United States District Court,
N.D. Iowa, Eastern Division.

PROBATTER SPORTS, LLC,
Plaintiff/Counterclaim-Defendant.
v.
JOYNER TECHNOLOGIES, INC,
Defendant/Counterclaim-Plaintiff.

No. 05-CV-2045-LRR

Aug. 1, 2007.

Background: Patentee sued competitor, alleging infringement of its patents relating to a baseball pitching system with a video display. Patentee filed motion for claim construction and competitor filed amended motion for Markman construction of asserted claims.

Holdings: The District Court, Linda R. Reade, Chief Judge, held that:
(1) clause "a predetermined time" meant a time that was set or otherwise determined before the ball was propelled toward a target;
(2) clause "countdown timer" meant a time that could count down different times depending upon the video clip and pitch;
(3) clause "programmable controller" meant control device employing the hardware architecture of a computer and a relay ladder diagram language, in accordance with definition in dictionary of scientific and technical terms;
(4) means-plus-function claims specifying means for synchronizing propelling of balls with moving image did not include a limitation requiring that initiation of display of video image and initiation of countdown had to occur simultaneously;
(5) clause regarding means by which a programmable controller initiated release of balls at predetermined time interval after video image was initially displayed was not a means-plus-function clause; and
(6) clause "means for causing said power head to assume a predetermined horizontal angular position," was means-plus-function clause, in which the only clearly identified structure for performing such function was the horizontal linear actuator.

Motions granted in part and denied in part

6,186,134, 6,513,512. Construed.

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ORDER REGARDING CLAIM CONSTRUCTION

LINDA R. READE**, Chief Judge.**

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I. INTRODUCTION

This matter comes before the court for construction of the disputed claims of the two patents-in-suit, the '134 Patent FN1 and the ' 512 Patent.FN2

FN1. Pitching System with Video Display Means, U.S. Patent No. 6,186,134 (filed Dec. 9, 1999) (issued Feb. 13, 2001).

FN2. Pitching System with Video Display Means, U.S. Patent No. 6,513,512 (filed Feb. 8, 2001) (issued Feb. 4, 2003).

II. BACKGROUND

On June 14, 2007, the court held a MarkmanFN3 hearing ("Hearing") in this patent infringement action. Attorneys Stephen J. Holtman and Susan M. Schlesinger represented Plaintiff/Counterclaim-Defendant ProBatter Sports, LLC ("ProBatter"). Attorneys Quentin G. Cantrell, John C. McNett and James S. Zmuda represented Defendant/Counterclaim-Plaintiff Joyner Technologies, Inc. ("Joyner").

FN3. Markman v. Westview Instruments, Inc., 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996) (holding that claim construction is a question of law for the court), *aff'g,* 52 F.3d 967 (Fed.Cir.1995) (en banc).

The court finds that the disputed claims of the two patents-in-suit are fully submitted and ready for construction. In construing such claims, the court considers (1) the parties' arguments at the Hearing, (2) the latest version of the parties' briefs and attached materials FN4 and (3) the parties' Joint Amended Claim Construction Chart ("JACCC") (docket no. 174).FN5

FN4. Various versions of the parties' briefs and materials are scattered throughout the docket. ProBatter's most recent motion documents are: Motion for Claim Construction (docket no. 158-1); Brief in Support of Motion for Claim Construction (docket no. 176-1); ProBatter's Exhibits A and B (docket nos. 176-2 and 176-3); ProBatter's Exhibits AA through II (docket nos. 159-2 through 159-10); and the First Declaration of Susan Schlesinger (docket no. 159-1). Joyner's most recent motion documents are: Amended Motion for Markman Construction of Asserted Claims (docket no. 165-1); Amended Brief on Markman Construction of Asserted Claims (docket no. 165-2); Joyner's Exhibits A through F (docket nos. 165-3 through 165-8); Joyner's Exhibits K through M (docket nos. 165-9 through 165-11); Joyner's Exhibit O (docket no. 165-12); and the Declaration of John McNett (docket no. 165-14). For some unknown reason, Joyner does not have Exhibits G, H, I, J or N. ProBatter's most recent responsive documents are: Brief in Response to Joyner's Motion for Claim Construction (docket no. 170-1); Second Declaration of Susan Schlesinger (docket no. 170-2); and Responsive Exhibits A through D (docket nos. 170-3 through 170-6). Joyner's most recent responsive document is its Response to ProBatter's Brief in Support of its Motion for Claim Construction (docket no. 168).

FN5. On May 29, 2007, the parties filed a Joint Claim Construction Chart ("JCCC") (docket nos. 158-2 and 165-13). At the Hearing, the parties agreed that the JCCC was not helpful to the court. On June 29, 2007, the parties filed the JACCC.

III. JURISDICTION

The court has original jurisdiction of civil actions "arising under any Act of Congress relating to patents." 28 U.S.C. s. 1338(a). It also has jurisdiction over related claims of unfair competition. Id. s. 1338(b).

ProBatter's Complaint (docket no. 1) and Joyner's Second Amended Counterclaim (docket no. 71) raise various claims of patent infringement, in violation of 35 U.S.C. s. 271, and common law unfair competition. Therefore, the court has subject-matter jurisdiction pursuant to s. 1338(a) and (b).

IV. PRINCIPLES OF CLAIM CONSTRUCTION

[1] [2] [3] A patent is a legal document that describes the exact scope of an invention to "secure to [the patentee] all to which he is entitled [and] to apprise the public of what is still open to them." Markman v. Westview Instruments, Inc., 517 U.S. 370, 373, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996) (citations omitted). By statute, a patent consists of two different elements: one or more "claims," which "particularly poin[t] out and distinctly clai[m] the subject matter which the applicant regards as his invention," and the "specification," which describes the invention "in such full, clear, concise and exact terms as to enable any person skilled in the art ... to make and use the same." Id. (citing 35 U.S.C. s. 112). "It is a 'bedrock principle' of patent law that 'the claims of a patent define the invention to which the patentee is entitled the right to exclude.' " Phillips v. AWH Corp., 415 F.3d 1303, 1312 (Fed.Cir.2005) (en banc) (quoting Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc., 381 F.3d 1111, 1115 (Fed.Cir.2004)). The goal of claim construction is to give proper meaning and scope to claim language. Abtox, Inc. v. Exitron Corp., 122 F.3d 1019, 1023 (Fed.Cir.1997).

There is "no magic formula or catechism for conducting claim construction." Phillips, 415 F.3d at 1324. However, the Federal Circuit Court of Appeals has developed the following general principles:

A. Claims

[4] [5] [6] Claim construction always starts with the language of the claim itself. Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed.Cir.1996); *see also* Digital Biometrics, Inc. v. Identix, Inc., 149 F.3d 1335, 1344 (Fed.Cir.1998) ("The actual words of the claim are the controlling focus.") (citing Thermalloy, Inc. v. Aavid Eng'g, Inc., 121 F.3d 691, 693 (Fed.Cir.1997)); Renishaw PLC v. Marposs Societa' per Azioni, 158 F.3d 1243, 1248 (Fed.Cir.1998) (stating that claim construction "begins and ends in all cases with the actual words of the claim"); SRI Int'l v. Matsushita Elec. Corp., 775 F.2d 1107, 1121 (Fed.Cir.1985) ("[I]t is the *claims* that measure the invention.") (emphasis in original). "[T]he words of a claim 'are generally given their ordinary and customary meaning.' " Phillips, 415 F.3d at 1312 (quoting Vitronics, 90 F.3d at 1582). The ordinary rules of grammar and syntax also apply. In re Hyatt, 708 F.2d 712, 714 (Fed.Cir.1983).

[7] [8] [9] "[T]he ordinary and customary meaning of a claim term is the meaning that the term would have to 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." Phillips, 415 F.3d at 1313 (citation omitted). The perspective of a person of ordinary skill in the art is "based on the well-settled understanding that inventors are typically persons skilled in the field of the invention and that patents are addressed to be read by others of skill in the pertinent art." Id. (citing, in part, Verve, LLC v. Crane Cams, Inc., 311 F.3d 1116, 1119 (Fed.Cir.2002)). In certain cases, however, the patentee may unequivocally impart a novel meaning to claim terms. Omega Eng'g, Inc. v. Raytek Corp., 334 F.3d 1314, 1323 (Fed.Cir.2003) (citations omitted). "It is a well-established axiom in patent law that a patentee is free to be his or her own lexicographer and thus may use terms in a manner contrary to or inconsistent with one or more of their ordinary meanings." Hormone Research Found., Inc. v. Genentech, Inc., 904 F.2d 1558, 1563 (Fed.Cir.1990). Therefore, "it is always necessary to review the specification to determine whether the inventor has used any terms in a manner inconsistent with their ordinary meaning." Vitronics, 90 F.3d at 1582.

B. Specification

[10] [11] The claims "must be read in view of the specification, of which they are a part." Markman v.

Westview Instruments, Inc., 52 F.3d 967, 979 (Fed.Cir.1995), *aff'd,* 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996). The specification is " 'the primary basis for construing the claims.' " Phillips, 415 F.3d at 1315 (quoting Standard Oil Co. v. Am. Cyanamid Co., 774 F.2d 448, 452 (Fed.Cir.1985)). "The close kinship between the [specification] and the claims is enforced by the statutory requirement that the specification describe the claimed invention in 'full, clear, concise, and exact terms.' " Id. at 1316 (quoting 35 U.S.C. s. 112). The Federal Circuit Court of Appeals recently summarized:

Ultimately, the interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim. The construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction.

Id. (quoting Renishaw, 158 F.3d at 1250).

[12] [13] [14] [15] If there is a dispute about the meaning of a claim term, the specification presents "the single best guide to the meaning of the disputed term." Vitronics, 90 F.3d at 1582. "[T]he purposes of the specification are to teach and enable those of skill in the art to make and use the invention and to provide a best mode for doing so." Phillips, 415 F.3d at 1323. It is well-settled, however, that courts should not ordinarily read a limitation into a claim from the specification. As the Federal Circuit Court of Appeals makes clear:

[The Federal Circuit Court of Appeals] has consistently adhered to the proposition that courts cannot alter what the patentee has chosen to claim as his invention, that limitations appearing in the specification will not be read into claims, and that interpreting what is *meant* by a word *in* a claim is not to be confused with adding an extraneous limitation appearing in the specification, which is improper.

Laitram Corp. v. NEC Corp., 163 F.3d 1342, 1348 (Fed.Cir.1998) (citations omitted, emphasis in original); *accord* KCJ Corp. v. Kinetic Concepts, Inc., 223 F.3d 1351, 1356 (Fed.Cir.2000) ("[A]lthough the specifications may well indicate that certain embodiments are preferred, particular embodiments appearing in a specification will not be read into the claims when the claim language is broader than such embodiments.") (quoting Electro Med. Sys., S.A. v. Cooper Life Sciences, Inc., 34 F.3d 1048, 1054 (Fed.Cir.1994)). To avoid pitfalls, the court must remain focused "on understanding how a person of ordinary skill in the art would understand the claim terms." Phillips, 415 F.3d at 1323.

C. Prosecution History

[16] [17] The court should also consider the patent's prosecution history, if it is in evidence. Phillips, 415 F.3d at 1317. The prosecution history consists of the record of the patent before the United States Patent and Trademark Office ("PTO"). Id. The prosecution history includes the prior art cited during the examination of the patent. Id.

[18] [19] [20] Although the prosecution history may assist in claim interpretation, as a general rule it may not "enlarge, diminish or vary the limitations in the claims." Markman, 52 F.3d at 980 (internal quotations omitted). Moreover, the prosecution history "often lacks the clarity of the specification and thus is less useful for claim construction purposes." Phillips, 415 F.3d at 1317.

Nonetheless, 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. Vitronics, 90 F.3d at 1582-83; *see also* Chimie v. PPG Indus., Inc., 402 F.3d 1371, 1384 (Fed.Cir.2005) ("The purpose of consulting the prosecution history in construing a claim is to 'exclude any interpretation that was disclaimed during

prosecution.' "), quoting ZMI Corp. v. Cardiac Resuscitator Corp., 844 F.2d 1576, 1580 (Fed.Cir.1988); Southwall Techs., Inc. v. Cardinal IG Co., 54 F.3d 1570, 1576 (Fed.Cir.1995).

Id.

D. Extrinsic Evidence

[21] [22] The claims, the specification and the patent's prosecution history comprise the so-called "intrinsic" evidence of the meaning of the claim terms. Vitronics, 90 F.3d at 1582. The intrinsic evidence is considered the most important evidence for construing a patent. Id. Other evidence that may be considered in construing a patent is so-called "extrinsic evidence," which is "evidence [that] is external to the patent and file history, such as expert testimony, inventor testimony, dictionaries, and technical treatises and articles." Id. at 1584. For example, the court may

consult dictionaries and technical treatises "at any time in order to better understand the underlying technology and may also rely on dictionary definitions when construing claim terms, so long as the dictionary definition does not contradict any definition found in or ascertained by a reading of the patent documents."

Phillips, 415 F.3d at 1322-23 (quoting Vitronics, 90 F.3d at 1584 n. 6).

[23] The Federal Circuit Court of Appeals has repeatedly cautioned district courts that, "while extrinsic evidence 'can shed useful light on the relevant art,' ... it is 'less significant than the intrinsic record in determining the legally operative meaning of claim language.' " Phillips, 415 F.3d at 1317 (quoting C.R. Bard, Inc. v. U.S. Surgical Corp., 388 F.3d 858, 862 (Fed.Cir.2004)). Extrinsic evidence "is unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence." Id. at 1319. As the Federal Circuit Court of Appeals articulated in Vitronics:

[I]n most situations, an analysis of the intrinsic evidence alone will resolve any ambiguity in a disputed claim term. In such circumstances, it is improper to rely on extrinsic evidence.... The claims, specification and [prosecution] history, rather than extrinsic evidence, constitute the public record of the patentee's claim, a record on which the public is entitled to rely. In other words, competitors are entitled to review the public record, apply the established rules of claim construction, ascertain the scope of the patentee's claimed invention and, thus, design around the claimed invention. Allowing the public record to be altered or changed by extrinsic evidence introduced at trial, such as expert testimony, would make this right meaningless.

90 F.3d at 1583 (citations omitted); *see also* Ga.-Pac. Corp. v. U.S. Gypsum Co., 195 F.3d 1322, 1332 (Fed.Cir.1999) ("[W]hen intrinsic evidence is unambiguous, it is improper for the court to rely on extrinsic evidence to contradict the meaning of the claims.") (citation omitted).

[24] [25] The court has the discretion to admit extrinsic evidence. Phillips, 415 F.3d at 1319. District courts are not "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." Id. at 1324 (citations omitted). In exercising its discretion, however, the court should "keep in mind the flaws inherent in each type of evidence and assess that evidence accordingly." Id. at 1319.

E. Means-Plus-Function Construction

An element in a claim for a combination may be expressed as a means or step for performing a specified

function without the recital of structure, material or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material or acts described in the specification and equivalents thereof.

35 U.S.C. s. 112, para. 6. This statute "allows patent applicants to claim an element of a combination functionally, without reciting structures for performing those functions." Envirco Corp. v. Clestra Cleanroom, Inc., 209 F.3d 1360, 1364 (Fed.Cir.2000). "Limitations contemplated by s. 112, para. 6, often referred to as means-plus-function or step-plus-function limitations, recite a specified function to be performed rather than the structure, material, or acts for performing that function." IMS Tech., Inc. v. Haas Automation, Inc., 206 F.3d 1422, 1429-30 (Fed.Cir.2000). In other words, "a patentee may define the structure for performing a particular function generically through the use of a means expression, provided that it discloses specific structure corresponding to that means in the patent specification." Kemco Sales, Inc. v. Control Papers Co., 208 F.3d 1352, 1360 (Fed.Cir.2000) (citations omitted). Where a patent claim includes a means-plus-function element, the construction of the element is "limited to the structure corresponding to the claimed function as 'described in the specification and equivalents thereof.' " Envirco Corp., 209 F.3d at 1365 (quoting 35 U.S.C. s. 112, para. 6); *see also* Atmel Corp. v. Info. Storage Devices, Inc., 198 F.3d 1374, 1380-82 (Fed.Cir.1999) (holding the structure supporting a means-plus-function limitation must be disclosed in the specification).

[28] [29] [30] The use of the word "means" in a claim gives rise to a presumption that s. 112, para. 6 applies. Personalized Media Commc'ns, LLC v. ITC, 161 F.3d 696, 703-04 (Fed.Cir.1998) (citing York Prods., Inc. v. Cent. Tractor Farm & Family Ctr., 99 F.3d 1568, 1574 (Fed.Cir.1996)). Conversely, failure to use the term "means" creates a presumption that s. 112, para. 6 does not apply. Id. (citing Mas-Hamilton Group v. LaGard, Inc., 156 F.3d 1206, 1213 (Fed.Cir.1998)). "These presumptions can be rebutted if the evidence intrinsic to the patent and any relevant extrinsic evidence so warrant." Id. at 704 (citing Cole v. Kimberly-Clark Corp., 102 F.3d 524, 531 (Fed.Cir.1996)). "In deciding whether either presumption has been rebutted, the focus remains on whether the claim as properly construed recites sufficiently definite structure to avoid the ambit of s. 112, para. 6." Id. (citing Sage Prods., Inc. v. Devon Indus., Inc., 126 F.3d 1420, 1427-28 (Fed.Cir.1997)).

[31] Once a court has determined that a claim limitation is written in means-plus-function format, construction of the means-plus-function limitation proceeds as follows:

[First,] the court must identify the function of the limitation. Altiris, Inc. v. Symantec Corp., 318 F.3d 1363, 1375 (Fed.Cir.2003) (citing Micro Chem., Inc. v. Great Plains Chem. Co., 194 F.3d 1250, 1258 (Fed.Cir.1999)). Next, the court "ascertains the corresponding structure in the written description that is *necessary to perform that function*." Id. (citing Micro Chem., 194 F.3d at 1258) (emphasis added); *accord* Omega Eng'g[, 334 F.3d at 1321] ("[T]he structure must be necessary to perform the claimed function."). Lastly, "[s]tructure disclosed in the specification is 'corresponding' structure only if the specification or prosecution history clearly links or associates that structure to the function recited in the claim." Altiris, 318 F.3d at 1375 (quoting B. Braun Med. v. Abbott Labs., 124 F.3d 1419 (Fed.Cir.1997)).

Kinzenbaw v. Case LLC, 179 Fed.Appx. 20, 24 (Fed.Cir.2006) (emphasis in original); *accord* Golight, Inc. v. Wal-Mart Stores, Inc., 355 F.3d 1327, 1333-34 (Fed.Cir.2004).

V. ANALYSIS

A. General Remarks

[32] [33] [34] [35] At the Hearing, the parties asked the court to construe six clauses,FN6 which appear at various places in the ' 134 Patent and the ' 512 Patent. Ordinarily, the court would consider the clauses

separately and as they occur in the patents and claims. *See, e.g.,* Hwy. Equip. Co. v. Cives Corp., 476 F.Supp.2d 1079, 1090-1115 (N.D.Iowa 2007). However, the parties apparently agree that the meaning of the six clauses is consistent throughout the patents-in-suit, because the ' 512 Patent is a continuation of the ' 134 Patent. *See* ' 512 Patent, col. 1, ll. 5-8 ("This is a continuation of U.S. patent application Ser. No. 09/457,809 filed on Dec. 9, 1999, now [the ' 134 Patent] ... which, in turn, was a continuation-in-part [of] U.S. patent application Ser. No. 09/259,722 filed on Mar. 1, 1999, now U.S. Pat. No. 6,182,649.").FN7 Where, as here, patents are derived from the same parent application and have "nearly identical" specifications, the same words in multiple patents will ordinarily have the same meaning. *See, e.g.,* Dayco Prods., Inc. v. Total Containment, Inc., 258 F.3d 1317, 1319, 1325-26 (Fed.Cir.2001). Further, "[b]ecause claim terms are normally used consistently throughout a patent, the usage of a term in one claim can often illuminate the meaning of the same term in other claims." Phillips, 415 F.3d at 1314.

FN6. The parties disagree about the proper construction of other clauses, but such clauses were not the focus of the Hearing. Joyner's Amended Motion for Markman Construction of Asserted Claims (docket no. 165-1) framed the debate at the Hearing and provides the basic structure for the instant Order.

FN7. "A continuation application is an application whose specification is the same as that of the parent application, but whose claims may be the same as or different from those of the parent application." Herbert F. Schwartz, *Patent Law & Practice* 26 (5th ed. 2006) ("Schwartz") (emphasis and footnote omitted); *see, e.g.,* Monsanto Co. v. Scruggs, 459 F.3d 1328, 1337 (Fed.Cir.2006) ("The patents are continuations or divisionals of a common parent application and therefore necessarily have almost identical specifications."), *cert denied,* 549 U.S. 1342, 127 S.Ct. 2062, 167 L.Ed.2d 770 (2007). "A continuation application is entitled to the parent's filing date as to all subject matter contained in it." Schwartz at 26; *see, e.g.,* Broad. Innovation, LLC v. Charter Commc'ns, Inc., 420 F.3d 1364, 1367-68 (Fed.Cir.2005) (holding that a patent was entitled to the filing date of one of its parents), *cert. denied,* 547 U.S. 1113, 126 S.Ct. 1920, 164 L.Ed.2d 666 (2006). For a discussion of continuation-in-part applications, see Schwartz at 26-27.

Accordingly, in what follows the court examines each disputed clause, in turn, on the parties' assumption that the clauses have the same meaning throughout the various claims of the patents-in-suit.

B. Claims at Issue

The six disputed clauses are found in four claims in the patents-in-suit. The claims are: Claims 1 and 22 of the '134 Patent and Claims 7 and 8 of the ' 512 Patent. Claims 1 and 22 of the '134 Patent state:

1. A pitching system including:

means for propelling balls toward a target; means for visually displaying a moving video image of a pitcher; and

means for synchronizing the release of said balls from said means for propelling with said moving image, said means comprising a programmable controller adapted to cause said means for propelling to initiate release of said balls at a predetermined time interval after the video image is initially displayed.

* * * * * *

22. A pitching system of the type having a power head including three coacting wheels for propelling a ball toward a batter to interchangeably simulate pitches of different types to different locations at different speeds, said machine including:

means for causing each of said wheels to rotate at a predetermined speed;

means for causing said power head to assume a predetermined horizontal angular position;

means for causing said power head to assume a predetermined angular vertical position;

a *programmable controller* for controlling the rotational speed of each wheel, the horizontal angular position of the power head and the vertical angular position of the power head;

means for visually displaying a moving video image of a pitcher; and

means for synchronizing the propelling of said balls with said moving image, wherein said programmable controller is adapted to initiate the display of said video image and initiate a countdown upon detecting that said wheels have reached a predetermined speed and the power head has assumed a predetermined horizontal and angular position.

'134 Patent, col. 19, ll. 20-29, col. 21, ll. 15-21, & col. 22, ll. 1-19 (bold in original, underlining supplied). Claims 7 and 8 of the '512 Patent state:

7. A pitching system including:

a power head for propelling a ball toward a batter; means for visually displaying a moving image of a pitcher; and

a *programmable controller* adapted to initiate the display of said video image and cause said ball to be introduced into said power head and propelled toward said batter at a *predetermined time* after the initiation of the display of said video image, said controller including a *countdown timer* which, upon reaching a *predetermined time,* will cause said ball to be introduced into said power head in synchronization with said video image.

8. A method of synchronizing the release of a ball from a pitching system with the display of a video image of a pitcher by said system, said method comprising the steps of:

initiating the display of said video image of the pitcher on a projection screen;

setting a *count down timer* from the beginning of the display of the video image;

propelling a ball toward the batter at *a predetermined* time after the initiation of the video image.

'512 Patent, col. 20, ll. 30-52 (bold in original, underlining supplied).

C. Disputed Clauses

1. "a predetermined time "

[36] The parties' first dispute concerns the clause "a predetermined time." This clause appears in Claims 7 and 8 of the '512 Patent and within the larger clause "at a predetermined time interval" in Claim 1 of the '134 Patent.

As a threshold matter, the court notes that the parties do not explicitly distinguish between "a predetermined

time" and "at a predetermined time interval." The fighting issue is whether the patents-in-suit claim what may be loosely referred to as a "fixed" or "variable" time or time interval.

ProBatter argues that the clause "a predetermined time" is properly construed as "a time ... that is set or otherwise determined before the ball is propelled toward a target." JACCC (docket no. 174), at 8. Conversely, Joyner argues that the clause is properly construed as "a period of time determined once, before the machine begins operating, that remains the same from pitch to pitch, regardless of conditions." Amended Motion for Markman Construction of Asserted Claims (docket no. 165-1), at 2.FN8 In other words, ProBatter argues that the patents-in-suit include a claim for a variable predetermined time, whereas Joyner argues that the predetermined time is fixed, i.e., "determined once and for all, before the videos are ever loaded into the machine." Amended Brief on Markman Construction of Asserted Claims (docket no. 165-2), at 6.

FN8. Joyner further argues that "a predetermined time" is a means-plus-function clause within the ambit of 35 U.S.C. s. 112, para. 6, because (1) in Claim 1 of the '134 Patent the clause is part of a broader "means for synchronizing" clause and (2) the "a predetermined time" clause is "claimed in functional terms, without sufficient recited structure to perform the function." JACCC (docket no. 174), at 8. It is unclear exactly how a means-plus-function analysis would alter the court's conclusion about the proper construction of the clause.

The court shall adopt ProBatter's construction. Joyner's construction impermissibly restricts the scope of the claim language. Nothing in the claim language requires that the time or time interval must be the same for each and every pitch. In other words, "a predetermined time" does not mean "one and only one predetermined time."

In addition, the specification of each patent teaches that the time interval, while preferably fixed between 5 and 7 seconds, need not be fixed. In pertinent part, each specification states:

FIG. 15 is a flow chart showing the operation of the ball-throwing machine **10** in conjunction with the video storage means **302** and video projection means **303.** The ball **308** is delivered to a queued position **317** in the ball introduction tube **90** by means of a feeder tube **316.** Once in the ball introduction tube **90,** the ball 308 is retained and prevented from entering the nip **92** by means of ball retaining means **318.** Upon delivery of the ball **308** to the queued position **317,** the control unit **200** chooses an appropriate video image **310** for the type of pitch being thrown. For example, if the pitch to be thrown is a curve-ball thrown by a left-handed pitcher, the control unit **200** will select the video image of a left-handed pitcher throwing a curve ball. Simultaneously therewith, the control unit **200** determines the appropriate settings for the particular pitch at the particular location from the stored data table and then sends signals to the drive control motors **202A-202C,** the horizontal actuator controller **206** and the vertical actuator controller **204** providing them with the applicable settings for the particular pitch. Upon receipt of the applicable signal, each of the drive motor controls **202** set their corresponding drive motors **80** to the specified speed to accomplish the desired wheel speed and the two actuator controllers **204, 206** set their corresponding actuators to the specified positions to position the power head **20** in the desired position. The affect [sic] of this is to reposition the power head **20** in the proper position to deliver the specified pitch to the predetermined position with the coacting wheels **70A-C** rotating at an appropriate speed to deliver the selected pitch.

Once the controller **200** receives the proper feedback from the drive control motors **202A-202C,** horizontal actuator controller **206** and vertical actuator controller **204** that indicate the power head **20** is in the correct position and the wheels **70A-C** are spinning at the correct rotational velocity, the controller **200** instructs the video storage means **302** and video display means **303** to play the chosen video image **310.** Immediately upon commencement of the video image **310** playback, the control unit **200** initiates a countdown for the

duration of time between the commencement of the video image **310** and the precise moment in which the ball **308** appears to be released by the video image **310.** This duration of time is precisely determined and is the same for every individual video image **310.** In the preferred embodiment, this duration is between 5 and 7 seconds, although it should be appreciated that shorter or longer durations may be preferred, either for more rapid operation or for a longer view of the pitcher in his motions.

Upon the termination of the countdown, at which time the pitcher in the video image **310** appears to be about to release the ball **308,** the control unit **200** sends a signal to a solenoid **322** located immediately behind the ball **308.** This signal instructs the solenoid to impel the ball **308** forward through the introduction tube **90** and into the nip **92,** where the ball **308** is engaged by coacting wheels **70A-70C** and further impelled through the opening **306** in the screen **304,** such that it appears the pitcher in the video image **310** had actually thrown the ball **308.**

Having thus described the invention with particular reference to the preferred forms thereof, it will be obvious that various changes and modifications can be made therein without departing from the spirit and scope of the present invention as defined by the appended claims.

'134 Patent, col. 18, ll. 23-67 & col. 19, ll. 1-18; '512 Patent, col. 18, ll. 36-67 & col. 19, ll. 1-31 (emphasis in original). Although the specification states that "[t]his duration of time is precisely determined and is the same for every individual video image," '134 Patent, col. 18, ll. 64-66, '152 Patent col. 19, ll. 10-12, and is preferably "between 5 and 7 seconds," '134 Patent, col. 18, l. 67, '512 Patent, col. 19, l. 13, the specification also makes clear that the predetermined time or time interval need not always be the same for each and every pitch. The specification states "it should be appreciated that shorter or longer durations may be preferred, either for more rapid operation or for a longer view of the pitcher in his motions." '134 Patent, col. 19, ll. 1-3; '512 Patent, col. 19, ll. 14-16. It appears then, that is this a classic case in which the specification "indicate[s] that certain embodiments are preferred, [but] particular embodiments appearing in a specification [should] not be read into the claims when the claim language is broader than such embodiments." KCJ Corp., 223 F.3d at 1356.

When the court focuses "on understanding how a person of ordinary skill in the art would understand the claim terms," Phillips, 415 F.3d at 1323, the court finds that the patent claims the possibility of variable predetermined timing. One of the objects of the invention is "to provide ... a ball-throwing machine that is able to interchangeably deliver a variety of different pitches to a variety of different locations at a variety of different speeds...." '134 Patent, col. 3, ll. 60-62; '512 Patent col. 4, ll. 1-4. If programmed with a smart card reader, the invention is able simulate the pitches of different pitchers. *See* '134 Patent, col. 18, ll. 15-22; '512 Patent, col. 18, ll. 28-35. A person of ordinary skill in the art would know, as even the casual observer of baseball knows, that (1) different pitchers take different amounts of time to pitch baseballs and (2) even the same pitcher may sometimes pitch out of a windup position and on other occasions pitch out of a less time-consuming, set position.FN9 As a consequence, the video clips used in the machine will often have different lengths. Although it may be preferable to have each video image have the same length, this is plainly not required or all that the patents-in-suit claim. FN10

FN9. *See* Official Baseball Rules, s. 8.01 (2007 ed.), *available at* http:// mlb. mlb. com/ mlb/ official_info/official_rules/pitcher_8.jsp (last visited July 27, 2007); *see also* http:// en. wikipedia. org/ wiki/ Pitching_ position (explaining that the windup position usually takes longer to complete than a pitch completed from the set or stretch position).

FN10. It appears that Joyner may have come to the same conclusion. For example, in the JACCC, Joyner repeatedly proposes the following, weaker construction: "The 'predetermined time' ... is the same length of time every time a *given* video clip is displayed." JACCC (docket no. 174), at 8 (emphasis added); *id*. at 20

(same); *id*. at 24 (same).

Accordingly, the court shall adopt ProBatter's construction of "a predetermined time."

***2.* "*countdown timer*"**

[37] The parties' second dispute concerns the clause "countdown timer." This clause appears Claims 7 and 8 of the '512 Patent.FN11

FN11. In Claim 7, the clause appears as "countdown timer." In Claim 8, the clause appears as "count down timer." Similarly, "countdown" appears in Claim 22 of the '134 Patent.

At the Hearing, counsel for ProBatter indicated that the construction of the clause "countdown timer" is part-and-parcel of the court's construction of the clause "at a predetermined time." Specifically, the parties' dispute with respect to "countdown timer" is whether, as Joyner suggests, "countdown timer" counts down a single, fixed time FN12 or whether, as ProBatter argues, "countdown timer" may count down different times depending upon the video clip and pitch. At the Hearing, counsel for Joyner agreed with ProBatter's assessment.

FN12. In the JACCC, Joyner construes "countdown timer" as "a timer which: (1) is started 'immediately upon' initiation of the video; (2) runs for the predetermined time; and (3) triggers the signal to release the ball." JACCC (docket no. 174), at 20. ProBatter does not offer a construction in the JACCC, because it believes the plain meaning of the clause is clear.

Accordingly, in light of the court's ruling in Part V.C.1, the court shall adopt ProBatter'sconstruction of "countdown timer."

***3.* "*programmable controller*"**

[38] The parties' third dispute concerns the clause "programmable controller." This clause appears in Claims 1 and 22 of the '134 Patent and Claim 7 of the '512 Patent. The specification of each patent is nearly silent as to the meaning of the clause. The specification of each patent simply states:

A programmable controller **208** is provided to control all of the various operations of the ball-throwing machine. A particularly preferred controller is the MultiPro+ MC controller, manufactured by Control Technology, Inc.

'134 Patent, col. 10, ll. 50-54 (emphasis in original); '512 Patent, col. 10, ll. 59-64 (emphasis in original).

In the JACCC, ProBatter declines to propose a construction for the clause, because it argues that " 'programmable controller' is a well understood term ... and the plain meaning of the clause is clear...." JACCC (docket no. 174), at 7. Joyner argues that the court should construe "programmable controller" as a control device, normally used in industrial control applications, that employs the hardware architecture of a computer and a relay ladder diagram language [and a]lso known as a programmable logic controller [("PLC")]. *Id*. Joyner avers that "[p]rogrammable controllers are different than cam timers and microcontrollers, but equivalent to desktop computers." *Id*.

At the Hearing, the nature and extent of the parties' dispute became less clear. On the one hand, ProBatter

argued that Joyner's proposed construction of "programmable controller" as including a PLC was wrong, because the specification of each patent proves that a "programmable controller" is not a PLC. Specifically, ProBatter claimed that the MultiPro + MC controller is not a PLC and, therefore, a "programmable controller" is not a PLC. ProBatter argued that the MultiPro+ MC controller is not a PLC, because its specification makes clear that it has a central processing unit ("CPU") like a computer and is, in essence, a computer. *See* ProBatter's Ex. FF (docket no. 159-7), at 1 (reflecting that the MultiPro+ MC controller has a "CPU").

On the other hand, notwithstanding its original position that "programmable controller" need not be construed, ProBatter indicated that it would be "fine" if the court construed the term. ProBatter argued that the court should accept a definition in the McGraw-Hill Dictionary of Scientific and Technical Terms ("SciTech Dictionary")-extrinsic evidence that *Joyner* relied upon in the briefing. In pertinent part, the SciTech Dictionary states:

programmable controller ... A control device, normally used in industrial control applications, that employs the hardware architecture of a computer and a relay ladder diagram language. Also known as programmable logic controller.

programmable controllers ... Electronic computers that are used for the control of machines and manufacturing processes through the implementation of specific functions such as logic, sequencing, timing, counting, and arithmetic. They are also known as programmable logic controllers (PLCs).

ProBatter's Ex. GG (docket no. 159-8), at 1 (emphasis added); Joyner's Ex. A (docket no. 165-3), at 1 (emphasis added); *accord* Allen-Bradley Co. v. Autotech Corp., No. 86C8514, 1989 WL 39795, (N.D.Ill. Apr.20, 1989) ("A programmable controller is a type of computer system designed particularly for use in a factory environment to direct the function of other machines."), *aff'd sub nom*. Allen-Bradley Co. v. Microfast Controls Corp., 895 F.2d 1420, 1990 WL 1344 (Fed.Cir.1990).

Accordingly, the court shall construe "programmable controller" as set forth above in the SciTech Dictionary, because it appears the parties do not dispute the accuracy of the SciTech Dictionary definition or the appropriate use of the same.FN13 Although the construction is admittedly based upon extrinsic evidence, the court shall enforce the parties' concessions.

FN13. The court notes that, in addition to stating that a programmable controller is also known as a PLC, the SciTech Dictionary also states that "[m]icroprocessors used in programmable controllers are similar or the same as those used in personal computers." Ex. GG (docket no. 159-8), at 1. This undercuts ProBatter's argument at the Hearing that the presence of a CPU in the MultiPro+ MC controller somehow proves that such controller is not a PLC.

4. "means for synchronizing the propelling of said balls with said moving image, wherein said programmable controller is adapted to initiate the display of said video image and initiate a countdown upon detecting that said wheels have reached a predetermined speed and the power head has assumed a predetermined horizontal and angular position"

[39] The parties' fourth dispute concerns the clause "means for synchronizing the propelling of said balls with said moving image, wherein said programmable controller is adapted to initiate the display of said video image and initiate a countdown upon detecting that said wheels have reached a predetermined speed and the power head has assumed a predetermined horizontal and angular position." This clause appears in Claim 22 of the '134 Patent.

The focus of the parties' dispute with respect to the clause is the language "adapted to initiate the display of said video image and initiate a countdown." Joyner argues that this clause should be construed to mean that "[t]he initiation of the video and the countdown timer must be simultaneous." Joyner's Amended Motion for Markman Construction of Asserted Claims (docket no. 165-1), at 2; *see also* JACCC (docket no. 174), at 13 (citing '134 Patent, fig. 15 & col. 18, l. 23 through col. 19, l. 13). Joyner does not offer much argument or evidence in support of this construction, however, but simply states that "[i]n context of the specification, which explains how the countdown timer is used to synchronize the video, no reasonable reader could be confused on this point." Joyner's Amended Brief on Markman Construction of Asserted Claims (docket no. 165-2), at 8.

ProBatter responds that nothing in the claims or the specification requires that the initiation of the display of the video image and the initiation of the countdown occur simultaneously and, as a consequence, Joyner is attempting to insert a limitation into the clause that does not exist.FN14

FN14. At the Hearing, counsel for Joyner appeared to concede that the clause did not require simultaneity and argued for a construction of the claim that would require "near simultaneity." Further, in the JACCC, which was filed after the Hearing, Joyner replaced simultaneity and near simultaneity with an "immediately upon" construction. It is unclear whether ProBatter would object to such a construction. Because Joyner did not brief this argument, however, the court considers Joyner's ever-shifting claim constructions to be waived.

The court declines to adopt Joyner's construction of the clause. Nothing in the intrinsic evidence indicates that the initiation of the display of the video image and the initiation of the countdown must occur simultaneously. Instructing the jury that simultaneity is required would be error. *Cf.* Omega Eng'g, 334 F.3d at 1329-30 ("[T]here is no ground for adding a 'sequential' limitation or for excluding the concept of simultaneity. In sum, we reject the [district court's] imposition of a 'sequential' limitation to the function of claims 16 and 18, because that restriction finds no support in the intrinsic evidence.").

5. "means for synchronizing the release of said balls from said means for propelling with said moving image, said means comprising a programmable controller adapted to cause said means for propelling to initiate release of said balls at a predetermined time interval after the video image is initially displayed"

The parties' fifth dispute concerns the clause "means for synchronizing the release of said balls from said means for propelling with said moving image, said means comprising a programmable controller adapted to cause said means for propelling to initiate release of said balls at a predetermined time interval after the video image is initially displayed." This clause appears in Claim 1 of the '134 Patent.

Joyner argues that the clause is a means-plus-function clause within the ambit of 35 U.S.C. s. 112, para. 6. Joyner further argues that: (1) the function is synchronizing the release of the ball with the video and (2) the corresponding structure is (a) "setting a countdown timer at the same time the programmable controller sends the signal to initiate the video" and (b) "sending a signal from the programmable controller to initiate propelling the ball when the countdown timer expires." Joyner's Amended Motion for Markman Construction of Asserted Claims (docket no. 165-1), at 2. Joyner further states that "the only means for synchronizing in the specification requires that the programmable controller send the signal to initiate the video only after receiving feedback that indicates the power head is aimed correctly and the wheels are spinning at the right speeds." *Id.* at 3.

It is unclear whether ProBatter believes that this is a means-plus-function clause within the ambit of 35 U.S.C. s. 112, para. 6. In its briefs, ProBatter took seemingly inconsistent positions. *Compare* ProBatter's Brief in Response to Joyner's Motion for Claim Construction (docket no. 170-1), at 7 (taking the position

that the clause is a means-plus-function clause) *and* ProBatter's Motion for Claim Construction (docket no. 158-1), at 12 (same), *with id*. at 15 (stating that the "adapted ... displayed" portion of the clause is not a means-plus-function clause). At the Hearing, counsel for ProBatter indicated that the entire clause it was not a means-plus-function clause, because the "adapted ... displayed" portion of the clause recited the necessary structure. In the JACCC, however, ProBatter stated that the clause is a means-plus-function clause. JACCC (docket no. 174), at 6.

[40] The court holds that the entire clause is not a means-plus-function clause. The use of the word "means" in the clause gives rise to a presumption that s. 112, para. 6 applies. Personalized Media Commc'ns, 161 F.3d at 703-04 (citing York Prods., 99 F.3d at 1574). "This presumption collapses, however, if the claim itself recites sufficient structure, material, or acts to perform the claimed function." Callicrate v. Wadsworth Mfg., Inc., 427 F.3d 1361, 1368 (Fed.Cir.2005). Here, the clause recites a function: synchronizing the video with the release of the ball. It then goes on to recite and describe the structure to perform such function: a programmable controller adapted to cause said means for propelling to initiate release of said balls at a predetermined time interval after the video image is initially displayed. FN15 Therefore, the clause is not a means-plus-function clause. *See* Sage Prods., Inc. v. Devon Indus., Inc., 126 F.3d 1420, 1427-28 (Fed.Cir.1997) ("[W]here a claim recites a function, but then goes on to elaborate sufficient structure, material, or acts within the claim itself to perform entirely the recited function, the claim is not in means-plus-function format."); *see, e.g.,* Cole, 102 F.3d at 530-31 (holding that "perforation means extending from the leg ban means to the waist band means through the outer impermeable layer means for tearing" was not a means-plus-function clause, because the claim "describe[d] the structure supporting the tearing function (i.e., perforations)").

FN15. " 'Comprising' is a term of art used in claim language which means that the named elements are essential, but other elements may be added and still form a construct within the scope of the claim." Genentech, Inc. v. Chiron Corp., 112 F.3d 495, 501 (Fed.Cir.1997).

Accordingly, because the court holds that this clause is not a means-plus-function clause, it declines to adopt Joyner's proposed claim construction, which is predicated upon an assumption that the clause is a means-plus-function clause.

6. "means for causing said power head to assume a predetermined horizontal angular position"

[41] The parties' sixth dispute concerns the clause "means for causing said power head to assume a predetermined horizontal angular position." This clause appears in Claim 22 of the '134 Patent.

Joyner argues that this is a means-plus-function clause within the ambit of 35 U.S.C. s. 112, para. 6. Joyner further argues that: (1) the "function is aiming the power head in the horizontal" and (2) "the only recited structure for performing that function is a combination of the center ball joint and a pair of wheels to support the power head with a horizontal linear actuator that powers the motion." Joyner's Amended Motion for Markman Construction of Asserted Claims (docket no. 165-1), at 2. *But see* JACCC (docket no. 174), at 8 (Joyner states that the corresponding structure is a horizontal linear actuator and a center ball joint). In support of its argument, Joyner relies on the following portion of the specification:

The power head **20** is further supported by a pair of pivot wheels **25** that are provided at the opposite sides of the front plate **21** and which permit the power head **20** to rotate in a horizontal direction on the base plate **30.**

The power head **20** is adapted to pivot in a horizontal plane about the center ball joint **40** in order to change the horizontal position of the power head **20** relative to a center position and, therefore, the angle at which a

ball is delivered to a batter. Actual movement of the power head **20** in a horizontal plane is effected by a horizontal linear actuator **50** which is provided on the upper surface of the base plate **30.** Horizontal linear actuator **50** includes a horizontally extending shaft **52** which extends from the horizontal linear actuator **50** to the inside surface of the front plate **21.** The horizontal linear actuator **50** serves to cause the power head to pivot in a horizontal direction about the front center ball joint **40.**

A spring **26** holds the power head against the linear actuator **50** removing backlash from the linear actuator internal mechanism, thereby increasing the accuracy of the horizontal alignment of the power head **20.** Spring **26** is secured between a post **27** that extends upwardly from the base plate **30** and the inside surface of the front plate **21.**

'134 Patent, col. 7, ll. 26-48 (emphasis in original).

ProBatter agrees that this is a means-plus-function clause within the ambit of 35 U.S.C. s. 112, para. 6. ProBatter characterizes the claimed function as causing the power head to assume a predetermined horizontal angular position. ProBatter argues that the corresponding structure is only the horizontal linear actuator, and not a center ball joint or a pair of pivot wheels. ProBatter seizes on the following sentence in the specification: "Actual movement of the power head **20** in a horizontal plane is effected by a horizontal linear actuator **50** which is provided on the upper surface of the base plate **30.**" '134 Patent, col. 7, ll. 34-35 (emphasis in original); *see also* Joyner's Amended Brief on Markman Construction of Asserted Claims (docket no. 165-2), at 7 n. 14.

The court agrees with the parties that this is a means-plus-function clause within the ambit of 35 U.S.C. s. 112, para. 6. Therefore, the court shall applying the familiar three-step process for construing such clauses.

First, the court identifies the function of the clause. Kinzenbaw, 179 Fed.Appx. at 24. The function of the clause is causing the power head to assume a predetermined horizontal angular position.

Second, the court ascertains the structure in the written description that is necessary to perform that function. Id. Clearly, many parts of the machine are necessary to cause the power head to assume a predetermined horizontal angular position. The court shall assume without deciding that these parts include a center ball joint, a pair of wheels to support the power head and a horizontal linear actuator.

Third, the court ascertains the corresponding structure, namely, the parts of the invention that are clearly linked or associated in the specification or the prosecution history to the claimed function. Id. Here, the court identifies what structure the specification or prosecution history clearly links to causing the power head to assume a predetermined horizontal angular position. The court holds that the only clearly identified structure for performing such function is the horizontal linear actuator. Although there is discussion in the specification of other structure, when the specification discusses *actual movement* of the power head in a horizontal plane, the specification only discusses the horizontal linear actuator. Neither a center ball joint nor a pair of wheels are clearly linked to such movement. In other words, the horizontal actuator moves the power head, not the center ball joint or the wheels.

Accordingly, the court shall adopt ProBatter's proposed construction of this claim.

VI. CONCLUSION

The court has construed the various disputed claims in the two patents-in-suit, as set forth herein. ProBatter's Motion for Claim Construction (docket no. 158-1) and Joyner's Amended Motion for Markman Construction of Asserted Claims (docket no. 165) are each **GRANTED IN PART AND DENIED IN PART.**

IT IS SO ORDERED.

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