

STARK, U.S. District Judge:

This is a patent infringement action brought by Plaintiffs Eleven Engineering, Inc. and Eleven Engineering Game Control LLC (“Eleven” or “Plaintiffs”). Eleven filed suit against Microsoft Corporation (“Microsoft” or “Defendant”), asserting that Microsoft infringed U.S. Patent No. 6,684,062 (the “’062 patent”). The patents relate generally to wireless radio frequency game control systems.

The parties submitted claim construction briefs (D.I. 108, 112, 119, and 127) and the Court held a claim construction hearing on April 25, 2016 (“Tr.”).

## I. LEGAL STANDARDS

The ultimate question of the proper construction of a patent is a question of law. *See Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 837 (2015) (citing *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 388-91 (1996)). “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) (internal quotation marks omitted). “[T]here is no magic formula or catechism for conducting claim construction.” *Id.* at 1324. Instead, the court is free to attach the appropriate weight to appropriate sources “in light of the statutes and policies that inform patent law.” *Id.*

“[T]he words of a claim are generally given their ordinary and customary meaning . . . [which 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.” *Id.* at 1312-13 (internal citations and quotation marks omitted). “[T]he ordinary meaning of a claim term is its meaning to the ordinary artisan after reading the entire patent.” *Id.* at 1321 (internal

quotation marks omitted). The patent specification “is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.” *Vitronics Corp. v. Conceptoronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996).

While “the claims themselves provide substantial guidance as to the meaning of particular claim terms,” the context of the surrounding words of the claim also must be considered. *Phillips*, 415 F.3d at 1314. Furthermore, “[o]ther claims of the patent in question, both asserted and unasserted, can also be valuable sources of enlightenment . . . [b]ecause claim terms are normally used consistently throughout the patent . . . .” *Id.* (internal citation omitted).

It is likewise true that “[d]ifferences among claims can also be a useful guide . . . . For example, the presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim.” *Id.* at 1314-15 (internal citation omitted). This “presumption is especially strong when the limitation in dispute is the only meaningful difference between an independent and dependent claim, and one party is urging that the limitation in the dependent claim should be read into the independent claim.” *SunRace Roots Enter. Co., Ltd. v. SRAM Corp.*, 336 F.3d 1298, 1303 (Fed. Cir. 2003).

It is also possible that “the specification may reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess. In such cases, the inventor’s lexicography governs.” *Phillips*, 415 F.3d at 1316. It bears emphasis that “[e]ven when the specification describes only a single embodiment, the claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using words or expressions of manifest exclusion or restriction.” *Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1372 (Fed. Cir. 2014) (quoting *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358

F.3d 898, 906 (Fed. Cir. 2004)) (internal quotation marks omitted).

In addition to the specification, a court “should also consider the patent’s prosecution history, if it is in evidence.” *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 980 (Fed. Cir. 1995), *aff’d*, 517 U.S. 370 (1996). The prosecution history, which is “intrinsic evidence,” “consists of the complete record of the proceedings before the PTO [Patent and Trademark Office] and includes the prior art cited during the examination of the patent.” *Phillips*, 415 F.3d at 1317. “[T]he prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be.” *Id.*

In some cases, “the district court will need to look beyond the patent’s intrinsic evidence and to consult extrinsic evidence in order to understand, for example, the background science or the meaning of a term in the relevant art during the relevant time period.” *Teva*, 135 S. Ct. at 841. Extrinsic evidence “consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises.” *Markman*, 52 F.3d at 980. For instance, technical dictionaries can assist the court in determining the meaning of a term to those of skill in the relevant art because such dictionaries “endeavor to collect the accepted meanings of terms used in various fields of science and technology.” *Phillips*, 415 F.3d at 1318. In addition, expert testimony can be useful “to ensure that the court’s understanding of the technical aspects of the patent is consistent with that of a person of skill in the art, or to establish that a particular term in the patent or the prior art has a particular meaning in the pertinent field.” *Id.* Nonetheless, courts must not lose sight of the fact that “expert reports and testimony [are]

generated at the time of and for the purpose of litigation and thus can suffer from bias that is not present in intrinsic evidence.” *Id.* Overall, while extrinsic evidence “may be useful” to the court, it is “less reliable” than intrinsic evidence, and its consideration “is unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence.” *Id.* at 1318-19. Where the intrinsic record unambiguously describes the scope of the patented invention, reliance on any extrinsic evidence is improper. *See Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1308 (Fed. Cir. 1999) (citing *Vitronics*, 90 F.3d at 1583).

Finally, “[t]he 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.” *Renishaw PLC v. Marposs Societa’ per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998). It follows that “a claim interpretation that would exclude the inventor’s device is rarely the correct interpretation.” *Osram GmbH v. Int’l Trade Comm’n*, 505 F.3d 1351, 1358 (Fed. Cir. 2007) (quoting *Modine Mfg. Co. v. U.S. Int’l Trade Comm’n*, 75 F.3d 1545, 1550 (Fed. Cir. 1996)).

## II. CONSTRUCTION OF DISPUTED TERMS<sup>1</sup>

- A. “the controllers [base tranceiver] can use the synchronous time domain multiplexing to save power by turning off their [its] radio traneivers when they are [it is] not receiving or transmitting data”<sup>2</sup>

### Eleven

“the controllers [base tranceiver] can use a synchronized polling process, specified time slots or similar detection and coordination method with different intervals of time to carry multiple signals on the same RF frequency or channel to lower power consumption of their [its] radio traneivers when they are [it is] not receiving or transmitting data”

### Microsoft

Indefinite. If not found indefinite, then “the controllers [base tranceiver] can use the synchronous time domain multiplexing to save power by turning off their [its] radio traneivers when they are [it is] not receiving or transmitting data” where “radio traneiver” is construed as Microsoft proposes below.

### Court

“the [controllers/base tranceiver] can use the synchronous time domain multiplexing to save power by turning off [their/its] radio traneivers when [they are/it is] not receiving or transmitting data”

The parties disagree about whether the claimed controllers save power by “turning off” their traneivers when the controllers are not receiving or transmitting data, or whether the claimed controllers need only “lower power consumption” through the use of time domain multiplexing.

The claims specify that the controllers “save power *by turning off*” radio traneivers when they are not receiving or transmitting data. (’062 pat. col. 14:31-34) (emphasis added) A Court’s construction “must give meaning to all the words in [the] claims.” *Funai Elec. Co. v. Daewoo*

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<sup>1</sup>Plaintiffs previously asserted U.S. Patent No. 6,346,047 (the “’047 patent”) against Microsoft, but the parties resolved their respective claims for relief related to the ’047 prior to the claim construction hearing. (D.I. 168) For this reason, the Court did not hear argument on previously-disputed terms of the ’047 patent, nor will it address them in this Opinion.

<sup>2</sup>This term appears in claims 1, 4, and 6-9 of the ’062 patent.

*Elecs. Corp.*, 616 F.3d 1357, 1372 (Fed. Cir. 2010). Although Eleven argues that time domain multiplexing **could** be used to lower power consumption without turning off the transceivers (and that such an approach would in practice be preferable to turning the transceivers entirely off), the record is devoid of intrinsic evidence to support the view that a person of ordinary skill in the art would have understood the claims to be using the words “sav[ing] power by **turning off**” (emphasis added) to include methods of saving power other than simply shutting it off. There is no support in the specification for Eleven’s contention. Moreover, during prosecution of the ’062 patent, the patentee amended the claim from “power down” to “turn off.” (See D.I. 113-1 at 42; D.I. 113-1 at 61) Whereas “power down” might imply one or more interim settings between “on” and “off,” “turn off” more strongly connotes a state of no power.

In light of the intrinsic record, the Court need not consider the parties’ extrinsic evidence, consisting principally of expert declarations. (See D.I. 109, 126 (Declarations of Eleven’s expert Shawn Burke); D.I. 120 (Declaration of Microsoft’s expert Peter Rysavy)) In any event, the Court would not rely on extrinsic evidence that contradicts the intrinsic evidence. Accordingly, the Court declines to adopt Eleven’s proposal that it construe “turning off” as “lower[ing] power consumption.”

The parties also disagree about the meaning of the term “time domain multiplexing,” or “TDM.” Eleven contends that the term is limited to a synchronized polling process, specified time slots, or similar detection and coordination methods with different intervals of time to carry multiple channel signals. In support of Eleven’s argument, Eleven’s expert states, without citing support, that a person of ordinary skill in the art would understand from the specification that TDM “involves the use of a synchronized polling process or . . . similar detection and

coordination methods that employ different intervals of time to carry multiple signals on the same RF frequency or channel.” (D.I. 109 ¶ 30) This conclusory statement does not, in light of the record, provide a sufficient basis for limiting the claims as Eleven suggests. The Court adopts Microsoft’s proposed construction.

**B. “radio transceiver” and “base transceiver”<sup>3</sup>**

<p><b>Eleven</b> <u>radio transceiver</u>: “circuitry for transmitting or receiving radio frequency signals”  <u>base transceiver</u>: “communication translation device”</p>
<p><b>Microsoft</b> <u>radio transceiver</u>: Indefinite. If not found indefinite, then “RF module that receives and transmits RF signals, containing a central microprocessor, a modulator, a demodulator, an oscillator, an amplifier, an RF switch, a bandpass filter, an antenna, a post detection filter, a data slicer circuit, and a received signal strength indicator (as shown in Fig. 10)”  <u>base transceiver</u>: Indefinite.</p>
<p><b>Court</b> <u>radio transceiver</u>: “circuitry for transmitting or receiving radio frequency signals”  <u>base transceiver</u>: “device capable of both transmitting and receiving data and commands, and translating data and commands into a format understandable by another device such as an electronic game device or console”</p>

Microsoft contends that these terms are indefinite. A patent claim is indefinite if, “viewed in light of the specification and prosecution history, [it fails to] inform those skilled in the art about the scope of the invention with reasonable certainty.” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2129 (2014). A party who challenges the validity of a patent or claim has the burden of establishing invalidity. *Id.* at 2130 n.10 (citing 35 U.S.C. § 282). In general, invalidity must be proven by “clear and convincing evidence.” *Microsoft Corp. v. i4i Ltd.*

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<sup>3</sup>This term appears in claims 1, 4, and 6-9 of the ’062 patent.



*Partnership*, 564 S.Ct. 2238, 2242 (2011) (discussing burden of proof for invalidity defenses).

Microsoft has not met this heavy burden with respect to either term.

The intrinsic record unambiguously describes what a radio transceiver is. The claims describe the claimed game controllers and base transceiver as having “radio transceivers” that can transmit and receive data. ’062 patent col. 14:30-36. The specification discloses a base transceiver that transmits data to and receives data from a controller via an “RF module.” *Id.* at 14:30-36. The patent explains that “RF” means “radio frequency.” *Id.* at 2:15-17. Taken together, these disclosures make clear that the term “radio transceiver” refers to an apparatus capable of sending and receiving radio frequency signals. Eleven’s expert confirms that a person of ordinary skill in the art would understand the patent this way, and would understand that a radio transceiver consists of circuitry, such as that disclosed in Figure 10.<sup>4</sup> (D.I. 109 at 15-6)

The specification also makes clear what a base transceiver is, and how it differs from a radio transceiver. The claims themselves indicate that a base transceiver includes a radio transceiver. *Id.* at 14:35-37 (“the base transceiver can . . . turn off *its* radio transceiver”) (emphasis added). The base transceiver also has additional capabilities, as set forth in each individual claim. For example, claim 1 requires a base transceiver “capable of relaying the data received from the controllers to the electronic game device[,] thus allowing the users to remotely control the electronic game device.” ’062 patent col. 13:40-43. Eleven’s expert states that a person of ordinary skill in the art would understand the base transceiver apparatus to be a “communication translation device,” that is, “a device that can both transmit and receive data and commands, and

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<sup>4</sup>The Court is not, however, persuaded that the term “radio transceiver” must be limited to the preferred embodiment outlined in Figure 10.

can translate data and commands into a format understandable by another device such as an electronic game device or console.” (D.I. 109 at 16-17) This description is consistent with the claims themselves, as well as the descriptions of preferred embodiments of the base transceiver disclosed in the specification. ’062 pat. col. ’4:25-41; 4:42-48; 11:66-12:1.

Neither Microsoft nor its expert disagrees with these points. Microsoft instead argues that a reasonably skilled artisan would not know with reasonable certainty which apparatus is part of the “base transceiver” and which apparatus is part of the “radio transceiver” – and, thus, would not know which apparatus must be “turn[ed] off” to save power when not receiving or transmitting data. (D.I. 120 ¶ 8; D.I. 119 at 8) Although the Court may eventually be required to resolve factual disputes in order to distinguish the claimed “radio transceiver” from the “base transceiver,” Defendant’s assertions do not amount to clear and convincing evidence that a person of ordinary skill in the art would not, with reasonable certainty, be able to make this distinction. Therefore, the Court finds that these claim terms have not been proven indefinite, and adopts constructions consistent with the representations made by Plaintiffs and their expert.

**C. “achieving a small system latency with a small standard deviation and therefore minimizing the user’s perceived control lag”<sup>5</sup>**

**Plaintiffs**

“achieving consistently small system delay that enables real time wireless video game performance”

**Defendants**

“a small system latency”: Indefinite.

“a small standard deviation”: Indefinite.

“minimizing the user’s perceived control lag”: Indefinite.

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<sup>5</sup>This term appears in claims 1, 4, and 6-9 of the ’062 patent.

**Court**

“achieving consistently small system delay that enables real time wireless video game performance”

Defendants argue that each term of degree in this claim term is indefinite. The Court disagrees. The disputed term, when read in its full context, describes the result of using “frequency hopping and synchronous time domain multiplexing techniques . . . in conjunction with one another to help ensure that packets are received intact on the first attempt.” ’062 pat. col. 14:23-30. Such laudatory language describes the value of the claimed invention, but does not impose structural limitations. *See Minton v. Nat’l Ass’n of Sec. Dealers, Inc.*, 336 F.3d 1373, 1381 (Fed. Cir. 2003). The Court finds that the claim term has not been proven indefinite.

**III. CONCLUSION**

The Court will construe the disputed terms as explained above. An appropriate Order will be entered.

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE**

ELEVEN ENGINEERING, INC. and	:	
ELEVEN ENGINEERING GAME	:	
CONTROL LLC	:	
	:	
Plaintiffs,	:	
	:	C.A. No. 09-903-LPS
v.	:	
	:	
MICROSOFT CORPORATION,	:	
	:	
Defendants	:	
	:	

**ORDER**

At Wilmington, this **23rd** day of **June, 2016**:

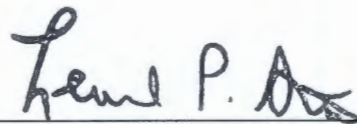
For the reasons set forth in the Memorandum Opinion issued this date,

**IT IS HEREBY ORDERED** that the disputed claim terms of U.S. Patent No. 6,684,062

(the “’062 patent”) are construed as follows:

Claim Term	Court’s Construction
<p><b>“the controllers [base transceiver] can use the synchronous time domain multiplexing to save power by turning off their [its] radio transceivers when they are [it is] not receiving or transmitting data”</b></p> <p>[claims 1, 4, and 6-9 of the ’062 patent]</p>	<p>“the [controllers/base transceiver] can use the synchronous time domain multiplexing to save power by turning off [their/its] radio transceivers when [they are/it is] not receiving or transmitting data”</p>

<p><b>“radio tranceiver” and “base tranceiver”</b></p> <p>[claims 1, 4, and 6-9 of the '062 patent]</p>	<p>“device capable of both transmitting and receiving data and commands, and translating data and commands into a format understandable by another device such as an electronic game device or console”</p>
<p><b>“achieving a small system latency with a small standard deviation and therefore minimizing the user’s perceived control lag”</b></p> <p>[claims 1, 4, and 6-9 of the '062 patent]</p>	<p>“achieving consistently small system delay that enables real time wireless video game performance”</p>




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HON. LEONARD P. STARK  
UNITED STATES DISTRICT JUDGE

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE

ELEVEN ENGINEERING, INC. and  
ELEVEN ENGINEERING GAME  
CONTROL LLC,

Plaintiffs,

v.

MICROSOFT CORPORATION,

Defendant.

C.A No. 1:09-cv-00903-LPS

**[PROPOSED] AMENDED CLAIM CONSTRUCTION ORDER**

WHEREAS on June 23, 2016, the Court issued a Memorandum Opinion (D.I. 192) and Order (D.I. 193) on the construction of the disputed claim terms of U.S. Patent No. 6,684,062 (“the ’062 patent”); and

WHEREAS the parties having jointly requested that the Court amend its Order (D.I. 193) to more closely reflect the Court’s June 23, 2016 Memorandum Opinion (D.I. 192)—specifically, by including the Court’s construction of the term “radio transceiver” that was omitted from the Order and by expressly including the Court’s conclusion that “turning off” means “a state of no power”;

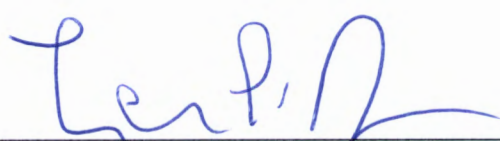
WHEREAS the Court agrees to amend the claim construction Order (D.I. 193);

At Wilmington, this 11<sup>th</sup> day of July 2016:

**IT IS HEREBY ORDERED**, for the reasons set forth in the Court’s Memorandum Opinion issued June 23, 2016 (D.I. 192), the Order dated June 23, 2016

(D.I. 193) is hereby amended and the disputed claim terms of the '062 patent are construed as follows:

Claim Term	Court's Construction
<p>"the controllers [base transceiver] can use the synchronous time domain multiplexing to save power by turning off their [its] radio transceivers when they are [it is] not receiving or transmitting data"</p> <p>[claims 1, 4, and 6-9 of the '062 patent]</p>	<p>"the [controllers/base transceiver] can use the synchronous time domain multiplexing to save power by turning off [their/its] radio transceivers when [they are/it is] not receiving or transmitting data, where 'turning off' means a state of no power"</p>
<p>"radio transceiver"</p> <p>[claims 1, 4, and 6-9 of the '062 patent]</p>	<p>"circuitry for transmitting or receiving radio frequency signals"</p>
<p>"base transceiver"</p> <p>[claims 1, 4, and 6-9 of the '062 patent]</p>	<p>"device capable of both transmitting and receiving data and commands, and translating data and commands into a format understandable by another device such as an electronic game device or console"</p>
<p>"achieving a small system latency with a small standard deviation and therefore minimizing the user's perceived control lag"</p> <p>[claims 1, 4, and 6-9 of the '062 patent]</p>	<p>"achieving consistently small system delay that enables real time wireless video game performance"</p>



HON. LEONARD P. STARK  
UNITED STATES DISTRICT JUDGE