

UNITED STATES DISTRICT COURT
DISTRICT OF CONNECTICUT

PROBATTER SPORTS, LLC,
Plaintiff,

v.

SPORTS TUTOR, INC.,
Defendant.

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CIVIL CASE NUMBER:

3:05-cv-01975-VLB

March 23, 2016

MEMORANDUM OF DECISION

Plaintiff ProBatter Sports, LLC (“ProBatter”), a Connecticut business designing, manufacturing, selling, installing, and servicing pitching machines, produces a three-wheeled machine called ProBatter Simulator. ProBatter Simulator, which has been sold to professional baseball teams, professional baseball players, and colleges, simulates a real-at-bat experience by generating almost any pitch within seven to ten seconds. ProBatter Simulator accomplishes this feat by utilizing a combination of technologies including dynamic braking, a programmable controller, and horizontal and vertical linear actuators. To protect its invention, ProBatter obtained United States Patent Numbers 6,182,649 and 6,546,924 (“ProBatter Patents”).

Defendant Sports Tutor, Inc. (“Sports Tutor”), a California corporation also involved in the pitching-machine business, manufactures and sells two machines called HomePlate and HomePlate Premier (“HomePlate Machines”). HomePlate Machines similarly employ, *inter alia*, regenerative braking, a programmable controller, and horizontal and vertical linear actuators to automatically simulate almost any pitch within seven seconds. HomePlate Machines likewise have been sold to Major League Baseball teams, professional baseball players, and college

programs, but they sell for substantially less than ProBatter Simulator. Sports Tutor introduced the HomePlate Machines after the approval of the ProBatter Patents. Sports Tutor does not hold a patent for its HomePlate Machines.

ProBatter brought this action for patent infringement against Sports Tutor. Sports Tutor answered, in relevant part, that the ProBatter Patents were invalid for obviousness. The Court granted summary judgment on the question of infringement but denied summary judgment on the question of invalidity. The Court held a five-day bench trial in July 2015 and subsequently ordered the parties to file proposed findings of fact and conclusions of law. Sports Tutor argues that the ProBatter Patents are invalid because at the time they were filed it would have been obvious to combine dynamic braking with existing pitching machines. Several companies had done so before ProBatter.

For the reasons stated below, the Court makes the following findings of fact and conclusions of law in accordance with Federal Rule of Civil Procedure 52(a).¹ The Court finds that: (1) there is insufficient evidence to make findings on the scope and content of the prior art; (2) there is insufficient evidence to make findings on the differences between the prior art and the claims at issue; (3) a person with the level of ordinary skill is someone with knowledge of engineering principles who deals with motor control vendors in his work designing and manufacturing pitching machines; and (4) secondary considerations such as commercial success weigh in favor of non-obviousness. The Court rules that Sports Tutor has not established that the claims at issue would have been

¹ A damages analysis will be issued in a separate memorandum of decision.

obvious to a person having ordinary skill in the art. The Court permanently enjoins Sports Tutor from making, using, offering for sale, or selling the HomePlate Machines.

FINDINGS OF FACT

“A patent shall be presumed valid.” 35 U.S.C. § 282. A challenger must present clear and convincing evidence to overcome the presumption of validity. *Microsoft Corp. v. i4i Ltd. P’ship*, 564 U.S. 91 (2011). This requirement derives from the principle “that the party challenging a patent in court bears the added burden of overcoming the deference that is due to a qualified government agency presumed to have done its job.” *Dome Patent L.P. v. Lee*, 799 F.3d 1372, 1378–79 (Fed. Cir. 2015) (internal quotation marks and citations omitted). Clear and convincing evidence “produces in the mind of the trier of fact an abiding conviction that the truth of the factual contentions [is] highly probable.” *Buildex Inc. v. Kason Indus., Inc.* 849 F.2d 1461, 1463 (Fed. Cir. 1988) (alterations, internal quotation marks, and citations omitted). A challenger must also produce “[p]hysical, documentary, or circumstantial evidence, or reliable testimony from individuals other than the alleged inventor or an interested party.” *Checkpoint Sys., Inc. v. All-Tag Sec. S.A.*, 412 F.3d 1331, 1339 (Fed. Cir. 2005). Corroboration is a question of fact. *Medichem, S.A. v. Rolabo, S.L.*, 437 F.3d 1157, 1171 (Fed. Cir. 2006). Mindful of these requirements, the Court must address: (1) the scope and content of prior art; (2) the differences between prior art and the claims at issue; (3) the level of ordinary skill in the pertinent art; and (4) secondary considerations. *Nike, Inc. v. Adidas AG*, 812 F.3d 1326, 1334–35 (Fed. Cir. 2016).

1. PRIOR ART

Sports Tutor presented insufficient evidence at trial to enable the Court to make findings on the scope and content of prior art. The Court must know what prior art to consider before analyzing the scope and content of prior art. Sports Tutor doesn't say. On the one hand, Sports Tutor proposes findings on one or two features of the MetalTek, Crown, and WNAN machines. ECF No. 462 at 8–18. On the other hand, Sport Tutor proposes a comparison between the patents considered on reexamination and the ProBatter Patents. *Id.* at 7–8. The Court cannot make any findings of fact with respect to this factor because Sports Tutor does not clearly articulate what prior art should be considered. See *Radar Indus., Inc. v. Cleveland Die & Mfg. Co.*, 424 F. App'x 931, 936 (Fed. Cir. 2011) (observing that insufficient briefing results in waiver). The Court nonetheless offers additional reasons for finding that it cannot make any findings of fact with respect to the scope and content of either the MetalTek, Crown, and WNAN machines or the patents considered on reexamination.

A. MetalTek, Crown, and WNAN Machines

Sports Tutor has not presented sufficient evidence on the scope and content of the MetalTek, Crown, and WNAN machines to enable the Court to make any findings of fact. Relying on these machines as prior art renders incomprehensible Sports Tutor's proposed findings of fact and conclusions of law. The only proposed findings on "the differences between the prior art and claims at issue" concerns the evidence considered on reexamination. ECF No. 462 at 7–8. Sports Tutor does not propose findings on the differences between

the MetalTek, Crown, and WNAN machines and the ProBatter Patents. *Id.* Without specifically proposing these findings, the obviousness defense would fail as a matter of law. Further, evening assuming that the only difference between these machines and the ProBatter Patents is the use of dynamic braking,² Sports Tutor would not have an obviousness defense. How could ProBatter have made an obvious improvement to the MetalTek, Crown, and WNAN machines, which allegedly used dynamic braking, by adding dynamic braking? That's a novelty defense, and Sports Tutor doesn't raise it.

The Court runs into another problem examining the MetalTek, Crown, and WNAN machines as prior art. Sports Tutor proposes the following findings of fact: (1) "Decades before Plaintiff's patents were filed, MetalTek began selling tennis machines that used dynamic braking to rapidly slow the pitching wheels;" (2) "Years before Plaintiff filed its patents Crown publicly used both tennis and baseball machines that used dynamic braking to slow the wheel"; and (3) "By January 1998, WNAN had publicly demonstrated a programmable baseball machine, the Program-A-Pitch, which used dynamic braking to slow the wheels."³

² Sports Tutor implies as much in reply. See ECF No. 466 at 2 ("Except for the dispute about dynamic braking, it is undisputed that the [Crown] machine has all of the elements of the claims."). This argument is waived. *Lismont v. Alexander Binzel Corp.*, 2016 WL 611665, at *7 n.2 (Fed. Cir. Feb. 16, 2016) ("To the extent his reply brief can be construed as objecting to the district court's conclusions on the prejudice factor, this argument is waived." (citation omitted)).

³ Sports Tutor also proposes that the Court find that both the Crown tennis and baseball machines used three wheels. ECF No. 462 at 11. This proposed finding of fact contradicts Sports Tutor's theory of the case. If the only relevant difference between the prior art and the claims at issue is the use of dynamic braking, why does Sports Tutor acknowledge that the use of three wheels, which is an element of some of the claims at issue, is relevant? If it is relevant, then the use of dynamic breaking in the WNAN machine, which did not use three wheels,

ECF No. 462 at 8, 10, 16. This information alone is insufficient to understand the scope and content of the prior art. See *In re Hedges*, 783 F.2d 1038, 1041 (Fed. Cir. 1986) (“[T]he prior art as a whole must be considered. The teachings are to be viewed as they would have been viewed by one of ordinary skill.”). After all, the parties do not dispute that dynamic braking existed before the time of the claimed invention. The legal issue is whether it would have been obvious to a person skilled in the art to employ dynamic braking in the many combinations employed by ProBatter. Without proposing findings about the other salient attributes of the MetalTek, Crown, and WNAN machines, the proposed finding of facts do not help answer the legal question.

Putting these issues aside, there is insufficient evidence on the use of dynamic braking by MetalTek, Crown, or WNAN. With respect to the MetalTek, the primary evidence consists of deposition testimony from Alfred Yarur, the President of MetalTek. See ECF 462 at 8–10 (citing Ex. CW-1). Yarur is an interested witness because he has a business interest in invalidating the ProBatter Patents. Ex. CW-1 at 54:7–10 (Yarur Dep. Tr.). No evidence corroborates his interested testimony. Sports Tutor relies solely on MetalTek’s 1995 promotional materials. See ECF 462 at 8–10 (citing Ex. CW-7). The promotional materials refer to “comprehensive deceleration component,” not dynamic breaking. Ex. CW-7 at 8. The single sentence using “comprehensive

would not alone be sufficient to rule in favor of Sports Tutor. Although unnecessary to resolve this action, the Court finds that Crown used three wheels in a pitching machine before ProBatter. This fact is supported by direct testimony from an objective witness on an easily observable phenomenon, ECF No. 454 at 35:14–17, and ProBatter has not objected, ECF No. 463.

deceleration component” provides insufficient information for the Court to determine whether this term refers to dynamic braking. *Id.* Sports Tutor does not rely on a photograph of an actual circuit with the word “dynamic brake” scribbled on top. Exhibit CW-3 at ST-001450. In any event, this evidence is unreliable because Yarur admitted that the photograph would be impossible to make sense of unless he had later written “dynamic brake.” Ex. CW-1 at 66:5–11; 68:2–13 (Yarur Dep. Tr.). The absence of corroborating evidence is further supported by Sports Tutor’s failure to produce extant, corroborating evidence—for example, bills of material and blueprints. *Id.* at 69:13–70:5. Yarur’s interested, uncorroborated testimony does not leave the Court with an abiding conviction that a MetalTek machine used dynamic braking.⁴

With respect to Crown, the primary evidence consists of testimony from James Scott, the former President of Crown. ECF No. 462 at 10–14 (citing ECF No. 456). Scott was an interested witness because he was being financially compensated for his assistance with case preparation and testimony. ECF No. 456 at 247:7–249:7 (Scott Testimony). Scott was more interested than the average paid-for witness because he was unemployed when he was first hired to work on this case and was at times paid more than \$45.00 per hour—hardly a “meager” wage. *Id.* Scott admitted that he did not possess any documents corroborating his testimony. *Id.* at 235:3–7; 236:23–237:2. Scott’s testimony was not credible. For example, this Court pointed out that Scott provided conflicting

⁴ This analysis also applies to Yarur’s testimony that he saw the purported Crown machine at the 1996 Supershow because that particular testimony was not corroborated and was also belied by Scott’s testimony. See ECF No. 456 at 238:20–241:17.

testimony at trial. See, e.g., ECF No. 452 at 44:21–23 (“You’re giving conflicting testimony.”). Further, after this Court explained the concept of personal knowledge, Scott admitted that he testified to facts outside of his personal knowledge and that he had no idea when he did so. *Id.* at 52:6–54:8. Scott’s interested, uncorroborated, unreliable testimony does not leave the Court with an abiding conviction that a Crown machine used dynamic braking.

Sports Tutor offered testimony from Jim Hill, the owner of a manufacturing representative firm called Hill & Associates. ECF No. 462 at 12–13 (citing ECF No. 452). Hill testified that he sold ten regenerative motor controls to Crown. ECF No. 452 at 103:5–106:21 (Hill Testimony). This evidence is circumstantial because Hill also testified that he had no personal knowledge whether those drives were ever used in a pitching machine. *Id.* at 133:22–25. His testimony was not persuasive, in part, because he admitted that his earlier affidavit concerning the type of regenerative braking control circuits sold to Crown—a material issue—was false. *Id.* at 129:2–130:12. Hill’s unreliable, circumstantial testimony does not leave the Court with an abiding conviction that a Crown machine used dynamic braking.

Sports Tutor offered the testimony of Eric Giffin, a technology representative who sold tennis machines for a Crown distributor. ECF No. 462 at 11, 14–15 (citing ECF No. 452). Giffin offered no direct testimony on the use of dynamic braking: that term was never used during his testimony. ECF No. 452 at 136–74 (Giffin Testimony). Giffin offered circumstantial evidence by testifying that the Crown machine sounded like a jet engine and could change pitches in a

matter of seconds. *Id.* at 114:9–18, 22–25. This circumstantial evidence is not persuasive. Giffin does not understand how braking works. *Id.* at 166:3–8. Giffin’s testimony contained various inconsistencies—ranging from material inconsistencies with respect to the demonstration he allegedly performed at the 1996 Supershow, *id.* at 159:12–160:5, to minor inconsistencies with respect to the unimportant features of the Crown machine such as lights, *id.* at 163:12–164:23, 165:7–24. Giffin’s unreliable, circumstantial testimony does not leave the Court with an abiding conviction that a Crown machine used dynamic braking.

Sports Tutor offered testimony from Lawrence Gallagher, a high school baseball coach. ECF No. 462 at 15–16 (citing ECF No. 454). Gallagher did not know whether the Crown machine employed dynamic braking. ECF No. 454 at 40:4–6 (Gallagher Testimony). Gallagher offered circumstantial evidence of this fact by testifying that the Crown machine could throw pitches in about seven second intervals. *Id.* at 21:23–22:25. Moreover, Gallagher testified about a single afternoon of his life that occurred almost two decades earlier. Testimony on the distant past is inherently suspect. See *In re Eastman Kodak Co.*, 479 B.R. 280, 303 (Bankr. S.D.N.Y. 2012) (“[M]emories undoubtedly fade about the relevant events when there is a two decade delay in pursuing rights.”). This rationale applies with greater force to the perception of time. Gallagher’s testimony is too circumstantial and unreliable to leave the Court with an abiding conviction that a Crown machine used dynamic braking.

Sports Tutor also offered a purported 1996 Crown Machine during the testimony of William Greene, Sports Tutor’s Chief Executive Officer. The Court

affords no weight to this machine because it was in Sports Tutor's possession, no one could account for what happened to the machine for years of time, and the machine used DC motors with production dates of January 3, 2000. ECF No. 456 at 101:24–104:16, 253:15–255:3 (Greene Testimony). The Court also affords no weight to the machine because it appeared in new condition—lacking any rust and possessing supple rubber wheels—despite the fact that it had allegedly been stored outside for years. Considering the totality of evidence offered on the Crown machine, the Court finds that there is insufficient evidence to find that a Crown machine used dynamic braking.

With respect to WNAN, the primary evidence consists of testimony from Tom Alesi, an engineer working for WNAN. ECF No. 462 at 16–18 (citing ECF No. 453). Alesi was an interested witness because he was being financially compensated for his time. ECF No. 453 at 53:19–55:25 (Alesi Testimony). No documents corroborate Alesi's testimony that his machine used dynamic braking. The *Baseball America* advertisement did not mention or indicate the type of braking. *Id.* at 67:7–14. Alesi admitted that the ABCA flyer was hyperbole and did not show the use of dynamic braking. *Id.* at 70:14–16, 73:7–18. WNAN's advertising for the Mark 400 machine, produced after ProBatter sought its patents, stated that it was the only machine that could deliver "pitches with the speed, location and action identical to that of virtually any major league pitcher." *Id.* at 84:20–86:10. Alesi's testimony was unreliable given inconsistencies between his testimony and earlier affidavit. *Id.* at 78:22–80:15. Similar to the other testimony offered by Sports Tutor, Alesi's interested, uncorroborated, unreliable testimony

is unconvincing and as such does not leave the Court with an abiding conviction that a WNAN machine used dynamic braking.

B. Prior Patents Considered on Reexamination

There is insufficient evidence on the scope and content of prior patents to enable the Court to make any findings of fact. The Court assumes that Sports Tutor relies on the PTO examination history because Sports Tutor refers to those trial exhibits in its proposed findings of fact (albeit with respect to a different factor). ECF No. 462 at 7–8 (citing Exs. AF; AP). Sports Tutor’s reliance on the PTO reexamination history is misplaced for several reasons. First, the Federal Circuit has held that “[i]n an infringement suit before a district court, the invalidity of a patent under 35 U.S.C. § 103 must be decided on the basis of prior art adduced in the proceeding before the court,” not the PTO. *Greenwood v. Hattori Seiko Co.*, 900 F.2d 238, 240 (Fed. Cir. 1990).

Second, Sports Tutor relies only on the portion of the reexamination history from the Examiner. This reliance is also misplaced. The Board reversed the Examiner’s conclusion that the claims were invalid as obvious. Exs. AK at CFH012446; AU at CFH006670. When a judgment is reversed, every fact and ruling necessary to support the reversed judgment falls as well. See *Andrulonis v. United States*, 26 F.3d 1224, 1232 (2d Cir. 1994) (“In essence, when a judgment is vacated all is effectually extinguished” (quoting *Falcon v. Gen. Tel. Co.*, 815 F.2d 317, 320 (5th Cir.1987)) (internal quotation marks omitted)); *Harris Trust & Sav. Bank v. John Hancock Mut. Life Ins. Co.*, 970 F.2d 1138, 1146 (2d Cir. 1992) *aff’d sub nom. John Hancock Mut. Life Ins. Co. v. Harris Trust & Sav. Bank*, 510

U.S. 86 (1993) (“It is well-settled in this circuit that a vacated order has no collateral estoppel effect.”). This basic legal principle applies with even greater force here because the Board made its own findings of fact, implicitly rejecting the Examiner’s findings. Exs. AK at CFH012434–36; AU at CFH006657–60. Sports Tutor neither offers evidence that the Board adopted the Examiner’s findings of fact nor any applicable legal authority to support its reliance on those findings.⁵ The Board’s decision is the only decision entitled to deference. See 35 U.S.C. § 282.

Third, the only proposed finding of fact that may arguably be construed as pertaining to the scope and content of the prior art is this: “every element of the claims was found in the prior art.” ECF No. 462 at 7 (citing Ex. AF at CFH010685 ; AP at CFH004687). This proposed finding suffers from two deficiencies. The evidence does not bear out this proposal. The “evidence” suggests only that the Floyd, Sanders, Pierce, and Delange patents possessed all of the elements of *claim 1* of the ‘649 and ‘924 Patents if all the elements of those four prior patents are combined. Ex. AF at CFH010685 (“Appellant argues that to combine Floyd,

⁵ *Dickinson v. Zurko*, 527 U.S. 150 (1999), and the Administrative Procedure Act (“APA”) have no applicability to the case at bar. *Dickenson* held that the Federal Circuit must use the framework set forth in Section 706 of the APA when appealing an agency decision. This is an action for patent infringement, not an appeal from an agency decision. If the Court were to adopt Sports Tutor’s argument that the APA’s review standards also apply to patent infringement suits, the Court would have to jettison the clear-and-convincing standard mandated by the Supreme Court. See Joshua L. Sohn, *Can’t the PTO Get A Little Respect?*, 26 BERKELEY TECH. L.J. 1603, 1614 (2011) (arguing that courts should apply the APA to patent infringement cases but recognizing that courts apply a less deferential clear-and-convincing standard contained in Section 282). The Court declines Sports Tutors invitation to disregard a plethora of binding authority.

Pierce or Sanders with DeLange would still fail to achieve the invention of *claim 1*. . . . [T]he examiner contends that if combined, all of the claim limitations are indeed met.” (emphasis added)); Ex. AP at CFH004686 (identical language). The citation does not apply to every claim at issue, so Sports Tutor would need to provide evidence of other prior art not addressed in those two pages. And this makes sense: for example, Sports Tutor offered (but does not cite in its post-trial brief) a fifth patent, the Nozato patent, for its use of a center pivot. ECF No. 458 at 2. “The term ‘center pivot’ is used in claims 7, 8, 25, 26, 27 and 31 of the ‘649 Patent,” not claim 1 of the ‘649 and ‘924 Patents. ECF No. 274 at 8. Sports Tutor cannot litigate its defense by relying on a “representative claim” because other claims contain different claim limitations. See *Harris Corp. v. Fed. Exp. Corp.*, 502 F. App’x 957, 967 (Fed. Cir. 2013) (“The weakness of FedEx’s trial evidence troubles FedEx’s appellate reliance upon these combinations to invalidate all sixty-two claims of the Asserted Patents. FedEx did not at trial, and does not on appeal, set forth a claim-by-claim analysis of all the asserted claims describing which elements can be found in which reference.”).

Further, even assuming that “every element of the claims was found in the prior art,” this proposed finding of fact is irrelevant. *Gillette Co. v. S.C. Johnson & Son, Inc.*, 919 F.2d 720, 724 (Fed. Cir. 1990) (“It is immaterial to the issue, however, that all of the elements were old in other contexts. *What must be found obvious to defeat the patent is the claimed combination.*” (citation omitted)). To make findings of fact with respect to claimed combinations, the Court is left with two unacceptable options: examine the prior patents or scour the reexamination

history itself. The first option is impossible. Some of the patents, including the DeLange patent, were not offered as trial exhibits. See ECF No. 460.

The second option is impractical, even accepting the reexamination history as evidence. The parties submitted numerous proposed exhibits prior to trial, and some of those exhibits were thousands of pages without Bates-stamping or any other method to differentiate them. ECF No. 419. At the end of the trial, the parties offered by stipulation exhibits consisting of thousands of pages (resubmitted with Bates-stamping). ECF No. 454 at 3. The Court warned the parties against entering voluminous exhibits into evidence without clearly explaining their relevance because it would be impossible for the Court to make sense of them. *Id.* at 66. The Court therefore advised the parties that it would only consider the portions of those exhibits specifically cited in their post-trials briefs. *Id.* The Court will keep its promise.

Sports Tutor has not offered any proposed findings of fact with respect to the prior patents or cited to the relevant pages of the reexamination history. It asks the Court to do it. See ECF No. 462 at 7 (“For the Patent Office’s exhaustive recitation of every claim element and where in the art it is taught, see Trial Exs. AF, pp. CFH010622–59 and AP, pp. CFH004601–60.”). For the reasons articulated at trial, the Court cannot and will not. The Court specifically reminded the parties of this legal obligation because of “[their] failure to comply with Rule 56 and our local rule in filing the motions for summary judgment.” As many courts have colorfully remarked in the context of summary judgment, “[j]udges are not like pigs, hunting for truffles buried in the record.” *Voccola v. Rooney*, 2015 WL

5595443, at *1 (D. Conn. Sept. 22, 2015) (quotation marks and citations omitted). This observation applies equally to bench trials. See *Bendix Corp. v. United States*, 600 F.2d 1364, 1368–69 (Ct.Cl. 1975) (holding that defendant abandoned its earlier asserted defenses because it did not address them in its post-trial brief).

2. DIFFERENCES BETWEEN THE PRIOR ART AND THE CLAIMS AT ISSUE

There is insufficient evidence to enable the Court to make findings on the differences between the prior art and the claims at issue. The Court’s inability to do so stems from Sports Tutor’s failure to articulate the prior art at issue and cite sufficient evidence concerning the scope and content of that prior art. Sports Tutor, however, argues that the parties stipulated that the *only* difference between the unspecified collection of prior art and the ProBatter patents was ProBatter’s use of dynamic braking. ECF Nos. 462 at 7; 466 at 2. As an initial matter, “[c]ourts are understandably hesitant to find an implied admission on obviousness based solely on actions during patent prosecution, litigation or research, whether by a patent owner or an accused infringer.” 2-5 Chisum on Patents § 5.03 (collecting cases). Further, this reading of the joint stipulation disregards its plain meaning. The joint stipulation stated that the “key distinguishing factor in the ProBatter Patents, and the primary issue at bar, is the use of dynamic braking.” ECF No. 357 at ¶ 7. The words “key” and “primary” are not synonymous with “only.” In fact, those words connote the exact opposite: identifying a number-one issue implies the existence of a number-two issue. Finally, this reading of the joint stipulation suffers from the problem identified

above—that is, what are the ProBatter Patents being distinguished from? The stipulation doesn't provide that essential piece of information.

3. LEVEL OF ORDINARY SKILL IN THE PERTINENT ART

There is insufficient evidence to find that a person with “[t]he level of ordinary skill in the art is someone with a degree in engineering, who understands the purpose of dynamic braking, working with a motor control vendor.” The factual inquiry is guided by a non-exhaustive list of factors: “(1) the educational level of the inventor; (2) type of problems encountered in the art; (3) prior art solutions to those problems; (4) rapidity with which innovations are made; (5) sophistication of the technology; and (6) educational level of active workers in the field.” *Daiichi Sankyo Co. v. Apotex, Inc.*, 501 F.3d 1254, 1256 (Fed. Cir. 2007). Sports Tutor cites little record evidence relevant to this inquiry, and based on this limited evidence, the Court finds that a person with the level of ordinary skill is someone with knowledge of basic engineering principles who deals with motor control vendors in his work designing and manufacturing pitching machines.

Sports Tutor cites no evidence in support of factors one, four, and five. ECF Nos. 462 at 5–6. The Court therefore is left only with evidence concerning factors two and three (“experience”) and six (“qualifications”). As an initial matter, evidence concerning the experience and qualifications of Mike Suba is irrelevant because he started working with pitching machines in December 2000. See *Sparton Corp. v. United States*, 89 Fed. Cl. 196, 208 (2009) (“Applying the first *Graham* factor to this case, the Court must define the level of ordinary skill in the

sonobuoy art *at the time the invention was made.*” (emphasis added)). Evidence concerning the experience and qualifications of Jim Hill is also irrelevant because he was not active in the field of designing and manufacturing pitching machines; he sold parts to people doing so. See *Multiform Desiccants, Inc. v. Medzam, Ltd.*, 133 F.3d 1473, 1477 (Fed. Cir. 1998) (“It is the person of ordinary skill in the field of the invention through whose eyes the claims are construed.”).

The Court is left with the experience and knowledge of Yarur, Scott, and Alesi. The problem with modeling the hypothetical person after the experience of Yarur, Scott, and Alesi is that these three individuals allegedly had already identified and solved the problem of rapid deceleration in ball-throwing machines by employing dynamic braking. If the Court accepts this proposed finding, then this factor becomes outcome determinative. The hypothetical reasonable person by definition knew of the problem and how to solve it. Such a high level of sophistication would be inappropriate. Cf. *Custom Accessories, Inc. v. Jeffrey-Allan Indus., Inc.*, 807 F.2d 955, 962 (Fed. Cir. 1986) (“The important consideration is the need to adhere to the statute, i.e., to hold that an invention would or would not have been obvious, as a whole, when it was made, to a person of ‘ordinary skill in the art’—not to the judge, or to a layman, or to those skilled in remote arts, or to geniuses in the art.” (citation and internal quotation marks omitted)).

Moreover, as the Court already explained, the cited evidence does not bear out this proposition. There is no clear and convincing evidence that any of these individuals employed dynamic braking in a ball-throwing machine or appreciated that dynamic braking could solve the problem of deceleration existing since the

advent of pitching machines. Finally, evidence from these three individuals ignores other evidence in the record: Charlie Pierce, who patented a different pitching machine, was admittedly unaware of dynamic braking before allegedly being introduced to it by Alesi. ECF No. 453 at 101:16–102:4 (Pierce Testimony). The Court therefore does not find that the ordinary skill in the pertinent art excludes people who were unaware of dynamic braking.

The Court, however, accepts the proposed finding to the extent that the level of ordinary skill includes people who worked with motor control vendors in the context of designing and manufacturing ball-throwing machines. Ball-throwing machines necessitate motor controls even in the absence of dynamic braking. ECF No. 456 at 135:20–24 (Scott Testimony); Ex. CW-1 at 15:8–20 (Yarur Dep. Tr.). The Court also finds that persons in the field would have knowledge of engineering principles but would not necessarily require a degree in engineering. Sports Tutor provided no evidence concerning the education levels of Scott, Scott's father, Pierce, or Gregory Battersy, the inventor of the ProBatter Simulator. This evidence could have been easily obtained and offered at trial but was not, leading the Court to conclude that the evidence in support was selectively offered to create an unfairly high degree of skill.

The Court therefore finds that a person of ordinary skill is someone with knowledge of engineering principles who worked with motor control vendors in the context of designing and manufacturing ball-throwing machines. It does not find that the person of ordinary skill would necessarily possess an engineering degree or have knowledge of dynamic braking.

4. **SECONDARY CONSIDERATIONS**

A. **Commercial Success of ProBatter Simulator**

ProBatter Simulator has been a commercial success, and its success is in some way due to the nature of the claimed invention. ProBatter has sold approximately 500 machines in 48 states and 12 countries, and the buyers have included Major League Baseball teams, professional baseball players, and college programs. ECF No. 455 at 88:13–90:18 (Suba Testimony); Pl. Ex. 64 (Video). ProBatter Simulator has generated approximately 20 million dollars in gross revenue, and ProBatter earns approximately 35–70% in gross profit margins from selling its machine. ECF No. 455 at 108:6–11 (Suba Testimony). ProBatter Simulator costs significantly more than other pitching machines, and this premium is justified by its patented features. *Id.* at 106:7–14.

B. **Commercial Success of HomePlate Machines**

HomePlate Machines have also been a commercial success, and their success is due to the use of ProBatter’s patented technology. Sports Tutor has sold over 2,000 machines, and the buyers have included Major League Baseball teams, professional baseball players, and college programs. ECF No. 455 at 224:3–21; Pl. Exs. 56 (Financials), 92 (Stipulation of Sales). HomePlate Machines generated approximately \$10 million in gross revenue, and ProBatter earns at least 20–30% in gross profit margins from selling its machine. ECF Nos. 455 at 224:16–21 (Greene Testimony); 456 at 70:9–71:7 (Green Testimony). HomePlate Machines cost significantly more than other Sports Tutor machines, and “one of the reasons” justifying the significantly higher price is the use of features

patented by ProBatter. ECF No. 456 at 68:21–69:12 (Greene Testimony). ProBatter Simulator sells for approximately \$40,000; HomePlate Machines sold “for right around that \$5,000 price—psychological price point.” ECF No. 455 at 106:7–13 (Suba Testimony); ECF No. 69:13–22 (Greene Testimony).

C. Copying

Sports Tutor copied ProBatter’s use of dynamic braking. From 1991 until 2002, Sports Tutor did not manufacture a pitching machine with dynamic braking. ECF No. 455 at 196:15–198:14 (Greene Testimony). In January 2003, Sports Tutor’s CEO attended a trade show where he saw the ProBatter pitching machine being demonstrated. *Id.* at 197:24–198:10. When he first saw ProBatter’s pitching machine, Sports Tutor’s CEO was admittedly “impressed,” thought it was “pretty cool,” and continues to believe that to this day. *Id.* at 198:15–199:1. Only after Sports Tutor’s CEO saw ProBatter’s pitching machine at the trade show in January 2003 did Sports Tutor design its HomePlate machine with dynamic braking. *Id.* at 198:11–19; ECF No. 456 at 15:22–16:8 (Greene Testimony).

D. Long-Felt Need

There was a long-felt need for designing a ball-throwing machine that could generate any pitch, at any speed, at any location within a very short time frame. Baseball pitching machines have existed since the 1950s. ECF No. 455 at 102:1–10 (Suba Testimony). Prior machines were manually adjusted and only threw one type of pitch, at one speed, at one location. *Id.* at 81:17–82:3, 102:1–106:6. They did not use dynamic braking and were not programmable. *Id.* at 102:15–103:25, 104:24–105:2. For example, in one type of machine, after each ball was thrown

the user would have to manually adjust the machine until the desired pitch and location was achieved. *Id.* This trial-and-error process could take up to 30 minutes. *Id.* In other machines, baseballs could only be thrown to fixed locations at fixed speeds and the user could not change pitches. *Id.* at 104:1–23, 105:3–106:1. Similarly, the machines Sports Tutor sold before HomePlate Machines simply tossed a ball in the air or pitched plastic whiffle balls. *Id.* at 196:15–197:23 (Greene Testimony); ECF No. 456 at 67:11–17 (Greene Testimony). ProBatter Simulator solves these problems and gives the hitter a simulation of a real at-bat experience. ECF No. 455 at 81:14–83:25 (Suba Testimony).

E. Industry Praise

ProBatter Simulator generated substantial industry praise. ProBatter Simulator has garnered immense unsolicited publicity and media attention and has been discussed in approximately one hundred television and print pieces. ECF No. 455 at 108:20–25; see also PI. Exs. 64 (Video), 66 (Video), 67 (Video), 68 (Video), 69 (Video), 72 (ProBatter PR Book). For example, Fox Sports Network reported:

It's already a hit in the major leagues, the Yankees, the Red Sox, the Mets, Indians, and the White Sox are all stepping up to the plate and signing the hottest free agent in the game—the ProBatter pitching stimulator, the PX2. The unique pitching machine that has incorporated technology and video to nearly duplicate the experience facing a real life pitcher.

PI. Ex. 64 (Video). Bob Todd, the Ohio State University Head Baseball Coach, stated: “I think it’s outstanding. We can emulate any type of pitch or pitcher that we want.” PI. Ex. 68 (Video). The former third baseman for the Kansas City Royals, Kevin Seitzer, proclaimed: “It’s an incredible piece of equipment . . . [I]t

will throw 40 to 100 miles an hour and it will throw any pitch that you can possibly ask for. I mean it is absolutely amazing . . . [I]t's exactly like you're facing the guy out on the mound." Pl. Ex. 69 (Video). Moreover, as already noted, when Sports Tutor's CEO first saw ProBatter's pitching machine, he was admittedly "impressed" and thought it was "pretty cool." ECF No. 455 at 198:20–199:1.

CONCLUSIONS OF LAW

Patents are presumed valid. 35 U.S.C. § 282. The party asserting invalidity bears the burden of proving invalidity. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 412 (2007). Section 282 refers to patents and the claims contained therein, but "infringement and validity analyses must be performed on a claim-by-claim basis." *Amazon.com, Inc. v. Barnesandnoble.com, Inc.*, 239 F.3d 1343, 1351 (Fed. Cir. 2001) (citing *Ortho Pharm. Corp. v. Smith*, 959 F.2d 936, 942 (Fed. Cir. 1992)). A court may invalidate a patent claim only on a showing of clear and convincing evidence. *Microsoft*, 564 U.S. at 131. Clear and convincing evidence "produces in the mind of the trier of fact an abiding conviction that the truth of a factual contention is 'highly probable.'" *Rd. & Highway Builders, LLC v. United States*, 702 F.3d 1365, 1368–69 (Fed. Cir. 2012) (quoting *Am-Pro Protective Agency v. United States*, 281 F.3d 1234, 1240 (Fed.Cir.2002)). Oral testimony by an interested party alone does not constitute clear and convincing evidence. *TransWeb, LLC v. 3M Innovative Properties Co.*, 812 F.3d 1295, 1301 (Fed. Cir. 2016). A party asserting invalidity must produce "[p]hysical, documentary, or circumstantial evidence, or reliable testimony from individuals other than the alleged inventor or an interested party." *Checkpoint*, 412 F.3d at 1339. Every

detail of interested testimony need not be corroborated. See *Ohio Willow Wood Co. v. Alps S., LLC*, 735 F.3d 1333, 1346 (Fed. Cir. 2013). “[E]ach corroboration case must be decided on its own facts with a view to deciding whether the evidence as a whole is persuasive.” *Cooper v. Goldfarb*, 154 F.3d 1321, 1331 (Fed. Cir. 1998) (citation omitted).

Sports Tutor argues that the ProBatter patents are invalid for obviousness.⁶ ECF No. 462 at 18–27. “A patent is invalid for obviousness ‘if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.’” *Apple Inc. v. Samsung Elecs. Co.*, 2016 WL 761884, at *6 (Fed. Cir.

⁶ Sports Tutor provides a one-page discussion on the definition of “prior art,” as defined by Section 102. The Court construes this discussion as support for Sports Tutor’s sole defense of obviousness pursuant to Section 103. See 2-5 Chisum on Patents § 5.03 (“Is ‘prior art’ within the meaning of Section 103 limited to those sources of reference enumerated in Section 102? . . . [T]he contemporaneous evidence indicates a general Congressional intent that prior art be defined by the provisions of Section 102.”).

Sports Tutor does not explicitly argue that the patents are invalid because the MetalTek, Crown, or WNAN machines constituted prior art, rendering the ProBatter patents invalid for lack novelty. “[N]ovelty under 35 U.S.C. § 102 and nonobviousness under 35 U.S.C. § 103 are separate conditions of patentability and therefore separate defenses available in an infringement action.” *Cohesive Techs., Inc. v. Waters Corp.*, 543 F.3d 1351, 1363 (Fed. Cir. 2008). The Court will not consider whether the patents are invalid for lack of novelty or any other affirmative defense asserted by answer. See *Bendix*, 600 F.2d at 1368–69 (holding that defendant abandoned its earlier asserted defenses because it did not address them in its post-trial brief).

Sports Tutor’s reply suggests a novelty defense. ECF No. 466 at 2 (“Except for the dispute about dynamic braking, it is undisputed that the Scott machine has all of the elements of the claims.”). The defense, however, is waived. See *Lismont v. Alexander Binzel Corp.*, 2016 WL 611665, at *7 n.2 (Fed. Cir. Feb. 16, 2016) (“To the extent his reply brief can be construed as objecting to the district court’s conclusions on the prejudice factor, this argument is waived.” (citation omitted)).

Feb. 26, 2016) (quoting 35 U.S.C. § 103(a) (pre-America Invents Act)).⁷ The ultimate conclusion of obviousness is a question of law, but it is premised upon underlying findings of fact. *KSR*, 550 U.S. at 427. “These underlying factual considerations consist of: (1) the ‘level of ordinary skill in the pertinent art,’ (2) the ‘scope and content of the prior art,’ (3) the ‘differences between the prior art and the claims at issue,’ and (4) ‘secondary considerations’ of non-obviousness such as ‘commercial success, long-felt but unsolved needs, failure of others, etc.’”⁸ *Nike*, 812 F.3d at 1334–35 (quoting *KSR*, 550 U.S. at 406). A court cannot make an obviousness determination without considering each of the four *Graham* factors. *Id.*

No claim at issue is invalid for obviousness. Given the absence of evidence concerning the prior art and the difference between that prior art and the claims at issue, the Court cannot rule that any claim would have been obvious. The Court simply doesn’t have enough facts to rule in favor of Sports Tutor. Even accepting Sports Tutor’s theory of case—which is not supported by record evidence—the Court cannot rule that a person with knowledge of basic engineering principles and experience designing and manufacturing ball-throwing machines would have thought to incorporate dynamic braking into an

⁷ The America Invents Act does not apply here because the patent applications were filed prior to March 16, 2013. See *PAR Pharm., Inc. v. TWI Pharm., Inc.*, 773 F.3d 1186, 1194 n.6 (Fed. Cir. 2014). The only difference between the two versions relates to timing: in this case, the Court must judge obviousness at the time of the invention rather than the time of filing the original application. Complex Litig. Comm. of the Am. Trial Law., *Anatomy of a Patent Case* 64 (2d ed. 2012).

⁸ These factors are known as the *Graham* factors because they were first discussed in *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

existing ball-throwing machine. People with more than a level of ordinary skill failed to do so even after acknowledging that a problem existed. The Court's alternative legal conclusion is reinforced by its findings concerning the secondary factors—all of which weigh against a ruling of obviousness. Sports Tutor's only affirmative defense thus fails as a matter of law.

In light of the Court's ruling, the Court must also consider ProBatter's request for an injunction. ProBatter's post-trial brief proposes applicable conclusion of law and findings of fact supported by admissible evidence. ECF No. 461 at 1–12, 40–44. Sports Tutor concedes that injunctive relief would be appropriate in these circumstances. ECF No. 464 at 1 (“Limiting ProBatter to injunctive relief is an appropriate remedy.”). The Court therefore permanently enjoins Sports Tutor from making, using, offering for sale, or selling the HomePlate Machines. See *Bendix*, 600 F.2d at 1368–69 (holding that defendant abandoned its earlier asserted defenses because it did not address them in its post-trial brief); cf. Local R. Civ. P. 7(a)1 (“Failure to submit a memorandum in opposition to a motion may be deemed sufficient cause to grant the motion, except where the pleadings provide sufficient grounds to deny the motion.”).

CONCLUSION

The Court finds that: (1) there is insufficient evidence to make findings on the scope and content of the prior art; (2) there is insufficient evidence to make findings on the differences between the prior art and the claims at issue; (3) a person with the level of ordinary skill is someone with knowledge of engineering principles who deals with motor control vendors in his work designing and

