UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION

PETER A. HOCHSTEIN, et al.,

Plaintiffs,

vs.

MICROSOFT CORPORATION,

Defendant.
_____/

Civil Action No.
04-CV-73071
08-CV-10331

PAUL D. BORMAN
UNITED STATES DISTRICT JUDGE

OPINION AND ORDER:

(1) ACCEPTING IN PART AND REJECTING IN PART THE SPECIAL MASTER'S DECEMBER 14, 2009, REPORT AND RECOMMENDATION ("R&R"),

(2) SUSTAINING MICROSOFT'S OBJECTIONS TO THE SPECIAL MASTER'S DECEMBER 14, 2009, R&R CONSTRUING THE TERM "ELECTRICALLY CONNECTED" TO INCLUDE THE PHENOMENON OF "ELECTROMAGNETIC INDUCTION,"

(3) DENYING HOCHSTEIN'S MOTION FOR RECONSIDERATION OF THE COURT'S JULY 9, 2009, ORDER CONSTRUING THE TERM "ELECTRICALLY CONNECTED" TO EXCLUDE THE PHENOMENON OF "ELECTROMAGNETIC INDUCTION" and

(4) DISMISSING THE CASE

The instant Opinion and Order relates solely to the Court's claim construction of the term "electrically connected."

I. INTRODUCTION & BACKGROUND

This is a patent infringement case. Plaintiffs Peter A. Hochstein, Jeffrey Tenenbaum, and Harold W. Milton (collectively, "Hochstein") claim that Defendant Microsoft Corporation ("Microsoft") infringed upon their U.S. Patent No. 5,292,125 ("'125 Patent"), titled "Apparatus and Method for Electrically Connecting Remote Video Games." The '125 Patent involves an invention that allows "for two or more players playing the same video game to compete with each other without using the same physical video game which alleviates the necessity of proximity of the players." '125 Patent col. 2 ll. 39-43. The '125 Patent describes a system where a video game player can talk and play with a remote opponent at the same time over a telephone line. Hochstein alleges that Microsoft's Xbox product infringes upon the '125 Patent in violation of 35 U.S.C. § 271.

On December 14, 2009, Special Master Richard D. Grauer issued his third "Report and Recommendation on Hochstein's Motion for Reconsideration of Claim Construction" relating to the term "electrically connected." *See* docket entry 518.[1] In this December 14, 2009, R&R, the Special Master recommends that the Court grant Hochstein's Motion for Reconsideration of the Court's previous construction of that term,[2] and construe the term "electrically connected," as used in claim 39 of the '125 patent, to include the phenomenon of "electromagnetic induction."[3]

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[1] Special Master Grauer's previous two Reports and Recommendations were issued on June 30, 2009, and May 16, 2009. *See* docket entries 481 and 367.

[2] On October 23, 2009, the Court held a hearing on Hochstein's Motion for Reconsideration.

[3] The concept of "electromagnetic induction" is succinctly explained by the Special Master at page 7 of his December 14, 2009, R&R:

As the case currently stands, the phenomenon of "electromagnetic induction" has been excluded from the scope of the term "electrically connected."

The Special Master had previously recommended that "electromagnetic induction" be excluded from the scope of "electrically connected" in his Report and Recommendation dated June 30, 2009. *See* docket entry 481, p. 2.[4] The Court subsequently adopted that claim construction in

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> A changing current (such as alternating current) flowing through a coil of wire (known as an "inductor" or "inductance") generates a varying magnetic field. If a second inductor is placed in close but unconnected proximity to the first inductor, the changing magnetic field will "induce" a current in the second inductor. When two such inductors are assembled in a coupling or isolation transformer, the electrical energy in the first inductor is "transformed" into magnetic energy that is transformed back into electrical energy in the second inductor by a process called "mutual inductance." The two inductors or coils are thus "inductively coupled" by "electromagnetic induction" or "mutual inductance." The inductors and their associated respective circuits are indirectly coupled together so that current flowing in one circuit will induce a current in the other, notwithstanding that electrical current does not exist in the gap between the two inductors.

[4]

> Aside from the patent title, the fact is that there is nothing in the '125 Patent specification stating or even suggesting that radio waves were considered by the patentee to be a form of "***electrical connection***."

Special Master's Report and Recommendation, June 30, 2009, p. 14 (emphasis in original).

Microsoft asserts that "electrically connected" is an example of a term covered by the Federal Circuit's observation in *Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005) (en banc):

> In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words.

The Court agrees. Nevertheless, the Court will conduct a comprehensive analysis.

a written order issued on July 9, 2009:

> For the reasons stated on the record, the Court adopts the following construction of "electrically connected": Joined by an electrically conductive connector or a capacitor, as distinguished from being joined through electromagnetic induction or radio waves.

Docket entry 502.

Pursuant to the Court's order dated December 15, 2009, *see* docket entry 519, Microsoft filed objections to the Special Master's December 14, 2009, R&R, advancing three arguments, *see* docket entry 520:

> 1. The Special Master misinterpreted the intrinsic evidence and erred when he concluded that the use of the term "electrically connected" in the patent was inconsistent.
>
> 2. The Special Master further erred in considering extrinsic evidence that was presented for the first time at the October 23, 2009 hearing and not part of the record.
>
> 3. The Special Master erred in placing undue reliance on the timing of Microsoft's claim construction position in reversing his prior construction.

On January 27, 2010, Hochstein filed a response to Microsoft's objections. *See* docket entry 522. Hochstein argues that the Special Master's December 14, 2009, R&R is sound in all respects except for one minor detail, discussed *infra*.[5]

The Court heard oral argument on Microsoft's objections to the December 14, 2009, R&R on March 5, 2010.

On April 4, 2010, the Special Master submitted to the Court a memorandum supplementing his December 14, 2009, R&R construction of the term "electrically connected." Pursuant to Fed.

[5] Hochstein states that he has "one disagreement with Special Master Grauer's analysis" concerning his proffered dictionary definition of "electrically connected."

R. Civ. P. 53(f)(1), the Court provided the parties with notice of that memorandum and an opportunity to respond by supplemental memoranda prior to issuing its Opinion and Order on this claim construction. *See* docket entry 525. The parties filed supplemental memoranda. The Court has had no further contact with the Special Master.

The issue of claim construction of the term "electrically connected" is now fully briefed and ready for decision. The Court reviews *de novo* factual findings and legal conclusions of the Special Master to which a specific objection has been made. *See* Fed. R. Civ. P. 53(f).

II. ANALYSIS

A. Legal Framework for Claim Construction

"Issues of claim construction—what do the claims mean?—are for the court to decide and explicate on the record." R. Harmon, *Patents & the Federal Circuit* § 6.1, p. 330 (9th ed. 2009). As stated by the United States Court of Appeals for the Federal Circuit,

> the words of a claim "are generally given their ordinary and customary meaning." We have made clear, moreover, that the 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 v. AWH Corp., 415 F.3d 1303, 1312-1313 (Fed. Cir. 2005) (en banc) (citations omitted).

"The ordinary and accustomed meaning of a disputed claim term is presumed to be the correct one." Harmon, *Patents & the Federal Circuit*, supra, at § 6.2, p. 352. "[A] party wishing to alter the meaning of a clear claim term must overcome the presumption that the ordinary and accustomed meaning is the proper one, demonstrating why such an alteration is required." *Id*. The presumption can be overcome "where the patentee has chosen to be his own lexicographer." *Bell Atlantic Network Servs., Inc. v. Covad Commc'n Group, Inc.*, 262 F.3d 1258, 1268 (Fed. Cir. 2001).

"[T]he patentee may act as his own lexicographer by using the specification to define terms either expressly or 'by implication.'" *Id*. at 1269. In other words, "the written description can provide guidance as to the meaning of the claims, thereby dictating the manner in which the claims are to be construed, even if the guidance is not provided in explicit definitional format." *SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1344 (Fed. Cir. 2001). "Thus, when a patentee uses a claim term throughout the entire patent specification, in a manner consistent with only a single meaning, he has defined that term 'by implication.'" *Bell Atlantic*, 262 F.3d at 1271. *See also* Harmon, *Patents & the Federal Circuit*, supra, at § 6.3(a)(i), pp. 368-369 ("lexicography does not require a statement in the form 'I define _ _ _ to mean _ _ _.' Such rigid formalism is not required"). "But where a specification contains neither a definition of a phrase nor a suggestion that the inventor sought to assign to the claim terms anything but their ordinary and accustomed meanings, those are the meanings that must be given to them." Harmon, *Patents & the Federal Circuit*, supra, at § 6.2, p. 352.

The legal propositions discussed in the preceding paragraph address the circumstances under which a court may alter the meaning of a disputed claim term that has an ordinary and accustomed meaning. But what about a situation where a claim term lacks an ordinary and accustomed meaning? "[T]here is no 'heavy presumption' of ordinary meaning where a disputed term lacks an accepted meaning in the art. Absent such an accepted meaning, a claim term is construed only as broadly as provided for by the patent itself." Harmon, *Patents & the Federal Circuit*, supra, at § 6.2, pp. 352-353.

Importantly, "[c]ourts construe claims by considering the evidence necessary to resolve disputes about claim terms and to assign a fixed, unambiguous, legally operative meaning to the

claim." *Id*. at p. 328. "[I]ntrinsic evidence is the most significant source of the legally operative meaning of disputed claim language." *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). As the term relates to claim construction, "intrinsic evidence" is "the patent itself, including the claims, the specification and, if in evidence, the prosecution history." *Id.*

"Extrinsic evidence," on the other hand, "consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises." *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 980 (Fed. Cir. 1995) (en banc), aff'd 517 U.S. 370 (1996).

> Th[e] use of extrinsic evidence as to the true meaning of the claim language is discretionary with the trial court. It can accept evidence it finds helpful, and reject other evidence as unhelpful, and resolve disputes en route to pronouncing the meaning of the claim language as a matter of law based on the patent documents themselves.

Harmon, *Patents & the Federal Circuit*, supra, at § 6.1, pp. 331-332 (footnote omitted). Critically, however,

> reliance on [extrinsic] evidence is unnecessary, and indeed improper, when the disputed terms can be understood from a careful reading of the public record. Nor may [extrinsic evidence] be used to vary claim terms from how they are defined, even implicitly, in the specification or file history.

Vitronics Corp., 90 F.3d at 1584-1585 (citations omitted). *See also Markman*, 52 F.3d at 981 ("[e]xtrinsic evidence is to be used for the court's understanding of the patent, not for the purpose of varying or contradicting the terms of the claims"); Harmon, *Patents & the Federal Circuit*, supra, at § 6.4, p. 386 ("[i]f the meaning of the claim limitations is apparent from the totality of the intrinsic evidence, then the claim has been construed"). Moreover,

> [r]elying on extrinsic evidence to construe a claim is proper when the claim language remains genuinely ambiguous after consideration of the intrinsic evidence. In addition, it is entirely appropriate, perhaps even preferable, for

a court to consult trustworthy extrinsic evidence.

Harmon, *Patents & the Federal Circuit*, supra, at § 6.4, p. 386.

Significantly, the Federal Circuit has stated that the title of the invention is "near[ly] irrelevan[t]" to claim construction. *See Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1312 (Fed. Cir. 1999). "We are only aware of one case from [the Federal Circuit] in which the patent title was accorded any significance whatsoever in a claim construction." *Id*. The court went on to note that even in that one case where the title was mentioned, the ultimate claim construction did not rely on the patent's title: "that the patent title has only been mentioned once by this court in the context of claim construction and, even then, merely to make an illustrative point in one sentence, makes a powerful statement as to the unimportance of a patent's title to claim construction." *See id.* at 1313.

B. The Special Master's Decision to Consider Extrinsic Evidence in the R&R of December 14, 2009

The critical question in the present case is whether the term "electrically connected" "can be understood from a careful reading of the public record." *See Vitronics Corp.*, 90 F.3d at 1584. If it can, then the Court is not permitted to consider extrinsic evidence. If it cannot, then the Court may consider extrinsic evidence so long as it is not "used to vary claim terms from how they are defined, even implicitly, in the specification or file history." *See id.* at 1584-1585.

The Special Master discussed the intrinsic evidence in Section III(C)(1) of his December 14, 2009, R&R, and concluded that "the intrinsic evidence alone does not provide a compelling basis to conclude whether 'electrically connected' encompasses a connection created by means of

electromagnetic induction." December 14, 2009, R&R at 19.[6] Accordingly, the Special Master proceeded to consider extrinsic evidence.

In its first objection, Microsoft contends that it was reversible error for the Special Master to consider extrinsic evidence because the intrinsic evidence is unambiguous regarding the meaning of "electrically connected." According to Microsoft, "[t]he intrinsic evidence points to one conclusion. 'Electrically connected' . . . does not include connections through electromagnetic induction." Microsoft's Objections to December 14, 2009, R&R at 8 (docket entry 520).

In order to evaluate Microsoft's initial objection, it is necessary to set forth the reasoning underlying the Special Master's conclusion that "the intrinsic evidence alone does not provide a compelling basis to conclude whether 'electrically connected' encompasses a connection created by means of electromagnetic induction, as in an isolating transformer." December 14, 2009, R&R at 19.

The Special Master began his analysis by examining the language used in the patent, noting that

> [w]ith the exception of the title of the invention, every disclosed connection that the patent describes as an "electrical connection" is a connection in the form of an electrically conductive wire or line, without any non-conductive gap as occurs in the case of a transformer (utilizing electromagnetic induction) or a capacitor. It is never used in the patent to describe or claim a connection that includes a non-conductive gap, such as exists in isolation transformers that function using electromagnetic induction.

Id. at 14 (footnote omitted). The Special Master is saying essentially two things. First, the term "electrically connected" is used consistently throughout the patent (except in the title of the

[6] When quoting the Special Master's R&R throughout this Opinion and Order, the Court deletes all emphasis used by the Special Master unless otherwise noted.

invention) to describe the same kind of connection – a connection in the form of an electrically conductive wire or line. Second, the term "electrically connected" is never used to describe a connection utilizing electromagnetic induction.

In reaching this conclusion, the Special Master noted significant facts. First, the Special Master noted that "[a]sserted claim 39 used the phrase 'electrically connected' three times to describe the relationship between various claimed components," December 14, 2009, R&R at 8, and that "[i]n every one of th[ose] uses of the term, . . . the corresponding 'electrical connection' disclosed in the specification and drawings is by means of electrically conductive wire or line, with no disclosed gap as would exist if there were a capacitor or transformer interposed between the connected components." *Id*. at 9-10.

Second, the Special Master noted that "[t]he phrase ["electrically connected"] was apparently not used during the prosecution history of the '125 Patent." *Id*. at 9.

Third, the Special Master noted that "'[e]lectrically connected'" (or 'electrically connecting') is used just four times outside of the claims." *Id*. The first two times it is used outside of the claims is in the title of the invention, which appears twice in the patent.

In accordance with *Pitney Bowes*, *supra*, the Special Master correctly recognized that "the title of a patent is entitled to little if any weight in claim construction analysis," *id*. at 11, while at the same time noting that the context in which the title appears supports Hochstein's position that electromagnetic induction should be included within the scope of "electrically connected." Ultimately, the Special Master concluded that "[i]n view of the *Pitney Bowes* holding, . . . the patent's title, though supporting Hochstein's arguments concerning claim construction, is entitled to limited weight in this claim construction analysis." *Id*. at 12-13.

With regard to the third "electrically connected" reference found outside of the claims, the Special Master concluded that there is "no indication in the specification or in Figures 2 and 3 that the connection described . . . is anything other than an electrically conductive wire or line." *Id*. at 13. The Special Master reached the same conclusion with regard to the fourth "electrically connected" reference found outside of the claims. *Id*.

Summarizing the intrinsic evidence as it relates to the use of the phrase "electrically connected" in the patent, the Special Master stated:

> [w]ith the exception of the title of the invention, every disclosed connection that the patent describes as an "electrical connection" is a connection in the form of an electrically conductive wire or line, without any non-conductive gap as occurs in the case of a transformer (utilizing electromagnetic induction) or a capacitor. It is never used in the patent to describe or claim a connection that includes a non-conductive gap, such as exists in isolation transformers that function using electromagnetic induction.

Id. at 14 (footnote omitted).

Next, the Special Master proceeded to examine the language in the patent used to describe connections utilizing electromagnetic induction. The Special Master noted, "it is particularly significant to the present analysis to consider the terminology that the patent did use to describe [connections utilizing electromagnetic induction]" since "th[is] phenomenon is at the heart of the present claim construction controversy." December 14, 2009, R&R at 14 (emphasis retained). After closely examining the language used in the patent, the Special Master correctly noted that the specification and claims use all of the following words to describe the connections formed by electromagnetic induction: "couplers," "coupling," "connect," "connecting," and "directly connecting." *Id*. at 19. Accordingly, the Special Master wrote:

> the pattern of using terminology other than "electrically connected" to describe the connection of the isolation transformers to associated elements,

> coupled with the use of the term only to describe direct and conductive connections, weighs against Hochstein's interpretation that "electrically connected" should encompass electromagnetic induction and isolation transformers.

Id. at 16.

Next, Special Master Grauer "consider[ed] other portions of the patent where some form of 'connected' is used dozens of times to refer to connections via current-carrying conductors, without the associated 'electrically' qualifier." *Id*. In other words, the Special Master proceeded to examine how the term "connected" is used in the patent, either alone or with a qualifier other than "electrically." The Special Master noted that "connected" is used in the patent to describe the same type of connection that is described elsewhere in the patent as "electrically connected." *Id*. at 16-17. That is, "connected" is sometimes used to describe connections by an electrically conductive wire or line. And, as discussed above, "connected" is also used to describe connections formed by electromagnetic induction. Because "connected" is used in the patent to describe both electrically conductive and non-conductive connections, the Special Master concluded that "the patent is not consistent in its use of [the terms 'connected' and 'electrically connected'], there being some arbitrariness in the choice of terms both in the specification . . . and in claim 39 itself." *Id*. at 16-17. For this reason, the Special Master thought it necessary to consult extrinsic evidence to aid in the construction of the disputed term "electrically connected."

C. The Parties' Positions Regarding the Admissibility of Extrinsic Evidence

1. Microsoft's Position

In its first and second objections to the Special Master's December 14, 2009, R&R, Microsoft argues that the Special Master should not have considered extrinsic evidence; he should have concluded his analysis after finding that (1) "electrically connected" is used consistently, with

the exception of the title of the invention, to describe a connection in the form of an electrically conductive line or wire, (2) "electrically connected" is never used to describe a connection utilizing electromagnetic induction, and (3) other terms—and not the term "electrically connected"—are used to describe connections utilizing electromagnetic induction.

Microsoft faults the Special Master for allowing the patent's use of a broader term, "connected," to create an ambiguity with regard to the meaning of a narrower term, "electrically connected," when it claims the narrower term, "electrically connected," is used consistently throughout the patent to describe one type of connection (one by a electrically conductive wire or line) that does not involve electromagnetic induction:

> The Special Master's stated reason for not resolving the controversy on the basis of the intrinsic evidence alone was his observation that a different term – "connected" – is used in the patent to describe both electrically conductive and non-conductive connections. But this is irrelevant as a matter of both law and logic: "electrically connected" is a subset of "connected." . . . . Whenever the patent discussed "electrical connections," the Special Master found that "electrical connections" referred consistently to electrically conductive connections. The fact that the patent also generically refers to them as "connections" is in no way inconsistent, and certainly does not undercut the clear meaning of "electrically connected."

Microsoft's Objections to December 14, 2009, R&R at 3-4 (docket entry 520). In other words, Microsoft argues that it is not inconsistent, as the Special Master found, for the patentee to use a broad term ("connected") to describe two narrower terms (direct connections using a line or wire, and connections utilizing electromagnetic induction), both of which fall under the broader "connected" umbrella. Because, according to Microsoft, the Special Master's decision to consider extrinsic evidence "rests [solely] upon [this] non-existent inconsistency," Microsoft argues that extrinsic evidence—which is what led the Special Master to reach his recommended claim construction—is inadmissible.

2. Hochstein's Position

Hochstein concurs with the Special Master's analysis and conclusion regarding the admissibility of extrinsic evidence to aid in the construction of the disputed term "electrically connected." According to Hochstein, "the Special Master correctly recognized that the intrinsic evidence does not define electrically connected and does not address whether 'electrically connected' includes or excludes electromagnetic induction." Hochstein's Resp. to Microsoft's Objections to December 14, 2009, R&R at 1 (docket entry 522).

D. The Special Master's April 4, 2010, Supplement to the R&R of December 14, 2009

Special Master Grauer's supplement dated April 4, 2010, reaches the same conclusion as his December 14, 2009, R&R; that "electrically connected" should be construed to encompass connections via electromagnetic induction.[7] The April 4, 2010, Supplement addresses, *inter alia*, the Federal Circuit's 2001 decision in *Bell Atlantic*.

E. *Bell Atlantic* & Its Progeny

In *Bell Atlantic*, the Federal Circuit reviewed the trial court's decision to construe the disputed claim term "mode" narrowly, despite the fact that "[i]t may be true that the ordinary meaning of the word . . . supports a broader meaning." 262 F.3d at 1269. The court considered whether to alter the meaning of a disputed claim term that may have had a broader ordinary and accustomed meaning. Because "the patentee may act as his own lexicographer by using the specification to define terms either expressly or 'by implication,'" the court "look[ed] at the intrinsic evidence to determine whether the patentee ha[d] given the term an unconventional meaning." *Id*.

[7] As noted *supra*, this conclusion is contrary to Special Master Grauer's Report and Recommendation of June 30, 2009, which recommended that electromagnetic induction be excluded from the scope of the term "electrically connected."

An examination of the intrinsic evidence revealed that the disputed term was consistently used narrowly throughout the specification. *Id*. at 1272-1273. The prosecution history of the patent also supported a narrower definition of the disputed term. *See id.* at 1273-1274. Because the term was used consistently, the Federal Circuit found that "the patentees [had] defined the term 'mode' by implication, through the term's consistent use throughout the . . . patent specification." *Id*. at 1273. The Federal Circuit reached this conclusion despite the fact that the ordinary and accustomed meaning of the disputed term may have been broader.

Several Federal Circuit cases have applied the *Bell Atlantic* holding, and each of them inform this Court's analysis. First, in *Nystrom v. TREX Co.*, 424 F.3d 1136, 1142 (Fed. Cir. 2005), the parties disputed whether the claim term "board" should be construed broadly to include planks made from any material, or narrowly to include planks made from wood only. Both parties acknowledged that the latter (narrow) construction reflected the ordinary meaning of the term. *Id*. at 1145. Although there was no language expressly limiting the term "board" to planks made from wood, the Federal Circuit noted that "[t]he written description and prosecution history consistently use the term 'board' to refer to wood decking materials cut from a [wooden] log." *Id*. Thus, even though there was "no disavowal of [claim] scope in the written description or prosecution history," *id*., the Federal Circuit concluded that the presumption in favor of the term's ordinary meaning had not been rebutted and that the disputed term had been defined through its consistent narrow usage in the patent: "Broadening of the ordinary meaning of a term in the absence of support in the intrinsic record indicating that such a broad meaning was intended violates the principles articulated in *Phillips*." *Id.* at 1145-1146.

Second, as summarized by the Federal Circuit in *Nystrom*, the court had recently stated, in

AquaTex Indus., Inc. v. Techniche Solutions, 419 F.3d 1374 (Fed. Cir. 2005):

> [T]he patentee consistently used the term "fiberfill" throughout the written description to refer to synthetic materials. Although the written description indicated that the composition of the fiberfill was not known to be critical, we held that "the context of the specification 'makes clear that the patentee did not intend the term [fiberfill] to encompass' natural materials." In particular, we noted that "[n]one of the patents [incorporated by reference] discusses the possibility of using natural fibers as commercial fiberfill batting." Although there was no disavowal of natural materials, we held that the consistent use of the term "fiberfill" to refer to synthetic materials and the extrinsic definitions supporting that interpretation led to the conclusion that a person of ordinary skill in the art would have understood the term to be limited to synthetic materials.

Nystrom, 424 F.3d at 1145 (citations omitted).

Third, in *Irdeto Access, Inc. v. Echostar Satellite Corp.*, 383 F.3d 1295, 1300 (Fed. Cir. 2004), the parties disputed whether the term "group key" should be construed broadly to include all subscribers or narrowly to include only subsets of all subscribers. The court noted that the disputed term had no accepted meaning in the art and, relying on *J.T. Eaton & Co., Inc. v. Atl. Paste & Glue Co.*, 106 F.3d 1563, 1570 (Fed. Cir. 1997), emphasized that "absent such an accepted meaning, we construe a claim term only as broadly as provided for by the patent itself." *Irdeto Access*, 383 F.3d at 1300. The court then examined the specification and determined that it "consistently uses the term 'group' to refer to a subset of all subscribers." *Id.* at 1301. Thus, the Federal Circuit construed the term narrowly in accordance with *Bell Atlantic*'s holding that a claim term may be implicitly defined by consistent usage in the specification:

> while the specification does not contain any statements of explicit disavowal or words of manifest exclusion, it repeatedly, consistently, and exclusively uses "group" to denote fewer than all subscribers, manifesting the patentee's clear intent to so limit the term.

Id. at 1303. *See also id.* at 1302 (discussing two additional Federal Circuit cases (*Liebel-Flarsheim*

Co. v. Medrad, Inc., 358 F.3d 898 (Fed. Cir. 2004), and *Brookhill-Wilk 1, LLC. v. Intuitive Surgical, Inc.*, 334 F.3d 1294 (Fed. Cir. 2003)), both of which apply the *Bell Atlantic* holding).

F. The Special Master Improperly Considered Extrinsic Evidence

Both parties agree with the Special Master's determination that, excluding the title of the patent, "'electrically connected' is used in the specification and claims only to describe connections by means of electrically conductive wires." December 14, 2009, R&R at 18-19. The parties further agree that, excluding the title of the patent, the disputed term, "electrically connected," "is never used to describe a connection with an intervening gap, such as occurs in an isolating transformer that utilizes electromagnetic induction to couple two circuits across a gap." *Id.* Instead, other words—such as "connected" or "couple"—are used in the patent to describe connections through electromagnetic induction.

Microsoft argues that the Court should not consider extrinsic evidence in light of these undisputed conclusions because "electrically connected" is defined implicitly through its consistent, narrow usage throughout the patent. Hochstein, on the other hand, emphasizes the Special Master's determination, also undisputed, that "nothing in the patent . . . explicitly excludes electromagnetic induction from the scope of "electrically connected," or . . . requires a conclusion that it should be so excluded," December 14, 2009, R&R at 18, since the disputed term is not explicitly defined in the patent. However, under *Bell Atlantic*, a claim term may be implicitly defined through consistent use. Thus, the Special Master's conclusion, and Hochstein's argument in favor of it, do not honor the *Bell Atlantic* holding.

Hochstein also contends that the manner in which the disputed term is used in the title of the patent is inconsistent with how it is used consistently elsewhere, thereby precluding a finding that

the claim term is consistently used "throughout the entire patent specification." *See Bell Atlantic*, 262 F.3d at 1271. But that contention just emphasizes the reality that "electrically connected" is used consistently throughout the patent to describe a connection by an electrically conductive wire or line; it is not used more broadly to describe other kinds of connections, such as a connection by means of electromagnetic induction.

The title of the patent, which appears twice in the specification, reads: "Apparatus and Method for Electrically Connecting Remotely Located Video Games." In his December 14, 2009, R&R, the Special Master analyzed in great detail whether the manner in which "electrically connecting" is used in the title is inconsistent with the way it is used elsewhere. *See* December 14, 2009, R&R at 10-13. Although the Special Master ultimately accorded "limited weight" to the title in accordance with *Pitney Bowes*, he nevertheless found probable merit to Hochstein's argument that a claim construction that excludes electromagnetic induction from the scope of "electrically connected" would render the title of the patent inaccurate:

> In my opinion, the context provided by the Background and Summary sections of the '125 Patent specification strongly favors Hochstein's interpretation of the patent's title. The second sentence of the Background section states that "the subject invention relates to the coordination of a computer game from more than one location" (1:9-11, emphasis added).
>
> The Background goes on to say that:
>
> > A problem with the modern video games is that virtually all video games are designed to be played locally . . . . in order for a player to compete with someone other than the computer, that person must leave the home or have someone come into the game-owner's home.
>
> 1: 21-30. The Summary of the Invention section concludes:
>
> > The advantage of the subject invention is the ability of two or more players playing the same video game to compete with

> each other without using the same physical video game which alleviates the necessity of proximity of the players.
>
> 2:39-43 (emphasis added). In my opinion, that context removes any doubt as to the meaning of the title: it states that the disclosed invention concerns video games that are remote from each other but nevertheless "electrically connected" to each other. That was the solution to the stated problem that the inventors were trying to solve, and therefore the fact and method of connection of the games was a logical subject for the title of their patent.

December 14, 2009, R&R at 11. Simply put, the Special Master is concluding that the proper reading is that it was never intended that connection from one player to the other distant player would be through a long electrical cord that could extend miles, or even hundreds of miles.

Microsoft disagrees with the Special Master's analysis and conclusion regarding the title, and argues that "the title of the '125 patent is consistent with the patentees' use of 'electrically connected' in the rest of the patent exclusively to describe electrically conductive connections." Microsoft reasons, as the Special Master noted in his December 14, 2009, R&R, "that the title does not specifically say that the local and remote video games are "electrically connected" to each other; the title could mean, as in the first sentence of the Abstract, that each of the two games is "electrically connected" to the video game communicator." December 14, 2009, R&R at 10-11 (underlined emphasis retained).

The Special Master considered Microsoft's argument and rejected it, stating that "the context provided by the Background and Summary sections of the '125 Patent specification strongly favors Hochstein's interpretation of the patent's title." *Id*. at 11. Thus, the Special Master concluded that the manner in which "electrically connecting" is used in the title is likely inconsistent with how the term is used elsewhere in the patent. According to the Special Master and Hochstein, the disputed term is used more broadly in the title to describe a connection that does not involve an electrically

conductive line or wire; elsewhere, it is used narrowly to describe only connections by means of electrically conductive lines or wires. Thus, Hochstein and the Special Master believe that the manner in which the disputed term is used in the title of the patent "destroys" the otherwise consistent manner in which the patentee used the term elsewhere in the patent.

The Court finds there to be genuine ambiguity with regard to how the disputed term is used in the title; the way in which the title is worded is ambiguous because it does not state to what the "remotely located video games" are being electrically connected. Given the entire context of the patent, the Special Master asserts that remotely located video games are being connected to each other, a connection that would involve electromagnetic induction. Microsoft argues that the title could mean that each remotely located game is "electrically connected" to the video game communicator, a connection that would not involve electromagnetic induction. It is impossible to conclude with ample certainty which interpretation was intended. Any effort to do so is, in the end, a guess. The title is simply ambiguous in its use of the disputed term.

In addition, the Court must reiterate that the Federal Circuit has explicitly stated that the title is "near[ly] irrelevan[t]" to claim construction and that it is "only aware of one case from [the Federal Circuit] in which the patent title was accorded any significance whatsoever in a claim construction." *See Pitney Bowes*, 182 F.3d at 1312. Based on the Court's reading of *Pitney Bowes*, it is improper to place any reliance on the title of the patent in this claim construction analysis. This Court ascribes no weight to the title in this claim construction analysis due to both its vagueness in its use of the disputed term, and in its near irrelevancy pursuant to *Pitney Bowes*.[8]

[8] In his April 4, 2010, Supplement to the December 14, 2009, R&R, the Special Master writes that he is "inclined to give [the title] a little more weight than [he] earlier stated [in his December 14, 2009, R&R]." April 4, 2010, Supplement to R&R of December 14, 2009, at 3.

In the end, the Court agrees with Microsoft that

> the '125 patent always uses the term "electrically connected" to describe electrically conductive connections that lack any inductive element interrupting the conductive connection. The '125 patent used different terms when it intends to include inductive connections.

Microsoft's Objections to April 4, 2010, Supplement to R&R of December 14, 2009, at 6 (docket entry 526). Stated differently,

> when the patentees intended to permit the use of electromagnetic induction, they dropped the limiting modifier "electrically" and used different and broader terms – "connected" and couples" – to convey that different and broader meaning. That consistent usage in the claims and specification defines "electrically connected," and none of the extrinsic evidence and arguments cited by the Special Master, even if they could properly be considered (and they cannot), can override that intrinsic evidence.

Id. at 1-2.

Once the Special Master made the correct and undisputed findings that the patentee (1) consistently used the term "electrically connected" to describe only electrically conductive connections, (2) never used the term "electrically connected" to describe connections utilizing electromagnetic induction, and (3) consistently used terms other than "electrically connected" to describe connections utilizing electromagnetic induction, the Court finds that he should have concluded his analysis utilizing intrinsic evidence alone. The Special Master erred when he proceeded to analyze how the broader term "connected" is used in the patent without the limiting modifier "electrically." It was this erroneous step that led the Special Master to his conclusion that "the intrinsic evidence alone does not provide a compelling basis to conclude whether 'electrically connected' encompasses a connection created by means of electromagnetic induction." December

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The Court rejects this approach to claim construction as inconsistent with the clearly established authority in *Pitney Bowes*.

14, 2009, R&R at 19. In turn, it was the extrinsic evidence that ultimately led the Special Master to his final claim construction recommendation. The Court believes that the Special Master's decision to continue his extrinsic analysis led him to reach an erroneous result. *See Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1327 (Fed. Cir. 2002).

Hochstein points out that "*Bell Atlantic* is about 'redefining' a claim term to have an 'unconventional meaning' different from the term's ordinary meaning." Hochstein's Resp. to Microsoft's Objections to April 4, 2010, Supplement to R&R of December 14, 2009, at 5 (docket entry 527). This is a correct statement. It is also correct, as Hochstein asserts, that this case does not involve such a scenario. However, *Bell Atlantic* does not apply only to situations where a court is considering a deviation from the ordinary meaning of a claim term. The reach of *Bell Atlantic* is wider; it applies whenever a claim term, though not explicitly defined, is used "throughout the entire patent specification, in a manner consistent with only a single meaning." *Bell Atlantic*, 262 F.3d at 1271. For example, in *Irdeto Access*, discussed above, the Federal Circuit held that the disputed claim term, which had no ordinary and accepted meaning in the art, was implicitly defined through consistent use in accordance with *Bell Atlantic*. *See* 383 F.3d at 1301. Here, the patentee consistently used "electrically connected" only in a narrow sense to describe electrically conductive connections. Moreover, the patentee consistently used other terms, such as "connected" (without the "electrically" qualifier) and "coupled" to describe connections over a gap in a transformer. Pursuant to *Bell Atlantic*, the Court finds that this consistent usage (and non-usage) of the disputed term evinces the patentee's "clear intention[]" to exclude electromagnetic induction from the scope of "electrically connected." *See Teleflex*, 299 F.3d at 1327. *See also* Harmon, *Patents & the Federal Circuit*, supra, at § 6.2, pp. 352-353 ("[a]bsent . . . an accepted meaning, a claim term is

construed only as broadly as provided for by the patent itself").

For all these reasons, the Court finds that the disputed term, "electrically connected," has been implicitly defined by consistent use in the patent pursuant to *Bell Atlantic* and its progeny, such that resort to extrinsic evidence is unnecessary. Notwithstanding this determination, however, the Court has closely examined the extrinsic evidence of record in this case and, for the reasons discussed in the next section of this Opinion and Order, finds all of it unhelpful. Thus, even if the Court were inclined to consider such evidence, the outcome of this claim construction dispute would remain unchanged.

G. The Extrinsic Evidence

As discussed above,

> [e]xtrinsic evidence consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises. This evidence may be helpful to explain scientific principles, the meaning of technical terms, and terms of art that appear in the patent and prosecution history.

Markman, 52 F.3d at 980. Moreover,

> [the] use of extrinsic evidence as to the true meaning of the claim language is discretionary with the trial court. It can accept evidence it finds helpful, and reject other evidence as unhelpful, and resolve disputes en route to pronouncing the meaning of the claim language as a matter of law based on the patent documents themselves.

Harmon, *Patents & the Federal Circuit*, supra, at § 6.1, pp. 331-332 (footnote omitted). However,

> reliance on [extrinsic] evidence is unnecessary, and indeed improper, when the disputed terms can be understood from a careful reading of the public record. Nor may [extrinsic evidence] be used to vary claim terms from how they are defined, even implicitly, in the specification or file history.

Vitronics Corp., 90 F.3d at 1584-1585 (citations omitted). *See also Markman*, 52 F.3d at 981 ("[e]xtrinsic evidence is to be used for the court's understanding of the patent, not for the purpose

of varying or contradicting the terms of the claims"); Harmon, *Patents & the Federal Circuit*, supra, at § 6.4, p. 386 ("[i]f the meaning of the claim limitations is apparent from the totality of the intrinsic evidence, then the claim has been construed").

In his R&R dated December 14, 2009, and his supplement dated April 4, 2010, the Special Master considered three types of purported extrinsic evidence: (1) the testimony of the parties' experts, Dr. Macedonia for Microsoft, and Dr. Matheson for Hochstein; (2) dictionary definitions of the disputed term; and (3) the litigation conduct of Microsoft. The Court addresses each, in turn.

1. Expert Testimony

Not surprisingly, Dr. Matheson, on behalf of Hochstein, and Dr. Macedonia, on behalf of Microsoft, disagree with regard to the ultimate question here – whether a person of ordinary skill in the art, at the time of the invention, would consider a connection by means of electromagnetic induction to be an "electrical connection." The Special Master urges the Court to give "enhanced credibility" and "additional weight" to the testimony of Microsoft's expert, Dr. Macedonia, elicited *before* the present dispute involving electromagnetic induction arose:

> I find particularly illuminating the opinions that Microsoft's expert, Dr. Macedonia, expressed (or failed to express) before the focus shifted from waves in wireless controllers to electromagnetic induction in isolation transformers. Because of that timing, it is my opinion that those original positions carry enhanced credibility and are entitled to additional weight.

December 14, 2009, R&R at 21. Before the focus of the parties' attention shifted from wireless connections (radio waves) to electromagnetic induction, Microsoft urged the Court to adopt one of the following constructions of "electrically connected":

1. "[A] connection that allows an electrical current to flow between the connected components." Docket entry 507-2, ¶ 38.

2. "[C]onnected in a way that allows for the flow of electricity between the two things

being connected." Docket entry 469, p. 8.

3. "[J]oined or linked together by operation of electricity." Docket entry 477, p. 2.

All three of these proposed constructions say the same thing – that an "electrical connection" must involve the flow of current/electricity between the two items being connected.

The Special Master concludes that

> these [proposed constructions] are admissions by Microsoft that the criterion [for "electrically connected"] is whether electricity flows between two connected elements, notwithstanding that there may be an interposed gap in the conductors, such as the internal gap in an isolation transformer or capacitor, wherein electrical signals (but not literally current) cross the gap by the phenomenon of electromagnetic induction or capacitance, respectively.

April 4, 2010, Supplement to R&R of December 14, 2009, at 1-2. Hochstein agrees with the Special Master.

The Court disagrees with the Special Master and Hochstein, and finds that Microsoft has never conceded or admitted that electromagnetic induction falls within the ambit of "electrically connected." It is true that, by offering the proposed constructions above, Microsoft admitted that an "electrical connection" is one that allows for current/electricity to flow between the two things being connected. However, the problem with the position of the Special Master and Hochstein is that Microsoft has never admitted that electricity or current flows between the gap in a transformer. In fact, Microsoft, through its expert, advances the exact opposite position:

> In the case of electromagnetic induction, there is no direct current path or electrically conductive connector across the related coils. Alternating current flowing in one coil can *induce a current in the other, but no current flows between the coils* and there is not an electrical connection.

Docket entry 488-2, ¶ 14 (emphasis added). Neither the Special Master nor Hochstein direct the Court's attention to anywhere in this record where Microsoft admitted that electricity or current

flows between the gap in a transformer.[9] Thus, so far as the Court is aware, there is simply no support for the latter clause of the Special Master's statement (beginning with "notwithstanding") that Microsoft, by offering the three constructions above, admitted that "the criterion [for "electrically connected"] is whether electricity flows between two connected elements, *notwithstanding that there may be an interposed gap in the conductors*." April 4, 2010, Supplement to R&R of December 14, 2009, at 1-2 (emphasis added). True, Microsoft has admitted that "the criterion [for "electrically connected"] is whether electricity flows between two connected elements," but it has never admitted that electricity or current flows over the gap in a transformer. Because Microsoft has never admitted that current/electricity flows over the gap in a transformer, the proffered three constructions, above, which were urged by Microsoft before the present dispute involving electromagnetic induction arose, do not constitute an "admission" that electromagnetic induction falls within the ambit of "electrically connected."

2. Dictionary Definitions

At the onset, the Court notes, as did the Special Master in his December 14, 2009, R&R, that

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[9] Microsoft has, however, admitted that current flows over the gap in a capacitor. *See* docket entry 516, October 23, 2009, Hr'g Tr. at 25, wherein Mr. Cederoth, on behalf of Microsoft, stated: "In electrical engineering, current flows through a capacitor." According to the Special Master, "isolation transformers . . . should be considered as providing no less of an electrical connection than the connection provided by a capacitor." December 14, 2009, R&R at 30. The Special Master explains this conclusion at pages 27-30 of his December 14, 2009, R&R and page 4, paragraph 10 of his April 4, 2010, Supplement. Hochstein agrees with it; Microsoft objects and urges the Court to disregard the Special Master's analysis regarding capacitors because the argument that transformers and capacitors are analogous was raised for the first time at oral argument on October 23, 2009, with no support in the record. Microsoft maintains that transformers and capacitors are materially different because, while they both have a gap, current flows over the gap in the case of a capacitor but not in the case of a transformer.

The Court agrees with Microsoft that the Special Master's analysis regarding capacitors should be disregarded because the record is undeveloped with regard to whether capacitors and transformers are analogous in the sense asserted by the Special Master and Hochstein.

the Federal Circuit has cautioned against placing "heavy reliance" on dictionary definitions:

> The main problem with elevating the dictionary to such prominence is that it focuses the inquiry on the abstract meaning of words rather than on the meaning of claim terms within the context of the patent. Properly viewed, the "ordinary meaning" of a claim term is its meaning to the ordinary artisan after reading the entire patent. Yet heavy reliance on the dictionary divorced from the intrinsic evidence risks transforming the meaning of the claim term to the artisan into the meaning of the term in the abstract, out of its particular context, which is the specification. The patent system is based on the proposition that claims cover only the invented subject matter. As the Supreme Court has stated, "[i]t seems to us that nothing can be more just and fair, both to the patentee and the public, than that the former should understand, and correctly describe, just what he has invented, and for what he claims a patent." *Merrill v. Yeomans*, 94 U.S. [568, 573-74 (1876)]. The use of a dictionary definition can conflict with that directive because the patent applicant did not create the dictionary to describe the invention. Thus, there may be a disconnect between the patentee's responsibility to describe and claim his invention, and the dictionary editors' objective of aggregating all possible definitions for particular words.

Phillips, 415 F.3d at 1321.

Regarding the "battle of the dictionaries," the Special Master concludes, after a thorough discussion in his December 14, 2009, R&R, that "it is inappropriate to place any reliance on [the dictionary definitions proffered by the parties] for claim construction guidance." December 14, 2009, R&R at 27.

Microsoft offers the following dictionary definition of "electrically connected":

> Joined through a conducting path or a capacitor, as distinguished from being joined merely through electromagnetic induction. Modern Dictionary of Electronics, Robert F. Graf, 7th ed. (1999), at p. 235.

Everyone agrees that this definition, by its express terms, excludes electromagnetic induction from the scope of "electrically connected."

Hochstein, on the other hand, stresses *Phillips*' de-emphasis on dictionary definitions, but offers the following definition, which it contends contradicts Microsoft's proffered definition:

> Connected via direct path, such as through a wire, resistence, inductance or capacitance. Illustrated Dictionary of Electronics, 5th ed. (1990).

Hochstein argues that its definition, unlike Microsoft's definition, encompasses electromagnetic induction within the meaning of "electrically connected." The Special Master, however, rejected Hochstein's argument, concluding that "there is no contradiction" between the two definitions since:

> the two dictionaries are talking about different arrangements of elements. The first dictionary [Microsoft's] is technically accurate as to the absence of a direct path for electricity between paired inductors via electromagnetic induction (as in an isolation transformer); the second dictionary is more generic and does not specifically address electromagnetic induction or isolation transformers. However, the two dictionaries are in agreement to the extent they associate "electrically connected" with a "conducting path" or a "direct path."

December 14, 2009, R&R at 26-27 (underlined emphasis retained). Hochstein objects to the Special Master's conclusion that the two definitions are not inconsistent. Hochstein argues that the Special Master "misread" its proffered definition because he "apparently . . . read [the first two commas in the definition] as serial commas, believing that the definition of 'electrically connected' was merely 'connected via direct path'" and that "'a wire, resistence, inductance or capacitance' are merely examples of direct paths." Hochstein's Resp. to Microsoft's Objections to December 14, 2009, R&R at 11 (docket entry 522). Thus, Hochstein's proffered definition of "electrically connected" is "[c]onnected via direct path, such as through a wire, resistence, inductance or capacitance." Illustrated Dictionary of Electronics, 5th ed. (1990). Hochstein argues that this dictionary definition should be read as follows:

- connected via direct path, such as through a wire
- connected via resistance,
- connected via inductance or

- connected via capacitance

The Court does not agree, and finds Hochstein's rewriting of the dictionary definition to be flawed. The Court reads the terms "wire," "resistence," and "inductance or capacitance" as examples of directs paths, not as separate connections. However, even if Hochstein's reading is the correct/intended one, the definition remains ambiguous with regard whether electromagnetic induction is encompassed within the meaning of "electrically connected" since, as the Special Master found, Hochstein's definition "is more generic and does not specifically address electromagnetic induction or isolation transformers." December 14, 2009, R&R at 26.

The Court agrees with the Special Master's conclusions regarding the "battle of the dictionaries" in this case:

> Summarizing this battle of the dictionaries: Hochstein asserts that its dictionary definition broadly encompasses electromagnetic induction and isolation transformers within the definition of "electrically connected," and that such definition contradicts Microsoft's dictionary definition; Microsoft asserts that the two definitions do not contradict because Hochstein's only refers to single inductors or coils, while Microsoft's is limited to paired inductors or coils, as in a transformer. Thus, the two experts do not even agree on what is meant by Hochstein's proffered dictionary definition. On the present contested state of the record concerning dictionary definitions, and particularly in view of *Phillips*' de-emphasis of this form of extrinsic evidence, it is inappropriate to place any reliance on such definitions for claim construction guidance.

December 14, 2009, R&R at 27.

3. Litigation Conduct of Microsoft

The Special Master considered the litigation conduct of Microsoft – specifically, the timing of its claim construction arguments, as extrinsic evidence in this matter. The Special Master believes that Microsoft's failure to raise the present non-infringement defense for several years is

> strongly suggestive of the conclusion that "the ordinary artisan after reading

> the entire patent" would conclude that "electrically connected" does encompass connections that indirectly transmit and couple signals and electrical energy through . . . isolation transformers.

December 14, 2009, R&R at 24 (citation omitted). Because of its importance to this discussion, the Court sets forth the Special Master's discussion of Microsoft's litigation conduct:

> According to Hochstein's present motion papers, Hochstein has for more than four years asserted that Microsoft's wired connections between the modem and microprocessor satisfied the "electrically connected" limitation of claim 39. In three cited expert reports and interrogatory answers spanning March, 2005 to March, 2009, Hochstein explicitly identified as the infringing structure the wired Ethernet cable connection between the microprocessor-containing Xbox/Xbox 360 consoles and the modem, using excerpts from Microsoft's written instructions and diagrams. Throughout this period, Microsoft has not denied knowledge that its accused consoles had an isolation transformer between the console's Ethernet port and the microprocessor.
>
> During this period, Microsoft's technical expert, Dr. Macedonia, filed ten expert reports. Hochstein asserts that Dr. Macedonia never, in any of those Reports, contended that Microsoft's wired modem-to-microprocessor connections were not "electrically connected" or that an isolation transformer or electromagnetic induction was not a form of "electrical connection." Dr. Macedonia's silence on this point until July 6, 2009 is particularly telling for two reasons.
>
> - First, four of Dr. Macedonia's earlier Reports were issued after a March 27, 2009 Expert Report from Hochstein's technical expert, Dr. Matheson, spelled out that an isolation transformer "couples a signal by converting the signal from an electrical signal on one circuit into a magnetic signal, and then back into an electrical signal on a different circuit." Thus, although (1) Microsoft was fully aware of the presence of an isolation transformer in the accused products; (2) its own expert and others on its litigation team must have read Dr. Matheson's description of how such common devices work to indirectly couple two conductors separated by a gap; and (3) the presence of such gap is undeniably inconsistent with Microsoft's originally proposed claim construction ("a connection that is in the form of electrically conductive connectors"), Microsoft failed for four years to raise this new-found non-infringement defense.
>
> - Second, in the same Report where Dr. Macedonia's attention was

> focused on "electrically connected" as his basis for concluding (1) that wireless controllers are not covered by claim 39 because they use radio frequency waves to transmit data (Dkt. 507-2, ¶ 38), and (2) that wireless modem-to-microprocessor connections similarly did not infringe, he did not assert that "electrically connected" also did not cover the wired modem-to-microprocessor accused products that included an isolation transformer in that connection, although they, too, would avoid infringement under Microsoft's proposed claim construction, namely, a "connection that is in the form of electrically conductive connectors."

Dr. Macedonia holds three degrees in electrical engineering, telecommunications and computer science. It is not credible that he and the entire Microsoft litigation team, after repeatedly focusing on the meaning of "electrically connected" and other non-infringement defenses based on that claim limitation, would overlook this newly raised one if, as they now allege, the "the ordinary artisan after reading the entire patent" would conclude that "electrically connected" does not encompass a connection including an isolation transformer located inside the Xbox/Xbox360 consoles. In fact, on June 22, 2009, the day before Hochstein requested, and the Court ordered, a claim construction of "electrically connected," Microsoft asserted that it "is not a complicated term." So uncomplicated and apparent did Microsoft think this task that its original claim construction brief on this term asserted this to be one of those cases where "the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than application of the widely accepted meaning of commonly understood words." Yet it was not apparent to Dr. Macedonia and the Microsoft litigation team until July 6, 2009.

The history and context of Microsoft's positions on the construction of "electrically connected" are strongly suggestive of the conclusion that "the ordinary artisan after reading the entire patent" would conclude that "electrically connected" does encompass connections that indirectly transmit or couple signals and electrical energy through capacitors and isolation transformers, these components being commonly used in equipment of the type disclosed in the '125 Patent. Indeed, even Dr. Macedonia and the Microsoft litigation team, who undoubtedly had been repeatedly scrutinizing and dissecting the relevant language of this patent throughout this litigation, seem to have so concluded during this four-year period. It is not plausible that "the ordinary artisan" would have undertaken the highly sophisticated analysis of indirect connection or coupling versus direct connection that underlies Microsoft's new-found positions on this issue.

December 14, 2009, R&R at 21-24 (citations and footnotes omitted).

Microsoft objects to this entire discussion by the Special Master "as irrelevant and not proper extrinsic evidence at all." Microsoft's Objections to December 14, 2009, R&R at 15 (docket entry 520). As stated by Microsoft,

> this is not a situation where an expert asserted one position and then reversed himself. Rather, . . . Dr. Macedonia did not say anything one way or the other. What an expert did not say is not evidence. The Special Master improperly relied on Dr. Macedonia's and Microsoft's seeming "failure" as being "strongly suggestive of the conclusion that the ordinary artisan after reading the entire patent would conclude that "electrically connected" does encompass connections that indirectly transmit or couple signals and electrical energy through capacitors and isolation transformers."

Id. at 16. Microsoft continues:

> the Special Master relied on this "silence," to in effect, declare, *sua sponte*, that Microsoft somehow waived its right to benefit from the Special Master's original claim construction simply because Microsoft's earlier expert reports were silent on that issue. The Special Master cites no authority for the novel proposition that a defendant's failure to articulate a particular claim construction argument to support a non-infringement defense at an earlier stage in the litigation can be taken as evidence, indeed, conclusive evidence, that the position is incorrect.

Id. at 17.

The Federal Circuit has stated that

> [e]xtrinsic 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.

True, the three forms of extrinsic evidence listed by the *Markman* court (testimony, dictionaries, and treatises) do not constitute an exhaustive list of allowable extrinsic evidence. However, neither the Special Master nor Hochstein cite any legal authority that would permit the

Court to consider a party's litigation conduct—namely, a party's silence regarding a potential defense that it had no affirmative duty to raise previously—as extrinsic evidence against that party in a claim construction analysis. Subsequently, in *Phillips*, the Federal Circuit elaborated, that where the

> claim term as understood by persons of skill in the art is often not immediately apparent, and because patentees frequently use terms idiosyncratically, the court looks to "those sources available to the public that show what a person of skill in the art would have understood disputed claim language to mean." Those sources include "the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art."

415 F.3d at 1314 (citations omitted). This list does not include litigation conduct.

The Court is unaware of any court that has considered a party's silence in this regard as evidence, nor does Harmon, in his treatise, mention litigation conduct in his discussion of allowable extrinsic evidence. *See* Harmon, *Patents & the Federal Circuit*, supra, at § 6.4, pp. 385-394 (discussing allowable extrinsic evidence). This is not a contracts case where the legal maxim "silence is acceptance," might apply. *See* Restatement (Second) of Contracts § 69 (1981).

Microsoft's failure to raise the present non-infringement defense earlier is not proper extrinsic evidence. The Court sustains Microsoft's third objection regarding its litigation conduct.

III. SUMMARY

The evidence in this case consists of intrinsic evidence, and extrinsic evidence in the form of expert testimony, dictionary definitions, and, purportedly, Microsoft's litigation conduct.

A. Intrinsic Evidence

With regard to the intrinsic evidence, the disputed term "electrically connected" is used

seven times in the patent. In five of the seven uses, the term is used consistently in a narrow manner to describe a specific type of connection – one by an electrically conductive wire or line.

The two remaining uses of the term appear in the title of the patent, "Apparatus and Method for Electrically Connecting Remotely Located Video Games." Hochstein argues that the disputed term is used in the title to describe a connection utilizing electromagnetic induction, and therefore the title's use of the term is inconsistent with how the term is used elsewhere. Microsoft, on the other hand, argues that the title is not relevant to the definition, but in any event the term is not used in the title to describe a connection by means of electromagnetic induction; rather, the manner in which the term is used in the title is fully consistent with how it is used elsewhere. The Special Master "strongly favors" Hochstein's position, but concludes:

> my own experience as a patent examiner and practitioner is that relatively little attention is directed to the title by the inventor, his attorney or the patent examiner. In my opinion, the subtlety of the technical question here (which will become more apparent as this analysis proceeds), and its probable insignificance to the examiner's evaluation of the patentability of the claims, make it unlikely that a busy patent examiner would have even noticed it, let alone be concerned about it. In view of the *Pitney Bowes* holding, I conclude that the patent's title, though supporting Hochstein's arguments concerning claim construction, is entitled to limited weight in this claim construction analysis, particularly as it concerns "electromagnetic induction."

December 14, 2009, R&R at 12-13.

In his April 4, 2010, Supplement to the December 14, 2009, R&R, the Special Master states that, "upon further reflection, [he is] inclined to give [the title] a little more weight." April 4, 2010, Supplement to December 14, 2009, R&R at 3. The Court is not so inclined. The way in which the title is worded is ambiguous because it does not say to what the "remotely located video games" are being electrically connected. Given the context of the patent, the Special Master asserts that remotely located video games are being connected to each other, a connection that must involve

electromagnetic induction. Microsoft argues the title could mean that each remotely located game is "electrically connected" to the video game communicator, a connection that would not involve electromagnetic induction. It is not possible to conclude with ample certainty which interpretation was intended. The title is ambiguous in its use of the disputed term. In any event, the Court is not permitted to rest its claim construction analysis on the title. *See Pitney Bowes*, 182 F.3d at 1312-1313.

The Court reiterates that it need not look to extrinsic evidence, and that intrinsic evidence supports its conclusion.

B. Extrinsic Evidence

The extrinsic evidence consists of (1) the parties' technical experts, Dr. Macedonia for Microsoft, and Dr. Matheson for Hochstein, (2) dictionary definitions, and (3) the litigation conduct of Microsoft. Taking these three sources in reverse order, the Court does not give any weight to the litigation conduct of Microsoft because no one has cited any authority whatsoever that permits the Court to consider this.

The dictionary definitions are minimally helpful and, in any event, are not entitled to great weight in accordance with *Phillips*. One definition (Microsoft's) unequivocally excludes electromagnetic induction from the scope of "electrically connected." It is not clear from the other definition—the one offered by Hochstein—whether electromagnetic induction is encompassed within the meaning of "electrically connected" since the definition "is more generic and does not specifically address electromagnetic induction or isolation transformers." December 14, 2009, R&R at 26.

With regard to expert testimony, the Special Master and Hochstein assert that Dr. Macedonia admitted, before the dispute shifted from radio waves to electromagnetic induction, that "electrically connected" encompasses electromagnetic induction. For the reasons stated above, the Court does not agree. In the end, the Court is left with the rival opinions of two experts who stay true to the litigation positions of their respective clients.

IV. CONCLUSION AND ORDER

For the reasons stated above, the Court construes the term "electrically connected" to exclude "electromagnetic induction" from its scope. This is because, as the Special Master correctly found in his December 14, 2009, R&R, the patent consistently uses the term "electrically connected" in a narrow sense to describe a specific type of connection that does not involve a gap, the patent never uses the term "electrically connected" to describe a connection by means of electromagnetic induction, and the patent consistently uses terms other than "electrically connected," such as "connected" (without the "electrically" qualifier) or "coupled," to describe connections over a gap in a transformer. Moreover, the extrinsic evidence in this case, even if admissible, does not aid the Court in its understanding of the disputed term.

Hochstein's Motion for Reconsideration is denied; this case is dismissed.

IT IS SO ORDERED.

S/Paul D. Borman
PAUL D. BORMAN
UNITED STATES DISTRICT JUDGE

Dated: July 30, 2010

CERTIFICATE OF SERVICE

Copies of this Order were served on the attorneys of record by electronic means or U.S. Mail on July 30, 2010.

S/Denise Goodine
Case Manager