

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF PENNSYLVANIA**

CARNEGIE MELLON UNIVERSITY,)	
)	
Plaintiff,)	
v.)	Civil Action No. 2:09-cv-00290-NBF
)	
MARVELL TECHNOLOGY GROUP, LTD.,)	
and MARVELL SEMICONDUCTOR, INC.,)	
)	
Defendants.)	

**PLAINTIFF CARNEGIE MELLON UNIVERSITY’S MEMORANDUM IN
OPPOSITION TO MARVELL’S MOTION FOR JUDGMENT ON
LACHES**

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I. INTRODUCTION

Marvell's Motion for Judgment on Laches improperly invokes equitable principles to shield Marvell from the full consequences of its own willful infringement. The undisputed facts show that Marvell is not entitled to equitable relief. Those undisputed facts include: (1) Marvell's infringement did not begin until March 2001; (2) CMU did not have actual knowledge of Marvell's infringement prior to discovery in this litigation; and (3) CMU could not have discovered Marvell's infringement through pre-litigation testing of Marvell's products. To avoid the result dictated by these and other facts, Marvell relies upon several premises, including: (1) CMU should have known of Marvell's infringement almost instantaneously, in May 2001; (2) CMU had a duty to question Marvell directly about its activities; and (3) if questioned, Marvell would have disclosed its infringing conduct to CMU and/or refrained from investing in the infringing technology. The evidence and case law expose these premises as false.

Even if Marvell could carry its burden of establishing unreasonable delay and prejudice, the equities still favor CMU. Marvell consciously copied CMU's invention, failed to secure an opinion of counsel, gave inconsistent trial testimony about the operation of its chips and had no objectively reasonable infringement defense. Marvell's unclean hands prevent it from invoking an equitable defense to limit (by \$620 million) the damages that it owes to CMU.

II. FACTUAL BACKGROUND

The facts pertinent to Marvell's Motion include the following:

- CMU's '839 patent issued on March 13, 2001. Marvell Finding of Fact ("Marvell FF") ¶ 9.
- On March 16, 2001, Marvell first infringed when Mr. Burd simulated the "Kavcic method" covered by the '839 patent.¹ CMU Finding of Fact ("CMU FF") ¶¶ 3-4.
- On March 23, 2001, Mr. Burd reported that his initial work with "Kavcic's media noise detector" was "disappointing." Marvell FF ¶ 10.

¹ The '180 patent did not issue until August 20, 2002, so the laches clock on it cannot start earlier than that date.

- On May 16, 2001, Drs. Moura and Kavcic met with Dr. White and others at CMU to discuss strategies to promote the newly-granted '839 patent to the hard disk drive industry. CMU FF ¶¶ 17-22.
- On May 17 and 30, 2001, Dr. White wrote to DSSC members Seagate and IBM, informed them of the '839 patent and requested they consider adopting the technology *in the future*. *Id.* ¶¶ 24-26.
- As of June 12, 2001, Mr. Burd was working on a non-linear single bit post-processor to address media noise. *Id.* ¶ 6. Marvell abandoned this approach. *Id.* ¶ 7.
- By December 28, 2001, Mr. Burd had outlined his infringing “KavcicPP” media noise detector. *Id.* ¶ 8.
- On January 3 and 4, 2002, Mr. Burd warned Marvell officers that CMU had patented the “Kavcic detection scheme.” *Id.* ¶¶ 9-10. Despite these warnings, Marvell did not secure a legal opinion concerning its exposure to CMU’s patents. *Id.* ¶ 11.
- On August 29, 2002, Marvell shipped the first engineering samples of its MNP detectors to customers. *Id.* ¶ 16.
- On April 3, 2003 (less than six years before CMU sued), Dr. Kavcic told Dr. Moura that he had heard “chip vendors are building chips EXACTLY as you said in your autoregressive noise paper.” *Id.* ¶ 29. Marvell was identified as one company building such chips. Neither Drs. Kavcic and Moura nor CMU had access to information that could be used to verify these rumors. *Id.* ¶¶ 30-32.
- On April 10, 2003, CMU asked Dr. Mark Kryder, the CTO of Seagate, whether he could confirm the rumors heard by Dr. Kavcic. *Id.* ¶ 33.
- Dr. Kryder consulted with Seagate’s signal processing expert and reported back to CMU on April 11, 2003 that Seagate was “not aware of anyone utilizing the claims in the Kavcic-Moura patent.” *Id.* ¶¶ 34-35. In addition to dispelling the rumors, Dr. Kryder wrote that “[e]ven before Kavcic and Moura filed their patent, there had been work by others on signal dependent noise. Hence, their patent does not read on every implementation of channels that are designed for signal dependent noise.” *Id.* ¶ 35. Dr. Kryder further confirmed that it would be very difficult to determine how a chip manufacturer’s circuits work. *Id.* ¶¶ 37-38. Accordingly, Dr. Kryder suggested that CMU send copies of the patents “to relevant people” at each company. *Id.* ¶ 39.
- On August 5, 2003, CMU sent letters to companies in the chip industry, including to Marvell’s CTO Pantas Sutardja (brother of CEO Sehat Sutardja) and Marvell’s general counsel. *Id.* ¶¶ 42-43. In the letter, CMU enclosed copies of the patents and told Marvell that CMU was willing “to work with you to negotiate a license... if that would be of interest to you.” *Id.* Marvell never responded to CMU’s letters. *Id.* ¶ 44. Marvell gave CMU no reason to believe it was even interested in CMU’s patents, much less that it was already infringing them. Despite CMU’s notice, Marvell again did not secure a legal opinion concerning its exposure to CMU’s patent. *Id.* ¶ 46.
- On November 11, 2004, Fujitsu requested Marvell’s “opinion regarding relationship between CMU’s Patents” and Marvell’s read channels – the 5575M and 7500M – and “the specific grounds/reasons for such opinion.” *Id.* ¶ 48. Marvell never answered

Fujitsu's letter, further hiding its infringement. *Id.* ¶ 49. Despite Fujitsu's inquiry, Marvell did not secure a legal opinion concerning CMU's patents. *Id.* ¶ 50.

- On August 16, 2005, Marvell's '585 patent issued and was published for the first time. *Id.* ¶ 64. Marvell did not publicly describe the contents of the pending application or of the patent itself prior to its issuance. *Id.* ¶¶ 64-65.
- In 2006, Dr. Kavcic became aware of and reviewed Marvell's '585 patent. *Id.* ¶ 70.
- Between 2006 and 2008, CMU, through the Office of General Counsel, performed an evolving analysis of the CMU patents. *Id.* ¶ 72.
- On March 6, 2009, CMU filed suit against Marvell. Marvell FF ¶ 1.
- Since CMU filed suit, Marvell has continued to sell its MNP-type and NLD-type chips and has no plans to redesign them so as not to infringe. CMU FF ¶¶ 73-75, 84-85.

III. ARGUMENT

A. Marvell Cannot Prevail Regardless of the Applicable Legal Standard

Marvell brings its Motion under Rule 52(c) while expressly requesting "judgment as a matter of law," which is authorized only under Rule 50. Dkt. 804 at 4 n.2 and *id.* at 5. Courts have considered motions for judgment of laches under both Rule 50 and Rule 52. *See, e.g., State Contracting & Eng'g Corp. v. Condotte Am., Inc.*, 346 F.3d 1057, 1065 (Fed. Cir. 2003); *TGIP, Inc. v. AT&T Corp.*, 527 F. Supp. 2d 561, 568, 582-83 (E.D. Tex. 2007); *I/P Engine, Inc. v. AOL, Inc.*, No. 2:11-cv-512, 2012 WL 5880265 at *1 (E.D. Va. Nov. 20, 2012). The Court should deny Marvell's Motion regardless of which rule applies.²

B. Marvell Is Not Entitled to a Laches Presumption

To establish a factual predicate for laches, Marvell has the burden to prove *both* that "plaintiff delayed filing suit an unreasonable and inexcusable length of time after [it] knew or reasonably should have known of its claim against the defendant *and* that the delay resulted in material prejudice to the defendant." *State Contracting*, 346 F.3d at 1065 (emphasis added).

² Under Rule 50, the court "must ... 'draw all reasonable inferences in favor of the nonmoving party, and ... may not make credibility determinations or weigh the evidence.'" *TGIP*, 527 F. Supp. 2d at 569 (laches case). "[U]nder Rule 52(c), the Court does not 'draw any inferences in the nonmovant's favor.... Instead, the court's task is to weigh the evidence, resolve any conflicts in it, and decide for itself where the preponderance lies.'" *EBC, Inc. v. Clark Bldg. Sys., Inc.*, No. 05-1549, 2008 WL 4922107 at *4 (W.D. Pa. Nov. 13, 2008).

The law affords infringers a rebuttable presumption that the patentee's delay was unreasonable and prejudicial, but *only if* the infringer shows that the patentee knew or should have known of the infringement more than six years prior to filing suit—here, March 6, 2003. *See, e.g., Ultimex Cement Mfg. Corp. v. CTS Cement Mfg. Corp.*, 587 F.3d 1339, 1349-50 (Fed. Cir. 2009).

If a patentee knows facts that would “put upon a man of ordinary intelligence the duty of inquiry,” the patentee is “chargeable with such knowledge as he might have obtained upon inquiry.” *Adv. Cardiovascular Sys., Inc. v. SciMed Life Sys., Inc.*, 988 F.2d 1157, 1162 (Fed. Cir. 1993). Where, however, the facts known to the patentee do not establish a duty of inquiry, or where the patentee satisfies its duty but does not or could not discover the infringement, constructive knowledge does not exist and the laches clock does not start ticking. *See id.; see also Wanlass v. Fedders*, 145 F.3d 1461, 1467 (Fed. Cir. 1998).

In this case, Marvell is not entitled to a laches presumption. Marvell does not even attempt to argue that CMU ever had actual pre-suit knowledge of Marvell's infringement. Instead, Marvell argues that CMU *should have known* of Marvell's infringement as of May 2001 because of: (1) a 1998 email between Dr. Kavcic and a Marvell employee, (2) a May 2001 meeting regarding licensing the '839 patent, and (3) hindsight application of the “must have” evidence that CMU introduced at trial. Marvell's argument is illogical on its face and contradicts its own view of this same evidence.

1. Dr. Kavcic's 1998 email exchange with Marvell does not show that CMU had a duty of inquiry let alone constructive knowledge.

Marvell did not begin infringing *until March 2001*, *see* CMU FF ¶¶ 3-4, so it is legally and factually impossible for CMU to have had constructive knowledge of Marvell's infringement in *1998* – the date of Dr. Kavcic's email to Marvell's Nersi Nazari. As a matter of law, the laches period cannot begin to run until the patent issues *and* infringement begins. *See, e.g.,*

Meyers v. Brooks Shoe, Inc., 912 F.2d 1459, 1462 (Fed. Cir. 1990) (overruled in part on other grounds by *A.C. Aukerman Co. v. R.L. Chaides Constr. Co.*, 960 F.2d 1020, 1038-39 (Fed. Cir. 1992); *Beam Laser Sys., Inc. v. Cox Commc'ns, Inc.*, 144 F. Supp. 2d 464, 469-70 (E.D. Va. 2001). Furthermore, as a factual matter, Dr. Kavcic testified that he did **not** believe that Marvell was working on signal dependent noise in 1998, and that in 1999, Dr. Nazari told him that Marvell was **not** using his approach. CMU FF ¶¶ 1-2. CMU had no duty to inquire further.

2. *Dr. Moura's 2001 meeting notes do not show that CMU had a duty of inquiry let alone constructive knowledge.*

Marvell's second constructive knowledge argument rests on mischaracterizing Dr. Moura's May 2001 meeting notes. Dkt. 804 at 9. Contrary to Marvell's current argument regarding the meaning of these notes,³ they, in fact, show that CMU did not know facts that would give rise to a duty to inquire further.

First, Dr. Moura's notes show that CMU was brainstorming only about "how to influence manufacturers – what it would take to **change chip**" and **adopt** CMU's invention:

Identify licensees...Usually companies interested – not disk manufacturers since they don't manufacture chips, except IBM, but buy from: Integr-Circuits, Marvel [sic], TI, Lucent, Infineon, SD Microelectronics, EMC as well, and any other company that makes chips.... Even though disk manufacturers don't make their chips we should contact them. Chip manufacturers will make whatever they <recording industry> want them to do.

CMU FF ¶¶ 17-18; *see also id.* ¶ 22 ("Industry – moves together, one company goes from peak detector to Viterbi, they all go; **a viable strategy is to convince IBM and Seagate.**"). While the notes mention Marvell as a potential licensee, they **nowhere** mention Marvell (or any other party) as a potential infringer.⁴

³ Marvell argued at closing that Dr. Moura's May 16, 2001 notes in conjunction with the follow-on May 17 and 30 letters proved that **as of May 2001 CMU knew that no one was using the CMU invention**: "And we see that in 2001 through this DSSC, they're pushing these guys to actually use the darn thing." CMU FF ¶¶ 23, 27. Marvell should not now be heard to argue that this same evidence proves that CMU believed Marvell was infringing.

⁴ Apart from including Marvell in the list of potential licensees on the first page, the notes reference Marvell one

Ignoring the notes as a whole, Marvell cherry-picks fifteen words from four pages as “evidence” that CMU should have known of Marvell’s infringement. Dkt. 804 at 9. When read in context, it is clear that no one at the meeting was discussing Marvell (or anyone) as a potential infringer. To the contrary, they show, at most, that Dr. Kavcic believed that companies might be trying to *avoid* infringement by “working around” the patent—not that the industry, and certainly not any specific company, was or might be *committing* infringement. The contemporaneous follow-on letters that CMU sent to Seagate and IBM for the purpose of generating *future* industry interest in the technology show that Marvell mischaracterizes these notes as evidence that CMU suspected Marvell was already infringing. *See, e.g., id.* ¶¶ 24-26 (“The DSSC believes this [invention] could have an impact on magnetic recording. *For this to happen, the major drive manufacturers must adopt it.*”).

Second, Marvell’s misinterpretation of the May 2001 notes is further predicated on misreading Dr. Moura’s testimony. According to Marvell, Dr. Moura testified that he found a document on the web *in 2001* indicating “that Marvell was building chips to tackle media noise as described” in the inventors’ papers. Dkt 804 at 10, ln.6-8 (citing 11/29/12 Tr. at 95:1-14). Dr. Moura’s cited testimony, however, relates to an *April 2003* email (DX-212), *not to 2001*, as the seven preceding lines of testimony show. *See* 11/29/12 Tr. at 94:19 – 95:14; 93:9-17; *see also* CMU FF ¶ 28; Marvell FF ¶ 27. Moreover, when asked at trial if he believed anyone was infringing in 2001, Dr. Moura testified, “*in 2001 it may be too early* because I think that’s – industry is very conservative. They kind of don’t say, okay, let’s switch gears. They had invested a lot in the Viterbis, *so I don’t think in 2001 that maybe industry jumped.*” CMU FF ¶ 28.

Finally, Marvell’s argument simply makes no sense. The May 16, 2001 meeting

other time, and then only to describe technology that Marvell had been looking at “three years ago” [i.e. 1998] (“turbocode,” a form of iterative). CMU FF ¶¶ 19-21. The notes do not mention media noise or signal dependent noise in connection with any discussion of Marvell.

occurred just *two months* after Mr. Burd first simulated CMU's invention with "disappointing" results. Marvell FF ¶ 10. There is no evidence that Marvell ever disclosed information about Mr. Burd's initial simulator code outside of Marvell, let alone that it did so before May 16, 2001. CMU FF ¶ 5. To the contrary, there is ample evidence that Marvell *never* shared that information and certainly would not have shared it with CMU. *Id.* ¶¶ 31-32, 52-66.⁵ On these facts, CMU could not have been on inquiry notice of Mr. Burd's activities. Further, Marvell's secrecy policy (and "paranoia"), *see infra* at 9-11, by itself precludes a finding of constructive knowledge based on these notes. *See, e.g., Eastman Kodak Co. v. Goodyear Tire & Rubber Co.*, 114 F.3d 1547, 1559 (Fed. Cir. 1997) (affirming finding of no constructive knowledge due in part "to [infringer's] policy of secrecy"); *Ultimax*, 587 F.3d at 1350 ("without access to [the infringer's] internal procedures, [patentee] could not have investigated...to determine infringement.... [and an] infringer does not escape liability merely by infringing in secret").⁶

3. CMU's Ability to Establish At Trial that Marvell Needed CMU's Technology Does Not Trigger the Laches Presumption.

Lacking a single document or any testimony to support its bid for the laches presumption, Marvell resorts to a different tactic. It argues illogically that CMU should have known of Marvell's infringement in May 2001 because CMU proved at trial that the invention was "must have" technology for Marvell and that Marvell's "suboptimal version of Kavcic's detector" infringed. This argument fails for the following reasons:

- Dr. Bajorek's "must have" opinion was grounded largely on (1) Dr. McLaughlin's opinion that Marvell had no alternatives to using the CMU inventions based on *Dr. McLaughlin's* analysis of *Marvell's unpublished, failed attempts* to address media noise and implement iterative detection in between **2000 and 2002**, and (2) Marvell's ill-conceived decision to bet the company on the "coffee warmer"

⁵ In fact, during discovery in this case, Marvell denied having such simulator code. CMU FF ¶ 59.

⁶ If, in May 2001, CMU had asked Marvell if it was infringing (CMU had no duty to do so) and Marvell responded truthfully, CMU would have learned only that Marvell's initial Kavcic simulator was "disappointing," and that Marvell had moved on to try a different solution (single bit party non-linear). CMU FF ¶ 6-7; Marvell FF ¶ 10.

iterative detector. CMU FF ¶¶ 76-81. These opinions required access to Marvell internal documents and to deposition testimony.

- The core internal Marvell “must have” documents cited by Dr. Bajorek are ***all dated no earlier than January, 2002 – seven (7) months after the May 2001 meeting relied upon by Marvell.*** See, e.g., P-285 (iterative detector is a “lost cause”); P-304 (Marvell accelerating implementation of the MNP); P-310 (the “only difference” between 5575 and 5575P is MNP); P-320 (“must have MNP in 7500 ASAP to be competitive”); P-328 (“MNP for C7500 is critical requirement for Hitachi and Fujitsu”); P-607 (in 2007, “the drives are dominated by media noise, and MNP or NLV is a must”); P-703 (MNP “helped firmly establish Marvell as the market leader”).
- CMU’s invention became an industry standard in **2005**, when perpendicular recording was commercialized. See, e.g., 12/4/12 Tr. 113-15, 226-33.
- Marvell’s reliance on the fact that the CMU’s patents disclosed the optimal media noise detector is equally misplaced. Marvell’s attempt to bootstrap this fact into CMU’s constructive knowledge of Marvell’s infringement in **2001** (see Dkt. 804 at 15-16) ignores that (1) Dr. Kryder told CMU **in April 2003** that Seagate knew of no one using CMU’s invention and that others may well be working on signal dependent noise, (2) the documents showing Marvell’s failed attempts in 2000 and 2001 to address media noise without using CMU’s invention were not produced until discovery, and (3) Dr. Moura’s testimony that 2001 was too soon for the industry to have switched. CMU FF ¶¶ 28, 35. Marvell’s hindsight argument fails.⁷

There is simply no basis to impose upon CMU constructive knowledge of Marvell’s

infringement prior to March, 2003, so Marvell is not entitled to a presumption of laches.⁸

C. **Marvell Cannot Carry its Burden to Show the Factual Predicates for Laches**

Marvell cannot show either (1) that CMU unreasonably delayed in bringing suit or (2)

⁷ Marvell’s reliance on *Comcast* is unpersuasive. See Dkt. 804 at 8,15. In *Comcast*, the court imputed constructive knowledge based on “Comcast’s open and notorious service offerings combined with [patentee’s] expansive view of the scope of its patent rights...” *Comcast Cable Comm’n’s Corp. v. Finisar Corp.*, No. 06-04206, 2008 WL 170672 at *5 (N.D. Cal. Jan. 17, 2008). As the court noted, Finisar’s theory of infringement meant that “Comcast infringed simply... **on the basics of the Comcast system as publicly known.**” *Id.* at *6 (emphasis added). Here, Marvell’s activities were anything but “open and notorious” (see *infra* at 9-11), and there was no way to learn that Marvell was infringing without access to Marvell’s circuit diagrams and engineers. CMU FF ¶¶ 31-32, 52-66. Finally, unlike here, Finisar did not point to evidence like Dr. Kryder’s 2003 email, that stated the relevant industry was not using its technology.

⁸ Marvell would not be entitled to a presumption under any circumstances because the evidence here raises a genuine dispute as to delay and prejudice, “bursting” the presumption. See *Hemstreet v. Computer Entry Sys. Corp.*, 972 F.2d 1290, 1293 (Fed. Cir. 1992) (“*Hemstreet II*”) (presumption is not applicable when patentee introduced evidence that raises a genuine dispute as to **either** delay or prejudice).

that any delay caused Marvell material prejudice. *State Contracting*, 346 F.3d at 1065.

I. Marvell cannot show that CMU unreasonably delayed filing suit.

Apart from its reference to May 2001, Marvell identifies no other date upon which it contends the laches clock starts to tick. Instead, Marvell simply recites various events after May 2001. None of those post-May 2001 events supports a finding of unreasonable delay.

a. Marvell's Secrecy Precludes a Finding of Constructive Knowledge and Unreasonable Delay.

While the laches analysis focuses first on the patentee's conduct, "the infringer's activities are relevant to whether the patentee's conduct was reasonable, including the infringer's efforts to maintain the secrecy of its processes.... ***An infringer cannot cloak its activities in secrecy and simultaneously accuse the patent holder of failing to... protect its rights.***" *Union Carbide Chems. & Plastics Tech. Corp. v. Shell Oil Co.*, No. 99-cv-274, 2004 WL 1305849 at *18 (D. Del. June 9, 2004) (emphasis added), *rev'd in part on other grds.*, 425 F.3d 1366 (Fed. Cir. 2005). Imputing constructive knowledge is improper when the infringement is "in secret," and cannot be determined through testing even if the time between patent issuance and filing of a lawsuit is ***more than*** six years. *Eastman Kodak*, 114 F.3d at 1559; *Ultimax*, 587 F.3d at 1350.

The evidence overwhelmingly establishes that (1) CMU could not have detected Marvell's infringement by testing chips, and (2) Marvell never would have told CMU how its chips worked. CMU FF ¶¶ 31-32, 52-66. Marvell's secret infringement precludes a finding of constructive knowledge and unreasonable delay in this case – at least as to any point in time prior to the issuance of the '585 patent. *See Eastman Kodak*, 114 F.3d at 1559; *Fromson v. Western Litho Plate & Supply Co.*, 670 F. Supp. 861, 864, 868-69 (E.D. Mo 1987) (finding no laches where infringer "deliberately sought to conceal" its infringement for years even though—unlike here—testing for infringement was possible during some of those years), *vac'd in part on other grounds*, 853 F.2d 1568, 1571-72 (Fed. Cir. 1988) (affirming finding of no laches).

Ignoring its secrecy policy and practices and the impossibility of detecting infringement through testing, Marvell resorts to pure speculation. It now self-servingly claims that, if CMU had just asked Marvell how its chips worked, Marvell would have provided the information necessary to permit CMU to evaluate its claims. Dkt. 804 at 12. The record conclusively demonstrates that Marvell's post-hoc speculation is not credible.⁹ For example:

- Marvell discovered CMU's patents on its own in January 2002, ignored warnings from its own engineer that "Kavcic's detection scheme is patented," and proceeded to infringe without (1) reading the patent claims or file history; (2) getting an opinion of counsel or (3) contacting CMU. CMU FF ¶¶ 9-14.
- Knowing of Burd's use of the "Kavcic detection scheme," Marvell refused to respond *at all* to what it characterizes as a "friendly" letter from CMU inquiring about its interest in the patents. *Id.* ¶¶ 44-47. Marvell now asks this Court to credit its post-hoc conjecture that it would have responded honestly to a more assertive letter.
- In November 2004, Fujitsu wrote precisely the type of more assertive letter that Marvell now claims CMU should have written—that is, a letter (1) identifying CMU's patents, (2) identifying Marvell products that they might cover, and (3) requesting an "opinion" as to how Marvell's chips differed from CMU's patents. Despite the fact that the letter came from its own customer (as opposed to the patent owner), Marvell did not respond. *Id.* ¶¶ 48-51. Given Fujitsu's and Marvell's common interest, Marvell's silence renders incredible Marvell's conjecture that it would have responded honestly to a similar letter from CMU.
- The testimony at trial was unambiguous: Marvell kept the inner workings of its chips a closely guarded secret. Indeed, Dr. Wu compared the workings of Marvell's chips to the secret formula for Coca-Cola, while Dr. Sutardja confirmed that it is extremely difficult to determine what is going on inside the chips and that Marvell is "paranoid" about secrecy. CMU FF ¶¶ 31-32, 52-66.
- Dr. Wu erased any doubts about the prospects of a candid response to a CMU inquiry by testifying that he *never* told Dr. Kavcic that Marvell had named a detector after him and would not have told Dr. Kavcic or CMU what was in Marvell's circuits. *Id.*¹⁰

⁹ In addition to its lack of credibility, CMU demonstrates in a Motion to Strike Certain Paragraphs of the Sutardja and Wu Declarations that Marvell's "evidence" on this point is inadmissible.

¹⁰ Marvell's evasiveness during the pendency of this case destroys any claim that Marvell would have honestly cooperated with a CMU pre-suit inquiry. For example, during discovery, Marvell tried to hide its simulator code and both its and its customers' firmware. *See* CMU FF ¶ 59. At trial, when Dr. Wu realized that his admission that claim 1 of Marvell's '585 patent covers the MNP undercut Marvell's infringement defense, he immediately

CMU is chargeable only with the knowledge that a reasonable inquiry would have produced—here, none. On the basis of its own secrecy, Marvell cannot show that CMU should be charged with constructive knowledge of Marvell’s infringement or that it unreasonably delayed in bringing suit. *See Eastman Kodak*, 114 F.3d at 1559; *Fromson*, 670 F.Supp at 864, 868-69.

b. CMU Had No Duty to Contact Marvell.

Marvell’s argument that CMU was under a duty of inquiry that required it to contact Marvell and inquire about how its circuits work, Dkt. 804 at 6, is flawed for two reasons.

First, setting aside the evidence that Marvell never would have cooperated with CMU, courts have soundly rejected the illogical proposition that a patentee must ask an infringer to confess infringement:

It is said [plaintiff] ought to have inquired of [the defendants], or some of them... and that his failure to do so was negligence on his part. It seems to us that *the unreasonableness of expecting [the defendants]... to voluntarily give self-inculcating evidence, excused any effort to induce them to do so*. Their personal interest, the strongest of human motives, impelled them not to do so, and any attempt to secure from them information which would necessarily expose them to civil liability... would, in our opinion, be not only an unreasonable requirement, but one which might have thwarted any ultimate discovery. *In such circumstances we cannot regard the failure to do so as fatal laches*.

Cunningham v. Pettigrew, 169 F. 335, 343 (8th Cir. 1909) (emphasis added); *Aukerman*, 960 F.2d at 1039 (“a notice requirement is not to be rigidly imposed”);¹¹ *Hemstreet II*, 972 F.2d at 1293 (although “prior precedent could be read to require explicit notice to the defendant.... *Aukerman* has clarified that this is far from a hard and fast requirement”). The unreasonableness of imposing any duty on CMU to direct additional inquiries to Marvell is particularly apparent here in view of Marvell’s “paranoia” about secrecy detailed above and the compelling evidence of Marvell’s willful infringement, (*see* Dkt. 793), which led the jury to find by clear and

contradicted his own prior trial testimony. *Id.* ¶¶ 68-69. If a Marvell vice president could not respond honestly under oath in front of a jury, this Court should not credit Marvell’s after-the-fact conjecture that it would have honestly admitted infringement if CMU had just asked.

¹¹ On this point, the court specifically distinguished the *Jamesbury* case Marvell cites. *Aukerman*, 960 F.2d at 1038.

convincing evidence that Marvell lacked an objectively reasonable defense to infringement.

Second, Marvell cites no authority to support its claim that contacting a defendant is *required* to avoid a finding of laches; rather, Marvell cites cases that merely held that such contact was *sufficient*. Dkt. 804 at 6-7 (citing *Aguayo v. Universal Instrum. Corp.*, 356 F. Supp. 2d 699, 751 (S.D. Tx. 2005); *Fromson v. Citiplate, Inc.*, 699 F. Supp. 398, 402-03 (E.D.N.Y. 1988)); *see also id.* at nn.4, 5 (citing other cases finding such contact sufficient). Furthermore, Marvell’s reliance on *Crown Packaging*, Dkt. 804 at 7, is misplaced because in *Crown*, unlike here: (1) there was “no evidence” the infringer had *any* policy of secrecy, and (2) there was not even a contention—much less, as here, ample evidence—that the infringer would not have responded to inquiries from the patentee or would not have responded honestly. *See Crown Pkg. Tech., Inc. v. Rexam Beverage Can Co.*, 679 F. Supp. 2d 512, 525 (D. Del. 2010).¹² Marvell’s assertion that CMU was required to contact it a second time and pointedly request access to its internal documents and engineers fails on the law and the facts.¹³

c. CMU undertook a reasonable investigation after hearing rumors in 2003.

While Marvell’s secrecy policy and practices scuttle Marvell’s claim of constructive knowledge and unreasonable delay, CMU nonetheless took affirmative, reasonable steps to

¹² Marvell cites three other district court opinions, *Cedarapids*, *Hemstreet* and *Jones*, but ignores two critical facts: (1) these three cases do not address the duty of inquiry, but rather the notice requirements (if any) imposed on patentees who are subject to the six-year presumption and seek to excuse their delay on the grounds that they were involved in other litigation; and (2) both *Cedarapids* and the Federal Circuit’s opinion in the appeal of *Hemstreet* contradict Marvell’s claim that the law imposes a duty on plaintiffs to contact defendants. *See Hemstreet II*, 972 F.2d at 1293 (although “prior precedent could be read to require explicit notice to the defendant.... *Aukerman* has clarified that this is far from a hard and fast requirement”); *Cedarapids, Inc. v. CMI Corp.*, No. 98-110, 2000 WL 34030837 at *3, *4 n.5, *8-9 (N.D. Iowa Nov. 2, 2000) (rejecting infringer’s argument in estoppel discussion that patentee had “a duty... to inform” the infringer “if [patentee] believed that the [accused product] infringed” and not even addressing the same argument in its subsequent laches discussion)

¹³ In contrast to this case, the particular facts and equities of the *Ferroline* case also show why the court there apparently found that the plaintiff’s duty of inquiry required it to contact the defendant. *Ferroline Corp. v. Gen. Aniline & Film Corp.*, 207 F.2d 912, 924 (7th Cir. 1953) (fact that plaintiff’s officer, who had personally *designed* certain equipment that only could be used as in plaintiff’s trade secret process, and *knew* defendant had bought that equipment, “imposed a duty on plaintiff to inquire whether defendant was employing its process”—presumably, although the court *did not* so state, by contacting the defendant).

investigate the rumors Dr. Kavcic heard in 2003. Those rumors cannot be the basis for a finding of unreasonable delay for the following reasons.¹⁴

First, the law and facts do not support Marvell's claim that "the duty of inquiry require[d]" CMU "to, at a minimum, contact" Marvell. *See supra* at 9-11; *see also Intirtool, Ltd. v. Texar Corp.*, 369 F.3d 1289, 1297-98 (Fed. Cir. 2004) (patentee is not required to police infringer's conduct based on speculative comments). Rather, if these rumors gave rise to a duty of inquiry, CMU's duty was to "make such inquiry and investigation as the circumstances reasonably suggest." *Wanlass v. Gen. Elec. Co.*, 148 F.3d 1334, 1338 (Fed. Cir. 1998). CMU did investigate the 2003 rumors, and as Marvell argued at trial,¹⁵ CMU's investigation did not substantiate them. CMU FF ¶ 40.

After CMU learned of the rumors, CMU asked Dr. Kryder whether Seagate could confirm them. *Id.* ¶ 33. As Marvell admitted at trial, after consulting with Seagate's signal processing expert in **April 2003**, Dr. Kryder informed CMU that Seagate was not aware of anyone using the patents. *Id.* ¶¶ 34-35. Dr. Kryder also told CMU that (1) others may well be working on signal dependent noise and (2) CMU should send letters to the industry advising them of the patents and inquiring about their interest in them. *Id.* ¶ 37-39. CMU did just that, including sending two letters to Marvell. Marvell did not respond. *Id.* ¶¶ 42-47. CMU's response to Dr. Kavcic's rumors, including its contact with Marvell, was reasonable and the inquiry yielded no information about Marvell's activities.

Second, CMU cannot be charged with constructive knowledge of Marvell's infringement

¹⁴ These rumors also were the basis of Dr. Kavcic's statement in his 2004 memorandum to Harvard's review committee, upon which Marvell relies. Dkt. 804 at 18-19. Thus, Dr. Kavcic's statement was not based on any additional information gleaned by him from any Marvell documents or products; which were unavailable to him (or CMU). Dr. Kavcic's belief in these rumors does not render CMU's investigation (and conduct) unreasonable.

¹⁵ At closing, Marvell argued that the correct interpretation of Dr. Kryder's April 2003 email was that a trustworthy CMU ally was telling CMU that no one was using the Kavcic-Moura detector. 12/20/12 Tr. at 82:14 – 83:10; D-Demo 17 at 54-55.

in the 2003 timeframe on any other basis. Marvell does not even attempt to claim that its infringement was “open and notorious.” *Cf. Gen. Elec.*, 148 F.3d at 1338; *Fedders*, 145 F.3d at 1467 (if infringement is not apparent from just looking at an accused device or a published description of it, even the ability to determine infringement by testing the product does not make the infringement “*open, and notorious*”). Here, it is undisputed that CMU *could not have discovered* infringement by examining or testing Marvell’s chips, and there is no evidence that Marvell published descriptions of how its circuits work. CMU FF ¶¶ 31-32, 52-66.

d. CMU did not unreasonably delay filing suit after learning of Marvell’s ‘585 patent.

In 2006, Dr. Kavcic discovered and reviewed Marvell’s ‘585 patent. CMU FF ¶ 70. He testified at trial that “what I’m seeing here” in the ‘585 patent is “how *their patent* to work actually practices our invention.” *Id.* (emphasis added).¹⁶ CMU did not unreasonably delay in filing suit after learning of Marvell’s patent for at least the following reasons.

First, ownership of a patent is not proof of use of the patent. *Id.* ¶¶ 66-67.¹⁷ Marvell does not mark its chips with its patent numbers. *Id.* Thus, CMU’s knowledge of Marvell’s patent did not place CMU on constructive notice of Marvell’s infringement. At most, it gave rise to a duty to investigate, which CMU satisfied. Between 2006 and 2008, CMU performed an “evolving” analysis of the CMU patents. *Id.* ¶ 72. While Marvell now faults CMU for not filing suit upon discovery of the ‘585 patent in 2006, *see* Dkt. 804 at 1, the law does not require CMU to “shoot first and ask questions later.” Marvell cites no authority imposing such an obligation.

¹⁶ Marvell illogically asserts that the ‘585 patent cannot be evidence of its infringement of CMU’s patents. *See* Dkt. 804 at 14. This assertion is baseless. A patent grants the right to exclude but not a right to practice the invention. *See, e.g.*, 35 U.S.C. § 154(a)(1); *Bio-Tech Gen. Corp. v. Genentech, Inc.*, 80 F.3d 1553, 1559 (Fed. Cir. 1996). In other words, Marvell’s ‘585 patent is not a “permission slip” to use CMU’s invention, *see* 12/3/12 Tr. at 47:6-14, and in fact, may be circumstantial evidence of infringement. *See In re Kaplan*, 789 F.2d 1574, 1577 (Fed. Cir. 1986) (device practicing second patent can infringe earlier patent). CMU argued at closing without objection that Marvell’s ‘585 was evidence of Marvell’s infringement. *See* 12/20/12 Tr. at 115, 119-123.

¹⁷ At trial, Marvell attempted to deny that its MNP-type chips practiced claim 1 of the ‘585 patent. *See* CMU FF ¶¶ 68-69.

Second, the period between CMU’s discovery of the ‘585 patent and the filing of CMU’s Complaint—approximately three years—is reasonable under the law. *See, e.g., Studiengesellschaft Kohle mbH v. Dart Indus. Inc.*, 549 F. Supp. 716, 759 (D. Del. 1982) (no laches where a patentee delayed only the “relatively short period” of three years and eight months). Indeed, the Federal Circuit “has pronounced a three or four-year delay unreasonable **only when that delay was accompanied by extraneous improper tactics or misleading conduct by the plaintiff.**” *IXYS Corp. v. Adv. Power Tech., Inc.*, 321 F. Supp. 2d 1156, 1163 (N.D. Cal. 2004) (emphasis added) (plaintiff told defendant “that possessing some right to the patent was unimportant to him”); *Rosemount, Inc. v. Beckman Instrum., Inc.*, 727 F.2d 1540, 1550 (Fed. Cir. 1984) (though infringer told patentee of the infringer’s Model 960B product “shortly after the complaint was filed,” patentee did not seek to add allegations that the 960B infringed until three years later)); *see also Mformation Techs., Inc. v. Research In Motion, Ltd.*, 830 F. Supp. 2d 815, 824-25 (N.D. Cal. 2011) (internal emails showing suspected infringement do not evidence “extraneous improper tactics or misleading conduct” and do not support laches after a two year and eleven month delay). Marvell has not pointed to a single fact that shows CMU **ever** engaged in any improper tactics or misleading conduct and thus, it cannot show unreasonable delay.

2. Marvell did not suffer economic or evidentiary prejudice.

Even if Marvell had proven unreasonable delay, Marvell cannot carry its burden of demonstrating either economic or evidentiary prejudice. *Aukerman*, 960 F.2d at 1033.

a. Marvell’s conduct since learning of CMU’s patents in 2002 and since litigation began precludes a finding of economic prejudice.

“Economic prejudice arises when a defendant suffers **the loss of monetary investments** or incurs damages that likely would have been prevented by earlier suit. **A nexus must be shown** between the patentee’s delay in filing suit and the expenditures;” in other words, **the “infringer**

*must change his position ‘because of and as a result of the delay.’” State Contracting, 346 F.3d at 1066 (citing Hemstreet II, 972 F.2d at 1294). An infringer **cannot show material economic prejudice** when it “knew about the patents in suit long before suit was filed” and “would not have acted differently if it had been sued earlier.” *Hearing Components, Inc. v. Shure, Inc.*, 600 F.3d 1357, 1376 (Fed. Cir. 2010). Marvell’s actions speak louder than its words on the issue of how it “would have” responded to an earlier assertion of infringement.*

Marvell’s pre-suit knowledge of CMU’s patents is well documented. Marvell discovered the patents on its own no later than January 2002, CMU informed Marvell of the patents in August 2003, and Fujitsu asked for an “opinion” concerning the patents in 2004. CMU FF ¶¶ 9-14, 42-51. Despite these numerous pre-suit notices, Marvell took no action. It did not seek a license from CMU, nor did it attempt to redesign its chips. Instead, Marvell pressed full speed ahead on development of its MNP-type chips, while admitting that it never bothered to read the claims of CMU’s patents or file histories or get an opinion. *Id.* Now, desperate to reduce the judgment, Marvell asserts that it would have ceased infringing if only CMU had spoken up about the patents that Marvell already **knew about** but **ignored**.

Marvell also has made no effort to change course in the **four years** since CMU filed suit, including the nearly three months since the verdict. Marvell now claims that if it had been sued or notified earlier it would have developed or licensed alleged alternatives such as “chips with iterative decoding that did not include NLD.” The record shows that, in the five years since installing its iterative decoder in 2008, Marvell neither removed the NLD from an existing chip that includes the iterative decoder, nor designed a new iterative chip without the NLD. CMU FF ¶¶ 82-85. Indeed, Marvell accepted multiple volume orders for MNP-type and NLD-type chips in the months after suit was filed and has **continued to participate in the sales cycle to this day**,

repeatedly infringing in order to sell its chips. *Id.*¹⁸

Consistent with a decade of unchanged business practices, Marvell's 30(b)(6) witness testified that Marvell had no plans to stop its infringing conduct. CMU FF ¶ 74. Moreover, Marvell's post-verdict public statements indicate that even now Marvell does not intend to change its infringing behavior; its only plan appears to be to hope for a reversal on appeal. *Id.* ¶ 75, 82-84. In other words, despite knowing of CMU's patents for more than a decade and being sued four years ago, Marvell has never shown any inclination to alter its conduct. Marvell's actions utterly belie its post-hoc words. Marvell has not changed its position "because and as a result of" any delay as the law requires for laches to apply.

The facts in *State Contracting* are remarkably similar to this case. There, the patentee's invention (a support system for highway sound walls) became part of Florida Department of Transportation ("FDOT") contracting specifications. 346 F.3d at 1064-65. The infringing contractors asserted economic prejudice, claiming that the patentee failed to notify FDOT of the patent and had it done so, the contractors and FDOT would have written the patented invention out of the FDOT bid specification. *Id.* at 1066. The Federal Circuit rejected the contractors' argument, noting that the patentee gave notice of the pending application and issued patent to the general contractors "yet the contractors continued to construct the sound walls in accordance with FDOT's specifications." *Id.* at 1067. Given the defendants' actual behavior subsequent to learning of the patent, they failed to show "that an earlier filing would have led them to alter their behavior or avoid incurring certain expenditures." *Id.* at 1066-67.

Similarly, the Wu and Sutardja declarations contain nothing more than (inadmissible) *ipse dixit* assertions that Marvell would have stopped infringing had CMU sued earlier. Just like

¹⁸ From November 19, 2010 (the date of the first Chip Stipulation, Dkt. 194) to November 16, 2012 (the date of the second Chip Stipulation, Dkt. 639), Marvell introduced approximately 60 new infringing NLD chips, including its new 88c9300, 88c9400, and 88c10000 families of NLD read channels. CMU FF ¶ 85.

the contractors in *State Contracting*, the overwhelming evidence in this case is Marvell made a ***deliberate business decision*** to ignore CMU's patents, such that an earlier suit by CMU would have had no impact whatsoever on Marvell's conduct. See *Gasser Chair Co. v. Infanti Chair Mfg. Corp.*, 60 F.3d 770, 775 (Fed. Cir. 1995) ("prejudice must result from the plaintiff's delay ***and not from a business decision or gamble that the patent owner would not sue***") (emphasis added); *Meyers v. ASICS Corp.*, 974 F.2d 1304, 1308 (Fed. Cir. 1992) (no economic prejudice where the evidence shows "that none of the defendants was concerned that its products might infringe... and does not show that [they] would have acted differently"). Even without the overwhelming evidence that Marvell would not have changed its behavior had CMU sued earlier, the Sutardja and Wu declarations do not come anywhere close to meeting Marvell's burden of showing economic prejudice. See *Humanscale Corp. v. CompX Int'l Inc.*, 09-cv-86, 2010 WL 3222411 at *13 (E.D. Va. August 16, 2010) (economic prejudice not established where "post-hoc assertions that it would have switched to a different line of products does not comport with its behavior [after it learned of the patents], and thus, does not change the result."); *In re Katz*, 882 F. Supp. 2d 1123, 1147 (C.D. Cal. 2010) (rejecting conclusory declaration that failed to explain why infringer did not implement alleged alternatives after receiving licensing request). Thus, there is ***no nexus*** between CMU's alleged delay and Marvell's business conduct. See *Humanscale*, 2010 WL 3222411 at *13 (infringer failed to prove economic prejudice where it "continued producing and selling the accused produced based on its own legal and business judgment" not due to any delay).

Even though Marvell argues that it would have abandoned the CMU invention if CMU had sued earlier, Marvell failed to put forward at trial a scintilla of evidence of any alleged alternatives to which it could and would have turned to at the relevant times to deal with media noise (not even to attempt to undercut CMU's damages theory). Dr. McLaughlin and Ms.

Lawton both testified regarding Marvell’s lack of alternatives, and Marvell itself expressly declined to present *any* such evidence through Mr. Hoffman or Dr. Blahut.¹⁹

Finally, the laundry list of Marvell technologies set out in Dr. Wu’s declaration demonstrates the flaws in Marvell’s economic prejudice claim.²⁰ Marvell had implemented at least seven of the technologies listed in Dr. Wu’s declaration *prior to the time it added the MNP* to its chips. CMU FF ¶ 79. Yet, Marvell went ahead and added the MNP (and NLD) anyway, and described the infringing technology as “must have” and “critical.” The other two technologies, Disc Sync Write (“DSW”) and iterative, likewise do not support Marvell’s claim of prejudice. Marvell developed DSW contemporaneously with the MNP but labeled the MNP, not DSW, as “must have.” *Id.* ¶ 80. As to iterative, Marvell declared that technology a “lost cause” in 2002 (*Id.* ¶ 81) and was unable to make it functional before 2008 (Dkt. 802-2 (Dr. Wu Affidavit) ¶ 21). Thus, any Marvell contention that it “would have” abandoned the MNP (and NLD) in favor of some hypothetical, earlier version of iterative if sued earlier is inadmissible conjecture.²¹

b. Marvell cannot show evidentiary prejudice.

Although Marvell recites a short laundry list that includes a deceased expert witness,

¹⁹ Without knowing that Dr. Wu would create a post-hoc laundry list of Marvell technologies, Dr. McLaughlin stated in his report that Marvell had other technologies that improved BER performance (including iterative and ECC) but these technologies did not address signal dependent noise. Dkt. 456 (Dr. McLaughlin’s January 2012 Expert Report) at p. 262-64; CMU FF ¶ 77.

²⁰ Dr. Wu also devotes considerable space in his declaration to what Marvell hypothetically would have done if CMU had sued between 2001 and 2007. However, Dr. Wu was not in charge of Marvell’s signal processing at that time—he was promoted only in 2008—and thus was not in a position to know what Marvell would have done. CMU FF ¶ 86. Moreover, since CMU sued in 2009 (one year after his promotion), Dr. Wu and Marvell did none of the things he now claims Marvell would have done in response to a lawsuit.

²¹ As to Marvell’s list of technologies as a whole, Marvell in fact presented the jury with a chart claiming that all of the technologies identified in the affidavits of Drs. Wu and Sutardja could have been used to provide SNR gain instead of the accused technology. *See, e.g.*, 12/11/12 Tr. 48-49, 59-61, 240, 250-81. By awarding CMU the damages it requested to the penny, the jury has already considered the impact of these other technologies. And, contrary to Dr. Sutardja’s claim that he would have “flipped out” had CMU approached Marvell in 2001 with a licensing demand of \$.50 per chip in 2001, *see* 12/11/12 Tr. at 63:20 – 64:3, the jury considered all of this evidence and determined that Marvell (and Dr. Sutardja) would have agreed to exactly that royalty rate during the hypothetical negotiation.

allegedly lost documents and clouded memories, Marvell does not even try to show how the loss of any of that purported evidence prevented it from “present[ing] a full and fair defense on the merits,” as required for a finding of evidentiary prejudice. *Aukerman*, 960 F.3d at 1033. For instance, Marvell attempts to use the unfortunate death of Dr. Wolf to its benefit by ignoring the fact that the Court rejected—and indeed, Marvell abandoned—Dr. Wolf’s “tap weight” theory of invalidity, and Marvell did not even present the “tap weight” theory at trial. CMU FF ¶¶ 87-88.

Marvell’s guesses about “potentially critical documents” that may have been lost also do not support a finding of evidentiary prejudice. *See Meyers*, 974 F.2d at 1308 (“Conclusory statements that there are missing witnesses, that witnesses’ memories have lessened, and that there is missing documentary evidence, are not sufficient.”). Marvell complains that Dr. Kavcic’s production “does not include his 1998 emails to Marvell about his GLOBECOM 98 paper”²² or “any other emails regarding his work on his media-noise detector during the 1996-2000 timeframe.” Dkt. 804 at 17-18. Marvell asserts in conclusory fashion that such hypothetical emails might somehow be “potentially critical” evidence to substantiate waiver, estoppel or acquiescence defenses. *Id.* Marvell, however, fails to explain how *any* of those defenses could be supported by such emails. It is pure speculation that Dr. Kavcic, then a graduate student, might have sent an email to Marvell in which he purported to grant rights in an invention he did not own, or to acquiesce in infringement that, as of the latest year Marvell cites (2000), Marvell had not yet committed. As to Dr. Moura’s allegedly lost documents from the period of 1996 through 2000, Marvell fails to even identify any defense to which such documents might pertain. Because Marvell’s infringement did not commence until March 2001, such 1996 – 2000 documents again cannot bear on laches or on Marvell’s allusions to waiver, equitable estoppel or acquiescence.

²² The production does include Dr. Kavcic’s Globecom 98 paper itself (which was never published). *See* Ex. 16.

As for Marvell's references to the testimony of Dr. Kryder and Mr. Wooldridge, Marvell fails to identify a single issue to which these witnesses' allegedly missing recollections relate. By itself, this omission in Marvell's argument is fatal to this aspect of its evidentiary prejudice claim. For example, Marvell cannot credibly claim that it was prevented from putting on a "full and fair defense" by minor memory lapses such as Dr. Kryder's lack of total certainty as to whether he asked Dr. Carley about the complexity of the CMU invention, or spoke with Dr. White about promoting it. *See* Dkt. 804 at 17-18, and n. 16. Indeed, Marvell made the conscious decision not to depose Drs. Carley and White even though CMU identified them in its initial disclosures served on August 17, 2009, and identified Dr. White as knowledgeable about CMU's alleged awareness of Marvell's infringement in its October 7, 2009 answers to Marvell's Interrogatories. CMU FF ¶¶ 91-93. Marvell cannot claim prejudice based on a lack of information when it chose not to fully investigate the issue. As for Marvell's references to the few times Mr. Wooldridge could not recall something, Marvell conveniently ignores that it argued to the jury that Mr. Wooldridge's testimony that he could not recall actions taken by CMU regarding the patents supported Marvell's view of damages – e.g., that CMU knew the patents were of little value. 12/20/12 Tr. at 87:20 – 88:24 ("They don't even discuss it as near as anybody can tell. Right? Because it's not worth anything in the real world."). Marvell is grasping at straws.

D. The Equities Here Preclude a Finding of Laches

Marvell's Motion also fails on the equities. Even if Marvell could establish the factual predicates for laches, the court still must "weigh[] the equities in order to *assess whether laches should apply* to bar those damages that accrued prior to suit." *State Contracting*, 346 F.3d at 1065; *Aukerman*, 960 F.2d at 1036. In particular, a finding of laches is inappropriate if there is evidence of "egregious conduct" such as "conscious copying" or the failure to obtain an opinion.

Aukerman, 960 F.2d at 1033; *see also Gasser Chair*, 60 F.3d at 775. Here, there is ample evidence of Marvell's conscious copying. *See, e.g.*, Dkt. 793 at 4-6. Moreover, Marvell never obtained an opinion of counsel. Finally, Marvell can neither plead ignorance nor good faith, since Marvell has known of the patents since January 2002 and the jury found by clear and convincing evidence that Marvell had no reasonable defense to infringement. Dkt. 762. As Marvell's conscious copying and failure to seek an opinion is egregious, the equities preclude a finding of laches.

IV. CONCLUSION

For the foregoing reasons, CMU respectfully requests that the Court deny Marvell's Motion for Judgment on Laches.

Respectfully submitted,

Dated: March 25, 2013

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CERTIFICATE OF SERVICE

I hereby certify that on March 25, 2013 the foregoing was filed electronically. Notice of this filing will be sent to all parties by operation of the Court's electronic filing system. Parties may access this filing through the Court's system.

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