

**EXHIBIT D Part 3**

## CMU Is Entitled to Post-Judgment Royalties of at Least \$0.50 and Up to \$1.50 Per Chip



---

**“[T]he Court must consider the change in the legal relationship between the parties to avoid incentivizing defendants to fight each patent case to the bitter end because without consideration of the changed legal status, there is essentially no downside to losing.”**

*Fractus, S.A. v. Samsung Electronics Co.*, No. 6:09-CV-203, 2012 WL 2505741, at \*45  
(E.D. Tex. June 28, 2012)

---

## CMU Is Entitled to Post-Judgment Royalties of at Least \$0.50 and Up to \$1.50 Per Chip



**A district court should set a post-judgment royalty where:**

- a permanent injunction is entered, but the injunction is stayed pending appeal, or
- an injunction is not entered.

*Amado v. Microsoft Corp.*, 517 F.3d 1353, 1362 (Fed. Cir. 2008); *Paice LLC v. Toyota Motor Corp.*, 609 F. Supp. 2d 620, 630 (E.D. Tex. 2009)



**Post-judgment royalties are awarded to “ensure that an adjudged infringer who voluntarily chooses to continue his infringing behavior ... adequately compensate[s] the patent holder for using the patent holder’s property. Anything less would be manifestly unjust and violate the spirit, if not the letter of the U.S. Constitution and the Patent Act.”**

*Paice LLC v. Toyota Motor Corp.*, 609 F. Supp. 2d 620, 630 (E.D. Tex. 2009)

## CMU Is Entitled to Post-Judgment Royalties of at Least \$0.50 and Up to \$1.50 Per Chip



In setting the post-judgment ongoing royalty rate, ***the royalty rate found by the jury is “significant as a starting point”*** from which to consider whether changes in the parties’ bargaining positions merit a different ongoing royalty rate.

*Fresenius USA, Inc. v. Baxter Int’l, Inc.*, No. C 03–1431 PJH, 2012 WL 761712, at \*11 (N.D. Cal. March 8, 2012) (citing *Paice LLC v. Toyota Motor Corp.*, 504 F.3d 1293, 1315 (Fed. Cir. 2007))



Courts often conduct a “modified” ***Georgia-Pacific*** analysis that takes into account the traditional Georgia-Pacific factors, but also considers the new legal status quo between the parties: ***the defendant is an adjudged infringer and any continuing infringement will be willful by definition.***

See, e.g., *Paice LLC v. Toyota Motor Corp.*, 609 F. Supp. 2d 620, 624-31 (E.D. Tex. 2009)

***Courts have exercised discretion in conducting the “modified” Georgia-Pacific analysis, applying a more or less rigorous analysis as merited by the facts, but nearly always focusing principally on the defendant’s status as an adjudged infringer.***

## CMU Is Entitled to Post-Judgment Royalties of at Least \$0.50 and Up to \$1.50 Per Chip



**Courts typically set the post-judgment ongoing royalty rate higher than the jury's rate.**

*See, e.g., Mondis Tech. Ltd. v. Chimei InnoLux Corp.*, 822 F. Supp. 2d 639, 646 (E.D. Tex. 2011); *Creative Internet Adver. v. Yahoo!*, 674 F. Supp. 2d 847, 861 (E.D. Tex. 2009)

### WHY?



**A higher ongoing royalty rate is justified in the usual case because “pre-suit and post-judgment acts of infringement are distinct.”**

*Paice LLC v. Toyota Motor Corp.*, 504 F.3d 1293, 1317 (Fed. Cir. 2007) (Rader, J., concurring); *see also Amado v. Microsoft Corp.*, 517 F.3d 1353, 1361-62 (Fed. Cir. 2008)

### WHAT DOES THIS MEAN?

The patentee's bargaining position is ***substantially strengthened*** in the hypothetical post-verdict negotiation because the patentee could sue again and the defendant – ***now an adjudged infringer*** – would be collaterally estopped from asserting any defenses. ***A finding of willful infringement would be virtually guaranteed, raising the specter of enhanced damages.***

## **CMU Is Entitled to Post-Judgment Royalties of at Least \$0.50 and Up to \$1.50 Per Chip**

***Tellingly, Marvell has not cited a  
single case where the court set an ongoing  
royalty rate less than the rate  
applied by the jury.***

***The best Marvell could do was to  
reference the very small handful of cases  
where the ongoing royalty rate was  
set equal to the jury's rate.***

# CMU Is Entitled to Post-Judgment Royalties of at Least \$0.50 and Up to \$1.50 Per Chip

**CMU proved that the infringing MNP and NLD technology was  
“must have,” “life or death” for Marvell, and “industry standard”**

**For example:**

Marvell's MNP Development

<p><b>From:</b> Michael O'Dell  <b>Sent:</b> Monday, June 17, 2002 6:04 PM  <b>To:</b> Bill Brennan  <b>Subject:</b> E-Staff Summary  <b>Attach:</b> E-staff weekly 6 17 02.doc</p> <p>Hi Bill,</p> <p>Hope you figure out the BS Quantum card! If you did, here's the summary along with a copy of the status we presented.</p> <p>First of all I called Frank Zeng at IBM to get a read on the Infineon chip - you will see the bullet under Hitachi/IBM. Basically what I found out is that Infineon is basically at the same point we are with 7500 - 1.5Gbps, basically functioning silicon, have not sampled anyone yet. (we may be a week or so ahead on sampling) However, this device does 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.</p> <p>Other news/questions from staff:</p> <p>Meeting with STM. Since you are in Japan - who is chatting that way from our side?</p> <p>We mistakenly sent WD the actual characterization units of 3540 - now they want all of the char data as well. Big mistake to send those units to WD - I think John T. did it. Albert will not allow the char data to be sent. May need to smooth this over so WD is not upset, but sending the char units along with all of the raw data is not something we typically do.</p> <p>Alan says Promise will take 40K units of SATA before end of Sept, and another 30K units in Q4. George wants to see SATA in the forecast.</p> <p>Liberty chip is getting by the day. Size has now increased to 312 mm2. (back in about 27mm2)</p> <p>Supposedly most of this is due to FT contributing to add logic - then is saving additional 30%.</p> <p>George is trying our backing is "very strong" - meaning he is somewhat concerned.</p> <p>Let me know if you have any questions.</p>	<p><b>From:</b> Michael O'Dell  <b>Sent:</b> Monday, June 17, 2002 6:04 PM  <b>To:</b> Bill Brennan  <b>Subject:</b> E-Staff Summary  <b>Attach:</b> E-staff weekly 6 17 02.doc</p> <p>Hi Bill,</p> <p>Hope you figure out the BS Quantum card! If you did, here's the summary along with a copy of the status we presented.</p> <p>First of all I called Frank Zeng at IBM to get a read on the Infineon chip - you will see the bullet under Hitachi/IBM. Basically what I found out is that Infineon is basically at the same point we are with 7500 - 1.5Gbps, basically functioning silicon, have not sampled anyone yet. (we may be a week or so ahead on sampling) However, this device does 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.</p> <p>Other news/questions from staff:</p>
--	--

P-320
54

P-320 at 54

**Q.** Dr. Bajorek, did you come to an opinion about whether or not the MNP and NLD technology have become -- has become an industry standard?

**A.** Yes, I have.

**Q.** What is that opinion?

**A.** They are an industry standard.

**Q.** Okay. Dr. Bajorek, did you come to an opinion about whether or not this MNP and NLD technology discussed by Dr. McLaughlin was must-have technology for Marvell?

**MR. JOHNSON:** Objection; leading.

**THE COURT:** Sustained.

**Q.** Dr. Bajorek, did you come to any opinion about whether or not the MNP and NLD technology was "must have" for Marvell?

**A.** Yes, I have.

**Q.** What was that opinion?

**A.** That it, indeed, it was "must have" for IBM -- for Marvell's survival at the time when Marvell adopted those technology, the MNP technology into its product stream.

**Q.** What do you mean by the phrase, must have?

**A.** It's, it's a life or death matter for the company.

12/4/12 Tr. at 73:5-73:24 (C. Bajorek testimony)

## CMU Is Entitled to Post-Judgment Royalties of at Least \$0.50 and Up to \$1.50 Per Chip

**Nothing has changed: CMU's patented technology  
is still critical to Marvell's business**

**Even now, four years after CMU sued, Marvell desperately  
needs permission to use CMU's patented methods for at  
least another *two years*.**

- **This fact would necessarily dominate a post-verdict  
hypothetical negotiation of an ongoing royalty rate,  
leading to a base ongoing royalty of \$0.50 or much  
greater as a survival premium.**



**“Fresenius argued that an injunction could destroy its business,  
shut down factories, and/or lead to massive lay-offs, and that it  
would also harm patients. These circumstances would seem to have  
increased Baxter's bargaining position in the hypothetical negotiation  
in late 2007.”**

*Fresenius USA, Inc. v. Baxter Int'l, Inc.*, No. C 03-1431, 2012 WL 761712, at \*12 (N.D. Cal. 2012)



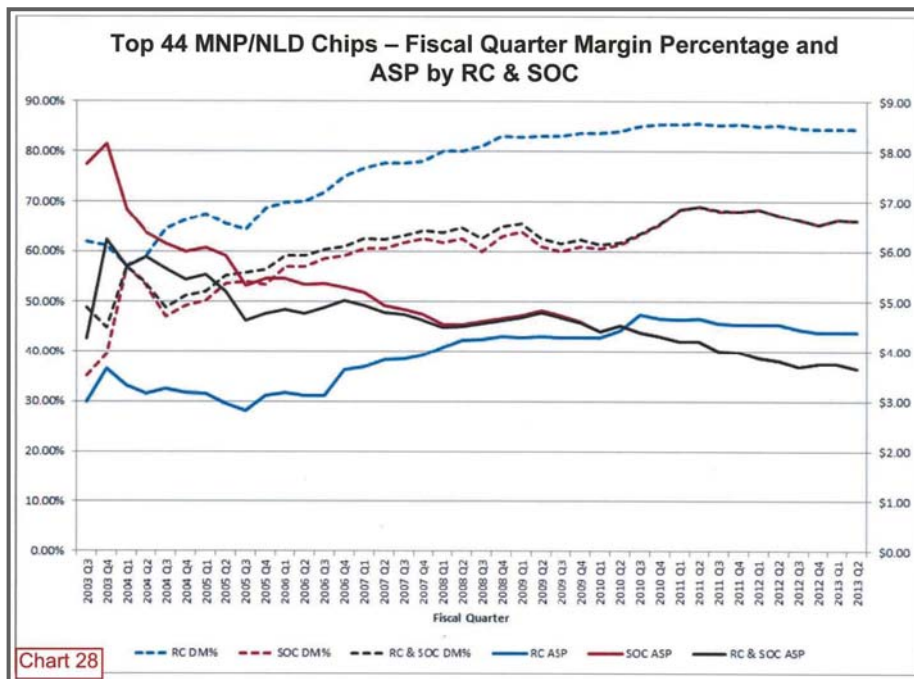
# CMU Is Entitled to Post-Judgment Royalties of at Least \$0.50 and Up to \$1.50 Per Chip

**Marvell's increasing profit margins further support an ongoing royalty of at least \$0.50 per chip**



**The rising profitability of the accused products increases the royalty rate to which the parties would have agreed at the hypothetical negotiation.**

*Lucent Technologies, Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1335 (Fed. Cir. 2009)



Q. Miss Lawton, what is Chart 28?

A. Chart 28 is a summary of Marvell sales price data per unit, and direct margin as a percentage for those 44 chips. So now we're looking at that subset that accounts for about 90 percent of the revenue. So stay with these MNP and NLD-type chips.

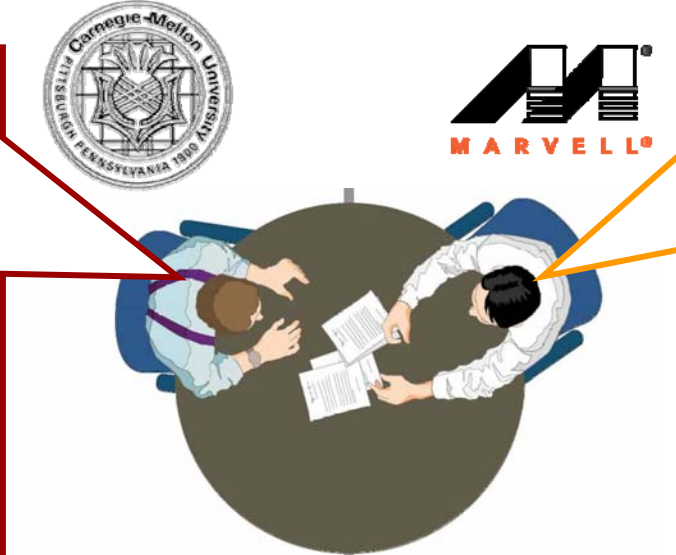
And you can see that from the, the profit lines here, the dash lines, the black is read channel and SoC combined, and the red dash line is the SoC only. And you can see also that Marvell's direct margin is increasing over time, and is in the range of 65 percent or so currently.

C. Lawton 12/10/12 Tr. at 106:11-107:20

## CMU Is Entitled to Post-Judgment Royalties of at Least \$0.50 and Up to \$1.50 Per Chip

### The Bottom Line

Marvell can stay in business only by continuing to infringe CMU's patents and, therefore, at a post-verdict hypothetical negotiation, Marvell would eagerly agree to pay a royalty of at least \$0.50 per chip with MNP and NLD as a short-term bridge to its alleged design-around.



"I could sue for your continuing, willful infringement and obtain enhanced damages, but I am willing to give you a license for the next few years to save your company – for the right rate that reflects that you are a proven infringer that has no other option."

"I need to use these patents for at least two more years, maybe longer. I have no other options. I'll pay almost all of my profits to get a license so that my company survives."

## CMU Is Entitled to Post-Judgment Royalties of at Least \$0.50 and Up to \$1.50 Per Chip

Contrary to Marvell's position, *Amado* actually supports an ongoing royalty rate higher than \$0.50



In *Amado*, the Federal Circuit stated that the jury's rate is the **floor** from which the district court determines a (potentially much higher) post-judgment royalty rate because the defendant is now an adjudged infringer (even assuming post-judgment willfulness is not considered).

*Amado v. Microsoft Corp.*, 517 F.3d 1353, 1361-62 & n.2 (Fed. Cir. 2008)

---



“We take no position on the proper amount of the eventual award. That, of course, is a matter committed to the sound discretion of the district court. We observe only that, logically, **the eventual award should fall somewhere between the \$0.04 amount the jury found to be an appropriate pre-verdict reasonable royalty and the \$2.00 amount Amado was willing to accept in exchange for a license.**”

*Amado v. Microsoft Corp.*, 517 F.3d 1353, 1361-62 & n.2 (Fed. Cir. 2008)

---



On remand, the district court **trebled** the jury's running royalty rate.

*Amado v. Microsoft Corp.*, No. SA CV 03-242, 2008 WL 8641264, at \*11 (C.D. Cal. Dec. 8, 2008)

## CMU Is Entitled to Post-Judgment Royalties of at Least \$0.50 and Up to \$1.50 Per Chip

**The Court should increase the ongoing royalty rate up to \$1.50 based on the willful nature of Marvell's continuing infringement**



**Several courts have expressly “enhanced” the ongoing royalty rate for post-judgment “willful” infringement.**

*See, e.g., Fractus, S.A. v. Samsung Electronics Co.*, Nos. 6:09–CV–203, 6:12–CV–421, 2013 WL 1136964, at \*2-\*3 (E.D. Tex. March 15, 2013); *Affinity Labs of Texas, LLC v. BMW North America, LLC*, 783 F. Supp. 2d 891, 901-05 (E.D. Tex. 2011)



**Courts typically set an ongoing royalty rate *higher than* the jury's rate.**

*See, e.g., Mondis Tech. Ltd. v. Chimei InnoLux Corp.*, 822 F. Supp. 2d 639, 646 (E.D. Tex. 2011); *Creative Internet Adver. v. Yahoo!*, 674 F. Supp. 2d 847, 861 (E.D. Tex. 2009)



**A verdict of infringement of valid patents substantially strengthens the patentee's bargaining power in a post-judgment hypothetical negotiation of an ongoing royalty, regardless of whether the continued infringement is expressly termed “willful.”**

*See, e.g., ActiveVideo Networks, Inc. v. Verizon Communications, Inc.*, 694 F.3d 1312, 1342-43 (Fed. Cir. 2012)

## **CMU Is Entitled to Post-Judgment Royalties of at Least \$0.50 and Up to \$1.50 Per Chip**

**The Court should reject Marvell's delaying tactics, including its request for an evidentiary hearing, and set a post-judgment ongoing royalty rate as part of an overall resolution of post-trial motions**

- **The Court can efficiently set an ongoing royalty rate when deciding post-trial motions**
- **The parties already have attempted to negotiate an ongoing royalty rate per the Court's April 24, 2013 order**
- **An evidentiary hearing is unnecessary because Marvell concedes that, at this point, CMU's patented technology remains "must have," "life or death" for Marvell, and industry standard**

## **CMU Is Entitled to Supplemental Damages**

## CMU Is Entitled to Supplemental Damages

- In its Amended Pretrial Statement (Dkt. 461 at 10), CMU expressly reserved the right to seek a post-verdict accounting and supplemental damages as to chips sold by Marvell after the effective date of Marvell's final pre-trial production of sales data.

---

***Numerous cases support CMU's entitlement to an accounting and supplemental damages.***



*See, e.g., Finjan, Inc. v. Secure Computing Corp.*, 626 F.3d 1197, 1212 (Fed. Cir. 2010); *Metso Minerals, Inc. v. Powerscreen Int'l Distribution Ltd.*, 833 F. Supp. 2d 333, 345-352 (E.D.N.Y. 2011); *Hynix Semiconductor, Inc. v. Rambus*, 609 F. Supp. 2d 951, 960-61 (N.D. Cal. 2009); *Aero Products Int'l, Inc. v. Intex Recreation Corp.*, No. 02 C 2590, 2005 WL 1498667, at \*1-\*2 (N.D. Ill. June 9, 2005)

- 
- Marvell fails to identify any authority in support of its baseless argument that supplemental damages are somehow excessive. ***This argument is really just a legally unjustified request that the Court endorse Marvell's royalty-free use of CMU's invention since July 29, 2012.***

## CMU Is Entitled to Supplemental Damages

**The Court should order an accounting and award supplemental damages to CMU for Marvell's sales of infringing chips from July 29, 2012 to January 14, 2013**

- Marvell has yet to produce sales data beyond July 28, 2012, the last day for which Marvell provided updated information pursuant to the Court's pre-trial orders.
- The Court entered judgment on the jury's verdict on January 14, 2013.
- ***CMU is seeking an order finding that it is entitled to supplemental damages from July 29, 2012 to January 14, 2013; this is a determination that should be made as part of the resolution of post-trial motions.***
- Post-January 14, 2013 sales should be addressed in the Court's decision regarding ongoing royalties.



## CMU Is Entitled to Supplemental Damages

- The jury's ***\$0.50 per chip*** royalty rate should apply to sales prior to entry of judgment on January 14, 2013 (the Court's ongoing royalty rate should apply to sales thereafter).
- If the Court enhances damages, ***CMU's supplemental damages should be enhanced based on the same multiplier that is applied to the verdict.***
- The Court also should award pre-judgment interest on CMU's supplemental damages on the same terms applied to the verdict.

**Carnegie Mellon University's Presentation on  
Its Motion for a Permanent Injunction, Post-Judgment  
Royalties, and Supplemental Damages - Dkt. 786**

May 1 – 2, 2013



**Carnegie Mellon**