

United States District Court,  
E.D. Texas, Marshall Division.

**CYBERGYM RESEARCH LLC,**  
Plaintiff.

v.

**ICON HEALTH & FITNESS, INC,**  
Defendant.

Civil Action No. 2:05-CV-527-DF

**Jan. 25, 2007.**

Carl R. Roth, The Roth Law Firm, P.C., Michael Charles Smith, Siebman Reynolds Burg Phillips & Smith, Marshall, TX, Jack Russo, Tim C. Hale, William C. Milks, III, John A. D. Kelley, Russo & Hale, Palo Alto, CA, for Plaintiff.

Lawrence Louis Germer, Charles W. Goehringer, Jr., Germer Gertz, L.L.P., Beaumont, TX, Brett A. Hansen, Charles L. Roberts, David R. Wright, Kirk R. Harris, Larry R. Laycock, Robert E. Aycok, Workman Nydegger & Seeley, Salt Lake City, UT, H. Craig Hall, Law Office of H. Craig Hall, Jr., West Valley, UT, Robert Parrish Freeman, Workman Nydegger & Seeley, Salt Lake City, UT, for Defendant.

### ***CLAIM CONSTRUCTION ORDER***

**DAVID FOLSOM, District Judge.**

Before the Court is Plaintiff's Opening Claim Construction Brief. Dkt. No. 53. Also before the Court are Defendant's brief in response and Plaintiff's reply. Dkt. Nos. 60 & 68, respectively. The Court conducted a claim construction hearing on December 11, 2006. After considering the patents, arguments of counsel, and all other relevant pleadings and papers, the Court finds that the claims of the patents-in-suit should be construed as set forth herein.

#### **I. BACKGROUND**

Plaintiff brings this cause of action alleging infringement of United States Patent Numbers 6,193,631 (the "631 Patent") and 6,749,537 (the "537 Patent") (collectively, the "patents-in-suit"). Amended Complaint, Dkt. No. 47. Defendant denies infringement, asserts the affirmative defenses of invalidity, unclean hands, waiver, laches, and estoppel, and counterclaims for invalidity, unenforceability, and trademark infringement. Answer to Amended Complaint, Dkt. No. 57.

#### **II. LEGAL PRINCIPLES OF CLAIM CONSTRUCTION**

A determination of patent infringement involves two steps. First, the patent claims are construed, and, second, the claims are compared to the allegedly infringing device. *Cybor Corp. v. FAS Techs., Inc.*, 138

F.3d 1448, 1455 (Fed.Cir.1998) (en banc).

The legal principles of claim construction were recently reexamined by the Federal Circuit in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed.Cir.2005) (en banc). Reversing a summary judgment of non-infringement, an en banc panel specifically identified the question before it as: "the extent to which [the court] should resort to and rely on a patent's specification in seeking to ascertain the proper scope of its claims." *Id.* at 1312. Addressing this question, the Federal Circuit specifically focused on the confusion that had amassed from its recent decisions on the weight afforded dictionaries and related extrinsic evidence as compared to intrinsic evidence. Ultimately, the court found that the specification, "informed, as needed, by the prosecution history," is the "best source for understanding a technical term." *Id.* at 1315 (quoting *Multiform Dessicants, Inc. v. Medzam, Ltd.*, 133 F.3d 1473, 1478 (Fed.Cir.1998)). However, the court was mindful of its decision and quick to point out that *Phillips* is not the swan song of extrinsic evidence, stating:

[W]e recognized that there is no magic formula or catechism for conducting claim construction. Nor is the court barred from considering any particular sources or required to analyze sources in any specific sequence, as long as those sources are not used to contradict claim meaning that is unambiguous in light of the intrinsic evidence.

*Phillips*, 415 F.3d at 1324 (citations omitted). Consequently, this Court's reading of *Phillips* is that the Federal Circuit has returned to the state of the law prior to its decision in *Texas Digital Sys. v. Telegenix, Inc.*, 308 F.3d 1193 (Fed.Cir.2002), allotting far greater deference to the intrinsic record than to extrinsic evidence. "[E]xtrinsic evidence cannot be used to vary the meaning of the claims as understood based on a reading of the intrinsic record." *Phillips*, 415 F.3d at 1319.

Additionally, the Federal Circuit in *Phillips* expressly reaffirmed the principles of claim construction as set forth in *Markman v. Westview Instruments, Inc.*, 52 F.3d 967 (Fed.Cir.1995) (en banc), *aff'd*, 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996), *Vitronics Corp. v. Conceptor, Inc.*, 90 F.3d 1576 (Fed.Cir.1996), and *Innova/Pure Water, Inc. v. Safari Water Filtration Systems, Inc.*, 381 F.3d 1111 (Fed.Cir.2004). Thus, the law of claim construction remains intact. Claim construction is a legal question for the courts. *Markman*, 52 F.3d at 979. The claims of a patent define that which "the patentee is entitled the right to exclude." *Innova*, 381 F.3d at 1115. The claims are "generally given their ordinary and customary meaning" as understood by "a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." *Vitronics*, 90 F.3d at 1582; *Phillips*, 415 F.3d 1313. However, the Federal Circuit stressed the importance of recognizing that the person of ordinary skill in the art "is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification." *Phillips*, 415 F.3d at 1313.

Advancing the emphasis on the intrinsic evidence, the *Phillips* decision explains how each source, the claims, the specification as a whole, and the prosecution history, should be used by courts in determining how a skilled artisan would understand the disputed claim term. *See, generally, id.* at 1314-17. The court noted that the claims themselves can provide substantial guidance, particularly through claim differentiation. Using an example taken from the claim language at issue in *Phillips*, the Federal Circuit observed that "the claim in this case refers to 'steel baffles,' which strongly implies that the term 'baffles' does not inherently mean objects made of steel." *Id.* at 1314. Thus, the "context in which a term is used in the asserted claim can often illuminate the meaning of the same term in other claims." *Id.* Likewise, other claims of the asserted patent can be enlightening, for example, "the presence of a dependent claim that adds a particular

limitation gives rise to a presumption that the limitation in question is not present in the independent claim." *Id.* at 1315 (citing *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 910 (Fed.Cir.2004)).

Still, the claims "must be read in view of the specification, of which they are part." *Markman*, 52 F.3d at 978. In *Phillips*, the Federal Circuit reiterated the importance of the specification, noting that "the specification 'is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.'" *Phillips*, 415 F.3d at 1315 (quoting *Vitronics*, 90 F.3d at 1582). To emphasize this position, the court cited extensive case law, as well as "the statutory directive that the inventor provide a 'full' and 'exact' description of the claimed invention." *Id.* at 1316 (citing *Merck & Co., v. Teva Pharms. USA, Inc.*, 347 F.3d 1367, 1371 (Fed.Cir.2003)); *see also* 35 U.S.C. s. 112, para. 1. Consistent with these principles, the court reaffirmed that an inventor's own lexicography and any express disavowal of claim scope is dispositive. *Id.* at 1316. Concluding this point, the court noted the consistency with this approach and the issuance of a patent from the Patent and Trademark Office and found that "[i]t is therefore entirely appropriate for a court, when conducting claim construction, to rely heavily on the written description for guidance as to the meaning of the claims." *Id.* at 1317.

Additionally, the *Phillips* decision provides a terse explanation of the prosecution history's utility in construing claim terms. The court simply reaffirmed that "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." *Id.* (citing *Vitronics*, 90 F.3d at 1582-83). It is a significant source for evidencing how the patent office and the inventor understood the invention. *Id.*

Finally, the Federal Circuit curtailed the role of extrinsic evidence in construing claims. In pointing out the less reliable nature of extrinsic evidence, the court reasoned that such evidence (1) is by definition not part of the patent, (2) does not necessarily reflect the views or understanding of a person of ordinary skill in the relevant art, (3) is often produced specifically for litigation, (4) is far reaching to the extent that it may encompass several views, and (5) may distort the true meaning intended by the inventor. *See id.* at 1318. Consequently, the Federal Circuit expressly disclaimed the approach taken in *Texas Digital*. While noting the *Texas Digital* court's concern with regard to importing limitations from the written description, "one of the cardinal sins of patent law," the Federal Circuit found that "the methodology it adopted placed too much reliance on extrinsic sources such as dictionaries, treatises, and encyclopedias and too little on intrinsic sources, in particular the specification and prosecution history." *Id.* at 1320. Thus, the court renewed its emphasis on the specification's role in claim construction.

Many other principles of claim construction, though not addressed in *Phillips*, remain significant in guiding this Court's charge in claim construction. The Court is mindful that there is a "heavy presumption" in favor of construing claim language as it would be plainly understood by one of ordinary skill in the art. *Johnson Worldwide Assocs., Inc. v. Zebco Corp.*, 175 F.3d 985, 989 (Fed.Cir.1999); *cf. Altiris, Inc., v. Symantec Corp.*, 318 F.3d 1364, 1372 (Fed.Cir.2003) ("[S]imply because a phrase as a whole lacks a common meaning does not compel a court to abandon its quest for a common meaning and disregard the established meaning of the individual words.") The same terms in related patents are presumed to carry the same meaning. *See Omega Eng'g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1334 (Fed.Cir.2003) ("We presume, unless otherwise compelled, that the same claim term in the same patent or related patents carries the same construed meaning.") "Consistent use" of a claim term throughout the specification and prosecution history provides "context" that may be highly probative of meaning and may counsel against "[b]roadening of the ordinary meaning of a term in the absence of support in the intrinsic record indicating that such a broad

meaning was intended...." *Nystrom v. TREX Co.*, 424 F.3d 1136, 1143-1146 (Fed.Cir.2005).

Claim construction is not meant to change the scope of the claims but only to clarify their meaning. *Embrex, Inc. v. Serv. Eng'g Corp.*, 216 F.3d 1343, 1347 (Fed.Cir.2000) ("In claim construction the words of the claims are construed independent of the accused product, in light of the specification, the prosecution history, and the prior art.... The construction of claims is simply a way of elaborating the normally terse claim language[ ] in order to understand and explain, but not to change, the scope of the claims.") (citations and internal quotations omitted). Regarding claim scope, the transitional term "comprising," when used in claims, is inclusive or open-ended and "does not exclude additional, unrecited elements or method steps." *CollegeNet, Inc. v. ApplyYourself, Inc.*, 418 F.3d 1225, 1235 (Fed.Cir.2005) (citations omitted). Claim constructions that would read out the preferred embodiment are rarely, if ever, correct. *Vitronics*, 90 F.3d at 1583-84.

The Court notes that a patent examiner's "Reasons for Allowance," where merely summarizing a claimed invention and not specifically noting that patentability is based on a particular feature, do not limit the scope of the claim. *See Apex Inc. v. Raritan Computer, Inc.*, 325 F.3d 1364, 1375 (Fed.Cir.2003). Similarly, an examiner's unilateral statements in a "Notice of Allowance" do not result in the alteration of claim scope. *See id.*; *see also Salazar v. Procter & Gamble Co.*, 414 F.3d 1342, 1346-47 (Fed.Cir.2005). "[F]or prosecution disclaimer to attach, our precedent requires that the alleged disavowing actions or statements made during prosecution be both clear and unmistakable." *Omega*, 334 F.3d at 1326. The Federal Circuit has "declined to apply the doctrine of prosecution disclaimer where the alleged disavowal of claim scope is ambiguous." *Omega Eng'g*, 334 F.3d at 1324.

The doctrine of claim differentiation is often important in claim construction. *Phillips*, 415 F.3d at 1315 (citing *Liebel-Flarsheim Co.*, 358 F.3d at 910). "Claim differentiation" refers to the presumption that an independent claim should not be construed as requiring a limitation added by a dependent claim. *Curtiss-Wright Flow Control Corp. v. Velan, Inc.*, 438 F.3d 1374, 1380 (Fed.Cir.2006). This is in part because "reading an additional limitation from a dependent claim into an independent claim would not only make that additional limitation superfluous, it might render the dependent claim invalid." *Id.*; *see also SRI Int'l. v. Matsushita Elec. Corp. of Am.*, 775 F.2d 1107, 1122 (Fed.Cir.1985) ("It is settled law that when a patent claim does not contain a certain limitation and another claim does, that limitation cannot be read into the former claim in determining either validity or infringement.") This doctrine is based in part on the presumption that each claim has a different scope. 35 U.S.C. s. 282; *Curtiss-Wright Flow Control Corp.*, 438 F.3d at 1380. The difference in meaning and scope between claims is presumed to be significant to the extent that the absence of such difference in meaning and scope would make a claim superfluous. *Free Motion Fitness, Inc. v. Cybex Int'l*, 423 F.3d 1343, 1351 (Fed.Cir.2005). Although a validity analysis is not a regular component of claim construction, if possible claims should be construed to preserve their validity. *Phillips*, 415 F.3d at 1327; *see also Rhine v. Casio, Inc.*, 183 F.3d 1342, 1345 (Fed.Cir.1999).

### III. THE PATENTS-IN-SUIT

The '631 Patent, entitled "Force Script Implementation Over a Wide Area Network," issued on February 27, 2001. The '537 Patent was issued on June 15, 2004, pursuant to a continuation-in-part of the application that led to the '631 patent. The '537 Patent is entitled "Method and Apparatus for Remote Interactive Exercise and Health Equipment," and the Abstract of the '537 Patent sufficiently introduces both of the patents-in-suit:

An exercise system includes a local system having an exercise apparatus and an associated local computer, where the local computer controls and monitors the operation and use, respectively, of the exercise apparatus. The system further includes a remote system having a remote computer, and a transmission medium preferably including the Internet that couples the local system to the remote system for data communication between the local system and the remote system. The remote system may receive local system data from the local system concerning the use of the exercise apparatus, and the local system may receive remote system data from the remote system concerning the operation of the exercise apparatus. The local computer preferably controls the operation of the exercise apparatus based upon a modifiable script stored in a read/write memory of the local computer, which can be updated by the remote system. A method for controlling an exercise apparatus includes running a modifiable script on a local computer to control the use and to monitor the operation of an exercise apparatus, and communicating with a remote system, preferably via the Internet, to provide the remote system with data concerning the use of the exercise apparatus. The script is stored in read/write memory of the local computer and remote system data received from the remote system may include at least a portion of a new script to be stored in the read/write memory of the local computer.

The application resulting in the '631 Patent was filed on March 22, 1999. The application resulting in the '537 patent was filed October 16, 2000. The inventor of the patents-in-suit is Paul L. Hickman (the "Inventor").

#### IV. CLAIM CONSTRUCTION

The parties request that the Court construe twenty five terms appearing in the patent-in-suit. These terms are: (1) "monitoring a use of said exercise apparatus" or "monitoring the ... use ... of said at least one exercise apparatus;" (2) "controlling an operation of said exercise apparatus" or "controlling ... the operation ... of said at least one exercise apparatus;" (3) "script;" (4) "*modifiable* script;" (5) "monitoring a use of said exercise apparatus and, in response thereto, controlling an operation of said exercise apparatus *based upon a modifiable script*;" (6) "a modifiable script *stored* in a read/write memory of said local computer;" (7) "a modifiable script ... *being stored* in read/write memory of said local computer;" (8) "wide area network;" (9) "remote server system;" (10) "being received;" (11) "monitoring the operation of an exercise apparatus;" (12) "running a modifiable script on a local computer to control the use and to monitor the operation of an exercise apparatus;" (13) "modified script;" (14) "to provide said remote server system with data concerning said use of said exercise apparatus, and to receive from said remote server system data including at least a portion of a modified script;" (15) "a loudspeaker;" (16) "a remote personal trainer;" (17) "a vocal communication of a remote personal trainer" or "a vocal communication from a remote personal trainer;" (18) "a remote system;" (19) "communication linkage;" (20) "a packet network connection;" (21) "such that said remote system may receive local system data from said local system concerning said use of said exercise apparatus and such that said local system may receive remote system data from said remote system concerning said operation of said exercise apparatus;" (22) "said operation may include a force-feedback to a user of said exercise apparatus;" (23) "a network using a TCP/IP protocol;" (24) "to provide said remote system with data concerning said use of said exercise apparatus, and to receive from said remote system data including at least a portion of a modified script;" (25) "at least one local computer ... operative to develop compressed video data in a packet protocol."

Plaintiff asserts Claims 6 and 11 of the '631 Patent and Claims 1, 10, 15, and 18 of the '537 Patent. Claims 6 and 11 of the '631 Patent are reproduced below with the disputed claim terms highlighted in italics:

6. A local system comprising:

at least one exercise apparatus;

at least one associated local computer *monitoring a use of said exercise apparatus* and, in response thereto, *controlling an operation of said exercise apparatus based upon a modifiable script stored in a read/write memory of said local computer, said script being received over a wide area network interface from a remote server system.*

...

11. A method for controlling an exercise apparatus comprising:

*running a modifiable script on a local computer to control the use and to monitor the operation of an exercise apparatus, said script being stored in read/write memory of said local computer, where the use of said exercise apparatus may be affected by said script and by said monitoring of said operation of said exercise device; and*

*communicating with a remote server system via a wide area network to provide said remote server system with data concerning said use of said exercise apparatus, and to receive from said remote server system data including at least a portion of a modified script to be stored in said read/write memory of said local computer.*

Claims 1, 10, 15, and 18 of the '537 Patent are reproduced below with the disputed claim terms highlighted in italics:

1. An exercise system comprising: a local system including at least one exercise apparatus, at least one associated local computer, said at least one local computer controlling and *monitoring the operation and use, respectively, of said at least one exercise apparatus*, and a *loudspeaker* coupled to said at least one local computer to provide a vocal communication of *a remote personal trainer; a remote system* including at least one remote computer; and a *communication linkage* including *a packet network connection* that at least part-time couples said local system to said remote system for data communication between said local system and said remote system, *such that said remote system may receive local system data from said local system concerning said use of said exercise apparatus, and such that said local system may receive remote system data from said remote system concerning said operation of said exercise apparatus.*

...

10. A local system comprising: at least one exercise apparatus; and at least one associated local computer *monitoring a use of said exercise apparatus* and, in response thereto, *controlling an operation of said exercise apparatus based upon a modifiable script stored in a read/write memory of said local computer*, wherein *said operation may include a force-feedback to a user of said exercise apparatus*, and a *loudspeaker* coupled to said at least one local computer to provide *a vocal communication of a remote personal trainer.*

...

15. A method for controlling an exercise apparatus comprising: *running a modifiable script on a local computer to control the use and to monitor the operation of an exercise apparatus*, said *script* being stored in read/write memory of said local computer, where the use of said exercise apparatus may be affected by said *script* and by said monitoring of said operation of said exercise device; communicating with a remote system via a network using a TCP/IP protocol to provide said remote system with data concerning said use of said exercise apparatus, and to receive from said remote system data including at least a portion of a modified script to be stored in said read/write memory of said local computer; and providing a vocal communication from a remote personal trainer.

...

18. An exercise system comprising: a local system including at least one exercise apparatus, a video camera associated with said exercise apparatus, and *at least one local computer* coupled to said video camera and operative to develop compressed video data in a packet protocol; a remote server system including at least one remote computer capable of at least communication to said exercise apparatus; and a communication linkage including a packet network connection that at least part-time couples said local system to said remote server system such that said compressed video data can be sent from said local system to said remote server system.

### **1. "monitoring a use of said exercise apparatus" or "monitoring the ... use ... of said at least one exercise apparatus"**

This term appears in Claim 6 of the '631 Patent and Claims 1 and 10 of the ' 537 Patent.

#### **A. The Parties' Positions**

Plaintiff proposes the term means "determining if the exercise apparatus is being used for an exercise activity." Dkt. No. 43, Exh. A at 1. Defendant proposes the term means "repeatedly detecting the level of effort exerted by a person exercising on the exercise apparatus." *Id.*

Plaintiff cites language in the specification purportedly showing that "use" is an "activity." Dkt. No. 53 at 16 (citing '537 Patent at 7:54-58). Next, Plaintiff argues that Defendant improperly attempts to employ a "means-plus-function" analysis. *Id.* at 17. Plaintiff also argues that because different words should be presumed to have different meanings, Defendant's construction is disfavored because it would give "use" and "operation" the same meaning. *Id.* Finally, Plaintiff argues extrinsic evidence is unnecessary to construe this term. *Id.*

Defendant argues that the term "monitoring" is used in the specification to mean "repeatedly detecting." Dkt. No. 60 at 10. Defendant cites Figure 4 and discusses specification language indicating that "the script can be modified based upon monitoring the user's performance...." *Id.* at 11. Defendant also cites a definition of "monitor" that means to "detect." *Id.* at 12 (citing *Random House Webster's College Dictionary* 847 (Second Edition 1997)). Defendant also emphasizes the specification's reference to "monitoring a use" or "monitoring the use," as opposed to "monitoring if in use." *Id.* at 13.

Plaintiff replies by emphasizing the purported distinction between "use" and "operation." Dkt. No. 68 at 10-11.

#### **B. Construction**

The specification does not define "use," but the "Background of the Invention" discusses "use of gymnasiums, fitness centers, and diet centers" and describes how "[p]ersonal trainers have been used both at fitness clubs and in the home." '631 Patent at 1:33-34 & 1:63-64. The only use of the word "monitoring" in the specification is as follows: "The order and structuring of the script can be modified based upon *monitoring* the user's performance or by other user feedback." *Id.* at 7:60-62. The specification does not teach, as Defendant suggest, that monitoring the "user's performance" is the same as monitoring the "use" of the exercise apparatus.

Rather, this language in the specification suggests that "use" and "user's performance" are different because otherwise the Inventor would simply have employed the phrase "user's performance" in the claims. Figure 3 of the '631 Patent also suggests that to monitor "use" is to determine whether there is "activity" that must be "process[ed]" because when there is no activity, i.e. the exercise apparatus is not in "use," the invention is in a "standby" mode. Defendant's extrinsic evidence that to "monitor" means to "detect" is not inconsistent with such a construction because the computer may detect whether the exercise apparatus is in use without detecting the level of effort being exerted thereon.

The Court therefore construes the term "monitoring a use of said exercise apparatus" or "monitoring the ... use ... of said at least one exercise apparatus" to mean "determining if the exercise apparatus is being used for an exercise activity."

## **2. "controlling an operation of said exercise apparatus" or "controlling ... the operation ... of said at least one exercise apparatus"**

This term appears in Claim 6 of the '631 Patent and Claims 1 and 10 of the ' 537 Patent.

### **A. The Parties' Positions**

Plaintiff proposes the term means "using exercise parameters to implement an exercise program and providing an output on a display concerning the level of effort being exerted by a person exercising on the exercise apparatus." Dkt. No. 43, Exh. A at 1. Defendant proposes the term means "controlling the resistance or other workload that the exercise apparatus imposes on a person to allow that person to exercise on the apparatus." *Id.*

Plaintiff cites specification language explaining that "exercise parameters are used to control the implementation of the exercise script...." Dkt. No. 53 at 18. Plaintiff argues that Defendant's proposed construction improperly attempts to import a "workload" limitation into the claim. *Id.* Plaintiff also argues that Defendant's proposed construction fails to include the "display operation controlled by the local computer to provide feedback to the person using the exercise apparatus...." *Id.*

Defendant argues that the term "workload" accurately explains that the invention controls the work that the user performs while exercising. Dkt. No. 60 at 14-15. Defendant argues that including a "display," as proposed by Plaintiff, is not supported by any claim language. *Id.* at 15.

Plaintiff replies that Defendant's term "workload" is not supported by the specification while Plaintiff's term "exercise parameters" is supported. Dkt. No. 68 at 12. Plaintiff also argues that failure to include the "display" function would leave the construction incomplete. *Id.*



## B. Construction

While the specification describes a "display" in the preferred embodiment, limitations in the specification generally should not be imported into the claims. Phillips, 415 F.3d at 1320. The Court finds no support for doing so as to the present claim term, and Plaintiff's proposed construction is accordingly disfavored to the extent it requires a display.

The specification expressly contemplates controlling the operation of the exercise apparatus by adjusting parameters. "For example, if it is detected that the user is getting tired due to a slowing of the exercise repetition rate, the steps or parameters of the exercise script can be modified accordingly." '537 Patent at 8:44-47. The specification describes "exercise parameters" as "typically includ[ing] things such as time, RPM [revolutions per minute], resistance, machine state, etc." *Id.* at 9:33-34. Moreover, an entire step in an exercise routine can be omitted to "control" the user's operation of the exercise apparatus, as follows: "For example, if a user is determined to be tiring by the local system ..., and if the script says the next exercise event is to be ten repetitions on the weight trainer ..., that step could be skipped." *Id.* at 8:49-52. In sum, "certain script steps can be skipped or the parameters concerning the steps can be modified." *Id.* at 8:47-49. Defendant's proposed construction excludes exercise parameters described in the specification and well-known in the art, such as time and number of repetitions, and such construction is therefore disfavored.

The Court construes the term "controlling an operation of said exercise apparatus" or "controlling ... the operation ... of said at least one exercise apparatus" to mean "controlling exercise parameters, such as time, RPM, and resistance, as well as the inclusion or omission of entire steps in an exercise script, that the exercise apparatus imposes on the user."

### 3. "script"

This term appears in Claims 6 and 11 of the '631 Patent and Claims 1 and 15 of the '537 Patent.

#### A. The Parties' Positions

Plaintiff proposes the term means "an exercise program including a sequence of exercise or other health-related events that are performed in fixed or variable sequences." Dkt. No. 43, Exh. A at 1. Defendant proposes the term is indefinite. *Id.* Alternatively, Defendant proposes the term means "a set of instructions that run on a computer that dictate a sequence of exercise or health related events that are performed in fixed or variable sequences, except that: (1) a script must be capable of operating while the local computer is not in communication with a remote system or a remote server; (2) a script is not a program that augments exercise programs already built into the exercise apparatus; (3) a script is not a series of sounds or tones, such as DTMF tones (dual tone multi-frequency) or touch-tone signals; (4) a script is not selected by the user; (5) a script selects the program, timing, and difficulty levels of the exercise apparatus during an exercise session." *Id.* at 1-2.

Plaintiff argues that the term "script" is expressly defined in the specification. Dkt. No. 53 at 19 (citing '537 Patent at 8:39-42). Plaintiff also argues that Defendant "fails to demonstrate that the prosecution history deviates from either the claim language or the express definition in the specification." *Id.* at 20.

Defendant argues that the term is indefinite because the prosecution history is inconsistent with Plaintiff's proposed construction. Dkt. No. 60 at 18-19. Defendant's proposed limitations on the term script, listed above, also purportedly arise out of the prosecution history of the patents-in-suit. *Id.* at 20-22 (citing Exhs.

E & F).

Plaintiff replies that the term is not indefinite and none of the prosecution history cited by Defendant limits claim scope. Dkt. No. 68 at 13-14.

## **B. Construction**

"[T]he specification may reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess. In such cases, the inventor's lexicography governs." Phillips, 415 F.3d at 1316. Here, the Inventor explicitly defined the term as follows: "A script is simply a sequence of exercise or other health-related events that are performed in fixed or variable sequences." '631 Patent at 7:58-60 & '537 Patent at 8:40-42.

### **(i) Indefiniteness**

As to indefiniteness, the Court notes that "[e]ach claim of a patent (whether in independent, dependent, or multiple dependent form) shall be presumed valid" and that "[t]he burden of establishing invalidity of a patent or any claim thereof shall rest on the party asserting such invalidity." 35 U.S.C. s. 282. "[C]lear and convincing evidence [must] be shown to invalidate a patent." *Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 1348 (Fed.Cir.2005). "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, we have held the claim sufficiently clear to avoid invalidity on indefiniteness grounds." *Id.*; *see also* *Energizer Holdings, Inc. v. Int'l Trade Comm'n.*, 435 F.3d 1366, 1369 (Fed.Cir.2006) ("By finding claims indefinite only if reasonable efforts at claim construction prove futile, we accord respect to the statutory presumption of validity and we protect the inventive contribution of patentees, even when the drafting of their patents has been less than ideal.") (citations omitted).

Defendant cites a document in the '537 Patent prosecution history wherein the Inventor distinguished the "Shea" prior art where "the user must *select* the exercise program from a menu of exercise programs, *input* the exercise time, and *input* the difficulty level." Dkt. No. 60 at 19 (quoting Exh. F at 4). Defendant argues that the term "script" is indefinite because the specification teaches that the user can create a script by selecting an exercise program while the prosecution history distinguished a reference that required the user to select an exercise program. *Id.* Defendant argues that because of this purported contradiction, "a person of ordinary skill in the art cannot determine the proper meaning of the term 'script.'" *Id.*

The Inventor's statement in the prosecution history distinguishing Shea does not appear to have foreclosed the ability of the user to manually create and select scripts. Because the exercise program "*can* be operated under someone else's control by the instrumentality of scripts," the user has the option of allowing the invention to provide the script automatically. Dkt. No. 60, Exh. F at 4 (emphasis added). Scripts are part of this method of remote control, but these statements in the prosecution history do not preclude scripts from being used in other ways. Because there is no contradiction, Defendant has not met its burden of showing indefiniteness by clear and convincing evidence. The Court accordingly rejects Defendant's indefiniteness argument as to the term "script."

### **(ii) Prosecution History**

"[F]or prosecution disclaimer to attach, our precedent requires that the alleged disavowing actions or statements made during prosecution be both clear and unmistakable." *Omega*, 334 F.3d at 1326. The Court

addresses Defendants' five proposed limitations, which are purportedly based on waivers of claim scope in the prosecution history, as follows:

First, the Court considers whether a script must be capable of operating while the local computer is not in communication with a remote system or a remote server. Defendant relies upon the following statement in the prosecution history where the Inventor distinguished the "Begun" prior art: "Since Applicant's exercise equipment is preferably controlled by scripts, the local system does not have to be in communication with the remote system in order to change the resistance of the exercise equipment." Dkt. No. 60, Exh. E at 3. However, the feature of Begun distinguished was manual, real-time control of resistance settings on exercise machines by a "remote operator" using touch-tone signals. *Id.* Because the Inventor intended his statement to distinguish *manual*, real-time operation, this prosecution history does not demonstrate a "clear and unmistakable" waiver of *script* communication that would require a connection to the remote system during exercise. Omega, 334 F.3d at 1326. The Court therefore rejects Defendant's proposed limitation.

Second, the Court considers whether a script may not be a program that augments exercise programs already built into the exercise apparatus. Defendant relies upon the Inventor's statement distinguishing Shea as follows:

The apparatus taught by Shea uses a remote software updating process, not scripts as disclosed by applicant. That is with Shea, new programs can be downloaded to an exercise device to augment their built-in programs. Shea does not download scripts ... which control the exercise routine being performed....

Dkt. No. 60, Exh. F at 3. However, the next sentence of this paragraph reads as follows: "That is, with Shea, the number of options can be increased by downloading new 'exercise programs,' but the actual exercise session must be chosen by the user." *Id.* This follow-up statement by the Inventor emphasizes that the user of the invention may download a script chosen for the user by the remote system. While the Inventor thus emphasized an advantage of his invention, he did not foreclose the ability of the user to select a program. The prosecution history cited by Defendant does not preclude a script from being downloaded and stored for later availability in addition to default programs available on the local system or the exercise apparatus itself. Defendant has thus not shown a "clear and unmistakable" waiver of augmenting exercise programs already built into the exercise apparatus. Omega, 334 F.3d at 1326. The Court therefore rejects Defendant's proposed limitation.

Third, the Court considers whether a script may not be a series of sounds or tones, such as DTMF (dual tone multi-frequency) tones or "touch-tone" signals. Defendant relies upon the Inventor distinguishing the Begun prior art in the prosecution history, as follows:

... Begun does not teach or suggest the use of a modifiable script, which is used to control the operation of an exercise apparatus, and wherein the operation may include a force-feedback to a user of the exercise apparatus. Instead, Begun uses DTMF signals transmitted from the base station to initiate the therapy and/or control the work load of the exercise device.

Dkt. No. 60, Exh. D at 4. However, the next sentence of this paragraph reads as follows: "Begun clearly, therefore, did not contemplate the use of modifiable scripts to control the operation of an exercise apparatus." *Id.* Because the Inventor emphasized that the script is "modifiable" in distinguishing Begun, he did not "clear[ly] and unmistakabl[y]" waive the use of DTMF signals. Omega, 334 F.3d at 1326. The Court therefore rejects Defendant's proposed limitation.

Fourth, the Court considers whether a script may not be selected by the user. Defendant cites the following statement distinguishing Shea in the prosecution history:

[In the Shea reference,] the user *must* select the exercise program from a menu of exercise programs, input the exercise time, and input the difficulty level. Applicant's exercise program, in marked contrast, can be operated under someone else's control by the instrumentality of scripts. These scripts select the program, timing, difficulty level, etc. of the exercise equipment during an exercise session (typically under the control of a remote trainer) to provide the exercise experiences.

Dkt. No. 60 at 22 (quoting Exh. F at 4). The Inventor's statement in the prosecution history distinguishing Shea did not foreclose the ability of the user to manually create and select scripts. Rather, the user has the option of allowing the invention to provide the script automatically because the exercise program "*can* be operated under someone else's control by the instrumentality of scripts." Dkt. No. 60, Exh. F at 4 (emphasis added). The Court therefore rejects Defendant's proposed limitation.

Fifth, the Court considers whether it must be a script that selects the program, timing, and difficulty levels of the exercise apparatus during an exercise session. Defendant cites the same prosecution history as for the previous proposed limitation, and Defendant's argument similarly fails. Dkt. No. 60 at 22. While the program, timing, and difficulty levels of the exercise apparatus "*can* be operated under someone else's control by the instrumentality of scripts," the Inventor did not waive manual control by the user. *Id.* (emphasis added). The Court therefore rejects Defendant's proposed limitation.

### **(iii) Conclusion**

Having rejected Defendant's proposed limitations, the Court adopts without limitation the lexicography used by the inventor and construes the term "script" to mean "a sequence of exercise or other health-related events that are performed in fixed or variable sequences."

## **4. "modifiable script"**

This term appears in Claims 6 and 11 of the '631 Patent and Claims 1 and 15 of the '537 Patent.

### **A. The Parties' Positions**

Plaintiff proposes the term means "a script whose implementation is capable of being varied or changed." Dkt. No. 43, Exh. A at 2. Defendant proposes the term means "a script that can be changed so as to dictate a different order and/or structuring of exercise or other health related events than it dictated before." *Id.*; *see also* Dkt. No. 60 at 23.

Plaintiff argues that this term has its plain meaning and cites language in the specification suggesting that scripts can be "varied" or "change[d]." Dkt. No. 53 at 20-21 (citing '537 Patent at 8:57-61 & 11:21-24). Plaintiff argues that Defendants attempt to construe "modifiable script" as a phrase improperly adds limitations "such as how a script may be changed and what about a script may be changed." *Id.* at 21.

Defendant argues that the construction must, to be clear, include "a sequence of exercise or other health-related events." Dkt. No. 60 at 23. For support, Defendant cites specification language that "[t]he ordering and structuring of the script can be modified" and "the steps or parameters of the exercise script can be

modified...." *Id.* Defendant also argues that Plaintiff's proposed construction would include a script that may be wholly replaced by another script. *Id.* at 24.

Plaintiff replies that a script need not necessarily be modified to impose a "different order." Dkt. No. 68 at 15. Plaintiff also proposes that a modified script is, essentially, a replacement. *Id.*

## **B. Construction**

Defendant proposes including language in the construction that explains the script may be changed to say something "different ... than it dictated before." This is superfluous as it restates the natural consequence of "chang[ing]" something, to wit, that it becomes something different than it was before being changed.

The specification defines a "script" as follows: "A script is simply a sequence of exercise or other health-related events that are performed in fixed or variable sequences. The order and structuring of the script can be modified based upon monitoring the user's performance or by other user feedback." '631 Patent at 7:57-62 & '537 Patent at 8:40-44. Defendants proposed language of "order and/or structuring of exercise or other health related events" is not supported by this language. Dkt. No. 60 at 23. Rather, Defendants appear to conflate the "ordering and structuring" of the script itself with the "sequence of exercise or other health-related events" controlled by the script. The specification teaches that the "ordering and structuring" of the script may be changed, but the specification does not limit the script itself to controlling only the "ordering and structuring" of exercise. '631 Patent at 7:60-67 & '537 Patent at 8:42-49. In other words, a script might control more than ordering and structuring.

Further, the specification does not limit the degree to which a script may be modified. As a result, a "modifiable script" may be completely changed or, alternatively, wholly replaced by another script.

The Court therefore construes the term "modifiable script" to mean "a script that can be changed or replaced."

## **5. "monitoring a use of said exercise apparatus and, in response thereto, controlling an operation of said exercise apparatus based upon a modifiable script"**

This term appears in Claim 6 of the '631 Patent and Claim 10 of the '537 Patent.

### **A. The Parties' Positions**

Plaintiff proposes the term "based upon a modifiable script" modifies only "controlling an operation." Dkt. No. 43, Exh. A at 2. Defendant proposes the term "based upon a modifiable script" modifies both "monitoring a use" and "controlling an operation." *Id.*

Plaintiff proposes that grammar supports its construction and that Defendant presents no intrinsic evidence to justify its position. Dkt. No. 53 at 21. Plaintiff also argues that Defendants proposed construction is disfavored because it could lead to an invalid construction. *Id.*

Defendant primarily relies on language in Claim 11 of the '631 Patent and Claim 15 of the '537 Patent. Dkt. No. 60 at 24-25. These claims both refer to "running a modifiable script on a local computer *to control* the use and *to monitor* the operation of an exercise apparatus." *Id.* Defendant also argues that "[b]ecause the claimed system is to be controlled based upon information received from monitoring, the system must know

which inputs to monitor in order to provide that control." *Id.* at 26. Defendant applies this argument to term 5, as well as term 12, *infra*.

Plaintiff replies that the prosecution history demonstrates that "based upon a modifiable script" only applies to "controlling" and not to "monitoring." Dkt. No. 68 at 15 (citing Dkt. No. 54 at Exhs. 3 & 4).

## **B. Construction**

The claim term at issue is part of the following claim limitation:

at least one associated local computer monitoring a use of said exercise apparatus and, in response thereto, controlling an operation of said exercise apparatus based upon a *modifiable script* stored in a read/write memory of said local computer, said script being received over a wide area network interface from a remote server system.

'631 Patent at 12:52-58 (emphasis added). Claim 10 of the '537 Patent contains similar language. '537 Patent at 15:53-61.

In the prosecution history, the Inventor distinguished Begun as follows: "Begun does not teach or suggest the use of a *modifiable script* which is used to control the operation of an exercise apparatus...." Dkt. No. 54, Exh. 3 at 4. Elsewhere in the prosecution history, the Inventor again distinguished Begun, stating: "Independent claim 10 claims an apparatus monitored and controlled by a local computer, where the control is based upon a modifiable script...." *Id.*, Exh. 4 at 1. Both of these statements by the Inventor indirectly suggest that the term "based upon a modifiable script" might only modify "controlling an operation."

These statements in the prosecution history comport with the meaning of the term "based upon a modifiable script" suggested by the claim language itself, which reads: "monitoring a use of said exercise apparatus and, in response thereto, controlling an operation of said exercise apparatus based upon a modifiable script...." The interjection of "in response thereto" might suggest, as Plaintiff argues, the Inventor's intent to separate the phrase "controlling an operation" from "monitoring a use." The absence of a comma after the phrase "controlling an operation of said exercise apparatus" might also comport with such an intent.

Nonetheless, a person of ordinary skill in the art "is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification." Phillips, 415 F.3d at 1313. A person of ordinary skill in the art would therefore read the term "based upon a modifiable script" in the context of Claim 11 of the '631 Patent and Claim 15 of the '537 Patent. These claims describe "running a modifiable script on a local computer to control the use and to monitor the operation of an exercise apparatus...." '631 Patent at 13:8-10 & '537 Patent at 16:13-15. This language contains no break between "to control the use" and "to monitor the operation," which strongly suggests that the invention uses the "modifiable script" to do both.

The Court therefore concludes that in the term "monitoring a use of said exercise apparatus and, in response thereto, controlling an operation of said exercise apparatus based upon a modifiable script," the constituent term "based upon a modifiable script" modifies both "monitoring a use" and "controlling an operation."

**6. "a modifiable script stored in a read/write memory of said local computer;" and**

**7. "a modifiable script ... being stored in read/write memory of said local computer"**

Term 6 appears in Claim 6 of the '631 Patent and Claim 10 of the '537 Patent. Term 7 appears in Claim 11 of the '631 Patent and Claim 15 of the '537 Patent.

### **A. The Parties' Positions**

Plaintiff proposes that the first term means "a modifiable script put into an electronic memory of the local computer" and the second term means "a modifiable script *is* put into an electronic memory of the local computer." Dkt. No. 43, Exh. A at 2 (emphasis added). Defendant proposes that both terms mean that "the modifiable script is maintained in read/write memory of the local computer such that the modifiable script may be run when the local computer is not in communication with a remote system or remote server." *Id.*

Plaintiff argues that the terms have their plain meanings and that Defendant improperly attempts to add the limitation that the scripts "may be run when the local computer is not in communication with a remote system or remote server." Dkt. No. 53 at 22.

Defendant argues that Plaintiff's construction only requires that the script "passes through" memory. Dkt. No. 60 at 27. Defendant argues that the script must be maintained in memory in order to be "stored" as contemplated by the claim term. *Id.* In support of its "not in communication" language, Defendant cites prosecution history that identifies this feature of the invention. *Id.* (citing Exh. E at 3).

Plaintiff replies by reiterating that the ordinary meaning of the term should be applied. Dkt. No. 68 at 16.

### **B. Construction**

Plaintiff advocates ordinary meaning, but reference to dictionaries provides no assistance as different definitions of "store" support different constructions. For example, to "store" may mean either "To retain a physical representation of (data or instructions) that enables them to be subsequently retrieved," or "To transfer into a store or storage location." *Oxford English Dictionary* (Second Edition 1989), 4. d & e. The Court instead follows *Phillips* and treats the specification as "the single best guide to the meaning of a disputed term" rather than simply as a "check on the dictionary meaning." *Phillips*, 415 F.3d at 1320-21 (citations omitted).

The specification states that in a preferred embodiment, "[t]he computer ... can then store *or* pass through the digital voice data and play the voice input to the user of local station ... via speaker...." '631 Patent at 6:2-4 & '537 Patent at 6:50-52 (emphasis added). This description suggests that the term "store" refers to more than a momentary "pass[ing] through" of data. Moreover, the relevant language of Claim 6 of the '631 Patent and Claim 10 of the '537 Patent describes "controlling an operation of said exercise apparatus based upon a modifiable script *stored in a read/write memory* of said local computer...." '631 Patent at 12:53-56 & '537 Patent at 15:54-57 (emphasis added). This language strongly suggests that the modifiable script is retained in memory and available for retrieval. As to "being stored," the relevant claim language similarly refers to "running a modifiable script on a local computer to control the use and to monitor the operation of an exercise apparatus, said script *being stored in read/write memory* of said local computer...." '631 Patent at 13:8-11 & '537 Patent at 16:12-15 (emphasis added).

The Court therefore construes the terms "a modifiable script stored in a read/write memory of said local computer" and "a modifiable script ... being stored in read/write memory of said local computer" to mean "a modifiable script available for retrieval from a read/write memory of said local computer."

## 8. "wide area network"

This term appears in Claims 6 and 11 of the '631 Patent.

### A. The Parties' Positions

Plaintiff proposes the term means "a network of computers over a large geographical area, the defining example being the Internet." Dkt. No. 43 at 2. Defendant proposes the term means "a network that extends over a large geographical area, e.g., the Internet." *Id.*

Plaintiff argues that this term must describe a computer network and that the only example of such a network is the Internet. Dkt. No. 53 at 22-23. Plaintiff quotes language from the specification that "the computer ... can be coupled to the remote computer ... by other communication linkages, such as ISDN digital transmission line, via a local area network, or via a wide area network (WAN) such as the Internet." *Id.* at 23 (quoting '537 at 6:12-17). Plaintiff also asserts that the context of the claims containing the term show that "wide area network" means a "computer network." *Id.*

Defendant replies that a wide area network need not be a computer network. Dkt. No. 60 at 28. Defendant argues that the specification suggests no such limitation and cites extrinsic evidence defining "wide area network" simply as a "communications network." *Id.*

Plaintiff replies that a wide area network does not include the telephone system because a wide area network "is set forth as an alternative to a telephone line." Dkt. No. 68 at 16 (citing '537 Patent at 6:12-17).

### B. Construction

The language quoted by Plaintiff indicates that the Internet is an example of a wide area network. That language does not state that the Internet is the *only* example. Further, Defendants present evidence of other examples. Dkt. No. 60 at 28. The Internet is therefore not the "defining" example because the term "wide area network" is not limited to the Internet. The only remaining issue is whether a "wide area network" must be a "computer network."

The term "wide area network" would be understood by one of ordinary skill in the art to be a computer network. Claim 6 explains that control is "based upon a modifiable script ..., said script being received over a wide are[a] network interface from a remote server system." '631 Patent at 12:54-58. Claim 7 describes "communicating with a remote server system via a wide area network to provide said remote server system with data concerning said use of said exercise apparatus, and to receive from said remote server system data including at least a portion of a modified script to be stored in said read/write memory of said local computer." *Id.* at 13:15-14:2. This language describes a connection between a local system and a remote system, both of which include computers. Further, the specification of the '537 Patent is highly instructive:

The computer 24 is also coupled to a modem 62 for communication over a telephone line 30. *Alternatively*, the computer 24 can be coupled to the remote computer 14 by other communication linkages, such as ISDN digital transmission line, via a local area network, or via a wide area network (WAN) such as the Internet.

'537 Patent at 6:11-16 (emphasis added). This language distinguishes between the use of a "wide area network" and the use of a telephone line, so a person of ordinary skill in the art would understand the term



"wide area network" to exclude the telephone system.

The Court therefore construes the term "wide area network" to mean "a computer network, such as the Internet, that extends over a large geographical area."

## 9. "remote server system"

This term appears in Claims 6 and 11 of the '631 Patent and Claim 18 of the '537 Patent.

### A. The Parties' Positions

Plaintiff proposes the term means "a remote system computer communicating over a bidirectional data channel with a local system." Dkt. No. 43 at 2. Defendant proposes the term means "a computer that uploads information from and downloads information to multiple 'remote systems' (as the term is defined below), but that does not directly upload information from or download information to local systems." *Id.*

Plaintiff proposes that the term is sufficiently described by the specification and that Plaintiff's proposed construction merely recites this intrinsic evidence. Dkt. No. 53 at 23-24 (citing '537 Patent at 2:14-15). Plaintiff also argues that Defendant's proposed construction is inconsistent with other claim language and with the specification. *Id.* at 24.

Defendant argues that the specification describes a hierarchy in which a remote server system would serve many remote systems. Dkt. No. 60 at 29-30. Defendant points out that the term "remote server system" does not appear outside of the claims, but the terms "remote system" and "server system" do appear. *Id.* at 31. Defendant discusses the prosecution history, during which the Inventor originally claimed "a remote system" but amended the claims to recite a "remote server system." *Id.* (citing Exh. K). Defendant thus argues that the "remote server system" cannot be the same as the "remote system" because otherwise the amendment would have had no effect. *Id.* Defendant argues that Plaintiff is estopped from arguing otherwise. *Id.* (citing *Sorensen v. Int'l Trade Comm'n*, 427 F.3d 1375, 1378 (Fed.Cir.2005)).

Plaintiff replies by reiterating its opening arguments but does not address the prosecution history issue raised by Defendant. Dkt. No. 68 at 17.

### B. Construction

In sum, Defendant proposes that the patents claim a hierarchy in which a "remote server system" is a system above many "remote systems," which are each above many local systems. However, Defendant's proposed construction conflicts with express claim language. Claims 6 and 11 of the '631 Patent, as well as Claim 18 of the '537 Patent, explain that a "local system" communicates with a "remote server system" to receive scripts, send exercise data, and/or send video data. '631 Patent at 12:52-58 & 13:15-14:2; '537 Patent at 16:48-52. The claim therefore contemplates direct communication between a local system and a remote server system, which is contrary to Defendant's proposed construction. Defendant's proposed construction is accordingly disfavored.

The prosecution history reflects an amendment to insert the word "server" in the middle of the phrase "remote system." Dkt. No. 60, Exh. K at 4. However, because the amended claims themselves describe communication between a "remote server system" and a "local computer," the Inventor did *not* make a "clear and unmistakable" waiver of such communication. *Omega*, 334 F.3d at 1326.

The Court therefore construes the term "remote server system" to mean "a remote system computer that can send data to, and receive data from, a local system."

## 10. "being received"

This term appears in Claim 6 of the '631 Patent.

### A. The Parties' Positions

Plaintiff proposes the term means "is received." Dkt. No. 43 at 2. Defendant proposes the term means "having been received." *Id.*

Plaintiff argues that Defendant attempts to grammatically change the term from present tense to past tense. Dkt. No. 53 at 24.

Defendant submits that "[t]he dispute here is whether this phrase requires that the script be *completely* received ( [Defendant's] position) or whether the script can simply be *in the process of receiving* ( [Plaintiff's] position)." Dkt. No. 60 at 32. Defendant argues that because the prosecution history indicates that a script can be run while the local system is not in communication with a remote system, the script must be completely received. *Id.* Further, Defendant argues that in order to be "stored" in Claim 6 of the '631 Patent, the script must be completely received. *Id.*

Plaintiff replies that "[Defendant's] proposed construction also improperly converts from present tense to past tense, is contrary to the plain language of the claim, is incorrectly directed to storage in 'memory' rather than receiving data, and twists the plain meaning to one which suits its proposed purposes." Dkt. No. 68 at 17-18.

### B. Construction

The context of the entire claim in which this claim term appears is instructive. Claim 6 of the '631 Patent reads as follows:

A local system comprising:

at least one exercise apparatus;

at least one associated local computer monitoring a use of said exercise apparatus and, in response thereto, controlling an operation of said exercise apparatus based upon a modifiable script stored in a read/write memory of said local computer, said script *being received* over a wide area network interface from a remote server system.

'631 Patent at 12:50-58 (emphasis added). On its face, the claim language does not exclude receiving the script continuously or intermittently while the local system is in use. Although Defendants argue that because the script is "stored" it must have been completely received, nothing in the claim requires that the entire script be "stored" before the local system is in "use." *Id.*

As to prosecution history, Defendant incorporates its first argument in s. IV.3.B.ii, *supra*, and the Court

incorporates its rejection thereof.

The Court therefore construes the term "being received" to mean "being in the process of being received or having been received."

## **11. "monitoring the operation of an exercise apparatus"**

This term appears in Claim 11 of the '631 Patent and Claim 15 of the '537 Patent.

### **A. The Parties' Positions**

Plaintiff proposes the term means "receiv[ing] information concerning the level of effort being exerted by a person exercising on the exercise apparatus." Dkt. No. 43 at 3. Defendant proposes the term means "repeatedly detecting the resistance or other workload that the exercise apparatus imposes on a person to allow that person to exercise on the apparatus." *Id.*

Plaintiff cites two instances where the specification teaches that the computer receives "information concerning the level of effort being exerted" by a user. Dkt. No. 53 at 25 (citing '537 Patent at 5:21-32). Plaintiff argues: (1) Defendant incorrectly references sensors; (2) Defendant's proposed construction is improperly based on a "means-plus-function" analysis; and (3) Defendant does not differentiate between the phrases "monitoring the operation" and "monitoring ... operation" found in different claims. *Id.*

Defendant argues that because "controlling an operation" relates to resistance provided by an exercise apparatus, "monitoring the operation" similarly relates to resistance. Dkt. No. 60 at 33-34. Defendant argues that the term "workload" is appropriate because it includes nonresistance forms of exercise, such as running on a treadmill. *Id.* at 34. Defendant argues that the effort exerted by the user of the exercise apparatus "does not describe the operation of the apparatus." *Id.* Defendant submits that its proposed term "detects" does not invoke a means-plus-function analysis and "[t]here is no attempt to require any particular structure...." *Id.*

Plaintiff replies by reiterating its opening arguments. Dkt. No. 68 at 18.

### **B. Construction**

Claim terms should be "read ... not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification." Phillips, 415 F.3d at 1313. Claim 1 of the '537 Patent refers to "controlling and monitoring the operation and use, respectively, of said at least one exercise apparatus." This distinction between "operation" and "use" teaches that the words have different meanings. The Court has interpreted "use" to encompass simply detecting whether the exercise apparatus is "in use," i.e. detecting whether or not there is activity. *See* s. IV. 1.B, *supra*. Monitoring "operation" is therefore something more than simply monitoring whether or not the exercise apparatus is being used.

The specification does not otherwise discuss monitoring "operation," but it does address "monitoring the user's performance." '631 Patent at 7:60-65; '537 Patent at 8:42-47. However, the specification does not teach that the "user's performance" is synonymous with the "operation of an exercise apparatus." All that the Inventor required is that monitoring "operation" involve something more than simply monitoring whether or not the exercise apparatus is in use. Because "operation" of the apparatus requires that the user be interacting with the exercise apparatus, "monitoring the operation of the exercise apparatus" means receiving

information about the interaction between the user and the exercise apparatus beyond simply whether or not the exercise apparatus is in use.

The Court therefore construes the term "monitoring the operation of an exercise apparatus" to mean "receiving information about the interaction between the user and the exercise apparatus beyond simply whether or not the exercise apparatus is in use."

## **12. "running a modifiable script on a local computer to control the use and to monitor the operation of an exercise apparatus"**

This term appears in Claim 11 of the '631 Patent and Claim 15 of the '537 Patent.

### **A. The Parties' Positions**

Plaintiff proposes the term means "a local computer controls the use of an exercise apparatus based upon a modifiable script and also monitors the operation of the exercise apparatus." Dkt. No. 43 at 3. Defendant proposes that a "modifiable script" is used to both "control the use" and "to monitor the operation." *Id.*

Plaintiff argues that the modifiable script does not monitor the operation of the exercise apparatus. Dkt. No. 53 at 26. Plaintiff argues that the prosecution history supports Defendant's proposed construction and that Defendant's interpretation "may render this claim even more indefinite as it is hard to image how or why one would modify the monitoring of the operation." *Id.* (citing Milks Decl., Exhs. 3 & 4).

Defendant's arguments are as described in s. IV.5.A, *supra*. Dkt. No. 60 at 24-26.

Plaintiff replies that Defendant's proposed construction improperly conflates the meanings of "monitor the operation" with "monitoring a use." Dkt. No. 68 at 14.

### **B. Construction**

The Court incorporates its discussion in s. IV. 5.B, *supra*.

The Court therefore construes the term "running a modifiable script on a local computer to control the use and to monitor the operation of an exercise apparatus" to mean that "a modifiable script" is used to both "control the use" and "to monitor the operation."

## **13. "modified script"**

This term appears in Claim 11 of the '631 Patent and Claim 15 of the '537 Patent.

### **A. The Parties' Positions**

Plaintiff proposes the term means "a script whose implementation is varied or changed." Dkt. No. 43 at 3. Defendant proposes the term means "a script that has been changed so as to dictate a different order and/or structuring of exercise or other health related events than it dictated before." *Id.*

Plaintiff and Defendant incorporate their arguments as to "modifiable script." Dkt. No. 53 at 27; *see* s. IV.4.A, *supra* .

## B. Construction

The Court incorporates its discussion of s. IV.4, *supra*. The Court therefore construes the term "modified script" to mean "a script that has been changed or replaced."

### **14. "to provide said remote server system with data concerning *said use* of said exercise apparatus, and to receive from said remote server system data including at least a portion of a modified script"**

This term appears in Claim 11 of the '631 Patent.

## A. The Parties' Positions

Plaintiff proposes this term requires no construction apart from its constituent terms. Dkt. No. 43 at 3. Defendant proposes the term means "to provide the remote server system with data concerning the use of the exercise apparatus that was controlled by running a modifiable script on the local computer, and to receive from the remote server system at least a portion of a modified script changed in response to that data." *Id.*

Plaintiff argues that Defendant has no support for adding the limitation "that the data that is received is in response to the data provided." Dkt. No. 53 at 35.

Defendant argues that the phrase "said use" has a "specific meaning in claim construction that might not be appreciated by a lay jury." Dkt. No. 60 at 50. Defendant argues that in Claims 11 and 15, "said use" refers back to "the use of the exercise apparatus that was controlled by running a modifiable script on the local computer." *Id.*

Plaintiff adds, in reply, that Defendant "attempts to improperly add the limitation that the data that is received is in response to the data that is provided." Dkt. No. 68 at 22. Plaintiff also argues that Defendant's proposed construction is inconsistent with language in the specification that reads as follows: "[T]his information can be used by the remote or server systems to modify the exercise scripts and/or provide dietary counseling or products to the individual users of the local stations...." *Id.* (quoting ' 537 Patent at 12:12-15).

## B. Construction

The antecedent basis for "said use" appears in the first limitation of Claim 11, where the patent claims "running a modifiable script on a local computer to control *the use* and to monitor the operation of an exercise apparatus, ... where *the use* of said exercise apparatus may be affected by said script and by said monitoring of said operation of said exercise device." '631 Patent at 13:8-14 (emphasis added). This claim language does not add any limitation to "the use." In particular, the claim only provides that the use "*may be* affected by said script and by said monitoring." *Id.* (emphasis added). This permissive language does not support Defendant's proposed requirement that "at least a portion of a modified script [has been] changed" in response to monitoring. Dkt. No. 43 at 3.

The Court also finds that requiring recitation of the antecedent basis, without any showing of need for such clarification, would add unnecessary complication to claim construction. Defendant provides no authority for why "[s]uch substitutions are both proper and necessary in order to properly instruct a jury as to the

treatment of antecedent bases in claim construction." *See* Dkt. No. 60 at 50.

The Court therefore finds this term requires no construction apart from that of its constituent terms.

## 15. "a loudspeaker"

This term appears in Claims 1 and 10 of the '537 Patent.

### A. The Parties' Positions

Plaintiff proposes the term means "any of various devices that convert amplified electronic signals into audible sound." Dkt. No. 43 at 3. Defendant proposes the term means "a sound amplifying device that changes electrical signals into sound loud enough to be heard at a distance from the device." *Id.*

Plaintiff argues that its definition comes from a dictionary published closer in time to the filing of the patents-in-suit than Defendant's proposed definitions. Dkt. No. 53 at 27-28. Plaintiff argues that Defendant's proposed construction "raises extraneous issues, such as what is 'a distance from the device.'" *Id.* at 28.

Defendant frames the issue as "whether the term 'loudspeaker' is limited to a speaker capable of broadcasting a sound loud enough to be heard at a distance, or whether 'loudspeaker' also encompasses headphones (earphones) that cannot be heard at a distance." Dkt. No. 60 at 35. Defendant argues that the plain meaning of "loudspeaker" does not include headphones. *Id.* Defendant also notes that while the specification uses the terms "speaker" and "loudspeaker," the claims only use the term "loudspeaker," which Defendant argues must therefore have a different meaning than "speaker." Defendant also submits three dictionary definitions. *Id.* at 35-36.

Plaintiff replies by reiterating its opening arguments. Dkt. No. 68 at 18-19.

### B. Construction

The parties submit competing dictionary definitions. However, the Court is bound by *Phillips* to begin with the intrinsic evidence. *See Phillips*, 415 F.3d at 1320.

The term "loudspeaker" need not have a different meaning than "speaker." The specification of the '537 Patent refers to a "loudspeaker 58" six times. ' 537 Patent at 5:9, 5:44, 5:67, 6:2, 6:29 & 6:43. Starting in the same paragraph as the last use of "loudspeaker 58," the specification refers to a "speaker 58" six times. *Id.* at 6:51, 8:5, 9:5, 9:8, 9:43 & 10:4. The specification's reference to the same object in the figures ("58") when describing a "loudspeaker" or "speaker" strongly suggests these terms refer to the same device. The abrupt change from the term "loudspeaker" to the term "speaker" mid-way through the specification further suggests that the Inventor, through error or otherwise, simply began using the term "speaker" instead of "loudspeaker." This change occurred as follows:

In any event, the telephone 70 can communicate directly with the *loudspeaker* 58 of the stationary bicycle 18 over the standard analog telephone line 30. Alternatively, the telephone 70 can communicate with the computer [and][t]he computer 24 can then ... play the voice input to the user of local station 12 via *speaker* 58.

*Id.* at 6:42-52 (emphasis added). Contrary to Defendant's argument that these terms must have different

meanings, the seemingly interchangeable use of the terms "loudspeaker" and "speaker" strongly suggests the terms are synonymous. Extrinsic evidence may be used to supplement the Court's examination of the intrinsic evidence, and at least one dictionary confirms that "loudspeaker" and "speaker" can be used as synonyms. *Oxford English Dictionary* (Second Edition 1989).

The claims teach that a "loudspeaker" acts "to provide a vocal communication of a remote personal trainer." '537 Patent at 15:8-9 & 15:60-61. While the specification describes a speaker built in to a piece of exercise equipment, the Court finds this term should not be limited to the preferred embodiment. Further, Defendant's proposed construction creates more ambiguity than it resolves by specifying that the sound produced by a loudspeaker is "loud enough to be heard *at a distance* from the device." Dkt. No. 60 at 35 (emphasis added). A person of ordinary skill in the art would understand that a loudspeaker or speaker may "provide a vocal communication" so long as it is audible. The specification further teaches that these audible sounds may be generated using "digitally synthesized," "digitally recorded," or "analog recording techniques." '537 Patent at 5:47-49.

The Court therefore construes the term "loudspeaker" to mean "a device that converts digital or analog signals into audible sound."

#### **16. "a remote personal trainer;" and**

#### **17. "a vocal communication of a remote personal trainer" or "a vocal communication from a remote personal trainer"**

These terms appear in Claims 1, 10, and 15 of the '537 Patent.

#### **A. The Parties' Positions**

Plaintiff proposes these terms must be construed together. Dkt. No. 43 at 3. Plaintiff therefore proposes that term 17 means "a remotely originated live, recorded, or synthesized voice which provides training." *Id.* at 4. Defendant proposes that "a remote personal trainer" means "a person with a fitness training background who is at the site of the remote system and who is providing fitness training services." *Id.* at 3. Defendant proposes that "a vocal communication of a remote personal trainer" therefore means "a live, non-recorded voice of a personal trainer." *Id.*

Plaintiff argues that "[Defendant's] proposed fragmentation of the phrase and associated constructions of the components are clearly contrary to the [specification], as well as lead to an improper result when the separate constructions are combined." Dkt. No. 53 at 28-29.

Defendant argues that the specification teaches that a "person[al] trainer is not merely someone or something that 'provides training.'" Dkt. No. 60 at 36-37. Instead, Defendant proposes, the specification describes personal trainers as "individuals who usually have a fitness training background...." *Id.* at 36 (citing '631 Patent at 1:64-66). Defendant further argues that a personal trainer is "at the 'remote system.'" *Id.* at 37. Defendant argues that Plaintiff's construction must fail because it "has no *person* associated with th[e] voice and training." *Id.* Defendant argues that there must be a human at the site of the remote system because this distinguishes a "personal trainer" from a "virtual personal trainer." *Id.* at 38.

Defendant continues that because a personal trainer must be human, vocal communication from a personal trainer at a remote location must be a live communication. *Id.* Defendant refers to language in the

specification disclosing how to achieve such live communication. *Id.* (quoting '537 Patent at 2:34-44). Defendant distinguishes vocal communication coming from the local system, which may be previously recorded. *Id.* at 39.

Plaintiff replies by reiterating its opening arguments. Dkt. No. 68 at 19.

## **B. Construction**

The term "remote personal trainer" does not appear outside of the claims. The Court therefore considers the meaning of the constituent term "personal trainer" to facilitate a proper construction of the term "remote personal trainer."

In the "Background of the Invention," the Inventor describes "personal trainers" as "individuals who usually have a fitness training background and who typically provide personal training services to an [sic] individual customers." '537 Patent at 1:61-63. Because a personal trainer "usually" has a fitness training background, "by implication" the Inventor has defined personal trainers as not necessarily having such a background. Phillips, 415 F.3d at 1321 (quoting Vitronics, 90 F.3d at 1582).

The remaining issue is thus whether a "remote personal trainer" must be a human. The Inventor's use of "personal trainer," "human personal trainer," and "virtual personal trainer" adds to the difficulty of construing the term at issue. As just discussed above, the Inventor described "personal trainers" as "individuals," i.e. humans. '537 Patent at 1:61-63. The specification states that the invention, by contrast, "can serve as a 'virtual personal trainer.'" '537 Patent at 2:12-13. The specification explains that this "virtual personal trainer" is not "remote" because "the *local* system can serve as a 'virtual personal trainer.'" *Id.* at 2:28-29 (emphasis added).

The specification appears to use the terms "human personal trainer" and "personal trainer" interchangeably, as synonyms. The specification teaches:

The remote system computer can be considered to be the communication tool of a *human personal trainer*, as opposed to the 'virtual personal trainer' emulated by software in the local system computer.... The personal trainer can ... call the individual user to provide additional instruction, encouragement, and cautions, and the remote system computer can download new exercise scripts to the local system to implement these changes.

*Id.* at 2:31-35 (emphasis added). The specification later explains that "[t]he 'virtual personal trainer' is, therefore, a computerized process which emulates part or all of the functions traditionally performed by a human personal trainer." *Id.* at 8:14-17.

This mixed use of "human personal trainer" and "personal trainer" comports with the Inventor's lexicography in the specification. Where "the specification ... reveal[s] a special definition given to a claim term by the patentee, ... the inventor's lexicography governs." Phillips, 415 F.3d at 1316. Initially, the Inventor's use of the phrases "human personal trainer" and "virtual personal trainer" suggests that a "personal trainer" can be either "virtual" or "human." '537 Patent at 2:31-35. However, the "Background of the Invention." teaches that a "personal trainer" is "[an] individual[ ] ... who typically provide[s] personal training services to ... individual customers." '537 Patent at 1:61-63. Furthermore, the specification later teaches that "[p]referably, the voice being used is that of the personal trainer associated with the remote



system...." '537 Patent at 5:51-52.

The Inventor has therefore defined a "personal trainer" as a human, and the Inventor's use of that term throughout the specification is consistent with that lexicography. Taking this into account, as well as the Inventor's use of the term "virtual personal trainer" and the Court's analysis of the term "remote system," *infra*, the Court finds that a "remote personal trainer" is therefore a human personal trainer that is not present at the local system.

The Court therefore construes the term "remote personal trainer" to mean a "a human, not present at the local system, who provides fitness training services."

As to vocal communication, Claims 1, 10, and 15 of the '537 Patent recite "vocal communication" but do not specify that the communication must be live rather than recorded. The specification does not suggest limiting a "vocal communication" to a live communication. However, this communication cannot be "synthesized," i.e. synthetic, because a personal trainer is a human, as discussed *supra*. The Court accordingly construes the term "a vocal communication of a remote personal trainer" to mean "a live or recorded voice of a human, not present at the local system, who provides fitness training services."

## **18. "a remote system"**

This term appears in Claims 1, 10, and 15 of the '537 Patent.

### **A. The Parties' Positions**

Plaintiff proposes that as to Claim 1, no construction of this term is needed, but that as to Claim 15, the term means "a system having a remote computer." Dkt. No. 43 at 4. Defendant proposes the term means "a data gathering and storage station at the site of the remote personal trainer that receives information from and provides information to multiple local systems and that allows communication and interaction between the human personal trainer and users of multiple local systems." *Id.*

Plaintiff argues that this term has a clear meaning based on the claims, as well the specification of the '531 Patent. Dkt. No. 53 at 29 (citing '537 Patent at 6:34-35). Plaintiff argues that Defendant's proposed "multiple local systems" limitation "inappropriately adds limitations to the claims." *Id.*

Defendant argues that the Inventor "acted as his ... own lexicographer" because the specification demonstrates that a remote system is connected to many local systems and provides communication with a human personal trainer. Dkt. No. 60 at 40-41. Defendant further argues that Plaintiff's proposed construction of "remote system" would render the term "remote system" superfluous because its meaning would be identical to that of "remote computer." *Id.* at 41.

Plaintiff replies by reiterating its opening arguments. Dkt. No. 68 at 19-20.

### **B. Construction**

The discussion in the patents-in-suit of the "logical hierarchy" emphasized by Defendant does not rise to the level of an express definition or "lexicography." Dkt. No. 60 at 40. Instead, the language cited by Defendant is part of the "Detailed Description of the Preferred Embodiments." '631 Patent at 3:38-39; '537 Patent at 3:56-57. The Inventor did not expressly define the term "remote system." While the Inventor's descriptions

of preferred embodiments provide context, limitations from preferred embodiments should generally not be imported into the claims. Phillips, 415 F.3d at 1320.

The claim language also counsels against requiring a remote system to be in communication with "multiple local systems." For example, Claim 1 of the '537 Patent teaches "a remote system including at least one remote computer" and "a communication linkage" that "couples said local system to said remote system for data communication." '537 Patent at 15:10-14. Because this claim describes a connection between one remote system and one local system, the remote system need not be connected to "multiple local systems," as Defendant proposes.

The Court does not find support for requiring, as Defendant proposes, that a "remote system" must "allow[ ] communication and interaction between the human personal trainer and users of ... local systems." The Court also notes its construction, *supra*, that a "vocal communication" of a personal trainer need not be live. *See s.s. IV. 16-17, supra.*

The Court therefore construes the term "remote system" to mean "a system including at least one remote computer that receives information from and provides information to at least one local system."

#### **19. "communication linkage;" and**

#### **20. "a packet network connection"**

These terms appear in Claims 1 and 18 of the '537 Patent.

### **A. The Parties' Positions**

Plaintiff proposes these terms must be construed together to mean "a packet network such as the Internet, or an Intranet, computer communication link, including a way to couple to the packet network, for example, a cable modem and cable, modem and telephone line, or wireless modem and antenna. A packet network is a network in which data is sent in packets." Dkt. No. 43 at 4. Defendant proposes the term "communication linkage" means "a transmission medium, such [as] a telephone line, an ISDN digital transmission line, a local area network (LAN), or wide area network (WAN) such as the Internet, a cable modem and cable, modem and telephone line, or wireless modem and antenna." *Id.* Defendant proposes the term "a packet network connection" means "a device, such as a modem, cable modem, or wireless modem, that is capable of connecting a computer to a packet network. A packet network is a network in which data is transmitted in packets. The Internet is an example of a packet network." *Id.*

Plaintiff argues that its proposed construction is "essentially a definition of a preferred embodiment described in the specification of the '537 Patent." Dkt. No. 53 at 30 (discussing '537 Patent at 6:19-27.) Plaintiff also argues that "the separate constructions proposed by [Defendant], when combined, produce a result that is overly broad and intended to engulf prior art." *Id.*

Defendant argues that the term "communication linkage" should be construed separately because that term "is plainly and expressly defined in the specification." Dkt. No. 60 at 42. Defendant cites the following language: "The Internet access apparatus can be coupled to the Internet ... by a number of communication linkages or 'transmission media.'" *Id.* (quoting '537 Patent at 13:33-35). Defendant asserts "[t]he specification also provides examples of communications linkages" and list those proposed examples in its proposed construction. *Id.* (discussing '631 Patent at 6:14-16 & '537 Patent at 13:33-46). Defendant argues

that while the term "communication linkage" includes packet network connections, the term is not limited to such connections. *Id.* at 43.

As to "a packet network connection," Defendants argue that Plaintiff mistakenly ignores that the term refers to a "connection" and not simply "a packet network." *Id.* at 43-44. Defendant proposes that the construction include examples provided by the specification. *Id.* at 44 (citing '537 Patent at 13:33-46). Defendant notes that "these devices (cable modem, standard modem, and wireless modem) are all part of a 'communication linkage.'" *Id.*

Plaintiff replies that Defendant's proposed construction ignores the word "including" in Claims 1 and 18 and attempts to "engulf prior art." Dkt. No. 68 at 20.

## **B. Construction**

In summary, Defendant argues that a "communication linkage" is a physical medium of communication while a "packet network connection" is a device that connects to that physical medium. Plaintiff, by contrast, proposes that the terms together describe a computer connection to a packet network.

The claims in which the disputed terms appear show that "a communication linkage includ[es] a packet network connection." '537 Patent at 15:12-13.

The specification describes "Internet access apparatus 196" as part of the preferred embodiment. '537 Patent at 12:65-66. This apparatus "can be coupled to the Internet ... by a number of communication linkages or 'transmission media.'" *Id.* at 13-33-35. Although this appears within the specification's description of a preferred embodiment, this mention of "communication linkages or 'transmission media'" suggests that the Inventor used them as synonyms. First, the Inventor used quotation marks around "transmission media," which suggests the Inventor's intent to use that term as an alternative or supplemental description of "communication linkages." Second, the specification does not describe or suggest that "communication linkages" are different from "transmission media." A "communication linkage" is, therefore, a transmission medium. The specification also provides examples that may be helpful to the jury, such as "a cable modem [and] a cable, ... a standard modem [and] a telephone line, ... [or] a wireless modem ... with an antenna." '537 Patent at 13-35-45.

The Court therefore construes the term "communication linkage" to mean a "transmission medium, such as a cable modem and a cable, a standard modem and a telephone line, or a wireless modem with an antenna."

As to "packet network connection," the parties agree that a packet network is a network, such as the Internet, in which data is sent in packets. The specification provides some further instruction as to the "connection" portion of this term where once a "connection is established ... information is uploaded or downloaded." '537 Patent at 10:27-29. This discussion, even though related to a preferred embodiment, teaches that a "connection" is something that allows information to be uploaded or downloaded.

The Court construes the term "packet network connection" to mean "a connection that allows information to be uploaded or downloaded on a network, such as the Internet, in which data is sent in packets."

**21. "such that said remote system may receive local system data from said local system concerning said use of said exercise apparatus and such that said local system may receive remote system data**

## **from said remote system concerning said operation of said exercise apparatus"**

This term appears in Claim 1 of the '537 Patent.

### **A. The Parties' Positions**

Plaintiff proposes this term does not require construction. Dkt. No. 43 at 4. Defendant proposes this term means that "the remote system must be capable of receiving from the local system data that was gathered from monitoring the use of the exercise apparatus and the local system must be capable of receiving from the remote system information concerning the control of the operation of the apparatus in response to that data." *Id.*

Plaintiff incorporates its arguments as described in s. IV. 14.A, *supra*. Dkt. No. 53 at 34-35. Defendant has similarly consolidated its arguments. Dkt. No. 60 at 49-50. Defendant argues that the proper antecedent for "said use" is "monitoring the ... use of said at least one exercise apparatus." *Id.* at 50.

### **B. Construction**

The Court incorporates its discussion of s. IV. 14.B, *supra*. The Court therefore finds this term requires no construction apart from that of its constituent terms.

## **22. "said operation may include a force-feedback to a user of said exercise apparatus"**

This term appears in Claim 10 of the '537 Patent.

### **A. The Parties' Positions**

Plaintiff proposes this term means "the operation is capable of imparting a force (such as tactile force or haptic force) to the person using the exercise apparatus to simulate real-world conditions." Dkt. No. 43 at 5. Defendant proposes this term means "the exercise apparatus is capable of imparting a 'force-feedback' to a person using the exercise apparatus. A 'force-feedback' is a tactile force (a force that the user can feel through the sense of touch) that (1) is imparted to the user by source(s) separate from the source(s) that normally impart resistance to a person for purpose of exercising on the apparatus and that (2) simulates real world conditions. An example would be imparting a vibration or shock to the handlebars or the seat of an exercise bicycle to simulate hitting a rock." *Id.*

Plaintiff argues that this term has been explicitly defined by the specification by the following language: "a force-feedback that can closely mimic real-world conditions, i.e. the actual forces that might be felt by a user...." Dkt. No. 53 at 31 (quoting '537 Patent at 4:54-55).

Defendant proposes that while the parties agree that "force feedback" is a "tactile force," Defendant "believes it is appropriate to define the term 'tactile,' as its definition may not be commonly known to a jury." Dkt. No. 60 at 45. Defendant cites dictionary definitions for "tactile" in support of its proposed parenthetical defining that word as "a force that the user can feel through the sense of touch." *Id.* Defendant's sources define "tactile" as "of or relating to the sense of touch," "pertaining to or affecting the sense of touch," and "perceptible to the touch; tangible." *Id.* ( *citing Webster's Ninth Collegiate Dictionary* 1201 (Ninth Edition 1987) & *Random House Webster's College Dictionary* 1310 (Second Edition 1997)).

Defendant also argues that "force feedback" cannot come from the same source as that which "provid[es] the resistance that allows a person to exercise." *Id.* Defendant argues that the specification describes a "brake" for providing resistance to pedaling and an "actuator" to provide "force feedback." *Id.* at 46 (citing '537 Patent at 5:13-18 & 14:11-19). Defendant argues that Plaintiff's construction must fail because "[if] the force-feedback can be from the same source as the operation of the exercise machine, either the term 'operation' or the term 'force-feedback' has no meaning." *Id.* at 46. Defendant also cites prosecution history in which the Inventor distinguished the "Andrus et al." prior art reference because "the force-feedback ... is something more than the simple resistance setting of the exercise apparatus." *Id.* at 47 (citing Exh. N at 3).

In reply, Plaintiff reiterates that "force-feedback" is explicitly defined. Dkt. No. 68 at 20-21. Plaintiff further argues that a "separate actuator," as Defendant proposes, is not required because the specification states as follows: "It should also be noted that the actuators can be used to provide mechanical resistance. For example, the actuator ... can eliminate the need for a friction-type brake...." *Id.* at 21.

## B. Construction

The following passage from the specification is highly instructive of the Inventor's intended meaning of the disputed term:

The weight trainer ... is preferably a resistance-type weight trainer, such as a bench press machine, a biceps curl machine, a squat machine, etc. Typically the use[r] grasps a bar connected to a cable that is attached to a resistance device. This resistance device can be weights, or can be an active resistance device such as a motor, or a passive resistance device such as an electrically actuated brake. Active resistance devices are advantageous in that they can provide a *force-feedback* that can closely mimic real-world conditions, i.e. the actual *forces that might be felt by a user when lifting real weights with a human "spotter" or trainer*. In any event, the amount of resistance to movement of the bar (or other portions of a piece of exercise equipment) is preferably under the control of the computer ... and the script that it is running. Particularly with active resistance devices, the control by the local computer is important. This is because a tight feed-back loop between sensors and actuators (such as motors, solenoids, etc.) is desirable to create realistic *force feed-back*.

'537 Patent at 4:46-61 (emphasis added). Of particular note, this description describes "force feed-back" as affecting the "resistance" against which the user is pushing. In particular, the force feed-back may be a change in resistance intended to simulate the help of a "spotter" during weight training. Defendants contention that force feed-back "is imparted to the user by source(s) separate from the source(s) that normally impart resistance" must fail because a preferred embodiment provides force feed-back by changing the resistance imparted to the user. Vitronics, 90 F.3d at 1583-84 (finding that claim constructions that would read out the preferred embodiment are rarely, if ever, correct.)

The principle against reading out preferred embodiments outweighs Defendant's prosecution history argument. Moreover, Defendant's argument that the Inventor's statement in the prosecution history that force feed-back be "something more than the simple resistance setting of the exercise apparatus" is not inconsistent with the specification because, for example, simulating the actions of a "spotter" can be "more than the simple resistance setting." Dkt. No. 60 at 47 (citing Exh. N at 3).

Having rejected Defendant's proposed limitation, the Court finds the parties otherwise in agreement. The Court therefore construes the term "said operation may include a force-feedback to a user of said exercise

apparatus" to mean "the operation is capable of imparting a force (such as a tactile force that a person can feel) to the person using the exercise apparatus to simulate real-world conditions."

### **23. "a network using a TCP/IP protocol"**

This term appears in Claim 15 of the '537 Patent.

#### **A. The Parties' Positions**

Plaintiff proposes this term means "a network of computers that utilizes a Transmission Control Protocol/Internet Protocol (TCP/IP) protocol. The Internet and Intranets are preferred defining examples of computer networks using a TCP/IP protocol." Dkt. No. 43 at 5. Defendant proposes the term means "a network that utilizes a Transmission Control Protocol/Internet Protocol (TCP/IP) protocol. The Internet is an example of a network using a TCP/IP protocol." *Id.*

Plaintiff argues that the specification defines this term in two places, discussed *infra*. Dkt. No. 53 at 32. Plaintiff argues that the network must be a "network of computers." *Id.* at 33.

Defendant notes that the dispute over this term is similar to the dispute over term 8, "wide area network." Dkt. No. 60 at 47. Defendant argues that while the specification describes how "a local computer" connects to "a remote system 'via a network using a TCP/IP protocol,'" the computers are not part of the network. *Id.* at 47-48. Defendant further argues that "extrinsic evidence shows that the plain and ordinary meaning does not require a network of computers." *Id.* at 48. Defendant cites technical definitions of "TCP/IP" defining that term, in relevant part, as "communications protocols" or "a software protocol" rather than a "network of computers." *Id.* (citing Exh G, *IBM Dictionary of Computing* 683 (Tenth Edition 1994) & Exh. H, *Microsoft Press Computer Dictionary* 384 (Second Edition 1994)). Finally, Defendant argues that Plaintiff's use of the phrase "preferred defining examples" improperly "suggests this term includes only the Internet and an intranet, which is incorrect and unduly narrow." *Id.* (citing Phillips, 415 F.3d at 1323).

Plaintiff replies that the specification's express definition of the term should control. Dkt. No. 68 at 21.

#### **B. Construction**

The language quoted by Plaintiff indicates that the Internet is an example of a network using a TCP/IP protocol. That language does not state that the Internet is the *only* example, and the patent contains no justification for such a narrow construction. The Court therefore declines to include the Internet as a "defining" example, which might incorrectly suggest that the Internet is the only example of "a network using a TCP/IP protocol."

The specification does not explicitly resolve the remaining dispute. As Plaintiff notes, the specification of the '537 Patent mentions the "TCP/IP protocol" twice, as follows: (1) "The Internet (and private networks known as Intranets) are packet networks operating on the well-known TCP/IP protocols;" and (2) in describing Figure 10, "a data packet network such as the Internet, or an Intranet, operating on a TCP/IP protocol is preferred." '537 Patent at 6:25-27 & 12:61-63. The '631 Patent does not discuss the TCP/IP protocol. Neither of these descriptions explicitly state whether "a network using a TCP/IP protocol" must be a computer network.

Nonetheless, the term "wide area network" would be understood by one of ordinary skill in the art, in the

context of Claim 15 of the '537 Patent, to be a computer network. Claim 15 suggests this is so where it describes "communicating with a remote system via a network using a TCP/IP protocol to provide said remote system with data ..., and to receive from said remote system data ... to be stored in said read/write memory of said local computer...." '537 Patent at 16:19-25. Claim 15 therefore describes a connection between a local system and a remote system, both of which include computers.

The Court therefore construes the term "a network using a TCP/IP protocol" to mean "a network of computers, such as the Internet, that uses Transmission Control Protocol/Internet Protocol (TCP/IP)."

**24. "to provide said remote system with data concerning *said use* of said exercise apparatus, and to receive from said remote system data including at least a portion of a modified script"**

This term appears in Claim 15 of the '537 Patent.

**A. The Parties' Positions**

Plaintiff proposes this term does not require construction. Dkt. No. 43 at 5. Defendant proposes the term means "to provide the remote system with data concerning the use of the exercise apparatus that was controlled by running a modifiable script on the local computer, and to receive from the remote system at least a portion of a modified script changed in response to that data." *Id.*

Plaintiff incorporates its arguments as described in s. IV. 14.A, *supra*. Dkt. No. 53 at 34-35. Defendant has similarly consolidated its arguments. Dkt. No. 60 at 49-50. Defendant argues that "said use" refers back to "the use of the exercise apparatus that was controlled by running a modifiable script on the local computer." *Id.* at 50.

**B. Construction**

Because the parties repeat their arguments as to s. IV. 14, *supra*, the Court incorporates its discussion from s. IV. 14.B, *supra*, and finds this term requires no construction apart from that of its constituent terms.

**25. "at least one local computer ... operative to develop compressed video data in a packet protocol"**

This term appears in Claim 18 of the '537 Patent.

**A. The Parties' Positions**

Plaintiff proposes the term means "a local computer produces compressed video data packets to be sent over the Internet." Dkt. No. 43 at 5. Defendant proposes the term means "the local computer both compresses video data and formats video data into packets." *Id.*

Plaintiff argues that the specification associates "compression" with the "Internet" in the following language: "[t]he computer ... can receive video data from a video camera ... of the user.... Preferably, *if this video data is to be sent over the Internet*, it is *compressed* by some form of standard compression algorithm, such as MPEG." Dkt. No. 53 at 33 (quoting '537 Patent at 14:3-8).

Defendant argues that Plaintiff "violat[es] established claim construction rules by adding a limitation into the claim that is not present in the claim itself" because of "the lack of any reference to the Internet (or any

other network) in the disputed phrase." Dkt. No. 60 at 49.

Plaintiff replies by reiterating its opening argument. Dkt. No. 68 at 22.

## **B. Construction**

Although the specification is "the single best guide to the meaning of a disputed term," the Court must take care to avoid the "improper importation of unintended limitations from the written description into the claims." Phillips, 415 F.3d at 1320 (citations omitted). In discussing the video data, the patent specification explains that "[p]referably, if this video data is to be sent over the Internet, it is compressed...." '537 Patent at 14:6-7 (emphasis added). This language denotes a preferred embodiment. The Inventor's use of "if" also suggests that video data need not necessarily be "sent over the Internet." Further, as discussed in s. IV.20, *supra*, the Internet is only an example of a packet network, i.e. a network in which data is sent in packets.

The Court therefore construes the term "at least one local computer ... operative to develop compressed video data in a packet protocol" to mean "a local computer produces compressed video data packets to be sent over a packet network."

## **V. CONCLUSION**

Accordingly, the Court hereby **ORDERS** the disputed claim terms construed consistent herewith.

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