UNITED STATES DISTRICT COURT
DISTRICT OF MASSACHUSETTS

SYNTHEON, LLC,	*	
Plaintiff,	*	
v.	*	Civil Action No. 16-cv-10244-ADB
COVIDIEN AG,	*	
Defendant.	*	

MEMORANDUM AND ORDER

BURROUGHS, D.J.

This case arises from a contractual dispute between Syntheon, LLC ("Syntheon"), and Covidien AG ("Covidien"). [ECF No. 1]. Syntheon claims it sold Covidien certain intellectual property relating to surgical devices, including a patent application that would ripen into U.S. Patent No. 8,742,269 ("the '269 Patent"). [ECF Nos. 78 at 1; 101 at 3]. In exchange, Covidien agreed to pay Syntheon royalties on sales of those devices. [ECF Nos. 78 at 2; 101 at 3].

Syntheon alleges, in part, that the '269 Patent covers a particular device, the LigaSure™ Small Jaw Open Instrument ("Small Jaw"), and that Covidien has failed to pay royalties on sales of this device. [See ECF No. 78 at 2]. Covidien disputes that the '269 Patent covers this device. [ECF No. 55 ¶¶ 4–5, 22–24]. The parties agree that to determine whether one or more claims in the '269 Patent cover the Small Jaw device the court must first determine "the scope and meaning of the patent claims asserted." Clearstream Wastewater Sys., Inc. v. Hydro-Action, Inc., 206 F.3d 1440, 1444 (Fed. Cir. 2000). [See ECF No. 58 ¶ 3].

To that end, the parties filed claim construction briefs [ECF Nos. 78, 79, 82, 83], and on June 7, 2017, the Court conducted a hearing at which the parties presented a technological

tutorial and their claim construction arguments. [ECF Nos. 96, 126]. For the reasons that follow, the Court adopts the constructions set forth below.

I. BACKGROUND

The particular allegations and factual disputes regarding the contractual relationship between Syntheon and Covidien are spelled out in greater detail in a prior opinion of the Court. [ECF No. 101]. The following summary is derived from the '269 Patent, with additional details reserved for later discussion as needed.

The '269 Patent pertains to ultrasonic surgical devices. '269 Patent, 2:65–3:2. Such devices use ultrasonic frequencies to produce high-speed vibrations in the tip of a blade. Id., 3:4–18. These instruments are very effective at both cutting organic tissue and simultaneously coagulating the tissue using the heat energy produced by the ultrasonic frequencies. Id. In other words, the devices both cut tissue and stop the related bleeding. See id. They are particularly useful in minimally invasive surgeries, such as endoscopic or laparoscopic procedures. Id. Optimal performance of ultrasonic surgical devices depends on several factors, including the frequency, current, and voltage applied to the blade. Id., 3:19–29.

The '269 Patent, entitled "Two-Stage Switch for Surgical Device," discloses a "surgical device control assembly [that] includes a control device operable to carry out at least two operational conditions of a surgical device and a button operatively connected to the control device." Id., Abstract. When pressed in one direction from the resting point, the button activates one "operational condition" of the device and, when pressed further in that same direction, it activates a second "operational condition." Id. In effect, generally speaking, one button is used to cause two different operations or actions. See id. Determining the more precise meaning and scope of these and other related terms is the primary task of the claim construction that follows.

II. APPLICABLE LAW

Claim construction, the first step in a patent infringement analysis, requires the Court to determine "the scope and meaning of the patent claims asserted." Clearstream Wastewater Sys., Inc., 206 F.3d at 1444. Claim construction is a question of law for the court, Markman v. Westview Instruments, Inc., 517 U.S. 370, 372 (1996), to be resolved with an eye toward the fact that the Court's adopted construction "becomes the basis of the jury instructions, should the case go to trial" on the issue of infringement, see AFG Indus., Inc. v. Cardinal IG Co., 239 F.3d 1239, 1244, 1247 (Fed. Cir. 2001).

The Federal Circuit has provided a framework governing claim construction. In general, a court must give claim terms their "ordinary and customary meaning," which the Federal Circuit has deemed to be "the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention." Phillips v. AWH Corp., 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (en banc). To ascertain this meaning, a court should consult intrinsic evidence—including "the words of the claims themselves, the remainder of the specification, [and] the prosecution history" of the patent—and may also look to "extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art." Id. at 1314 (quoting Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc., 381 F.3d 1111, 1116 (Fed. Cir. 2004)).

This list represents a "hierarchy of sources," Skyline Software Sys., Inc. v. Keyhole, Inc., 421 F. Supp. 2d 371, 375 (D. Mass. 2006), that places primary importance on the intrinsic record—in particular, the claim language and the specification. See Phillips, 415 F.3d at 1313–14, 1317. First, the claim language itself is where claim construction "must begin and remain centered" because "the claims of a patent define the invention to which the patentee is entitled

the right to exclude." Innova/Pure Water, Inc., 381 F.3d at 1115–16. Second, the specification "is always highly relevant to the claim construction analysis" and "[u]sually . . . is dispositive." Phillips, 415 F.3d at 1315 (quoting Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996)). In the specification, a patentee may define his own terms, give a claim term a different meaning than the term would otherwise possess, or disavow certain meanings. See id. at 1316. That being said, the Federal Circuit has "warned against importing limitations from the specification into the claims absent a clear disclaimer of claim scope." Andersen Corp. v. Fiber Composites, LLC, 474 F.3d 1361, 1373 (Fed. Cir. 2007). Third, the prosecution history, which is also part of the intrinsic evidence, can provide additional insight into how the inventor and the Patent and Trademark Office understood the patent, although such evidence may lack the clarity of the specification and therefore be less helpful than other intrinsic evidence. Phillips, 415 F.3d at 1317. Finally, district courts have discretion to rely on extrinsic evidence, such as inventor testimony, dictionaries, or learned treatises, but when doing so must "keep in mind the flaws inherent in each type of [extrinsic] evidence and assess that evidence accordingly." Id. at 1317, 1319.

This case also implicates a special class of claims—so-called "means-plus-function" claims—that must be construed under 35 U.S.C. § 112(f)[1] (formerly 35 U.S.C. § 112, ¶ 6). "Means-plus-function" claims are those that recite a "means or step for performing a specified function without the recital of structure, material, or acts in support thereof." Tele-Publishing, Inc. v. Facebook, Inc., 205 F. Supp. 3d 142, 140 (D. Mass. 2016) (quoting 35 U.S.C. § 112(f)).

[1] Section 112(f) provides: "An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof." 35 U.S.C. § 112(f).

See Phillips, 415 F.3d at 1311 ("Means-plus-function claiming applies only to purely functional limitations that do not provide the structure that performs the recited function.").

The starting point for determining whether § 112(f) applies is the presence or absence of the word "means" in the disputed claim. See Williamson v. Citrix Online, LLC, 792 F.3d 1339, 1348 (Fed. Cir. 2015). Use of the word "means" creates a rebuttable presumption that § 112(f) applies. Id. Conversely, a claim that does not use the word "means" triggers a rebuttable presumption that § 112(f) does not apply.[2] Id. A challenger, however, can overcome this presumption by showing that "the claim term fails to 'recite[] sufficiently definite structure' or else recites 'function without reciting sufficient structure for performing that function.'" Id. at 1349 (alteration in original) (citation omitted). When the Court encounters a "means-plus-function" claim within the scope of § 112(f), claim construction is a two-step process. Id. at 1351. "The court must first identify the claimed function. Then, the court must determine what structure, if any, disclosed in the specification corresponds to the claimed function." Id. (citation omitted).

III. CLAIM CONSTRUCTION

The parties present six disputed claim terms for construction: (1) "operational conditions," (2) "control device operable to carry out at least two operational conditions of a surgical device," (3) "a single actuation member," (4) "effecting a first [or second] of the at least two operational conditions," (5) "switch," and (6) "button." Five of the terms are emphasized in the following illustrative claim:

> "16. A surgical device control assembly, comprising:
> a control device operable to carry out at least two operational conditions of the surgical device; and
> a two-actuation-position button operatively connected to the control device and having a single actuation member, a first depressed position of the actuation

[2] This presumption was once characterized as "strong," but this is no longer the case. Williamson v. Citrix Online, LLC, 792 F.3d 1339, 1348–49 (Fed. Cir. 2015).

member effecting a first of the at least two operational conditions and a second depressed position of the actuation member in substantially the same direction effecting a second of the at least two operational conditions that is different from the first operational condition."

'269 Patent, Claim 16, 39:25–40:2 (emphases added). The remaining term, "switch," appears in several dependent claims. For example:

> "11. The device according to claim 1, wherein the button comprises:
> a two-position switch; and
> a plunger coupled to the two-position switch and operable to change the positions of the two-position switch when pressure is applied to the plunger."

Id., Claim 11, 39:5–10 (emphases added).

A. "operational conditions"

Syntheon's Proposed Construction	Covidien's Proposed Construction
Plain and ordinary meaning. Alternative: states of the surgical device when used in surgery, such as grasping, clamping, cutting, cauterizing, or coagulating.	Condition in which an amount of power is delivered to drive the surgical device.

[ECF No. 89-1].

Syntheon argues that the term "operational conditions" needs no construction because its meaning within the '269 Patent would be readily understood by any English speaker. [ECF No. 78 at 13–14]. Should the term require construction, Syntheon, in support of its proposed language, offers intrinsic evidence from the specification and extrinsic evidence, such as dictionary definitions and testimony from one of the inventors on the patent. Id. at 14–15.

Covidien argues that this term is facially ambiguous and that, under Phillips, its proposed construction should prevail because the specification language only discloses "operational conditions" that relate to an amount of power being delivered to drive the surgical device. [ECF No. 79 at 14–15]. Covidien further asserts that the patent's prosecution history supports such a

construction. Id. at 17–18. Syntheon does not dispute that the '269 Patent discloses some "operational conditions" that result from power being delivered to the surgical device, but argues that the patent also covers other "operational conditions," such as grasping or clamping, that do not require the application of power. [ECF No. 78 at 14–15].

To begin, the Court disagrees with Syntheon's position that the term "operational conditions" requires no construction. As demonstrated in the discussion below, a person having ordinary skill in the art would not readily understand the scope and meaning of this term without reference to the rest of the claim language, the specification, and the prosecution history of the patent. Further, although Syntheon's proposed construction may make sense in the abstract, it is not supported by the claim language, the specification, and the prior art relied upon in the '269 Patent, and therefore must be rejected.

First, the claim language indicates a direct linkage between "operational conditions" and the two-stage switch that is the main focus of the '269 Patent. For example, claim 1 describes a device equipped with a "button" that, when actuated, "effect[s]" either of two "operational conditions." '269 Patent, 38:25–41. See also discussion of "effecting a first [or second] of the at least two operational conditions" and "button," infra, Sections III.D, III.F. This same basic relationship—the user presses a button to "effect" one of two "operational conditions"—appears in independent claims 16 and 20 as well. See '269 Patent, 39:25–40:2; 40:21–32. Thus, the claim language itself limits the scope of "operational conditions" to those conditions that are or may be "effected" by pressing a button to engage the claimed two-stage switch.

Next, the specification describes "operational conditions" largely in terms of the varying amounts of power that may be applied to the surgical device, consistent with the fact that varying amounts of power is what results when a user presses the button to engage the claimed switch.

See discussion of "switch" and "button," infra, Sections III.E–F. For instance, the patent states that "the first operational condition is power delivered from the power supply" and that "the second operational condition is power delivered from the power supply." '269 Patent, 6:44–49; 38:58–62. It further specifies that "the control device has a circuit and the button further comprises at least one electrical contact that electrically closes the circuit to effect at least one of the at least two operational conditions." Id., 6:50–54. The patentee also explained the purpose of the invention's two-stage functionality:

> "In practice, ultrasonic cutting devices, such as ones employing the present invention, encounter a variety of tissue types and sizes and are used in a variety of surgical procedure types, varying from precise movements that must be tightly controlled to non-delicate cutting material that requires less care. It is therefore advantageous to provide two ultrasonic cutting power levels that allow an operator to select between a low-power cutting mode and a higher-power cutting mode."

'269 Patent, 35:55–62. All of this language reinforces the idea of a power-based limitation on "operational conditions."

Further, the Federal Circuit has instructed that "the prior art cited during the examination of the patent" is part of the prosecution history, and hence part of the intrinsic evidence upon which the Court may rely in construing claims. See Phillips, 415 F.3d at 1317. In this case, the prior art cited in the '269 Patent covers a broad range of existing ultrasonic surgical devices, including some that are capable of grasping or clamping tissue. See, e.g., '269 Patent, 3:30–44 (describing device with "pivoting arm that acts to grasp or clamp onto tissue"), Figs. 1–2. According to Syntheon, because the patent discloses these mechanical (and not power-based) "operational conditions"—for instance in Figure 25—one of skill in the art would understand "that clamping and grasping are among the things the claimed instruments are capable of and intended to do." [ECF No. 82 at 7].

This argument blurs the distinction, relied upon elsewhere in Syntheon's briefing, between the patent claims and the particular embodiments disclosed in the patent. Federal Circuit case law is clear that "the claims, not the specification, provide the measure of the patentee's right to exclude." Johnson & Johnston Assocs. Inc. v. R.E. Serv. Co., 285 F.3d 1046, 1052 (Fed. Cir. 2002). Here, the Court interprets the '269 Patent—entitled "Two-Stage Switch for Surgical Device"—to claim various forms of a two-stage switch, which the specification describes as being incorporated into various existing ultrasonic surgical devices that were already capable of other "operational conditions" such as grasping or clamping. The scope of the term "operational conditions," then, is best understood as being limited to those "operational conditions" brought about by engaging the claimed two-stage switch. Based on this disclosure, a person having ordinary skill in the art would not understand the claim term "operational conditions" in the '269 Patent to encompass all imaginable "operational conditions" that ultrasonic surgical devices might encounter, but only those particular "operational conditions" that may be brought about by the patentee's novel two-stage switch.

This conclusion receives further support from the limited portion of the prosecution history that is available in the record before this Court. This history shows that the patentee took pains to distinguish the claimed invention from prior art, which did not allow a user to "carry out **two** different operational conditions (e.g., MAX and MIN power settings) by pressing just a **single** activation member of the button member to a first or second depressed position." [ECF 79-2 at 5] (emphases in original). Based on this language, the distinguishing feature of the '269 Patent is technology that permits a user to effect two "operational conditions"—a high-power mode and a low-power mode—by pressing a single button.

Syntheon also relies on extrinsic evidence, including two declarations by one of the named inventors and a declaration by a consulting engineer. In effect, these declarations offer interpretations of the '269 Patent consistent with Syntheon's—that the "operational conditions" disclosed in the patent include grasping and clamping, as well as high-power and low-power modes. [ECF Nos. 78-4 ¶ 5; 82-1 ¶¶ 12–14; 99 ¶¶ 7, 14]. The Federal Circuit, however, has cautioned that this type of extrinsic evidence is generally "less reliable than the patent and its prosecution history in determining how to read claim terms." Phillips, 415 F.3d at 1318–19. Moreover, the proffered extrinsic evidence does not alter the Court's conclusion that Syntheon's construction of "operational conditions" is inconsistent with the intrinsic evidence. See id. at 1319 ("[E]xtrinsic evidence may be useful to the court, but it is unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence."); Key Pharm. v. Hercon Labs. Corp., 161 F.3d 709, 716 (Fed. Cir. 1998) ("[I]f the meaning of a disputed claim term is clear from the intrinsic evidence—the written record—that meaning, and no other, must prevail; it cannot be altered or superseded by witness testimony or other external sources simply because one of the parties wishes it were otherwise."); see also Sanofi-Aventis Deutschland GmbH v. Genentech, Inc., 473 F. App'x 885, 892 (Fed. Cir. 2012) (declining to adopt construction based on extrinsic evidence when district court's construction was supported by intrinsic evidence).

Although the Court does not accept Syntheon's proposed construction, it also finds Covidien's proposed construction to be too narrow. There is nothing in the intrinsic record that would require limiting the construction of "operational conditions" to those states in which different amounts of power are used to "drive" the surgical device. Instead, the Court construes

"operational condition" to mean: **a condition in which an amount of power is delivered to the surgical device**.

Syntheon counters that such a construction renders superfluous dependent claims 6 and 7, which specify that the two "operational conditions" are "power delivered from the power supply." [ECF No. 82 at 8-9]. See '269 Patent, 38:58–62. Syntheon is correct that the doctrine of claim differentiation creates a presumption that dependent claim limitations are not included in an independent claim. GE Lighting Sols., LLC v. AgiLight, Inc., 750 F.3d 1304, 1310 (Fed. Cir. 2014). Therefore, dependent claims 6 and 7 are presumptively not included in independent claims 16 and 20. However, "claim differentiation is not a hard and fast rule, and the presumption can be overcome by a contrary construction required by the specification or prosecution history." Id. Here, a person of skill in the art would, based on the intrinsic evidence described above, understand the term "operational conditions" to encompass those states of the surgical device that are brought about (or "effected") by the claimed two-stage switch, which necessarily imposes a power-based limitation on the claim. A broader reading is precluded by the claim language, the specification, and the prosecution history.

B. "control device operable to carry out at least two operational conditions of a surgical device"

Syntheon's Proposed Construction	Covidien's Proposed Construction
Plain and ordinary meaning. Alternative: a device, for regulating the operation of a surgical device, that is capable of carrying out two or more operational conditions of the surgical device.	This claim element is governed by 35 U.S.C. §112, ¶ 6. The disclosed structure is: "assembly consisting of a processor and related circuitry." The disclosed function is: "to carry out at least two operational conditions."

[ECF No. 89-1].

Syntheon again claims that the Court need not construe this term. Alternatively, Syntheon argues that because this term does not use the word "means," it is presumptively outside the scope of § 112(f), and further that the '269 Patent recites sufficient structure to preclude the presumption from being rebutted. [ECF No. 78 at 12–13]. Finally, Syntheon asserts that if the Court decides to construe the term under § 112(f), then Covidien's construction, in light of its related construction of "operational conditions," see supra, Section III.A., is too narrow because it fails to include "various triggers, handles, levers, and the like" that may be a part of carrying out the disclosed functions. Id. at 13.

Covidien, in turn, argues that a person of ordinary skill in the art would not understand the term "control device" to disclose a definite structure, and therefore the presumption against applying § 112(f) in the absence of the word "means" is rebutted. [ECF No. 79 at 19]. Accordingly, Covidien identifies the '269 Patent as disclosing the function "to carry out at least two operational conditions" and argues the only disclosed structure capable of performing this function consists of a processor and related circuity required to deliver power and carry out the operational conditions of the surgical device. Id. at 19–20.

At the outset, the Court must determine whether this disputed claim is a "means-plus-function claim" under § 112(f). See Williamson, 792 F.3d at 1348. The Court concludes that although this claim does not use the word "means," the term "control device operable to carry out at least two operational conditions of a surgical device" fails to recite a sufficiently definite structure to avoid the application of § 112(f). See id. at 1349. The term is built around the word "device"—so-called "nonce" language that the Federal Circuit has deemed inadequate to defeat § 112(f). See Robert Bosch, LLC v. Snap-On Inc., 769 F.3d 1094, 1099 (Fed. Cir. 2014) ("[T]his court has found the word 'device' to be a non-structural, 'nonce' word."); Mass. Inst. of Tech. &

Elecs. For Imaging, Inc. v. Abacus Software, 462 F.3d 1344, 1354 (Fed. Cir. 2006) ("The generic terms 'mechanism,' 'means,' 'element,' and 'device,' typically do not connote sufficiently definite structure."). Such language triggers § 112(f) because it sets forth a "black box recitation of structure" akin to using the term "means." See Williamson, 792 F.3d at 1350 (discussing term "module"). While additional description may sometimes save such "black box" claim language from the application of § 112(f), see Mass. Inst. of Tech. & Elecs. For Imaging, Inc., 462 F.3d at 1354, no such language rescues this term.

Having determined that this term recites a "means-plus-function" claim, the Court proceeds to the requisite two-step process for construing the claim. See Williamson, 792 F.3d at 1351. First, the Court must identify the claimed function. Id. Here, the only function disclosed by the term "control device operable to carry out at least two operational conditions of a surgical device" is, as Covidien suggests, "to carry out at least two operational conditions of a surgical device." Syntheon does not dispute this specific point. [ECF No. 78 at 13 ("Covidien proposes the claimed function is to 'carry out at least two operational conditions,' which on its face is appropriate.")].

Second, the Court must determine what structure, if any, disclosed in the specification corresponds to the claimed function. Williamson, 792 F.3d at 1351. A proper understanding of the disclosed function depends on the Court's construction of "operational conditions," as more fully discussed above. Relying on that construction here, the contested claim recites the function of carrying out a condition in which an amount of power is delivered to the surgical device. See discussion of "operational conditions," supra, Section III.A. The only structure disclosed in the '269 Patent that corresponds to this function is the claimed two-stage switch, triggered by the pressing of a button.

Syntheon argues that the disclosed structures in the '269 Patent "comprise far more than a processor and circuitry" and should include "the various triggers, handles, levers, and the like" that appear in the patent. [ECF No. 78 at 13]. The fundamental problem with this argument is that the '269 Patent does not—and could not—cover prior art. Although the patent discloses some existing ultrasonic surgical devices that use "various triggers, handles, levers, and the like" for grasping or clamping, the '269 Patent does not lay claim to these devices independent of the novel two-stage switch that allows the user of such devices to alternate between high-power and low-power modes by moving a single button.

Instead, the specification states that

> "embodiments of the invention described herein may be comprised of one or more conventional processors and unique stored program instructions that control the one or more processors to implement, in conjunction with certain non-processor circuits and other elements, some, most, or all of the functions of ultrasonic cutting devices described herein."

'269 Patent, 11:66–12:5. It then repeatedly discusses or depicts embodiments that incorporate processors. See, e.g., id., 12:36–52; 20:1–12; 28:4–19; 30:4–16; 35:1–4. Several embodiments also refer to or incorporate Figure 3, depicting "a block circuit diagram [that] shows the invention [and] includes a microprocessor . . . ." Id., 12:37–39. Syntheon points to no embodiment or potential embodiment capable of carrying out an "operational condition," as construed above, without a processor and related circuitry, and none are apparent to the Court based on this record.[3]

[3] The Court's claim construction, therefore, assumes that some combination of processors and/or circuitry is necessary to effect an "operational condition" as construed above. The parties point to no information that would support an alternative conclusion. Nonetheless, if necessary, the Court may engage in "rolling claim construction" and revisit its interpretation of the claim terms as its understanding of the technology evolves. See Wi-LAN USA, Inc. v. Apple Inc., 830 F.3d 1374, 1385 (Fed. Cir. 2016), cert. denied, 137 S.Ct. 1213 (2017).

In light of the foregoing, the Court adopts the following construction for this claim term: **an assembly, consisting of a processor and related circuitry, or its equivalents, used to carry out at least two operational conditions**.

C. "a single actuation member"

Syntheon's Proposed Construction	Covidien's Proposed Construction
Plain and ordinary meaning. Alternative: a single device configured to move the two-actuation position button.	Single depressible button.

[ECF No. 89-1].

Syntheon argues the term "single actuation member" needs no construction because it consists of common and easily understood words, and the patent requires no alternative definition. [ECF No. 78 at 15]. If the Court construes the term, Syntheon proposes "a single device configured to move the two-actuation position button," based in part on definitions from Dictionary.com, the Dictionary of Mechanical Engineering, and testimony from one of the inventors named on the patent. Id. at 15–17. Covidien's proposed construction relies on evidence in the intrinsic record related to the patentee's attempts to distinguish the invention from prior art. [ECF No. 79 at 22]. Covidien also points to several places in the specification that mention "a single button" or "only one button." Id. at 23. The parties do not attempt to redefine the word "single." Thus, the dispute comes down to whether "actuation member" means (a) "device configured to move the two-actuation position button," as Syntheon suggests, or (b) "depressible button," as Covidien suggests.

The claim language itself is the first impediment to Covidien's proposed construction. Specifically, claims 16 and 20 use "button" and "actuation member" as distinct terms. '269 Patent, 39:25–40:2; 40:20–32. These claims indicate that the "button" is a structure that includes

a "single actuation member," which can be depressed to two positions to correspond with two different "operational conditions." Id. "Where claims use different terms, those differences are presumed to reflect a difference in the scope of the claims." Forest Labs., Inc. v. Abbott Labs., 239 F.3d 1305, 1310 (Fed. Cir. 2001).

The prosecution history of the '269 Patent suggests a similar distinction between these two terms: "To further clarify that the claimed surgical device control assembly comprises a single depressible button, claims 16 and 20 have been amended to specifically recite that the two-actuation-position button is comprised of a single actuation member." [ECF No. 79-2 at 3] (emphases altered from original). Construing "actuation member" to mean only "depressible button" would contradict this intrinsic evidence, which suggests that the former is a component of the latter.

Syntheon's proposed construction is not without its own problems. In particular, the word "device" does little, if anything, to refine the meaning of "actuation member"—and may be even more ambiguous than the original term. Further, defining "actuation member" as a "device configured to move the two-actuation position button" does not necessarily account for the fact that the '269 Patent discloses a structure in which the "actuation member" is *a component of* the "button" used to alter the position of the underlying switches.

Instead, a person having ordinary skill in the art would understand the term "actuation member" to denote a single piece of the button that can be moved to activate the underlying two-stage switch. See, e.g., '269 Patent, 35:19–43 and Fig. 55 (describing single button in which plunger is depressed to two distances to activate different sub-switches); 39:25–40:2 (similar); 40:20–32 (similar). That is, the '269 Patent discloses that "single actuation member" constitutes a label for a device such as a plunger that is used to operate a "button," as construed below.

Therefore, the Court construes the term "a single actuation member" to mean **a single component of a button, such as a plunger, the movement of which changes the position of a coupled two-position switch**.

D. "effecting a first [or second] of the at least two operational conditions"

Syntheon's Proposed Construction	Covidien's Proposed Construction
Plain and ordinary meaning. Alternative: bringing about or accomplishing the first [or second] operational condition.	Causing a first/second operational condition.

[ECF No. 89-1].

Setting aside the phrase "operational conditions," which has been construed above, Syntheon argues that this phrase does not need construction because the word "effecting" is common and easily understood by any English speaker. [ECF No. 78 at 17]. If the Court construes the phrase, Syntheon proposes "bringing about or accomplishing the first [or second] operational condition." Id. Covidien argues that the term "effecting" has multiple meanings, and that the construction most supported by the teaching of the '269 Patent is "to directly cause the operational condition to be carried out." [ECF No. 79 at 27].

The word "directly" appears nowhere in the patent claims or specification as related to this particular claim, and Covidien makes no compelling argument as to why the Court should read it into the claim. Insofar as the parties debate whether "bringing about" or "causing" more accurately captures the meaning of "effecting," the Court sees no reason to resolve the dispute. See Brown v. 3M, 265 F.3d 1349, 1352 (Fed. Cir. 2001) ("[Terms that] are not technical terms of art . . . do not require elaborate interpretation."); U.S. Surgical Corp. v. Ethicon, Inc., 103 F.3d 1554, 1568 (Fed. Cir. 1997) (court need not "repeat or restate every claim term," as claim construction "is not an obligatory exercise in redundancy"); Federal Judicial Center, Patent Case

Management Judicial Guide § 5.1.4.3, at 5-29 (2016) ("If a claim term is nontechnical, is in plain English, and derives no special meaning from the patent and its prosecution history, then the court need not function as a thesaurus.").

Neither party points to any convincing intrinsic evidence to show that "effecting" takes on a special meaning in the context of the '269 Patent, that the term would be misunderstood by a person having ordinary skill in the art, or that the term otherwise requires clarification by the Court. To the contrary, a person having ordinary skill in the art would readily understand the meaning of "effecting" in this claim term without any input from the Court. This conclusion is bolstered by extrinsic evidence, which shows that to "effect" means "to cause to come into being" or "to bring about." See Effect, MERRIAM-WEBSTER ONLINE DICTIONARY, https://www.merriam-webster.com/dictionary/effect (last visited Sept. 20, 2017). The parties' suggested constructions are merely synonyms for readily understood claim language. Accordingly, the Court declines to construe this term.

E. "switch"

Syntheon's Proposed Construction	Covidien's Proposed Construction
Plain and ordinary meaning.	A device for making or breaking a two-pole connection in an electrical circuit.

[ECF No. 89-1].

Syntheon again asserts that the term "switch" is familiar to any English speaker and that it needs no construction because the '269 Patent does not use the word in any unusual way. [ECF No. 78 at 17]. Syntheon also argues that Covidien's proposed construction is overly narrow even based on Covidien's own extrinsic dictionary definition because it limits the term to "making or breaking" circuit connections and to "two-pole" connections, which are not limitations found in the patent itself. Id. at 18. Covidien argues that the term "switch" in the '269 Patent is repeatedly

associated with making or breaking an electrical connection, and that its proposed construction comports with an extrinsic dictionary definition from Merriam-Webster. [ECF No. 79 at 24–25].

The Court agrees with Syntheon that the patent claims and specification include no unique definition of "switch," apart from its "two-stage" nature, which is not offered for construction here. Instead, the claims and related specification language rely upon the rudimentary understanding that a "switch" is used to make, break, or alter the connections in an electrical circuit. See, e.g., 269 Patent, 13:20–46 and Fig. 3 (depicting role of switch between power supply and drive circuit); 34:58–35:4 (describing how button causes switch to close, which "complet[es] a circuit between the battery . . . and the ultrasonic-driving-wave-signal generating circuit"); 35:5–18 (describing how the "switch . . . controls power delivery to the transducer," such that "the state change will either complete or break the circuit"); 35:19–43 and Fig. 55 (depicting how two-stage switch can allow user to move between "two possible output power levels available that result in two different motion displacement values of the waveguide"); 36:18–37 (similar).

These portions of the patent disclose a definition of "switch" that mirrors the simple dictionary definition offered by Covidien, defining "switch" as "a device for making, breaking, or changing the connections in an electrical circuit." [ECF No. 79-3 at 3]. In essence, this term, as used in the '269 Patent, falls within that class of terms identified by the Federal Circuit as having a readily apparent meaning to the person of ordinary skill in the art such that claim construction "involves little more than the application of the widely accepted meaning of commonly understood words." Phillips, 415 F.3d at 1314. This type of claim construction permits reference to "general purpose dictionaries." Id.

That being said, Covidien provides no basis, and the Court finds none in the intrinsic record, for limiting the construction of "switch" to "two-pole" connections. At the hearing, the parties identified some confusion about whether a "two-pole" connection was meant to relate to the "two-stage" switch mentioned throughout the '269 Patent. [See ECF No. 126 at 102:25–107:1]. In any event, because the "two-pole" limitation appears nowhere in the intrinsic record, the Court declines to read it into the claim. See Homeland Housewares, LLC v. Whirlpool Corp., 865 F.3d 1372, 1375 (Fed. Cir. 2017) (claim construction inquiry "begins and ends in all cases with the actual words of the claim") (citation omitted). Accordingly, the Court construes the term "switch" to mean **a mechanism for making, breaking, or altering connections in an electrical circuit**.

F. "button"

Syntheon's Proposed Construction	Covidien's Proposed Construction
Plain and ordinary meaning.	A device for making or breaking a two-pole connection in an electrical circuit.

[ECF No. 89-1].

Syntheon argues that the term "button" requires no construction because its meaning is familiar to any English speaker. [ECF No. 78 at 18]. Should the Court construe the term, Syntheon proposes a definition from Dictionary.com ("any small knob or disk pressed to activate an electric circuit, release a spring, or otherwise operate or open a machine, small door, toy, etc."). Id. Covidien argues that the author of the '269 Patent acted as his own lexicographer by claiming a "button" that operates in essentially the same way as the claimed "switch." [ECF No. 79 at 26]. See discussion of "switch," supra, Section III.E. In other words, the patent discloses a "button" that sends power to a transducer by completing a circuit, which is accomplished by closing the claimed "switches." [ECF No. 79 at 26]. Thus, according to Covidien, the Court

should construe "button" the same way it construes "switch." Id. at 26–27. Covidien seeks to bolster this position by arguing the terms "button" and "switch" are "used interchangeably throughout" the '269 Patent. Id. at 26.

The Court agrees with Covidien that the patent discloses a "button" that operates by closing a two-stage "switch." But "[w]here claims use different terms, those differences are presumed to reflect a difference in the scope of the claims," Forest Labs., Inc., 239 F.3d at 1310, and the Court does not find that the terms "button" and "switch" are being used interchangeably.

Although the claim language demonstrates a close functional relationship between the "button" and the "switch," the claim language and the specification repeatedly and unmistakably show that these are two distinct components of the claimed invention. See '269 Patent, 6:61–65 ("In accordance with again a further feature of the invention, the button comprises a two-position switch and a plunger coupled to the two-position switch and operable to change the positions of the two-stage switch when pressure is applied to the plunger."); 34:58–35:4 (describing a button that causes electrical contacts within a switch to close); 35:19–43 and Fig. 55 (describing relationship between "button" and two-stage "switch" in one embodiment); 36:18–38 (similar); 36:9–17 ("The present invention includes any multiple-stage switch that engages different stages by movement of a single button.").

Claim 11 illustrates the point neatly:

> "11. The device according to claim 1, wherein the **button** comprises:
> a two-position **switch**; and
> a plunger coupled to the two-position **switch** and operable to change the positions of the two-position **switch** when pressure is applied to the plunger."

'269 Patent, Claim 11, 39:5–10 (emphasis added). This claim would make no sense if the words "button" and "switch" were interchangeable.

Based on this language, and consistent with the constructions provided above, a person of ordinary skill in the art would understand "button" in the '269 Patent to denote **a structure that combines a single actuation member and a switch**. This meaning is apparent without resorting to Dictionary.com, and Covidien offers no compelling reason to depart from it.

IV. CONCLUSION

For the reasons discussed, the Court adopts the constructions described above. For ease of reference, they are reproduced below in Table A.

SO ORDERED.

Dated: September 22, 2017

/s/ Allison D. Burroughs
ALLISON D. BURROUGHS
U.S. DISTRICT JUDGE

Table A

Disputed Claim Term	Court's Adopted Construction
"operational conditions"	A condition in which an amount of power is delivered to the surgical device
"control device operable to carry out at least two operational conditions of a surgical device"	An assembly, consisting of a processor and related circuitry, or its equivalents, used to carry out at least two operational conditions
"a single actuation member"	A single component of a button, such as a plunger, the movement of which changes the position of a coupled two-position switch
"effecting a first [or second] of the at least two operational conditions"	No construction needed
"switch"	A mechanism for making, breaking, or altering connections in an electrical circuit
"button"	A structure that combines a single actuation member and a switch