

UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF FLORIDA

CASE NO. 05-61225-CIV-MARRA/HOPKINS

COBRA INTERNATIONAL, INC.,

Plaintiff,

vs.

BCNY INTERNATIONAL, INC., *et al*,

Defendants.

---

**OPINION AND ORDER GRANTING IN PART AND DENYING IN PART  
DEFENDANTS' MOTION FOR SUMMARY JUDGMENT**

THIS CAUSE is before the Court upon Defendants' Motion for Summary Judgment (DE 320). The motion is fully briefed and ripe for review. The Court has carefully considered the briefs and is fully advised in the premises.

**I. Background<sup>1</sup>**

This is a patent infringement case brought by Plaintiff Cobra International, Inc. ("Cobra") against Defendants BCNY International, Inc., Jordara Far East, Inc., Fred's Stores of Tennessee, Inc., Family Dollar Stores, Inc., Dollar General Corporation, Inc., Bruce Cagner, and Larry Roth (collectively "BCNY" or "Defendants") for an alleged infringement of claim 9 of U.S. Patent No. 5,821,858 (" '858 Patent " or "Patent"). Defendants now move for summary judgment on the issues of infringement and intervening rights.

---

<sup>1</sup> The material facts, culled from affidavits, exhibits, depositions, are reasonably inferred therefrom in the light most favorable for the Plaintiff.

## *A. The Patent*

The '858 Patent, filed on October 13, 1998, presents a design for lighted footwear. '858 Patent at Abstract. The Patent acknowledges prior art in the field, but notes certain deficiencies in each of those designs. '858 Patent at col. 1-3. The object of the '858 Patent is to “provid[e] lighted footwear such as a slipper having a lighting assembly including outwardly directed and externally visible lighting elements, means for powering the lighting elements, and means for sequencing the activation of the lighting elements in a repeating cycle.” '858 Patent at col. 3. The Patent describes such footwear: (1) as “providing maximum battery life and minimized weight,” (2) “which is compact and easily mounted and concealed within the footwear,” and (3) “which is durable and inexpensive to manufacture.” '858 Patent at col. 3. The Patent attempts to achieve these goals by setting forth ten (10) separate claims. The only claim at issue in this Motion is Claim 9.

Claim 9 reads:

A lighted shoe apparatus comprising:  
a shoe having a shoe body  
a plurality of outwardly directed and externally visible light emitting elements mounted to said shoe body for lighting in a sequence,  
an Or gate having input terminals and an Or gate output terminal,  
a voltage source connected to said Or gate,  
a ground wire containing a control switch connected to once said Or gate input terminal,  
a clock having a clock input terminal connected to said Or gate output terminal for generating a step output signal when said Or gate output is on and having a clock output terminal,  
a first counter having a first counter input terminal connected to said clock for translating said step output signal into a counted Boolean sequence of numbers and having first counter output terminals,  
a plurality of And gates, including a counter controlling And gate, each said And gate having And gate input terminals and an And gate output terminal, said And gate input terminals being connected in parallel to both of said first

counter output terminals, such that each said And gate received each counted Boolean number, wherein each of said plurality of light emitting elements is connected to a corresponding one of said And gate output terminals, such that an on signal from each said And gate causes the corresponding said light emitting element to light, and such that an off signal from each And gate causes the corresponding light emitting element to not light, and cycle restarting means.

'858 Patent at col. 9-10.

## *B. Patent Prosecution History*<sup>2</sup>

### 1. Original Examination

The application for the '858 Patent was originally filed on May 22, 1997, and contained seven claims. See Original Patent Application, Def. Exh. "E" at Cover Page.(hereinafter referred to "Original Patent Application"). Claim 7, which was the predecessor to the current patent's Claim 9, provides:

A lighted shoe apparatus comprising:  
a shoe having a shoe body  
a plurality of externally visible light emitting elements mounted to said shoe body for lighting in a sequence,  
logic circuit means comprising an Or gate for supplying logic and power to logic circuit, a clock for generating an output signal, a counter for converting said output signal into a number sequence, a plurality of And gates each corresponding and connected to one said light emitting element for receiving said number sequence and lighting the corresponding said light emitting element selectively for certain numbers in said number sequence,  
a control switch for activating and deactivating said logic circuit,  
and interconnection conductor means electrically joining said Or gate and said control switch

Original Patent Application at 20.

---

<sup>2</sup> Plaintiff denies most of Defendants' statements regarding the prosecution history. The Court has therefore quoted directly from relevant documents of the prosecution history.

The Patent Office rejected Claim 7 “under 25 U.S.C. 103(a) as being unpatentable over MacMillan (US Pat. #5,381,615) in view of Heminover (US Pat. #4,231,079).” Jan. 9, 1998 Office Action Summary by Patent Office, Def. Exh. “F” at 3 (hereinafter referred to as “1/9/98 Office Action”). The Patent Office noted,

Macmillan differs from claimed invention in that MacMillan does not disclose that the logic circuit comprises a clock and counter for generating an output signal and converting the output signal into a number sequence. However, as taught by Heminover, who is from the same field of endeavor, providing a clock and a counter to generate the specific pattern of the light emitting elements when activated is merely a matter of design choice and well known in the art. In addition, whether the logic circuit utilizes an OR gate as claimed or an Exclusive-OR gate as disclosed by MacMillan is merely a matter of design choice based on the number of switches used and/or the particular way to activate the logic circuit. Therefore, it would have been obvious to an artisan of ordinary skill at the time of invention to use an OR gate and provide a clock and a counter to the logic circuit of MacMillan as taught by Heminover in order to generate the specific illuminating pattern of the light emitting elements for a more attractive lighting shoe.

Id. at 4 (internal citations omitted).

In response, the Applicant cancelled claim 7 and added Claims 8, 9, 10, and 11 (which are claims, 7, 8, 9, and 10 in the ‘858 Patent). Jan. 30, 1998, Amendment, Def. Exh. “G” (hereinafter referred to as “1/30/98 Amendment”). The Amendment provided:

Claim 7 was rejected under 35 U.S.C. section 103 as being unpatentable over MacMillan in view of Heminover. Claim 7 is cancelled.

Independent Claims 8 and 10 are added to focus on the broader inventive structure detailed in claim 1. Claim 8 relegates the specifics of the cycle restarting means to dependent claim 9. Claim 10 relegates the specific of the And gate nipple configurations to dependent claim 11. The essential elements distinguishing the present invention from the teachings of the cited art remain in claims 8 and 10, so that the decoder of Heminover is not required.

Id. at 9.

The '858 Patent, as articulated in the January 30, 1998, Amendment, was approved by the Patent Office on May 15, 1998. Notice of Allowability at 3, Def. Exh. "H" (hereinafter referred to as "Notice of Allowability"). The Examiner said the newly amended claims were "allowable over the prior art of record because the prior art does not fairly teach a lighted shoe apparatus comprising the claimed logic circuit for energizing a plurality of light emitting elements to illuminate in a given sequence, especially including the specific arrangement of each components [sic] in the claimed logic circuitry." Id. at 3.

## 2. First Reexamination

On July 11, 2002, the Patent Office granted a request for reexamination of the '858 Patent. Order Granting Request for Reexamination, Def. Exh. "I" (hereinafter referred to as 7/11/02 Order Granting Reexamination"). The Order provided:

5. The consideration of Garner raises a substantial new question of patentability as to claims 1-10 of the ['858] Patent. . . . Garner teaches the shoe and outwardly visible light elements and associated circuitry. Briggs *et al* teaches a similar apparatus with additional circuitry in which a reasonable examiner would consider combining at least these two references together in deciding whether or not the claim is patentable.

6. The consideration of Garner also raises a substantial new question of patentability as to claim 9. The Garnet patent appears to teach the same subject matter as the claim. There is substantial likelihood that a reasonable examiner would consider this teaching important in deciding whether or not the claim is patentable.

7. The consideration of MacMillan raises a substantial new question of patentability as to claims 1-10 of the ['858] patent. This reference in conjunction with the Briggs *et al* reference appears to claim similar subject matter as to the ['858] reference such as the shoe with a plurality of externally visible light emitting elements mounted thereon. There is substantial likelihood that a reasonable examiner would consider this teaching important in deciding whether or not the claim is patentable.

Id. at 3.

In response, the Patent Holder made the following argument relevant to this matter:

MacMillan does not teach the use of an Or gate, but rather discloses an Exclusive-Or gate, which is inherently different and in this instance operates entirely different from an Or gate. And even if MacMillan could be argued to suggest an Or gate, which it does not, the output of the MacMillan Exclusive-Or gate does not control a clock as in [the '858 Patent], and further the MacMillan Exclusive-Or gate requires two or more switches, which the ['858 Patent] circuit inherently operates on one switch, as recited in the ['858 Patent] claims. The claimed structure and function of the ['858 Patent] Or gate and switch are very different from the Exclusive-Or gate and the plurality of switches taught by MacMillan.

...

It is noted that neither MacMillan, Briggs, nor Kazama, *et al* teach the use of an Or gate. Like Macmillan, Briggs has an Exclusive-Or gate and Briggs uses this Exclusive-Or gate as a buffer, and not as an Or gate.

And even if Requester tries to argue that any of these references does somehow teach or suggest an Or gate, it is noted that none of them teaches or suggests an Or gate controlling a clock. The ['858 Patent] independent claims do recite activating and reactivating a clock with an Or gate. Therefore this limitation, found in all of the ['858 Patent] independent claims, is not shown in the cited art. Since an Or gate is absent from the relevant cited references, [the Requester's argument fails.]

Furthermore, the And gates of MacMillan, Briggs or Kazama, *et al* do not combine outputs of a counter that provide counted Boolean numbers, which the ['858 Patent] claims indicate combining Boolean sequences from a plurality of counter outputs with an And gate to control the illumination of the lights.

...

Thus neither MacMillan, Briggs, nor Kazama, *et al*, whether considered individually or in combination teaches or suggests combining the outputs of a counter with And gates, such as to drive lighting elements according to a Boolean sequence. And once again, the claimed structure and function of the ['858 Patent] Or gate and switch are very different from the Exclusive-Or gate and the plurality of switches taught by MacMillan.

First Reexamination's Opening Statement of Patent Holder at 4-6, Def. Exh. "J."

The Patent Office ultimately found the '858 Patent to be patentable over the prior art cited by the Requestor of the First Reexamination. First Reexamination's Reason for Patentability, Def. Exh. "K." In so finding, the Examiner found that the prior art lacked an "Or gate having input and output terminals, the voltage source connected to said Or gate, a ground wire containing a control switch, a clock connected to the Or gate terminal, and first counter having input and output terminals." *Id.* With regard to a plurality of AND gates, the Examiner stated "To be fair, the And gates found in Garner are connected to a counter, but there is no evidence that this counter is compatible or linked in any way to the time based counter. . ." *Id.*<sup>3</sup>

### 3. Second Reexamination

#### a. Initial Rejection

On March 10, 2009, the Patent Office declared its intent to reject all of the claims associated with the '858 Patent in response to a second request for reexamination by a third party. Second Reexamination's 3/19/09 *Ex Parte* Reexamination Non-Final Action, Def. Exh. "L" (hereinafter referred to as "3/19/09 Office Action"). The third party seeking reexamination

---

<sup>3</sup> In their Statement of Facts, Defendants asserted as undisputed the following:

The Patent Office determined that the '858 patent claims were patentable over the cited art, and specifically explained that the prior art Garner patent (while teaching almost everything in the claimed circuit) did not teach "connecting a plurality of AND gates, including a counter controlling AND gate connected to the first counter" as specifically recited in the '858 patent claims.

Plaintiff denied this statement as an undisputed fact. In their Reply Statement of Facts, Defendants state that "Cobra does not deny that Defendants have quoted the Examiner accurately. Defendants agree that the cited document speaks for itself."

The Court has reviewed the Examiner's Reason for Patentability and notes that, although the Examiner found the AND gates in the Garner patent are connected to a counter, the critical distinction was that "there is no evidence that this counter is compatible or linked in any way to the time base counter."

set forth four challenges to the '858 Patent: Issues 1, 2, 3, and 4. *Id.* The Examiner rejected Issues 1, 3, and 4, but accepted issue 2, which sought rejection of the '858 Patent as being obvious over Garner in view of Ratcliffe (US Pat. #5,680,718) and a published Student Manual.<sup>4</sup> *Id.* The Examiner stated: "The rejection [set forth in Issue 2] was proposed by the third party requester in the request for reexamination, and it is accepted for the reasons set forth in the request for reexamination . . . which is hereby incorporated by reference." *Id.* at 8. The portions of the request for reexamination incorporated in the Office Action go through each element of each claim in the '858 Patent, setting forth arguments why each element is obvious in light of Garner independently, or Garner in view of either Ratcliffe, the Student Manual, or both. *Id.* at 9-26.<sup>5</sup>

In response to the 3/19/09 Office Action, the Patent Holder asserted five independent arguments. April 13, 2009, Amendment in Response to Non-Final Office Action in *Ex Parte* Reexamination Proceeding, Def. Exh. "O" at 8 (hereinafter referred to as "4/13/09 Amendment"). One of the five arguments advanced by the Patent Holder was that "The Ratcliffe Reference Is Incorrectly Applied." *Id.* (Argument "V" of "V"). The entire argument advanced in the Amendment was:

Ratcliffe is cited specifically for its OR gate, and yet the Ratcliffe circuit does not use the OR gate the way that the '858 patent circuit does. The '858

---

<sup>4</sup> The "Student Manual" is cited in the 3/19/09 Office Action as "Student Manual for The Art of Electronics, Hayes and Horowitz, Cambridge University Press, 1989, page 298, Figure X13A.7, 1-of-4 decoder." This document will hereinafter be referred to as the "Student Manual."

<sup>5</sup> Although Ratcliffe is discussed in other claims, the portion of the request that addresses Claim 9 of the '858 Patent only reference Garner and the Student Manual, noticeably omitting any reference to Ratcliffe. *Id.* at 23-25.



patent circuit switch connects directly to the OR gate, and the '858 OR gate turns on the clock. In the '858 patent, either the switch or the cycle counter can trigger the OR gate and thus the clock. The '858 circuit counts the number of times the sequence repeats before it is shut off.

The Ratcliffe circuit OR gate simply turns on a continuous flash, and does not and cannot control flash sequencing. The Ratcliffe lighting cycle evidently is turned off with either a manually operated switch or by an optical switch mounted inside the hat which opens when the hat is removed from the wearer head. The Ratcliffe circuit operation expires at a fixed time using a timer circuit, while the '858 OR gate turns the flashing circuit on and off.

The '858 patent discloses and claims a counter controlling OR gate, which is a key inventive feature of the '858 patent and a reason why it was originally stated to be allowable.

Id.

On September 25, 2009, the Patent Office officially rejected the argument that the '858 Patent was obvious in view of Garner, Ratcliffe, and the Student Manual. Second Reexamination's 9/25/09 *Ex Parte* Reexamination Final Action, Def. Exh. "P" at 4 (hereinafter referred to as "9/19/09 Final Office Action"). The examiner explicitly rejected each of the five arguments raised in the Patent Holder's Amendment. Id. at 5-15. In direct response to the Amendment's assertion that "The Ratcliffe Reference Is Incorrectly Applied," the Examiner stated:

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (*i.e.*, the switch **directly** to the OR gate) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Ratcliffe teaches OR gate 134 triggering clock oscillator 170 in response to an on signal from switch 114 via flip flop latch 132. If Patent Owner feels that "the switch connected **directly** to the OR gate" the patentable feature, this feature should be more actively claimed.

Id. at 15 (emphasis in original).

Based, in part, on the above-stated rationale, the Examiner rejected all 10 of the claims set forth in the '858 Patent. *Id.* at 16.

**b. Amendment of the '858 Patent**

After the '858 Patent was rejected, Plaintiff's counsel conducted interviews with the Examiner on September 22, 27, and 28, 2010. Second Reexamination's 10/4/10 *Ex Parte* Reexamination Interview Summary, Def. Exh. "Q" (hereinafter referred to as "10/4/10 Summary"). The description of that interview, as articulated by the Examiner and written in the 10/4/10 Summary, provided: "Discussed for clarifying the language of the claims to avoid the prior art of record and put case in condition for allowable. Exr. and Att. agreed upon changed. See the attached examiner's amendment." *Id.* That attached Examiner's amendment provided:

An examiner's amendment to the record appears below. The changes made by this examiner's amendment will be reflected in the reexamination certification to issue in due course.

In claim 7, before "and cycle restarting means" (last line), insert paragraph:

**"a second counter having a second counter input terminal and a second counter output terminal, wherein said counter controlling And gate is connected to said counter input terminal,"**

In claim 8, lines 3-6, delete paragraph:

**"a second counter having a second counter input terminal and a second counter output terminal, wherein said counter controlling And gate is connected to said counter input terminal,"**

In claim 9, line 11, after "a clock having a clock input terminal," insert -- **logically directly** --.

Second Reexamination's 10/4/10 Notice of Intent to Issue a Reexamination Certificate, Def. Exh.

"R" at 3 (hereinafter referred to as "10/4/10 Notice") (emphasis in original).

The examiner held that the amendment to independent claim 7 was allowable because:

none of the references of record disclose or teach alone or in combination the limitation: "a second counter having a second counter input terminal and a second counter output terminal, **wherein said counter controlling And gate is connected to said second counter input terminal**" in combination with "OR gate, a clock, a first counter, a plurality of And gates and a cycle restarting means" as called for in amended claim 7.

Id. at 5 (emphasis in original).

With regard to independent claim 9, the Examiner held that it was allowable because:

none of the references of record disclose or teach alone or in combination the limitation: a clock input terminal **logically directly connected to said Or gate output terminal** for generating a step output signal when said Or gate output is on and having a clock output terminal" in combination with "OR gate, a first counter, a plurality of And gates and a cycle restarting means" as called for in amended claim 9.

Id. at 5 (emphasis in original).

The amendments set forth in the 10/4/10 Notice were included in the *Ex Parte* Reexamination Certificate, issued January 11, 2011.

### *C. BCNY's Accused Product*

The parties disagree over whether the schematic diagram relied on by Defendants is representative of the circuitry in the accused products. Defendants rely on three separate diagrams: BCNY0001, BCNY0002, and BCNY0003. BCNY0001 is claimed to be a schematic diagram of a ROM chip allegedly in the BCNY circuit, whereas BCNY0002 and BCNY0003 are claimed to be schematic representations of the circuit itself in the accused products. Joseph

McAlexander, an expert witness for the Defendants, testified that BCNY0002-0003 is representative of the circuitry in the accused products. McAlexander Testimony at 34 (DE 322).

Plaintiff disclosed two expert witnesses: John “Jack” Oltman and Michael Anthony.

Referring to BCNY0001, the schematic allegedly describing the ROM circuitry depicted in the BCNY0002-0003 circuit, the following dialogue took place in the Oltman deposition:

**Q: Reading that plurality of AND gates language in the [‘858] Patent, would it immediately occur to you to use ROM circuitry to perform that function in designating circuitry to perform that function in designing circuit?**

A: You know, when I actually look at what is represented here, and I’ll be frank, I could be wrong about it. I don’t really think this is a traditional ROM. A ROM actually has memory cells. The memories are programmed and address decodes is provided, which then looks up the content of that memory cell. I believe this is just wired transistors and AND gates. I trusted, if you will, when I first looked at that, this was a ROM and a device. . . . I don’t think it is memory cells that are programmed. It is just transistors. It is not really a read only memory and providing a. It --

**Q: Just so I make sure. Why did you not think that the BCNY circuit -- Why do you think it doesn’t contain memory cells programmed?**

A: I don’t see them evident here. I just see transistors. I don’t see -- I don’t see address decode that is then drive a memory cell and look up what I would expect to see at a transistor level here. I will admit I am not a guru at looking at just transistors. I think if you look at this, it really boils down to a bunch of AND gates.

**Q: So your opinion is that what is depicted in [BCNY0001] is not really ROM circuitry. It is just a bunch of AND gates.**

A: As I would look at a ROM, a device, I would buy commercially, is a device I would get and I would put it on a programmer and I would load the contents of the memory locations. And I could do that however I wished. You know, I would burn the memory location. And then I would look them up. I don’t see the technology here in this picture that there is an actual memory cell.

Oltman Testimony, Plaintiff Exhibit “M” at 223-25. Michael Anthony expressly testified that he did not believe the ROM outlined in BCNY0001 was in the accused device. Anthony Testimony, Plaintiff Exhibit “N” at 180-81.

Finally, Defendants also cite to Proffer by Jack O’Neal. O’Neal Proffer, Plaintiff Exhibit “R”. Through his testimony, Mr. O’Neal states that a NOR gate is “an integrated combination of an OR gate plus an inverter.” *Id.* at ¶ f

#### *D. Markman Hearing*

On June 18, 2008, this Court entered its Order construing Claim 9 of the ‘858 Patent after holding a Markman hearing. DE 281. The Court incorporates its claims construction from that Order into its analysis here. The Court notes, however, that its 2008 Order construed the ‘858 Patent prior to its Amendment in 2011. Accordingly, the Court has not construed the newly added term “logically directly,” incorporated into Claim 9 of the ‘858 Patent after the Second Reexamination.

## **II. Intervening Rights**

### *A. Legal Standard*

Section 252 of Title 35 of the United States Code provides:

The surrender of the original patent shall take effect upon the issue of the reissued patent, and every reissued patent shall have the same effect and operation in law, on the trial of actions for causes thereafter arising, as if the same had been originally granted in such amended form, but in so far as the claims of the original and reissued patents are identical, such surrender shall not affect any action then pending nor abate any cause of action then existing, and the reissued patent, to the extent that its claims are identical with the original patent, shall constitute a continuation thereof and have effect continuously from the date of the original patent.

The term “identical” as used in section 252 means, at most, “without substantive change.” *Westvaco Corp. v. International Paper Co.*, 991 F.2d 735, 741 (Fed. Cir. 1993) (citing *Seattle Box Co. v. Industrial Crating & Packing*, 731 F.2d 818, 827-28 (Fed. Cir. 1984)). “[I]t is the scope of the claim that must be identical, not that the identical words must be used.” *Id.* (quoting

Slimfold Mfg. Co., Inc. v. Kinkead Indus. Inc., 810 F.2d 1113, 1115 (Fed. Cir. 1987)). However, “an amendment that clarifies the text of the claim or makes it more definite without affecting its scope is generally viewed as identical for the purpose of § 252.” Bloom Engineering Co., Inc. v. North Am. Mfg. Co., Inc., 129 F.3d 1247, 1250 (Fed. Cir. 1997).

A determination of whether the scope of a reissued claim is identical to the scope of the original claim is a question of law reviewed *de novo*. Westvaco, 991 F.2d at 741 (citing Tillotson, Ltd. v. Walbro Corp., 831 F.2d 1033, 1037 (Fed. Cir. 1987)). Such a determination requires “analysis of the scope of the original and reexamined claims in light of the specification, with attention to the references that occasioned the reexamination, as well as the prosecution history and any other relevant information.” Bloom, 124 F.3d at 1250. An amendment that results in the allowance of claims that had been rejected in the reexamination proceeding over prior art is “highly influential.” Laitram Corp. v. NEC Corp., 163 F.3d 1342, 1348 (Fed. Cir. 1998).

#### *B. Discussion*

The Court concludes that a plain reading Amended Claim 9 establishes that the Second Reexamination resulted in a substantive change to that claim. Specifically, the addition of the language “logically directly” to Claim 9 narrows the scope of the ‘858 Patent. Prior to the Second Reexamination, a clock input terminal that was **not** “logically directly” connected to an OR gate output terminal would have been included within the scope of Claim 9. The addition of the term “logically directly” imposes a new limitation on the type of connection referenced in Claim 9.

This conclusion is supported by the prosecution history of the '858 Patent. When the Patent Office rejected the '858 Patent as being obvious in 2009, the Examiner expressly stated "it is noted that the features upon which applicant relies (*i.e.*, the switch **directly** to the OR gate) are not recited in the rejected claim(s) . . . If Patent Owner feels that 'the switch connected **directly** to the OR gate' the patentable feature, this feature should be more actively claimed." 9/19/09 Final Office Action at 4 (emphasis in original). Only after the Patent Holder amended Claim 9 to include the term "logically directly" did the Patent Office allow the '858 Patent. In fact, as stated above, the Examiner held that the '858 Patent was allowable because:

none of the references of record disclose or teach alone in combination the limitation: a clock input terminal **logically directly connected to said Or gate output terminal** for generating a step output signal when said Or gate output is on and having a clock output terminal" in combination with "OR gate, a first counter, a plurality of And gates and a cycle restarting means" as called for in amended claim 9.

10/4/10 Notice at 5 (emphasis in original).

Plaintiff asserts that the added language amounts only to clarifying language, relying exclusively on the description of the Interview Summary provided by the Examiner. That description provided: "Discussed for clarifying the language of the claims to avoid the prior art of record and put case in condition for allowable. Exr. and Att. agreed upon changed. See the attached examiner's amendment." 10/4/10 Summary. This Court agrees with the rationale articulated by the United States District Court for the Central District of California in rejecting this identical argument:

Cobra relies far too heavily on the Examiner's use of the word "clarifying" in the Interview Summary, in reference to the purpose of the amendments. This word may not be read alone. In context, it is part of a sentence explaining that the amendments were "discussed for clarifying the language of the claims to avoid the

prior art of record and [to] put [the] case in condition for allowab[ility].” Taking this sentence as a whole, it is clear that the amendments not only clarified the language of Claims 7 and 9, but they altered rejected claims so that they distinguished from prior art.

Cancaribe Ltd. v. Cobra Int’l, Inc., Case No. 07-CV-041820GAV-E at \*11 (C.D. Cal. Feb. 13, 2012) (DE 90).

Accordingly, the Court Defendant’s Motion for Summary Judgment (DE 320) is **GRANTED** relative to the assertion that the Second Reexamination of the ‘858 Patent resulted in a substantive change, and was not a mere clarification.

### **III. Infringement**

#### *A. Legal Standard*

The Court may grant summary judgment “if the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law.” Fed. R. Civ. P. 56(c). The stringent burden of establishing the absence of a genuine issue of material fact lies with the moving party. *Celotex Corp. v. Catrett*, 477 U.S. 317, 323 (1986). The Court should not grant summary judgment unless it is clear that a trial is unnecessary, *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 255 (1986), and any doubts in this regard should be resolved against the moving party. *Adickes v. S.H. Kress & Co.*, 398 U.S. 144, 157 (1970).

The movant “bears the initial responsibility of informing the district court of the basis for its motion, and identifying those portions of [the record] which it believes demonstrate the absence of a genuine issue of material fact.” *Celotex Corp.*, 477 U.S. at 323. To discharge this



burden, the movant must show the Court that there is an absence of evidence to support the nonmoving party's case. *Id.* at 325.

After the movant has met its burden under Rule 56(c), the burden of production shifts and the nonmoving party "must do more than simply show that there is some metaphysical doubt as to the material facts." *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 586 (1986). According to the plain language of Rule 56(e), the non-moving party "may not rest upon the mere allegations or denials of the adverse party's pleadings," but instead must come forward with "specific facts showing that there is a genuine issue for trial." Fed. R. Civ. P. 56(e); *Matsushita*, 475 U.S. at 587.

Essentially, so long as the non-moving party has had an ample opportunity to conduct discovery, it must come forward with affirmative evidence to support its claim. *Anderson*, 477 U.S. at 257. "A mere 'scintilla' of evidence supporting the opposing party's position will not suffice; there must be enough of a showing that the jury could reasonably find for that party." *Walker v. Darby*, 911 F.2d 1573, 1577 (11th Cir. 1990). If the evidence advanced by the non-moving party "is merely colorable, or is not significantly probative, then summary judgment may be granted." *Anderson*, 477 U.S. 242, 249-50.

With regard to patent claims, the law of the Federal Circuit Court of Appeals governs the proper construction of such claims. *Absolute Software, Inc. v. Stealth Signal, Inc.*, 659 F.3d 1121, 1129 (Fed. Cir. 2011).

#### *B. Discussion*

Defendants asserts that the accused products do not infringe the '858 patent because they lack the required: (1) "OR Gate" and direct connections switch; (2) the "cycle restarting means";

and (3) the plurality of AND gates and required connections to the counter and LEDs. In response, Plaintiff challenges each of Defendants' infringement arguments and also asserts that there is a genuine question of material fact with regard to whether Defendants' alleged circuit is in the accused products.

#### 1. BCNY Circuits in the Accused Products

Preliminarily, the Court finds that there is a question of material fact with regard to whether the circuits relied on by Defendants are in the accused products. Plaintiff relies upon the testimony of Jack Oltman and Michael Anthony as creating a dispute on this question. Mr. Oltman stated that BCNY0001 is not a traditional ROM, and Mr. Anthony stated that he does not believe BCNY0001 is in the accused device. Defendants, on the other hand, relied on the testimony of Joseph McAlexander, who testified that BCNY0002-0003 is representative of the circuitry in the accused products. McAlexander Testimony at 34 (DE 322).

Defendants argue that Mr. Oltman never concluded that the BCNY schematics did not correspond to the BCNY circuit, and that the conclusions of Mr. Anthony are nothing more than unsupported speculation and conjecture that fail to raise a genuine fact issue. The Court agrees with Defendants that Mr. Oltman's testimony does not create a genuine question of material fact as to whether the BCNY circuits are in the accused products. Even if Mr. Oltman is correct that BCNY0001 does not represent a "traditional" ROM, that fact does not create a question as to whether that circuitry is in the accused product.

However, the Court rejects Defendants challenge to Mr. Anthony's testimony. In their Reply Brief, Defendants argue that Mr. Anthony "never looked under the hood to examine the actual physical circuit at issue." Reply Brief at 6. This challenge, however, goes to Mr.

Anthony's credibility, an issue the Court can not resolve on summary judgment. See *Crystal Entertainment & Filmworks, Inc. v. Jurado*, 643 F.3d 1313, 1320 (11<sup>th</sup> Cir. 2011) ("The credibility of a witness is in the province of the factfinder.")

The Court concludes that there is a genuine issue of fact with regard to whether the circuitry relied on by Defendants is representative of the circuits in the accused products. Therefore, there is a genuine question of material fact as to whether the circuitry in the accused product does infringe on the '858 Patent.

## 2. Infringement Analysis

Although the Court has determined that summary judgment on the issue of infringement is not appropriate because there is a genuine question of material fact with regard to whether the BCNY circuits are in the accused products, the Court will address the merits of the infringement arguments raised in Defendants' Motion for Summary Judgment to clarify those issues that may proceed to trial.

### **a. Legal Standard for Infringement**

"An infringement analysis is a two step inquiry. First, the court determines the scope and meaning of the patent claims asserted, and then the properly construed claims are compared to the allegedly infringing device." *Cordis Corp. v. Boston Scientific Corp.*, 658 F.3d 1347, 1354 (Fed. Cir. 2011) (quoting *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1454 (Fed. Cir.1998) (en banc)). Whether an accused product actually infringes a patent is a question of fact. *Absolute Software*, 659 F.3d at 1129-30.

Even if an accused product is determined not to literally infringe a patent, "the doctrine of equivalents prohibits one from avoiding infringement liability by making only 'insubstantial

changes and substitutions which, though adding nothing, would be enough to take the copied matter outside the claim, and hence outside the reach of law.” *Siemens Medical Solutions USA, Inc. v. Saint-Gobain Ceramics & Plastics, Inc.*, 637 F.3d 1269, 1280 (Fed. Cir. 2011) (quoting *Graver Tank & Mfg. Co. v. Linde Air Prods. Co.*, 339 U.S. 605, 607 (1950). “The ‘essential inquiry’ in any determination under the equivalents doctrine is whether ‘the accused product or process contain[s] elements identical or equivalent to each claimed element of the patented invention.’ ” *Id.* (citing *Warner–Jenkinson Co., Inc. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 40 (1997)). Insubstantially can be tested by applying the “function-way-result” test articulated in *Union Paper–Bag Mach. Co. v. Murphy*, 97 U.S. 120, 125 (1877), which asks whether an element of an accused product “performs substantially the same function in substantially the same way to obtain the same result” as an element of the patented invention. *Id.* (citing *TIP Sys., LLC v. Phillips & Brooks/Gladwin, Inc.*, 529 F.3d 1364, 1376 (Fed.Cir.2008), *Abraxis Biosci., Inc. v. Mayne Pharma (USA) Inc.*, 467 F.3d 1370, 1379 (Fed.Cir.2006)). “Equivalence,” however, “is not the prisoner of a formula and is not an absolute to be considered in a vacuum.” *Id.* (citing *Warner–Jenkinson*, 520 U.S. at 24–25). Whether a product infringes a patent based on the doctrine of equivalents is also a question of fact. *Absolute Software*, 659 F.3d at 1129-30.

The doctrine of equivalents is not without limits. “The doctrine of prosecution history estoppel prevents a patent owner from recapturing through the doctrine of equivalents subject matter surrendered to acquire the patent.” *Duramed Pharmaceuticals, Inc. v. Paddock Laboratories, Inc.*, 644 F.3d 1376, 1380 (Fed. Cir. 2011) (citing *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 734 (2002)). “Whether prosecution history estoppel applies to a particular argument, and thus whether the doctrine of equivalents is available for a particular

claim limitation, is a question of law.” *Intervet Inc. v. Merial Ltd.*, 617 F.3d 1282, 1290-91 (Fed. Cir. 2010) (citing *Bai v. L & L Wings, Inc.*, 160 F.3d 1350, 1354 (Fed. Cir. 1998)).

Finally, if during prosecution a patent holder narrows the scope of a patent in response to a prior art rejection, a presumption of prosecution history estoppel applies. *Id.* (internal citations omitted). This presumption may be rebutted by the patent holder by a showing that the alleged equivalent would have been unforeseeable at the time of the amendment and thus beyond a fair interpretation of what was surrendered. *Id.* (internal quotations omitted). “An alternative is foreseeable if it is disclosed in the pertinent prior art in the field of the invention. In other words, an alternative is foreseeable if it is known in the field of the invention as reflected in the claim scope before amendment.” *Id.* (internal quotations omitted). “Foreseeability is a question of law based on underlying issues of fact.” *Id.* (internal citations omitted).

**b. “OR Gate” and Direct Connections Switch - “OR Gate”<sup>6</sup>**

Defendants first assert that the accused products do not infringe on the ‘858 Patent because they lack an OR gate with an input connected to a switch and an output connected to the clock as required by claim 9. “Instead,” Defendants argue, “in the BCNY circuit the switch is connected to a NAND gate while the clock enable signal is generated by an entirely separate NOR gate.” Motion at 12.

**i. Literal Infringement**

The Court construed an OR gate to be

---

<sup>6</sup> Although Defendants combine the arguments relating to the issue of whether the accused products’ alleged lack of a specific type of “OR Gate” and the issue of a lack of a “direct connection,” for clarity, the Court addresses each argument independently.

a specific type of logic circuit where the output from the circuit is “off” or “false” whenever all inputs to the circuit are “off” or “false,” and where the output from the circuit is “on” or “true” where at least one of the inputs from the circuit is “on” or “true.” The OR gate also has input terminals and an output terminal.

DE 281, Markman Order at 6. The Court stated that it rejects “Plaintiff’s contention that the term OR gate in this claim should be construed to mean any logic gate.” Id.

Plaintiff responds to Defendants’ argument by claiming that “a NOR gate plus an inverter is equal to an OR gate.” Response at 13. Essentially, Plaintiff is arguing that Defendants’ logical gates are the functional equivalent of Claim 9, but do not argue that the BCNY circuit literally infringes claim 9 by having the same exact “OR” gate. Accordingly, the Court concludes that there is no question of fact with regard to whether there is literal infringement on this issue.

#### ii. Doctrine of Equivalents

Defendants argue that Plaintiff is “precluded from arguing that either the NOR gate or the NAND gate in the BCNY circuit is equivalent to the claimed OR gate [Plaintiff] repeatedly relied on the expressly claimed ‘OR gate’ to distinguish the claimed invention from the prior art in the First Reexamination.” Motion at 12.

The Court rejects this argument. In response to the Patent Office’s first reexamination, Plaintiff did distinguish the ‘858 Patent from prior art because of its use of an “OR gate.” However, Plaintiff has presented the testimony of Mr. O’Neal which raises a question of fact as to whether the logic gates used in Defendants’ circuit, specifically a NOR gate with an inverter, is the functional equivalent to the “OR gate” described in Claim 9. Although it would be improper for Plaintiff to argue that any logic gate is the functional equivalent of the “OR gate” described in Claim 9, a genuine question of material fact exists with regard to whether the

specific gate used in the BCNY circuit is the functional equivalent of the “OR gate” described in Claim 9. Accordingly, summary judgment on this issue is not appropriate.

**c. “OR Gate” and Direct Connections Switch - “OR Gate”**

Defendants also argue that there is no infringement because the required connections are absent. Specifically, Defendants argue that the switches are not directly connected to the logic gate in question. Although the Court has determined that the Second Reexamination narrowed the scope of the ‘858 Patent by adding the term “logically directly” to Claim 9, Plaintiff properly notes that the Court has not construed that term. The Court cannot grant relief to Defendants as a matter of law over a term that it has not yet construed, and the Court will not construe that term without briefing from the parties on the matter. Accordingly, the Court reserves judgment on this issue as to both literal infringement and infringement under the doctrine of equivalents until the Court construes the term “logically directly.”

**d. “Cycle Restarting Means”**

Defendants next assert that the BCNY circuit does not infringe the ‘858 Patent because it does not have a “cycle restarting means.” In its Markman Order, the Court construed the term “cycle restarting means” by stating:

This element is construed as a means-plus-function in accordance with 35 U.S.C. § 112(6) because the claim does not recite definite structure which performs the described function.

The function of the cycle restarting means is to restart the cycle so that a signal will be generated to reactivate the clock such that the counting and lighting cycle begins again. The cycle is a complete count of all the numbers that can be output from the first counter and the corresponding flashing pattern generated by the plurality of And gates.

The structure disclosed in the specifications that performs this function consists of: the second counter, which is connected to its input terminal by the output terminal of and driven by the output from the counter controlling And,

which second counter is connected by its output terminals to the input terminals of the cycle restarting And gate, and which cycle restarting And gate is connected by its output terminal to the second of the input terminals of the OR gate.

Markman Order at 10-11.

i. Legal Standard

“[F]or an accused structure to literally meet a section 112, paragraph 6 means-plus-function limitation, the accused structure must either be the same as the disclosed structure or be a section 112, paragraph 6 “equivalent,” *i.e.* (1) perform the identical function and (2) be otherwise insubstantially different with respect to structure.” *Kemco Sales, Inc. v. Control Papers Co., Inc.*, 208 F.3d 1352, 1364 (Fed. Cir. 2000) (citing *Odetics, Inc. v. Storage Tech. Corp.*, 185 F.3d 1259, 1267 (Fed. Cir. 1999)). “Under a modified version of the function-way-result methodology described in *Graver Tank & Manufacturing Co. v. Linde Air Products Co.*, 339 U.S. 605 (1950), two structures may be ‘equivalent’ for purposes of section 112, paragraph 6 if they perform the identical function, in substantially the same way, with substantially the same result.” *Id.* (citing *Odetics*, 185 F.3d at 1267).

“If an accused structure is not a section 112, paragraph 6 equivalent of the disclosed structure because it does not perform the identical function of that disclosed structure and hence does not literally infringe, it may nevertheless still be an ‘equivalent’ under the doctrine of equivalents.” *Id.* “Thus, if one applies the traditional function-way-result test, the accused structure must perform substantially the same function, in substantially the same way, to achieve substantially the same result, as the disclosed structure.” *Id.* (citing *Dawn Equipment Co. v. Kentucky Farms Inc.*, 140 F.3d 1009, 1016 (Fed. Cir. 1998)). “A key feature that distinguishes ‘equivalents’ under section 112, paragraph 6 and ‘equivalents’ under the doctrine of equivalents



is that section 112, paragraph 6 equivalents must perform the identical function of the disclosed structure, while equivalents under the doctrine of equivalents need only perform a substantially similar function.” *Id.* (internal citations omitted).

i. Literal Infringement

The Court concludes that Plaintiff has failed to raise a genuine issue of material fact as to whether the circuit contained in the accused products perform an **identical** function as the circuit described in Claim 9. In construing “cycle restarting means”, this Court held that the structure disclosed in the specifications that performs this function consists of, at least in part, a **second** counter. *Markman Order* at 11. Plaintiff has failed to present any record evidence suggesting the existence of a **second** counter in the accused products. Although Plaintiff presented testimony that may give rise to a question of fact as to whether the circuit in the accused products perform a substantially similar function to the schematic described in Claim 9, the Court concludes that Plaintiff’s failure to identify a second counter in the accused products precludes a finding of infringement with regard to the “cycle restarting means.”

ii. Doctrine of Equivalents

Although the Court finds, as a matter of law, that there is no literal infringement relative to the cycle restarting means, the Court does conclude that there is a question of material fact with regard to the doctrine of equivalents on this issue. Unlike literal infringement, Plaintiff need only raise a question of fact as to whether the accused products perform a substantially similar, as opposed to identical, function. *Kemco*, 208 F.3d at 1364. The Court concludes that the testimony of Mr. Oltman meets this threshold. Defendants assert that “[i]nstead of restarting the first counter cycle several times . . . the BCNY circuit provides an extended lighting sequence

in an entirely different way by using part of the cycle from a single large counter to reference . . . up to 128 lighting patterns stored in a ROM.” Motion at 15. Mr. Oltman testified that he did not believe the BCNY circuit utilized a traditional ROM, undermining how Defendants assert the BCNY circuit functions. See Oltman Testimony at 223-25. By challenging the structure and function of the BCNY circuit, the Court concludes that Plaintiff has raised a genuine issue of material fact under the doctrine of equivalents.

**e. Plurality of AND Gates and Required Connections to the Counter and LEDs**

Finally, Defendants assert that the BCNY circuit does not infringe the ‘858 Patent because it lacks a “plurality of AND gates” connected between the LEDs and a two-bit counter. In construing the portion of Claim 9 describing “a plurality of AND gates, including a counter controlling AND gate, each said AND gate having AND gate input terminals and an AND gate output terminal,” this Court held:

These limitations are also construed according to their ordinary meaning by one skilled in the art. There are at least two AND gates, one of which performs the function of controlling the second counter which is part of the cycle restarting means. An AND gate is a logic gate with an output terminal that is “off” or “false” when any one of its input terminals is “off” or “false.” The Court concludes that the patent’s inclusion of inverters, described in the patent as “a distinctive nipple configuration,” are separate structures from the AND gate and do not alter the manner in which the AND gates operate or function. The inverter alters the condition of the input before it interacts with the AND gates.

The Court rejects Plaintiff’s assertion that, at this stage of the proceedings, the Court should interpret “plurality of AND gates” to include logic gates.” In this regard, Plaintiff essentially is asking the Court to make a premature determination of equivalency.

Markman Order at 8-9.

The Court finds there are genuine questions of material fact as to both literal infringement and the doctrine of equivalents on this aspect of the patent. Mr. Oltman explicitly stated that he believed the ROM chip in the BCNY circuit, which is connected to the LED lights, is “just wired transistors and AND gates.” Oltman Testimony at 223. Accordingly, there is a question as to whether the alleged ROM chip in the BCNY circuit satisfies the definition of a “plurality of AND gates” as defined in the Court’s Markman Order. Further, the Court finds that Mr. Oltman’s testimony also raises a genuine question of fact under the doctrine of equivalents.

#### **IV. Conclusion**

For the foregoing reasons, it is hereby **ORDERED AND ADJUDGED** that Plaintiff’s Motion for Summary Judgment (DE 320) is **DENIED IN PART** and **GRANTED IN PART**. Those portions addressing Defendants’ intervening rights are **GRANTED**, whereas those portions addressing infringement are **DENIED**. The parties are further **ORDERED** to issue a joint scheduling report with regard to the Markman hearing addressed in section III of this Order within 30 days of the date of this Order. Finally, Defendants Request for Oral Argument (DE 347) is **DENIED AS MOOT**.

**DONE AND ORDERED** in Chambers at West Palm Beach, Palm Beach County, Florida, this 27<sup>th</sup> day March, 2012.



---

KENNETH A. MARRA  
United States District Judge

Copies to:  
Counsel of record