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NETLIST, INC.

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

OAKLAND DIVISION

GOOGLE INC. Plaintiff, v. NETLIST, INC., Defendants. AND RELATED COUNTERCLAIMS	CASE NO. C-08-04144 SBA **DEFENDANT NETLIST, INC.'S CLAIM CONSTRUCTION REPLY BRIEF**

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INTRODUCTION

Through its claim constructions, Google seeks to exclude the accused fully buffered dual in line memory modules ("FBDIMMs") from the reach of Netlist's claims. However, Google's request that the Court effectively rewrite Netlist's claims to exclude FBDIMMs must fail for several reasons, most notably, that FBDIMMs are *expressly mentioned* in the '386 Patent as an embodiment of the claimed invention. Federal Circuit precedent holds that construing patent claims to exclude an embodiment is impermissible in the absence of express language in the patent indicating an exclusionary intent. No such language has been identified by Google because there is none.

In support of its constructions, Google mischaracterizes the text and drawings of the '386 Patent and the deposition testimony of its inventors. Nowhere does the '386 Patent describe or depict a logic element that receives control, command, or chip-select signals "directly" from a computer system. Instead, every description of the logic element consistently states that signals are received "from" the computer system, regardless if the signals are received "directly" or indirectly.

Nowhere in the '386 Patent are command, control or chip select signals described as being presented on "dedicated pins." The FBDIMMs referenced in the specification did not include dedicated pins for each signal. Moreover, inventor Jeffrey Solomon testified that the signals depicted in the figures could be transmitted by any means known in industry, which includes serial communication systems that lack dedicated pins. There is no basis for importing an unclaimed "pins" feature into the '386 Patent claims.

Similarly, the '386 Patent claims do not require "tricking" the computer into believing or understanding its memory modules have fewer memory devices or ranks than are actually present. At most, the '386 Patent includes "tricking" examples which are by their own terms expressly limited to "certain embodiments." No Federal Circuit precedent, including any of the cases cited by Google, sanctions limiting claims to unclaimed embodiment features that are described in such terms.

Recognizing that the Court may be inclined to view its constructions as impermissible importation of the preferred embodiments, Google attempts to dress them up and disguise them as mere "definitions," contending that "pins" define a "signal," and that "tricking" the computer system defines the "corresponding to" limitations of claim 1. These attempts are not credible and fly in the face of well-established rules and usage of the English-language. Thus, the Court should reject Google's constructions and adopt Netlist's constructions in their entirety.

I. "LOGIC ELEMENT"—GOOGLE IMPROPERLY IMPORTS A STRUCTURAL RELATIONSHIP BETWEEN THE "LOGIC ELEMENT" AND THE "COMPUTER SYSTEM"

A. Neither the Claims Nor the Embodiments of the '386 Patent Describe the Logic Element as "Directly" Receiving Signals From the Computer System

Google admits that its construction of "logic element" "states the *structural relationship between the computer system and logic element*." Google's Responsive Claim Construction Brief (Sealed Version), filed August 25, 2009 ("Google's CC Brief") at 7 (emphasis added). However, claim 1 is not limited to and does not require any particular structural relationship between the "logic element" and the "computer system." Instead, it simply recites that the "logic element receiv[es] a set of input control signals from the computer system." Pruetz Decl., Exh. A (the "'386 Patent") at 33:32-33.[1] Neither the claim language nor the text of the specification indicates that the logic element must receive input control signals *directly* from the computer system. Every specification excerpt cited by Google uses the phrase "from the computer system" without the modifier "directly." *See* Google's CC Brief at 7.

A simple analogy further reveals the fallacy in Google's reasoning. If someone sends an item through the mail to a recipient, it is well understood that the recipient received the item "from the sender" notwithstanding the intervening act of a mail carrier in delivering the item. Yet,

[1] "Pruetz Decl." refers to the Declaration of Adrian M. Pruetz, filed on July 28, 2009. In addition, the Declaration of Steven R. Hansen in support of Netlist's Claim Construction Reply Brief, dated September 22, 2009 ("Hansen Reply Decl."), is filed concurrently herewith.

Google's reasoning would suggest that the recipient received the item from the carrier and *not* the sender, a conclusion that is clearly at odds with the well understood usage of the preposition "from."

Google next attempts to stand the canons of claim construction on their head by arguing that "no disclosed embodiment contains intervening circuitry between the computer system and logic element." *Id.* at 8. If taken at face value, Google's argument suggests that no patent claim can cover any product that does not identically track each and every feature of the patent's embodiments. This is not and has never been the law of claim construction. To the contrary, the Federal Circuit has "expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1323 (Fed. Cir. 2005).

B. Google's Construction Would Exclude the '386 Patent's Disclosure of Combined Registers and Logic Elements

Google's construction is inconsistent with the '386 Patent's disclosure of devices that combine logic elements with buffers and phase-lock loop devices. FIG. 1A depicts a "register 60 [that] receives and buffers a plurality of control signals, including address signals . . . ." The '386 Patent at 5:36-41 (Pruetz Decl., Exh. A). The figure also depicts a "phase-lock loop device 50." *Id.* at 5:27-30. The patent expressly states that the three functions can be combined in one device: "[I]n certain other embodiments, two or more of the phase-lock loop device 50, the register 60, and the logic element 40 are portions of a single component." *Id.* at 5:42-48. Google's construction would improperly exclude such a combined device because it would require the device's logic circuitry to be connected "directly" to the computer system. Under well established Federal Circuit precedent, constructions that read out embodiments are "rarely, if ever, correct." *MBO Labs., Inc. v. Becton, Dickinson & Co.*, 474 F.3d 1323, 1333 (Fed. Cir. 2007)(citations omitted). *See also, Oatey Co. v. IPS Corp.*, 514 F.3d 1271, 1277 (Fed. Cir. 2008).

In support of its restrictive definition of "logic element" Google mischaracterizes the testimony of inventor Jay Bhakta. Mr. Bhakta *did not* testify that "all embodiments require the

logic element to receive signals from the computer system directly, not from intervening circuitry." Google's CC Brief at 8. Instead, he merely confirmed what claim 1 says—that the logic element receives a set of input control signals "from the computer system":

> Q: See where it says, "the logic element receiving a set of input control signals from the computer system"?
>
> A: Uh-huh
>
> * * *
>
> Q: Okay. So the input control signals are coming from the computer system to the logic element, correct?
>
> A: Yes?

Bhakta Tr. at 142:4-15, Hansen Reply Decl., Exh. A. Moreover, Google falsely characterizes the '386 Patent drawings as "depict[ing] signal lines connecting the computer system directly to the logic element . . . . " Google's CC Brief at 8. The drawings do not even *depict the computer system* ("The memory module is connectable to a computer system (not shown)"[2]). Thus, they cannot possibly show a "direct connection" between the computer system and the logic element. Inventor Jeffrey Solomon--who prepared FIG. 1A-- testified that the figure does not depict any particular connection between the computer system and the logic element:

> Q: And what of the –what are the lines that are drawn to the logic device [in FIG. 1A]? What are those?
>
> A: Yeah, those lines are ways for - - to represent a way for those signals to get to the logic device.
>
> Q: And how are those to get to the logic device, those signals?
>
> A: For whatever means the industry has, you know.
>
> Q: What did you mean by it when you wrote them down here on this figure?
>
> A: I meant to—you know—on a—I guess, on a conceptual level, I meant them to be as provided as inputs to the logic device. I didn't mean—I wasn't implying

[2] The '386 Patent at 5:13-14 (Pruetz Decl., Exh. A).

> any particular method, just that they—that the logic device employed—used these signals to develop the outputs.

Solomon Tr. at 181:20-21 and 183:15-184:9 (Hansen Reply Decl., Exh. B).

As the foregoing indicates, claim 1 is silent on the structural relationship between the logic element and the computer system and embraces receiving a set of input control signal both indirectly and directly from a computer system. Google incorrectly characterizes Netlist's proposed construction as eliminating the requirement that the input control signals be received "from the computer system." To the contrary, Netlist's construction simply reflects the fact that the signals can be provided in any manner by the computer system and that no specific structural relationship between the logic element and computer system is required.

Netlist's construction of "logic element" is "a hardware circuit that performs a predefined function on input signals and presents the resulting signals as its output." Both parties apparently agree that the logic element performs a "function" on input signals. Google's CC Brief at 7. However, Google takes issue with Netlist's use of the term "predefined function" in its construction, complaining that "predefined function" is not expressly recited in the text of the '386 Patent. *Id.* However, Google's phrase "particular function" is nowhere to be found in the '386 Patent. Moreover, Google's construction improperly divorces the application of the function from the input signals. Claim 1 recites that "the logic element generat[es] a set of output control signals *in response to* the set of input control signals." The '386 Patent at 33:36-38 (Pruetz Decl., Exh. A)(emphasis added) . However, Google's construction simply states that the logic element performs "one or more particular functions" regardless of whether those functions are performed on the input signals or not.

II. <u>"RANK"—GOOGLE IMPROPERLY BROADENS "RANK" TO MEAN A ROW OF *ANYTHING*</u>

Google attempts to define "rank" to mean a row of anything, notwithstanding the '386 Patent's exclusive use of the term to describe modules having memory devices arranged in rows. Every portion of the specification and drawings cited by Google refers to a "rank" as a row of

memory devices such as DRAM chips. Google's CC Brief at 9-10. "Rank" is used in no other sense in the '386 Patent. Nevertheless, Google seeks to broaden the term "rank" to encompass rows of items other than memory devices.

Netlist construes "rank" to mean "a row of memory devices." Contrary to Google's contention, Netlist's construction does not result in a "nonsensical reading of claim 1." As Google contends, inserting Netlist's definition of "rank" into claim 1 would yield the phrase "the set of input signals corresponds to a second number of rows of memory devices of memory modules." This phrase clearly indicates that the memory devices are arranged in rows and that the *second number* of rows is a characteristic of the claimed memory modules. Because Netlist's construction comports with the consistent meaning of "rank" in the '386 Patent, its construction should be adopted.

III. "SIGNAL," "CONTROL SIGNAL," "COMMAND SIGNAL," AND "CHIP SELECT SIGNAL"—GOOGLE'S CONSTRUCTION IMPROPERLY EXCLUDES FBDIMMS AND IS CONTRARY TO FEDERAL CIRCUIT PRECEDENT

Google's constructions of the several terms that use the word "signal" improperly require the use of "dedicated pins" for each different signal. In proffering its constructions of these terms, Google invites the Court to commit reversible error because regardless of how Google dresses up its rationale, its constructions constitute the importation of unclaimed aspects of preferred embodiments into Netlist's claims.

A. Google's Construction Excludes the FBDIMM Embodiment of the '386 Patent

"A claim interpretation that excludes a preferred embodiment from the scope of the claim is rarely, if ever, correct." *MBO Labs, Inc.* 474 F.3d at 1333 (citations omitted). Google argues that the text of the '386 Patent specification "confirms signals are transmitted on dedicated pins." Google's CC Brief. However, Google ignores the patent's express reference to FBDIMMs: "Furthermore, memory modules 10 compatible with embodiments described herein include, but

are not limited to . . . fully-buffered DIMM (FB-DIMM)." The '386 Patent at 6:2-8 (Pruetz Decl., Exh. A).

By requiring "dedicated pins," Google's constructions would expressly exclude or "read out" FBDIMMs from the scope of Netlist's claims. At the time the application for the '386 Patent was filed, those skilled in the art of memory module design understood that FBDIMMs received control and command signals from the computer system on a serial communication link, called the "Southbound Link." FB-DIMM Draft Specification: Architecture and Protocol, Revision 0.1a, dated May 3, 2004 ("FBDIMM 5/3/04 Spec.") at 7 and FIG. 2-1, attached as Exh. A to the accompanying Declaration of Jayesh Bhakta, dated September 21, 2009 ("Bhakta Decl.") at ¶¶ 3-8. While the signals were transmitted to "pins" on an "advanced memory buffer" or "AMB," the pins were not dedicated to a particular type of signal such as a "control signal," "command signal" or "chip select signal." Bhakta Decl. at ¶ 8. By expressly stating that FBDIMMs could be used to embody the claimed memory modules, the inventors clearly contemplated modules in which control, command and chip select signals would be transmitted *other than* to dedicated pins. *See Oatey Co.*,514 F.3d at 1278 (holding that "The district court erred in construing claim 1 as excluding this embodiment [of Figure 3]"). The Court should reject Google's attempt to exclude FBDIMMs from claim 1.

B. Google Mischaracterizes Particular Embodiments as "Defining" the Various Signals

While ignoring the '386 Patent's disclosure of FBDIMMs, Google points to three isolated examples in the specification that it contends describe "dedicated pins." The first two specification excerpts are expressly limited to specific examples and embodiments, and they do not even refer to control, command, or chip select signals. *See* the '386 Patent at 29:56-63 (Pruetz Decl., Exh. A) (emphasis added)("FIG. 12B schematically illustrates **exemplary** current limiting resistors . . . ."); *Id*. at 31:65-32:11 (emphasis added) ("Other **embodiments** have a plurality of DQ pins . . . .").

Google's third specification citation is to Table 1 and the accompanying text. However, neither the table nor the text even uses the word "pin" or otherwise suggests that the various signals have to be provided on distinct wires or pins. *Id.* at 7:63-8:44. Thus, one of ordinary skill in the art would not interpret control, command and chip select signals in the manner suggested by Google.

With respect to "control signals," in particular, Google cites JESD79F because "[i]t refers to control signals as inputs on dedicated pins." Google's CC Brief at 13. Not only is it improper to rely on such extrinsic evidence to contradict the intrinsic record, *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1584 (Fed. Cir. 1996), but the cited standard is irrelevant. The JESD79F standard pertains to SDRAM devices, an embodiment of the "memory devices" in claim 1. The parties' dispute as to the various signal limitations concerns signals sent from the computer system to the *logic element*, not to DRAM chips. Moreover, JEDEC's FBDIMM standard makes clear that the FBDIMMs referenced in the '386 Patent received control signals via a serial bus, not on "dedicated pins." FBDIMM 5/3/04 Spec. at 7 and FIG. 2-1 (Bhakta Decl., at ¶ 8, Exh. A).

Contrary to Google's assertions, the drawings of the '386 Patent do not show signals transmitted on dedicated lines and pins. Google falsely suggests that inventor Jay Bhakta testified that Figures 1A, 1B, 2A, 2B, 3A, and 3B all show signals "presented to the logic element on dedicated signal lines and pins." Google's CC Brief at 11. The cited excerpts from Mr. Bhakta's deposition testimony say no such thing, and none of them mention "pins." For example, Google cites Mr. Bhakta's transcript at 178:14-179:2, which reads as follows:

> Q: Okay. Let me refer you back to Figure 1A, if you would, of the patent. Does Figure 1A show a memory module that's like the one claimed in Claim 1 of this patent?
>
> THE WITNESS: Yes.
>
> A: You see a number of signals on the left side of the figure, the CS0, CS1, An+1. You see those things?
>
> A: Yes.
>
> Q: Are those all signals?

A: Those are all signals.

Bhakta Tr. at 178:14-179:2 (Hansen Reply Decl., Exh. A). The other cited portions of Mr. Bhakta's testimony similarly fail to support Google's position. *See Id.* at 181:14-22; 184:10-185:4. Inventor Jeffrey Solomon--who prepared Figure 1A--confirmed that the figure is merely conceptual and that the logic element receives the depicted signals by "whatever means the industry has." Solomon Tr. at131:10-13; 183:15-24 (Hansen Reply Decl., Exh. B). Mr. Solomon also testified that the module of Figure 1A has been embodied in modules that use serial communication architectures of the type that FBDIMMs use and which Google's "signal" construction would exclude:

> Q: So, have you ever seen the concept of Figure 1A, as you've described it, actually in hardware form where the chip select signals and the command signals did not get connected to a logic device through a wire and dedicated pins?
>
> A: **Yeah**. I've worked on various aspects of computer systems through my career, and sometimes these signals were time-shared in a serial bus.

Id. at 189:22-190:7 (emphasis added).

Google protests that its construction of the various "signal" limitations does not import limitations into claim 1. However, it fails to explain how a term like "dedicated pins" could possibly *define* a commonly used and well-understood word such as "signal." Google's own usage of the term "signal" separate and apart from the term "pins" suggests that this cannot possibly be the case (e.g., "The specification consistently shows **signals** presented on dedicated pins of the logic element," "**signals** are transmitted by varying voltages on pins"). Google's CC Brief at 12 (emphasis added). Thus, "pins" cannot define "signals."

C. <u>The '386 Patent Does Not Include the Types of Claim-Limiting Statements Identified by the Federal Circuit</u>

Even if Google were correct (it is not) in asserting that every embodiment of the '386 Patent describes and depicts the transmission of signals on dedicated pins, Federal Circuit precedent squarely prohibits the limited claim scope that Google seeks. "Even 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 expression of manifest exclusion or restriction.'" *Liebel-Flarsheim Co. v. Mallinckrodt, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004) (refusing to limit the asserted claims to require a pressure-jacket even though all embodiments included one). The cases cited by Google such as *Curtiss-Wright Flow Control, Toro,* and *Nikon Corp.*, Google's CC Brief at 6, 12, involve explicitly restrictive specification statements that are not present in the '386 Patent. For example, in *Curtiss-Wright Flow Control Corp. v. Velan, Inc.*, 438 F.3d 1374, 1379 (Fed. Cir. 2006), the Federal Circuit limited the asserted claims to a feature that was described as "a critical aspect of the present invention" in the specification. *Id.* at 1379. In *Toro Co. v. White Consol. Indus., Inc.*, 199 F.3d 1295 (Fed. Cir. 1999), the Federal Circuit limited Toro's vacuum-blower claims to require an integral air inlet cover and restriction ring because the specification stated that "it is needed" to build the restriction ring on the air inlet cover. *Id.* at 1301. Similarly, in *Nikon Corp. v. ASM Lithography B.V.*, 308 F.Supp. 2d 1039 (N.D. Cal. 2004), Judge Patel limited the asserted claims to a feature that was expressly described as "an essential condition and an important aspect of the present invention" in the text of the patent-in-suit. *Id.* at 148. The '386 Patent does not even mention "dedicated pins," much less describe them as "critical," "essential," or "the invention." Thus, Google's constructions of the various "signal" limitations are not supported by and cannot be reconciled with the Federal Circuit's canons of claim construction.

D. Netlist's Constructions of "Control Signals," "Command Signals," and "Chip-Select Signals" are Supported by and Consistent with the Specification

Google circularly uses the term "control" in its construction of "control signals," "command" in its construction of "command signals," and ""chip-select" in it s construction of "chip-select signals" while criticizing Netlist for providing constructions that distinguish and define these various types of signals. Netlist construes "control signals" as "signals, including address and command signals, that regulate system operations." Google is correct that the '386 Patent does not use the phrase "regulate system operations." However, each of the signals identified as a "control signal" in the '386 Patent in some way regulates system operations, such as

by defining a memory location where a command will be directed or by defining the nature of the command. Google fails to explain why the control signals identified in the '386 Patent do not "regulate system operations." Moreover, unlike Netlist's construction, Google's circular use of "control" renders its construction of "control signal" virtually limitless as to the information content of the signal and, therefore, entirely unhelpful to the jury.

Netlist construes "command signal" as "a signal, such as a read, write, refresh or precharge signal, that initiates a predetermined type of computer operation." Google criticizes Netlist's construction for its use of the phrase "initiates a predetermined type of computer operation." While this phrase is not expressly recited in the '386 Patent Specification, Google does not dispute that it accurately characterizes all of the types of command signals (e.g., read, write, precharge) that are set forth in the specification. In contrast, Google's circular use of "command" provides no guidance as to the information content that makes a particular signal a "command signal."

Netlist construes "chip-select signal" as "an address signal that enables the input and output of data to and/or from a memory device." Google criticizes the fact that Netlist's construction describes a chip select signal as a type of "address signal" because, according to Google, the '386 Patent distinguishes between address signals and chip select signals. Google's CC Brief at 25. However, Google's argument confuses "address signals" with "row/column address signals." Chip select signals and ***row/column*** address signals are both species of the genus "address signals." The chip select signal designates the rank of memory devices to be activated, while the row/column address signals specify a particular location in the internal memory array of the chips. Bhakta Decl. at ¶ 9. In contrast, Google's circular use of "chip-select" provides the jury with no guidance as to the information content of a "chip select signal."[3]

[3] Netlist contends that "signal" requires no construction, but in the alternative defines the word as "an event or phenomena that conveys information from one point to another."

IV. "THE SET OF INPUT CONTROL SIGNALS CORRESPONDING TO A SECOND NUMBER OF MEMORY DEVICES . . . ." AND "THE FIRST COMMAND SIGNAL CORRESPONDING TO THE SECOND NUMBER OF RANKS"— GOOGLE FALSELY EQUATES THESE LIMITATIONS WITH "TRICKING" THE COMPUTER

Google seeks to limit Netlist's claims to memory modules used in computer systems that are unaware of the actual number of memory devices and ranks on the module, a feature Google refers to as "tricking" the computer system. This "tricking" feature is reflected in Google's constructions, which require that the computer system "understand[] the memory module to have the second number of devices" and the "second number of ranks." Google confuses the concept of a computer system generating signals that "correspond to" a number of memory devices and ranks smaller than that which is present on the memory module with what the computer "understands." Of course, claim 1 covers embodiments in which the computer "sees" or is "tricked" into believing that the memory module has fewer memory devices and ranks than are actually present on the module. However, claim 1 is not *limited to* such embodiments.

A. Google Relies on Isolated Examples that are Expressly Described as "Certain Embodiments"

Google mischaracterizes the '386 Patent specification when it asserts that "The specification repeatedly explains . . . that the computer system generates input control signals ***based on its understanding that the memory module contains the apparent number of memory devices***." Google's CC Brief at 17 (emphasis added). Every specification excerpt cited by Google expressly states that this unclaimed "understanding" or "tricking" feature is limited to "certain embodiments." Google's CC Brief at 16-17. Nowhere does the '386 Patent describe this feature as "critical," or "essential," or "the invention." No "words or expressions of manifest exclusion or restriction" which would support Google's construction are included in the '386 Patent. Thus, under *Phillips*, 415 F.3d at 1323 and *Liebel-Flarsheim Co.*, 358 F.3d at 906, it is improper to limit Netlist's claims to any particular "understanding" or "tricking" of the computer system.

Google contends that it is not "improperly import[ing] a limitation into the claim" and that it is merely "explain[ing] the 'corresponding to' limitation as it appears in the patent." Google's CC Brief at 19. Google's efforts to disguise its importation of claim limitations are unavailing. In support of its contention, Google again mischaracterizes the specification by asserting that "Every time 'corresponding to' appears in the specification referring to input signals, it is in the context of language explaining that the computer system sees the module as having the apparent number (not the actual number) of devices and generates signals according to that understanding." *Id.* Five of the seven specification excerpts cited by Google are completely devoid of any reference to the computer system's "understanding" regarding the number of devices and ranks on the module. *See* the '386 Patent at 2:50-55, 2:60-67, 3:5-12, 5:16-23, and 7:7-14 (Pruetz Decl., Exh. A). The remaining two portions of the specification cited by Google are expressly limited by their own terms to "certain embodiments". *Id.* at 11:44-55 and 11:59-65. As Google's own citations indicate, the '386 Patent specification is replete with references to the phrase "corresponding to" which have nothing to do with the computer's understanding of the number of memory devices or ranks on the memory module.

B. The '386 Patent Drawings are Silent as to the Computer System's "Understanding" of the Actual Memory Module Configuration

Google also distorts the intrinsic record in contending that "The drawings also show the computer system understands the memory module to have the apparent number of devices, and generates a set of input control signals corresponding to that number." Google's CC Brief at 18. As mentioned previously, the drawings do not even show the computer system much less depict its "understanding" as to the memory module configuration. Of course, the specification indicates that the input control signals shown in the figures come "from the computer system," but that has nothing to do with what the computer understands the module configuration to be.

Again, Google turns claim construction on its head by arguing that the '386 Patent fails to disclose any embodiments in which the computer is aware of the actual number of memory devices and ranks on the memory module. Google's implicit premise is that only those

embodiments that are expressly disclosed in a patent specification may be encompassed by the patent's claims. As discussed above, that is not and has never been the law of claim construction.

C. Neither Inventor Testified that "Tricking" the Computer System is the "Essence of the Alleged Invention"

Google also mischaracterizes and distorts inventor Jay Bhakta's testimony to support its position. According to Google, Mr. Bhakta "described ***the essence of the alleged invention*** as the memory module's ability to 'trick' the computer system into seeing only the apparent number of memory devices on the memory module instead of the actual number." Google's CC Brief at 16 (emphasis added). Instead, Mr. Bhakta testified that the "tricking" description was used by those who *were not knowledgeable* to describe the '386 Patent:

> Q: So, the "tricking the system" language came more internally?
>
> A: More internally or somebody who, you know, **didn't know how it is being done** and things like that and then they will simplify the thing that, oh, we just trick the computers or systems.

Bhakta Tr. at 60:4-9 (Hansen Reply Decl., Exh. A) (emphasis added). Furthermore, inventor Jeff Solomon repeatedly testified that any such "tricking" feature was limited to specific embodiments. *See* Solomon Tr. at 172:7-23; 180:14-23 (Hansen Reply Decl., Exh. B).

D. Netlist's Construction Does Not Read Out "Corresponding To"

Netlist contends that the "corresponding to" limitations need no construction. In the alternative, Netlist defines "the set of input control signals corresponding to a second number of memory devices" to mean "the set of input control signals received from the computer system, which is configured to utilize a memory module having a second number of memory devices" and defines "the first command signal corresponding to the second number of ranks" to mean "the first command signal received from the computer system, which is configured to utilize a memory module having the second number of ranks." Contrary to Google's assertions, Netlist's constructions do not read "corresponding to" out of the claim. These constructions would exclude

implementations in which the computer system is not configured to use modules with the second number of ranks and devices.

V. "NUMBER OF RANKS OF MEMORY MODULES"—GOOGLE'S CONSTRUCTION WOULD RENDER THE CLAIM INCONSISTENT WITH ALL EMBODIMENTS OF THE '386 PATENT

Google seeks to exploit what it terms an "apparent incongruity" between claim 1 and the specification so it can argue that claim 1 requires "rows of memory modules." However, Google concedes that the '386 Patent consistently describes memory devices, and not memory modules, as being configured in ranks. Netlist's construction reflects the fact that the '386 Patent uses the term "ranks" to describe particular arrangements of memory devices, and therefore, that the "number of ranks" is a property of the module. Bhakta Decl. at ¶ 10.

Google's construction would effectively exclude *every embodiment* of the '386 Patent, and therefore, should be rejected. *Oatey Co.*, 514 F.3d at 1277; *MBO Labs. Inc.*, 474 F.3d at 1333; *Invitrogen Corp. v. Biocrest Mfg., L.P.*, 327 F.3d 1364, 1369 (Fed. Cir. 2003) ("This Court has held that construing a claim to exclude a preferred embodiment is rarely, if ever, correct and would require highly persuasive evidentiary support") (citations omitted). However, to simplify the matter, the Court may simply replace the word "modules" with "devices" instead of adopting either party's construction.

CONCLUSION

For the reasons provided above, the Court should adopt Netlist's claim constructions in their entirety.

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