

EXHIBIT F Part 2

Marvell Disregarded its Own Documents and Presented Incredible (and False) Testimony



At trial, Marvell offered a new damages theory based on false testimony from Drs. Sutardja and Wu

Marvell was not first to build an SoC

Q. Miss Lawton, what was the basis of your answer that Dr. Sutardja's testimony regarding Marvell's being the first SOC -- company to develop the SoC was incorrect?

A. The deposition testimony of Marvell's vice-president of sales, Mr. Brennan, testified that the first company to develop SoC was Cirrus Logic. I also looked at press releases, and after Dr. Sutardja testified, I checked again, just to verify one more time. And I looked at the Cirrus Logic 10-K's, and they reported the same thing; that in fact, Cirrus Logic was the first company in the world to introduce

Tr. 12/18/12 at 119:16-25

Marvell Disregarded its Own Documents and Presented Incredible (and False) Testimony



At trial, Marvell offered a new damages theory based on false testimony from Drs. Sutardja and Wu

Marvell was not first to build an SoC

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-K
ANNUAL REPORT PURSUANT TO SECTION 11 OR 13(a) OF THE
SECURITIES EXCHANGE ACT OF 1934 (SEE INSTRUCTIONS)

FOR THE FISCAL YEAR ENDED MARCH 27, 1999
COMMISSION FILE NUMBER 1-17792

CIRRUS LOGIC, INC.
(Exact name of registrant as specified in its charter)

CIRRUS LOGIC, INC.
(Exact name of registrant as specified in its charter)

PART I

ITEM 1. BUSINESS

Cirrus Logic, Inc., ("Cirrus Logic" or the "Company") was reincorporated in the state of Delaware on February 17, 1999. Prior to this date, the Company had been incorporated in California since February 3, 1984, as the successor to a research corporation which had been incorporated in California in 1979.

Magnetic Storage

The Company supplies integrated circuits that perform the key electronic functions contained in advanced magnetic and removable disk drives. Incorporating the IDE (integrated drive electronics) standard for magnetic disk drive controllers in 1992, the Company has helped engineer the development of higher capacity 2.5-inch disk drives for desktop computers and workstations and 2.5-inch form factor drives for portable computers. The Company shared mass storage activities as a leading merchant supplier of controllers to the disk drive market. In fiscal 1999, the Company continued its strategy of expanding its opportunity in the disk drive electronics market by pioneering development of CMOS digital read channels. In fiscal 1999, the Company introduced the industry's first integration of a hard disk controller, a read channel and microprocessor ("3CI"), offering extremely high integration, as well as the industry's first open architecture solution embodying the ARM microprocessor. The open architecture program was awarded independently from other drive manufacturers, with a goal of providing drive compatible solutions from two of the major suppliers of hard disk microelectronics. The Company's mass storage customers during fiscal 1999 included Western Digital, Fujitsu, Hitachi, Fugate and Sony. The following mass storage products are expected to be the most profitable in the market.

Optical Storage

The Company supplies integrated circuits that perform key electronics functions in advanced optical disc drives. The Company entered the optical storage market in fiscal 1995 with a CD-ROM decoder product, followed by three more generations of CD-ROM decoders with read speeds of up to 15x in fiscal 1997. The first CD-R/CD-RW decoder/decoder products were introduced and are currently on their third generation, supporting up to 10x write and 40x read speeds. During fiscal 1999, the Company's optical storage business transitioned from CD-ROM decoder to CD-R/W encoder/decoder products.

In 1998, the Company announced its entry into the DVD drive electronics market. The DVD Drive Manager integrates on one piece of silicon the RF Amp circuitry, PEARL read channel, full servo subsystem, ECC and decoder for both DVD and CD-ROM drives and CIRC decryption circuitry. The DVD Drive Manager can be used for either DVD-ROM or DVD-Play applications.

CMOS digital read channels. In fiscal 1999, the Company introduced the industry's first integration of a hard disk controller, a read channel and a microprocessor ("3CI"), offering extremely high integration, as well as the industry's first open architecture solution embodying the ARM

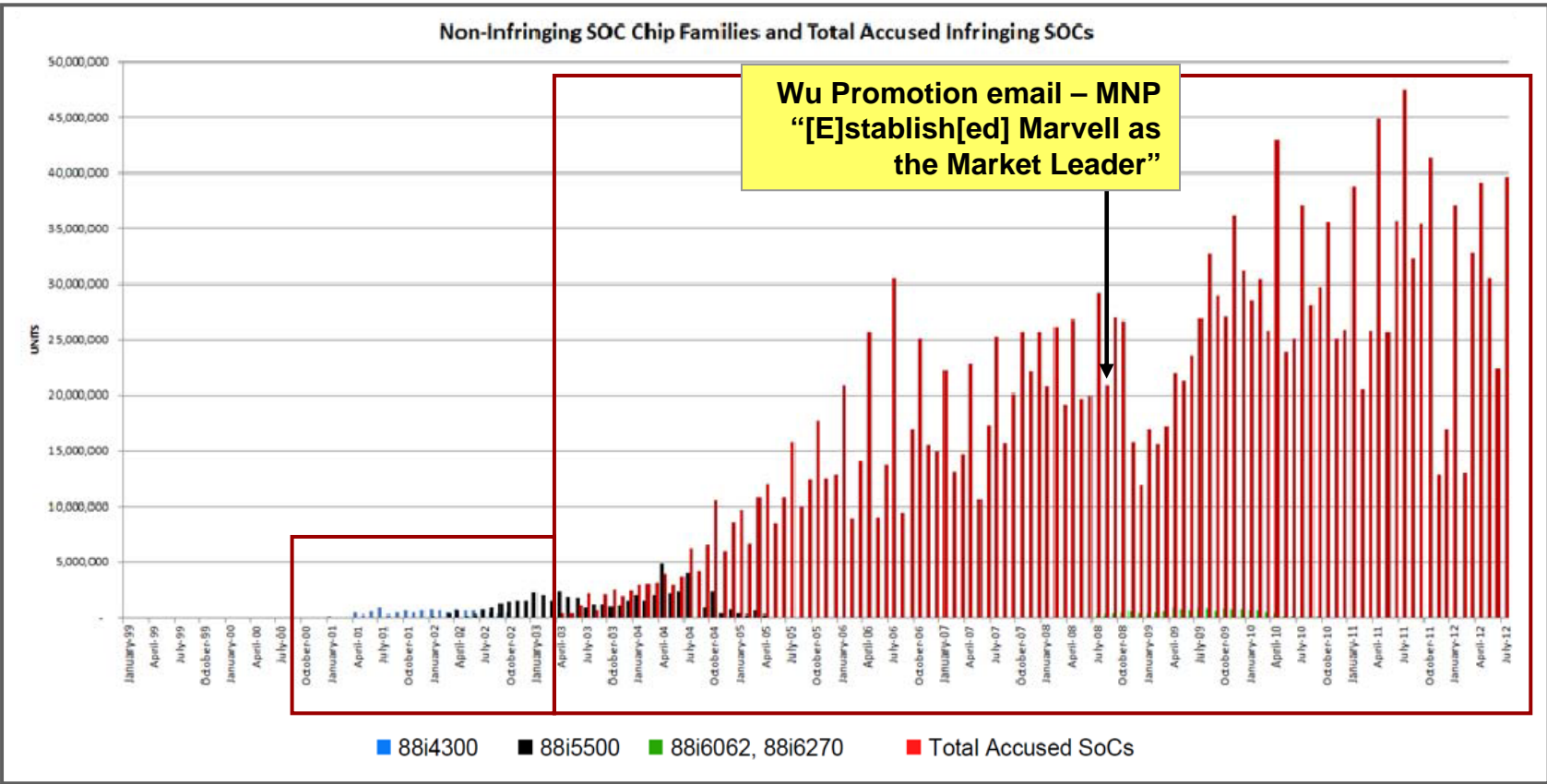
Dkt. 794-1 at 8-13 (Cirrus Logic, Inc. 10-K, June 16, 1999)

Marvell Disregarded its Own Documents and Presented Incredible (and False) Testimony



At trial, Marvell offered a new damages theory based on false testimony from Drs. Sutardja and Wu

CMU’s invention, not Marvell’s SoCs, “firmly establish[ed] Marvell as the market leader...”



P-Demo 13 (Chart 23) (rectangles added); Tr. 12/7/12 at 111

Marvell Disregarded its Own Documents and Presented Incredible (and False) Testimony



At trial, Marvell offered a new damages theory based on false testimony from Drs. Sutardja and Wu

CMU's invention, not Marvell's SoCs, "firmly establish[ed] Marvell as the market leader..."

Zi-Ning has been with Marvell for the past 9 years working in the Data Storage Signal Processing team. In the past few years, Zi-Ning has helped me in the definition of our Read Channel roadmap along with his main responsibility of developing our Read Channel architectures and algorithms. In addition, Zi-Ning has been involved in many technical engagements with our Data Storage customers to strengthen Marvell's position with existing customers and to establish new relationships with potential customers. Working with our Read Channel VLSI team and our Data Storage SOC design teams, **Zi-Ning and his DSP team have been instrumental in the development of the Media Noise Processor (MNP) and Advance ECC (AECC) for our Data Storage products. The introduction of these technologies has helped firmly establish Marvell as the market leader in the HDD IC business.**

P-703 at 2

Marvell Disregarded its Own Documents and Presented Incredible (and False) Testimony



At trial, Marvell offered a new damages theory based on false testimony from Drs. Sutardja and Wu

Mr. Hoffman falsely stated Ms. Lawton did not consider SoC integration in her report or testimony

Q. And did Miss Lawton take that factor, SoC integration into account in reaching her amount here?

A. I didn't see it in her report or her testimony.

MISS GAY: Pass the witness, Your Honor.

THE COURT: Thank you, Miss Gay.

Mr. McElhinny, cross. Will you be using the flip chart?

Tr. 12/12/12 at 245:9-15

Marvell Disregarded its Own Documents and Presented Incredible (and False) Testimony



At trial, Marvell offered a new damages theory based on false testimony from Drs. Sutardja and Wu

Ms. Lawton addressed SoC integration extensively in her report and testimony

- **An entire section of Ms. Lawton's report addresses SoC integration and whether it accounts for Marvell's successes**

C. THE SOC MARKET AND MARVELL'S SOCS Lawton Report, Dkt. 367-2, at 108-33

- **Ms. Lawton investigated whether SoC integration caused Marvell's success and determined it did not**

As such, **one of the important damages issues in this case is the position that Marvell achieved in the SoC market and the extent to which it was aided by the accused infringing technology.** To

Finally, **it should be noted that Marvell's reported non-infringing SoCs total 76.6 million units shipped (11 part numbers).⁷⁴¹ In contrast, Marvell's reported units that include an MNP, EMNP or NLD total more than 1.4 billion units shipped (102 part numbers).⁷⁴²**

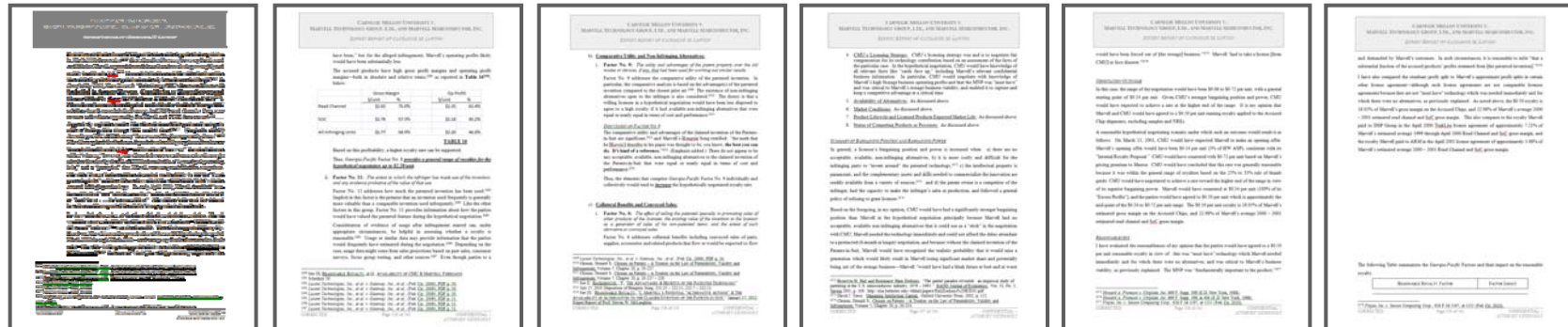
Lawton Report, Dkt. 367-2 at 116

Marvell Disregarded its Own Documents and Presented Incredible (and False) Testimony



At trial, Marvell offered a new damages theory based on false testimony from Drs. Sutardja and Wu

- Ms. Lawton addressed SoC integration in her royalty analysis



Lawton Report, Dkt. 367-2 at 525-26, 528, and 537-39

- Ms. Lawton addressed SoC integration several days before Mr. Hoffman testified
12/7/1 Tr. at 106-08, 114, 122-32 & P-953

Marvell Disregarded its Own Documents and Presented Incredible (and False) Testimony



Dr. Sutardja gave incredible testimony about Marvell's need for CMU's invention

Dr. Sutardja testified that "must" usually means "not a must"

thinking about it. It's the way -- it's the way we are. So when -- so our people use this word must and it become -- now become miss -- miss -- misinterpreted as something else.

Q Let me show you --

A And many things we say is must is not a must.

12/11/12 Tr. at 153:1-5

Marvell Disregarded its Own Documents and Presented Incredible (and False) Testimony



Dr. Sutardja gave incredible testimony about Marvell's need for CMU's invention

Marvell's documents refute Dr. Sutardja's testimony

have the IBM dual parity (same as Redwing) AND has an MNP!! I put in staff that we must have MNP in 7500 ASAP to be competitive - no one disagreed.

June 2002, P-320

3. 5575+: We have pulled in the MNP. Our previous plan was 5575 + 10-bit for 40GB generation and 5575+ for 60GB generation, but we have aggressively planned to pull in the MNP to have both available for the 40GB drives. We need to have this part to Toshiba by early to mid August!!

April 2002, P-304

As you know, MNP for C7500 is critical requirement for Hitachi and Fujitsu due to lack of 10-bit ECC in their HDC to be supplied by Qlogic. Hitachi has told

August 2002, P-328

If I remember correctly, you have sent Samsung a report on AECC performance in the past. This report has plots of MNP+PECC vs. MNP+AECC. We did not do comparison with linear Viterbi since now days the drives are dominated by media noise, and MNP or NLV is a must. I will try to dig up some slides on NLV performance. But basically, everything is the same as with MNP. The AECC algorithm has not changed, we just switch the source of soft info (from MNP to NLV),

February 2007, P-607

Marvell Disregarded its Own Documents and Presented Incredible (and False) Testimony



Dr. Sutardja gave incredible testimony about Marvell's need for CMU's invention

Mr. O'Dell refuted Dr. Sutardja's testimony regarding E[xecutive]-Staff meetings

Dr. Sutardja

Q Sure. This meeting in June of 2002, the weekly E-staff meeting, was that a meeting that you attended?

A I -- did you say this is an E-staff meeting?

Q It's -- it says -- E-staff summary is the title.

A Oh, okay, I get it. No, this is not my meeting.

Q It's not your meeting?

A Yes, it's not my meeting.

Q What is E-staff?

A E-staff -- it says E-staff summary.

Q Yes. What is E-staff? Do you know, sir, what E-staff is?

A The meetings of my staff members.

12/11/12 Tr. at 118:6-17

Mr. O'Dell

Q And the E-staff is a weekly meeting where all the executives get together; isn't that right, sir?

A That's correct.

Q And even the CEO is typically there, isn't he?

A Yes, he is.

Q Would you be surprised to learn that Dr. Sutardja testified that he doesn't attend those meetings?

A Yes, I would. But in this time frame he did attend those meetings.

12/17/12 Tr. at 233:24-234:7

Marvell Disregarded its Own Documents and Presented Incredible (and False) Testimony



Dr. Proakis contradicted his own sworn testimony on Worstell

Dr. Proakis's Declaration 11/2/11 (incorporated in his report) states that Worstell is a single function

34. Based on the Court's construction of "function," Worstell's "further modified" branch metric is a "single" branch metric function and not a "set" of branch metric functions.

Dr. Proakis' trial opinions directly contradicted his prior sworn declaration and expert report

The Worstell Patent Discloses "selecting...a set of signal-dependent branch metric functions"

selecting a branch metric function for each of the branches at a certain time index from a set of signal-dependent branch metric functions; and

applying each of said selected functions to a plurality of signal samples to determine the metric value corresponding to the branch for which the applied branch metric function was selected, wherein each sample corresponds to a different sampling time instant.

Worstell Patent, Figure 4 (annotated)

D-Demo12-15

12/17/12 Tr. at 83, 84:10-20

**Marvell's Tactics Delayed
Resolution and Drove up Costs**

Marvell's Tactics Delayed Resolution and Drove up Costs



Marvell's second summary judgment motion on invalidity was based solely on contradicting positions Marvell previously took

Marvell Admits that a Single Equation that Contains a Parameter Represents a "Set" of Functions

Last May, Marvell also admitted that the term "parameter" is part of the "ordinary," "general English" application of "function"

Mr. Radulescu:

parameter called c_i

We are going to define this parameter called c_i where it's the bonus pay rate in dollars per hour billed over 2,000 hours.

Docket #301, May 17 Hearing Transcript, p. 25

That's the table of associate bonus functions.

It's a set of six in this example.

Docket #301, May 17 Hearing Transcript, p. 26

It's a set of six separate and unique functions and that's the plain and ordinary meaning of what a function is.

Docket #301, May 17 Hearing Transcript, p. 26

Plain English says that this is a set of six functions.

Docket #301, May 17 Hearing Transcript, p. 33

Example of "function" - Associate Bonus Functions $B_i(X)$

c_i can be inserted for each class to demonstrate $B_i(X)$ is a set of functions.

Class Year	Bonus Pay Rate c_i [\$ per hour]	Associate Bonus Functions
1 st	50	$B_1(X) = 50 * X$
2 nd	60	$B_2(X) = 60 * X$
3 rd	70	$B_3(X) = 70 * X$
4 th	80	$B_4(X) = 80 * X$
5 th	90	$B_5(X) = 90 * X$
6 th	100	$B_6(X) = 100 * X$

Using more sophisticated nomenclature, the above 6 functions can also be expressed in the following form:

$$B_i(c_i, X) = c_i * X$$

Docket #298, Marvell's May 17 Hearing Slides, Slide 21

Marvell's Tactics

Delayed Resolution and Drove up Costs



Marvell's second summary judgment motion on invalidity was based solely on contradicting positions Marvell previously took

Marvell Admits that a Single Equation that Contains a Parameter Represents a "Set" of Functions

Last May's Admission:

Example of "Function" – Associate Bonus Functions $B_i(x)$

- c_i can be inserted for each class to demonstrate $B_i(X)$ is a "set of functions"

$$B_i(x) = c_i \cdot X$$

20

Docket #298, Marvell's May 17 Hearing Slides, Slide 20-21

Today's Claim:

combined with some common sense. Similarly, based on the Court's construction for function, the example previously provided by Marvell, the "Associate Bonus Function" $[B_i(X) = c_i \cdot X]$ (Dkt. No. 298 at 20-21), is a **single** function, not a set of functions, even though it includes a number of variables that result in a **different** equation being used to calculate the particular

Docket #327, Marvell Reply Brief, p. 4

6

Marvell's Tactics

Delayed Resolution and Drove up Costs



Marvell's written description/enablement SJ Motion was a waste of time and resources

Marvell compounded its misconduct by filing a meritless motion for reconsideration

- **Marvell filed a “*Pro Forma*” motion for reconsideration**

Dkt. 339

- **The Court properly characterized Marvell's arguments in that motion as “disingenuous,” “without merit,” and violative of Fed. R. Civ. P. 1.**

Dkt. 423 at 3 n.2, 8-10

Marvell's Tactics

Delayed Resolution and Drove up Costs



Marvell's misconduct regarding its inequitable conduct defense

CMU expended significant resources defending itself

MAY 2011
Therasense
issues

JAN 2012
Dr. Proakis'
inequitable
conduct
report

MAR 2012
Dr. McLaughlin's
deposition on
inequitable
conduct

APR 2012
Dr. Proakis'
deposition on
inequitable
conduct

APR 2012
CMU moves
for Summary
Judgment

MAY 2012
Marvell responds to
Summary Judgment
Motion and Moves to
"Amend" to "streamline
the case"

MAY 2012
CMU Opposes
Marvell's Motion
to "Amend"

2011

2012

Marvell's Tactics Delayed Resolution and Drove up Costs



Marvell's misconduct regarding its inequitable conduct defense

Marvell's attempt to justify its misconduct as a response to a "change in the law" fails

refute these facts. And Marvell's motion was granted. (Dkt. 115.) Subsequently, however, the Federal Circuit issued an opinion that substantially changed the law regarding claims of inequitable conduct predicated on the non-disclosure of prior art references. *Therasense, Inc. v. Becton, Dickinson, & Co.*, 649 F.3d 1276 (Fed. Cir. 2011). Marvell dropped its inequitable conduct defense after evaluating this change in the law. Thus, though CMU now labels

Dkt. 835 at 14

- **Marvell has proffered inconsistent justifications for dropping the claim.**
Compare Dkt. 387, with Dkt. 835
- **Marvell did not voluntarily dismiss its claim with prejudice.**

Marvell's Tactics Delayed Resolution and Drove up Costs



On the eve of trial, Marvell's falsely cried "emergency"

Marvell filed an "emergency" motion on alleged "extraterritorial sales" that was merely an untimely motion for reconsideration

- **The Court properly faulted Marvell for disguising its motion for reconsideration as an emergency, ignoring the "extensive briefing and argument on the issue," and trying to "block CMU's use of Marvell sales information" "two days before the start of trial."** Dkt. 672 at 2, 4-5
- **As the Court found, Marvell's motion (again) misstated CMU's damages theory**

¹² To be clear, CMU does not seek damages from alleged infringement of the Accused Chips that are never used in the United States, because the Court has held the extra-territorial sales are not infringing (Docket No. 441), it seek damages on the infringement from the U.S. based sales cycle, and has chosen to quantify these damages by applying a per chip royalty rate on all Accused Chips produced under the sales cycle. (*Id.*). Marvell will have a full opportunity at trial to argue that this quantification is unreasonable.

**The Court Should Determine the Fee Award
Using the Procedure CMU Proposed**

The Court Should Determine the Fee Award Using the Procedure CMU Proposed

Marvell has not objected to CMU's proposed procedure



“[T]he district court’s consideration of a fee petition ‘should not result in a second major litigation.’”

Webb v. County Bd. of Educ., 471 U.S. 234, 244 n.20 (1985) (quoting *Hensley v. Eckerhart*, 461 U.S. 424, 437 (1983))



The fee award procedure should not “lead to further delay and encourage additional motion practice on a case that is [over] four years old and has generated voluminous docket activity.”

Univ. of Pitt. v. Varian, No. 2:08-cv-01307 (W.D. Pa. May 7, 2012)

**Carnegie Mellon University's
Presentation on Motion for Attorneys' Fees
Pursuant to 35 U.S.C. § 285 – Dkt. 810**

May 1 – 2, 2013



Carnegie Mellon