definition of "module," meaning "a standardized unit or component of a system designed for easy assembly or flexible use." The American Heritage Desk Dictionary 545 (4th ed. 2001). Plaintiff contends that since the Patents-in-Suit assign no specific meaning to the term "modular manner," resort to the plain meaning (as demonstrated by the dictionary definition) is appropriate.

Third, Plaintiff asserts that there is no limitation as to whether a specific elevator is modernized in a modular manner or whether an entire elevator installation is to be modernized in a modular manner. In other words, Plaintiff argues that it is not necessary for each step of the modernization process to be completed sequentially on each elevator installation before proceeding to the next installation, rather the modernization process can be accomplished in a piecemeal manner.

Plaintiff further argues that nothing contained in the language of performing steps "a through c" requires an exact order in which the steps are to be completed. Plaintiff contends that nothing explicitly or implicitly indicates the particular chronological order in which these steps must be carried out, and therefore, it is inappropriate to read such a limitation into the language of the claim.

Defendants respond that the term "in succession" indicates that the required steps are to be performed for each

elevator car and elevator control one at a time, and that the entire process is to be completed before moving on to the next car. Defendants argue that the natural reading of the term "in succession" means the "act or process of following in order," see Webster's Ninth Collegiate Dictionary 1178 (1983), and that this indicates an order of installation for the modernization process.

Defendants dispute Plaintiff's construction of the term "in succession" to mean "in a modular manner" on the ground that it seeks to impermissibly equate two terms which are different concepts merely because they are contained in the same claim. Defendants argue that the term "modular manner" is the result of performing the required steps, whereas the term "in succession" indicates the method for performing those steps.

Defendants' proposed construction is that the complete modernization of each elevator is required to be executed in the sequential steps prior to performing the modernization process for another elevator. In other words, Defendants assert that the modernization process as a whole necessitates that steps (a), (b) and (c) be completed in order before beginning the modernization process for the next elevator. Defendants cite to the language of the claim itself in support of their argument, noting that step (a) requires the installation of a floor terminal, step (b) requires a computing unit be connected to the floor terminal, and step (c) requires installing the modernizing device to the floor

terminal and the computing unit. (See '465 Patent, col.11:9-26.) Defendants claim that because these steps are dependent upon one another it would not be possible to complete them out of order, i.e., the connection of the computing unit to the floor terminal in step (b) could not possibly be completed without first installing the floor terminal in step (a).

In support of the argument that a modernization of the entire elevator installation (rather than completing the steps on several elevators simultaneously) is contemplated by the Patents-in-Suit, Defendants cite to language in claim 1 and claim 10 which states that the method of modernization relates to an "elevator installation," and not merely a single elevator. Defendants also rely upon language in the specification, in which Plaintiff distinguishes the Patents-in-Suit from prior art by stating:

By contrast to the state of the art according to U.S. Pat. No. 5,352,857, elevator installation components are not, however, combined into modules and such a module modernizes the elevator installation in each method step, **but at least one elevator is substantially completely modernized in each method step.** With advantage, an elevator car of an elevator installation is modernized in one method step, the drive of this elevator is modernized, the conveying cable of this elevator is modernized, the elevator control of this elevator is modernized, and the [modernizing] device is removed from this elevator.

(Id. 3:43-53.) (emphasis added).

First, the Court concludes that Plaintiff's proposed

construction of the term "in succession" is inconsistent with the plain and ordinary meaning of the term and requires the Court to interpret it with the specialized meaning of "in a modular manner" that is not supported by the record. Other than the fact that the two terms appear in the same claim, there is nothing in the claim language itself to indicate that the term "in succession" is to be informed by the term "in a modular manner." In contrast, Defendants' construction of the term "in succession" relies directly upon the ordinary meaning of the words as informed by the dictionary definition. Therefore, the Court rejects Plaintiff's proposed construction of the term and concludes that it is to be read according to its plain meaning.

Furthermore, although Plaintiff's proposed construction is consistent with the generalized meaning of the term "module," the Court finds that Defendants' proposed construction of the relevant claims is superior. The Court agrees with Defendants that the process contemplated by the Patents-in-Suit requires completion of the sequential steps of one elevator before moving on to the next elevator. The claim itself requires "performing steps a. **through** c. . . . in succession," which indicates that a complete modernization of a single elevator is contemplated. (See id. Col. 11:9-26.) Furthermore, the fact that steps (a) through (c) are interdependent and cannot be performed out of order (i.e., the floor terminal required by step (a) must be

installed before connection to the computing unit required by step (b)) bolsters the construction that complete modernization of an individual elevator is required by the Patents-in-Suit. (See id.) Therefore, Defendants' construction that the enumerated steps must be performed one after another and in full before commencing modernization of the next elevator is more consistent with the language and the scope of the Patents-in-Suit.¹³ Thus, the Court finds that the term "performing said steps a. through c. [of claim 1] for each elevator car and associated elevator control of an elevator installation in succession whereby the elevator installation is modernized in a modular manner" means "The steps (a) through (c) of claim 1 are performed one after the other such that each elevator is completely modernized before modernization of the next elevator commences. Accordingly, this language requires installation of the floor terminal (step (a)), followed by installation of the computing unit (step b)), followed by installation of the modernizing device (step (c))."

¹³ Defendants also emphasize correctly that following Plaintiff's proposed construction of the terms "in succession" and "modular manner" would result in a nonsensical reading of the claim because if "in succession" means "in a modular manner" and "in a modular manner" means "using standardized units or components designed for easy assembly or flexible use," then "in succession" would therefore mean "using standardized units or components designed for easy assembly or flexible use."

| Claim Term | Plaintiff's Proposed Construction | Defendants' Proposed Construction |
|---|--------------------------------------|---|
| "temporarily" ('861 Patent claims 1 and 11) | "lasting or used for a limited time" | "used in connection with the elevator installation during modernization, and removed after modernization is complete" |

Plaintiff notes that the term "temporarily" is not expressly defined in the specification and therefore cites to the dictionary definition of "lasting or used for a limited time." See American Heritage Desk Dictionary 843 (4th ed. 2001). Plaintiff asserts that the term "temporarily" is used to describe the (1) operation of an elevator during modernization, and (2) the connection of the modernizing device to an elevator control. ('861 Patent, col. 11:5-10; id. col. 12:49-53.) Plaintiff contends that its proposed construction is consistent with the claim language because it denotes that the use contemplated will only persist during the limited time of the modernization process.

Defendants concede that Plaintiff's construction comports with the dictionary definition of "temporarily." Defendants argue, however, that the meaning of "temporarily" must be construed in the context of the patents in order to provide the appropriate meaning. Defendants note that the construction provided by Plaintiff does not provide any definitive time limitation (e.g., one month or one year), and therefore it is too

vague. Defendants argue that the only proper context for understanding the term "temporarily" is to link it to the modernization process itself. Thus, Defendants' proposed construction defines the term with respect to its relation to the modernization process.

Although Plaintiff's proposed construction is consistent with the ordinary meaning of the term "temporarily," the term is best understood as measuring the time in which the modernization process takes place. Plaintiff concedes that the relevant guidepost for understanding the term "temporarily" relates to the time during which the modernization steps are completed. Therefore, Defendants' proposed construction best comports with the scope of the term "temporarily" by tying it directly to the process to which the term applies. See Toro Co. v. White Consol. Indus., Inc., 199 F.3d 195, 1299 (Fed. Cir. 1999) ("[W]ords of ordinary usage must nonetheless be construed in the context of the patent documents."). In other words, the best (and seemingly only) way to comprehend the meaning of "temporarily" is to relate it to the process which will determine how long "temporarily" will actually be. As explained by the Federal Circuit in Toro:

As this case well illustrates, the dictionary definitions of common words are often less useful than the patent documents themselves in establishing the usage of ordinary words in connection with the claimed subject matter. This is not an issue of the richness of language, or variety or imprecision in the usage of words.

Determining the limits of a patent claim requires understanding its terms in the context in which they were used by the inventor, considered by the examiner, and understood in the field of the invention.

In judicial "claim construction" the court must achieve the same understanding of the patent, as a document whose meaning and scope have legal consequences, as would a person experienced in the technology of the invention. Such a person would not rely solely on a dictionary of general linguistic usage, but would understand the claims in light of the specification and the prior art, guided by the prosecution history and experience in the technologic field.

Id. In light of the context provided by the Patents-in-Suit, the Court finds that the term "temporarily" means "used in connection with the elevator installation during modernization, and removed after modernization is complete."

VI. CONCLUSION

An Order consistent with this Memorandum will issue.

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

INVENTIO AG, : CIVIL ACTION
 : NO. 08-874-ER
Plaintiff, :
 :
v. :
 :
THYSSENKRUPP ELEVATOR :
AMERICAS CORPORATION, :
et al., :
 :
Defendants. :

O R D E R

AND NOW, this **14th** day of **June 2010**, for the reasons discussed in the Memorandum Opinion issued this date, it is hereby **ORDERED** that the following terms in United States Patent No. Patent No. 6,892,861, and United States Patent No. 6,935,465, are assigned the following meanings:

1. The term "modernized" and/or "modernizing" means "a more or less complete exchange of components in an elevator installation."

2. The term "modernizing device" is indefinite.

3. The term "a device for temporarily operating an elevator installation during modernization" means "the device is used while an elevator installation is undergoing a more or less complete exchange of components, and is removed then the modernization process is complete."

4. The term "a system for modernizing an elevator installation" means "a system used in connection with an elevator

installation undergoing a more or less complete exchange of components."

5. The term "a method for modernizing an elevator installation" means "a method used in connection with an elevator installation undergoing a more or less complete exchange of components."

6. The term "elevator installation" means "a group of elevators that convey passengers in a building, where each elevator is controlled by an elevator control."

7. The term "elevator control" means "an existing device that controls the operation of the elevator - the identical elevator control that was in place before modernization."

8. The term "call report" means "a signal providing passenger conveying information used to control the elevator control."

9. The term "floor terminal" means "a device for allowing a user to provide a destination floor or an identification code."

10. The term "at least one of [A] and [B]" means "capable of performing both [A] and [B]."

11. The term "floor terminal . . . operative for at least one input of destination call reports and recognition of identification codes of passengers" means "operative for input of destination call reports and recognition of identification codes of passengers."

12. The term "floor terminal . . . for at least one of the input of destination call reports and for recognition of identification codes of users" means "for the input of destination call reports and for recognition of identification codes of users."

13. The term "computing unit . . . for at least one of evaluating the destination call reports and association of destination floors with recognized ones of the identification codes" means "for evaluating the destination call reports and for association of destination floors with recognized ones of the identification codes."

14. The term "identification code" means "a code that identifies each individual passenger and is associated with that passenger's destination floor."

15. The term "recognition of identification codes of passengers" means "the passenger identification codes are associated with each individual passenger's identity as well as that passenger's destination floor."

16. The term "computing unit" is indefinite for failure to set forth sufficient algorithmic structure associated with the contested means-plus-function clauses.

17. The term "destination signal" means "a data signal providing passenger conveying information that identifies the boarding floor and/or the destination floor."

18. The term "interrupting at least one existing electrical floor call transmitter line between at least one floor call transmitter and the elevator control" means "the floor call transmitters that existed prior to modernization are not connected to the elevator control."

19. The term "interrupting at least one existing car call transmitter line between at least one car call transmitter and the elevator control" means "the car call transmitters that existed prior to modernization are not connected to the elevator control."

20. The term "the elevator control being disconnected from the hall call transmitters and the car call transmitters of the elevator installation" means "all of the car call transmitters and all of the hall call transmitters are not connected to the elevator control."

21. The term "existing electrical floor call transmitter line" means "an electrical line that connected the floor call transmitter to the elevator control prior to modernization."

22. The term "existing car call transmitter line" means "an electrical line that prior to modernization connected a car call transmitter to the elevator control. This existing line is interrupted and reconnected to the modernizing device during modernization."

23. The term "floor call transmitter line input" means "an

input to the elevator control that formerly was connected to a floor call transmitter line, but is now connected to an output from the modernizing device."

24. The term "car call transmitter line input" means "an input to the elevator control that formerly connected a car call transmitter to an input of the elevator control."

25. The term "hall call transmitter" means "a device with an input located at a floor which permits a user to request an elevator."

26. The term "performing said steps a. through c. [of claim 1] for each elevator car and associated elevator control of an elevator installation in succession whereby the elevator installation is modernized in a modular manner" means "the steps (a) through (c) of claim 1 are performed one after the other such that each elevator is completely modernized before modernization of the next elevator commences. Accordingly, this language requires installation of the floor terminal (step (a)), followed by installation of the computing unit (step b)), followed by installation of the modernizing device (step (c))."

27. The term "temporarily" means "used in connection with the elevator installation during modernization, and removed after modernization is complete."

AND IT IS SO ORDERED.

EDUARDO C. ROBRENO, J.

EDUARDO C. ROBRENO, J.