EXHIBIT H Part 3

Marvell Has Not Proven Laches

CMU Acted Reasonably After Learning of Marvell's '585 Patent

- **CMU learned of Marvell's '585 patent in 2006**

- **After discovering Marvell's '585 patent, CMU conducted an evolving investigation**

- **CMU did not mislead Marvell about its intentions**

- **CMU sued in March 2009, which is presumptively reasonable**

IXYS Corp. v. Adv. Power Tech., Inc., 321 F. Supp. 2d 1156, 1163 (N.D. Cal. 2004); *see also Mformation Techs., Inc. v. Research in Motion, Ltd.*, 830 F. Supp. 2d 815, 824 (N.D. Cal. 2001)

Marvell Has Not Proven Laches

CMU Had No Duty to Demand
Access to Marvell's Documents and Engineers

Marvell incorrectly asserts that "CMU had to directly inquire about Marvell's suspected infringement or how its chips operate"

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 inculpating 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)

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Marvell Has Not Proven Laches

Marvell's reliance on *Rexam* and *Smith & Assocs.* is misplaced

Where infringement is not indicated by publicly available ("open and notorious") information or facts witnessed by the patentee, *and cannot be determined through inspection or testing,* such infringement cannot be the subject of "constructive knowledge."

See Wanlass v. Gen. Elec. Co., 148 F.3d 1334, 1338 (Fed. Cir. 1998); *Wanlass v. Fedders Corp.*, 145 F.3d 1461, 1467-69 (Fed. Cir. 1998)

In *Rexam*, the defendant's infringement was "open and notorious": the plaintiff contended, and the inventors confirmed, that they could determine infringement from a visual inspection of the accused cans.

Crown Packaging Tech., Inc. v. Rexam Beverage Can Co., 679 F. Supp. 2d 512, 523 (D. Del. 2010)

***Smith & Assocs.* supports CMU's position. Based on plaintiff's admissions the court determined that no access or inspection of defendant's equipment was required to determine infringement.**

Ronald A. Smith & Assocs. v. Hutchinson Tech., Inc., No. C 01-03847 WHA, 2002 WL 34691677 at *9 -*10 (N.D. Cal. Aug. 16, 2002)

- **CMU did not see Marvell's '585 patent until 2006**
- **At trial, Marvell tried to deny that the '585 covered the MNP**

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

"[T]he 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), 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 the onset of infringement and filing of a lawsuit is *more than* six years.

*See Eastman Kodak Co. v. Goodyear Tire & Rubber Co.,*114 F.3d 1547, 1559 (Fed. Cir. 1997); *Ultimax Cement Mfg. Corp. v. CTS Cement Mfg. Corp.,* 587 F.3d 1339, 1350 (Fed. Cir. 2009)

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

Marvell's post-hoc claim that it would have told CMU how its chips work is contrary to the evidence

The evidence demonstrates that Marvell is "paranoid" about secrecy and that it treats its designs like the "formula for Coca Cola."

Q   Yes. But when Marvell makes a design, it wants to keep that design secret unless it patents it, correct?

A   Yes.

Q   And you described yourself and your company as a little bit paranoid. Correct?

A   Yes.

Q   So that paranoia means you want to keep things secret unless they're in a patent, right?

A   Yes.

Dr. Sutardja, 12/11/12 Tr. 95:9-17

A   No. Not -- this is like -- like you see in the commercial from Coca-Cola. It tells you it's cool, it's refreshing, but it never tell you the formula inside the Coca-Cola.

Q   And you don't tell your competitors, right?

A   No.

Q   And you keep that as -- that's a state secret, isn't it, sir?

A   Just like Coca-Cola keeps their formula as a secret.

Q   That's exactly right, sir. Coca-Cola is a state secret, isn't it?

A   What do you mean by state secret?

Q   I mean no one knows what the formula is outside of Coca-Cola, right?

A   Yeah.

Dr. Wu, 12/12/12 Tr. 61:23-62:1, 62:22-63:7

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

Marvell's post-hoc claim that it would have told CMU how its chips work is contrary to the evidence

Dr. Wu admitted he would never tell CMU or Dr. Kavcic about Marvell's designs

Zi-Ning Wu

Q   And nobody at CMU, sir — you would not talk to CMU and tell them what was in your circuits, would you?

A   No, I wouldn't.

Q   And you never told Dr. Kavcic what was in your circuits, did you?

A   No.

Q   Even though you met him.

A   Correct.

Q   Did you tell Dr. Kavcic you had files named after him?

A   No.

Q   Why not?

A   Why should I? It's just — it's like Dr. Viterbi, right? I think I bump into Dr. Viterbi at the conference, should I just approach him and say: Dr. Viterbi, we implemented your algorithm named after you?
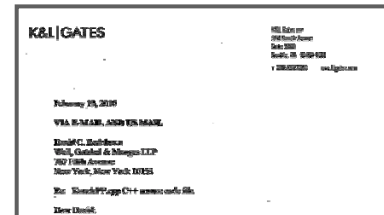
12/12/12 Tr. 63:19-64:8

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

Marvell's post-hoc claim that it would have told CMU how its chips work is contrary to the evidence

During the lawsuit, Marvell tried to hide the simulator code that bears Dr. Kavcic's name

Second, in prior conversations, you told us point blank that there is no "source code" to produce, despite the extensive efforts of your predecessor counsel to set up arrangements for production of source code. In view of the attached, we consider that representation to

Dkt. 794-1 at Ex. 6

Yet Marvell did in fact have the code

```
D:\Other Files\Greg Burd\My Documents\... post processor\archived\kavcicBank.cpp
286             //filter
287             bmVit=noiseVit[memory+L+j];
288             bmAlt=noiseAlt[memory+L+j];
289             #if FIXED_POINT_PRECISION == FIXED_OFF
290                 bmVit=bmVit*sigmas[index1];
291                 bmAlt=bmAlt*sigmas[index2];
292             #else
293                 bmVit=floor(bmVit*sigmas[index1]*pow(2, firMultResolution))/pow(2,
        firMultResolution);
294                 bmAlt=floor(bmAlt*sigmas[index2]*pow(2, firMultResolution))/pow(2,
        firMultResolution);
```
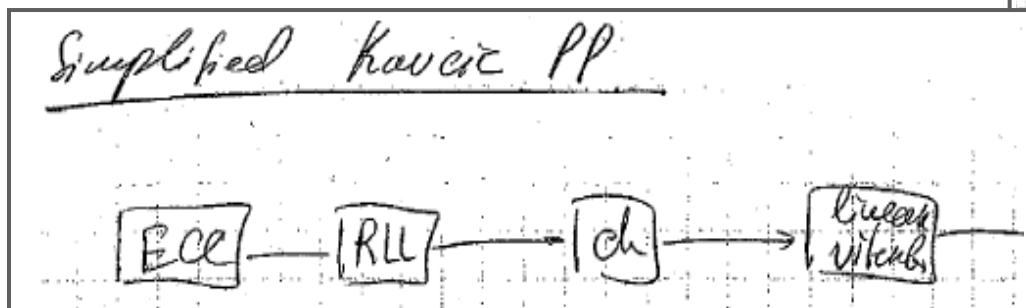
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Marvell's Secrecy Precludes a Finding of Constructive Knowledge and Unreasonable Delay

Marvell's post-hoc claim that it would have told CMU how its chips work is contrary to the evidence

When it first began infringing, Marvell referred to the technology as "Kavcic PP"

P-196 at MSI 5528900

Later Marvell covered its tracks, renaming the technology "MNP"

A. This is a software simulation file for Kavcic post processor.

Q. Is that what would become the media noise processor?

A. That's correct. Later on we renamed it into, MNP.

Mr. Burd, 12/17/12 Tr. at 143:13-16

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

Marvell's post-hoc claim that it would have told CMU how its chips work is contrary to the evidence

Marvell's failure to respond to CMU's "invitation to license" is even more glaring in view of Marvell's conduct vis-à-vis other "invitations"

> QUESTION: What were the patent notice letters that you recall?)
>
> MR. ZADO: Objection as to form.
>
> THE WITNESS: I recall receiving a letter from IBM, and I recall receiving a letter from Agilent, and I recall receiving a letter from an Australian governmental research organization called CSIRO.
>
> MR. ROYALTY: That's C-S-I-R-O.
>
> THE WITNESS: C -- I think it is, yes.
>
> MR. ROYALTY: Q.   Do you recall any other besides -- any others besides those three?
>
> A.   From the third parties, inviting a license, no.

Dkt. 858-1 at 17; Gloss Dep. 38:25-39:13

> Q.   What was the date of the CSIRO letter?
> A.   I think that was later. Maybe 2005.
> Q.   Did Marvell respond to the IBM letter?
> A.   We did, yes.

Dkt. 858-1 at 17; Gloss Dep. 39:25-40:1

> Q.   Did Marvell enter a license with Agilent relating to the patents discussed in the letter?
> A.   Yes.

Gloss Dep. at 42:6-8

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

Marvell's post-hoc claim that it would have told CMU how its chips work is contrary to the evidence

Marvell did not even respond to its customer's request for an opinion regarding whether its chips practiced CMU's invention

RE:Patents of Carnegie Mellon University

Gentlemen:

As a customer of Marvell's read channel, i.e., 5575M, 7500M, we hereby send this letter to your company.

We receive a license offer from Carnegie Mellon University ("CMU") regarding the following US patents ("CMU Patents"), which relate to correlation sensitive adaptive sequence detectors for signal-dependent noise and their application in data storage and retrieval using magnetic media:

USP 6,201,839 B1
USP 6,438,180 B1

Since it seems that these patents might be related to read channel, we would like to know, by the end of November, your opinion regarding relationship between CMU's Patents and the above Marvell's lead channel and the specific grounds/reasons for such opinion.

We look forward to receiving your answers to the above question. In the meantime, if you have any question, please let us know.

FUJITSU

November 11, 2004

PLAINTIFF'S
TRIAL EXHIBIT
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Marvell's Secrecy Precludes a Finding of Constructive Knowledge and Unreasonable Delay

Even *after* trial, Marvell plans to *continue* operating in secret

As an adjudicated infringer, Marvell's opposition to post-verdict monitoring belies its claimed willingness to have made disclosures to CMU

Dkt. 863 at 4-6

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Marvell Has Not Proven 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 & Eng'g Corp. v. Condotte Am., Inc., 346 F.3d 1057, 1066 (Fed. Cir. 2003) (citing *Hemstreet v. Computer Entry Sys. Corp.*, 972 F.2d 1290, 1294 (Fed. Cir. 1992))

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)

"[P]rejudice must result from the plaintiff's delay and not from a business decision or gamble that the patent owner would not sue."

Gasser Chair Co. v. Infanti Chair Mfg. Corp., 60 F.3d 770, 775 (Fed. Cir. 1995)

Marvell Has Not Proven Economic Prejudice

There is 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."

Meyers v. ASICS Corp., 974 F.2d 1304, 1308 (Fed. Cir. 1992)

Economic prejudice was 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."

Humanscale Corp. v. CompX Int'l Inc., 09-cv-86, 2010 WL 3222411 at *13 (E.D. Va. Aug. 16, 2010)
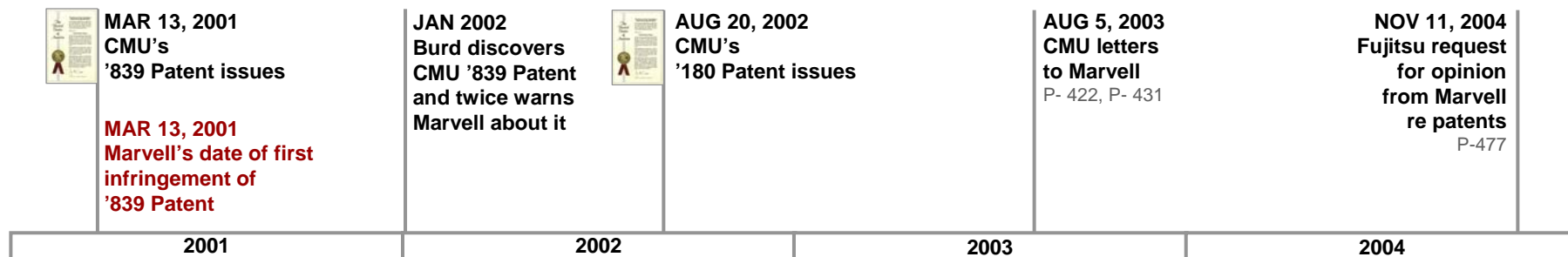
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Marvell Has Not Proven Economic Prejudice

Marvell's "[in]action speaks louder than words"

Marvell's inaction contradicts its speculation that it would have abandoned the technology had CMU sued earlier

> 25.   Therefore, **had CMU sued any time between 2001 and 2004,** Marvell would have either: (1) not added MNP to its chips, or **at a minimum, phased out MNP by the next product generation;** (2) relied on alternative technologies such as 10-tap adaptive FIR, programmable target, sync mark improvement, high rate RLL code, 3-interleaved ECC, servo Gray code, 10-bit ECC, disk synchronous write and permuted RLL and ECC to improve SNR; and/or (3) used another existing alternative such as Dr. Cioffi's approach.

Dkt. 802-2 at ¶ 25

- **In view of its deliberate indifference to CMU's patents as far back as 2002, Marvell's claim is groundless**

MAR 13, 2001 **CMU's** **'839 Patent issues** **MAR 13, 2001** **Marvell's date of first** **infringement of** **'839 Patent**	**JAN 2002** **Burd discovers** **CMU '839 Patent** **and twice warns** **Marvell about it**	**AUG 20, 2002** **CMU's** **'180 Patent issues**	**AUG 5, 2003** **CMU letters** **to Marvell** P- 422, P- 431	**NOV 11, 2004** **Fujitsu request** **for opinion** **from Marvell** **re patents** P-477
2001	**2002**	**2003**		**2004**

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Marvell Has Not Proven Economic Prejudice

Marvell's "[in]action speaks louder than words"

Marvell's executives ignored warnings from Mr. Burd

Toai Doan

From:	CN=Greg Burd/O=Marvell
Sent:	Friday, January 4, 2002 5:31 PM
To:	CN=Toai Doan/O=Marvell@marvell.com; CN=Nersi Nazari/O=Marvell@marvell.com; CN=Ke Han/O=Marvell@marvell.com
Subject:	weekly status report
Attach:	kavcicPP.pdf, performance.ppt

Continued simulating media noise list detector. Written a brief document describing the media noise detector (you should already have a soft copy, but in case you do not here it is again)

Experimented with number of best paths passed to non-linear PP by linear PP. Observed that Viterbi output + best error event is enough to get the gain. There is almost no gain by further increasing number of errors in the list.

Added a single bit parity code to the media noise detector. Observed that there is no gain due to the parity code in terms of BER (over uncoded media noise detector). If you remember the system we used at ultra high UBD ("extended target in a PP") also does not give any gain if parity is added. I think this is due to the fact that most of the error events corrected by the parity PP, have been already fixed by utilizing non-linear info or, as in the case of "extended target", better noise whitening. So maybe we should look at multiparity???

Increased number of states in the non-linear PP (by adding some future/past bits). This did not give any gain.

Read Lucent's patent on media noise detector more carefully. It seems that Lucent did not patent list detector (since this was presented by K. Knudson, et at GLOBCOM'93), instead they patented the media noise PP as a whole. I.e. the system comprising of linear Viterbi and beefed-up PP which utilizes some extra information not used by Viterbi(e.g. non-linear noise, extended whitening filter, etc. And of course as I mentioned earlier, Kavcic detector is also patented.

greg

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Marvell Has Not Proven Economic Prejudice

Marvell's "[in]action speaks louder than words"

Marvell's executives ignored warnings from Mr. Burd

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41.   Page 193:05 to 193:08   (00:00:05.741)

      05            THE WITNESS:   I am aware of Kavcic's -- that
      06   Kavcic has a patent.
      07   BY MR. KNEDEISEN:
      08      Q.   But did you care that he had a patent?

42.   Page 193:10 to 193:11   (00:00:04.455)

      10            THE WITNESS:   I don't have any particular
      11   feeling about Kavcic's patent.
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JX-D-1 at 6 *(Doan)*

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33.   Page 191:18 to 191:19   (00:00:04.330)

      18            THE WITNESS:   As I mentioned before, I have
      19   never looked at Kavcic's patent.
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JX-D-1 at 5 *(Doan)*

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Marvell Has Not Proven Economic Prejudice

Marvell's "[in]action speaks louder than words"

- **No evidence that anyone at Marvell read the file histories of the CMU patents**

- **Mr. Burd did not read the claims of the CMU patents**

- **No evidence that Marvell got an opinion of counsel**

- **Prior to suit, Marvell had every opportunity to do the right thing but chose not to**

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Marvell Has Not Proven Economic Prejudice

Marvell's "[in]action speaks louder than words"

Marvell's post-suit indifference to CMU's patents is confirmed by its decision not to "phase out" the MNP and NLD

> 21.   It is important to understand that one of the primary reasons Marvell developed its NLD enhancement was because MNP did not work well with iterative coding, which promised significant SNR gains. Marvell ultimately gained more than 3 dB from iterative coding, which it first included in chips shipped to customers in 2008 (chips with NLD were first shipped in 2007). Marvell expended years of research and development effort from 1999-2008 on its iterative coding technology. The chips with iterative coding also incorporated the accused NLD technology. However, neither NLD nor MNP were needed to obtain the gain from iterative coding. Had CMU sued Marvell in 2001 - 2007 or notified Marvell of its intent to enforce its patents against Marvell, Marvell would have developed chips with iterative coding that did not include NLD. With the large SNR gain achieved from

Dkt. 802-2 at ¶ 21

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