EXHIBIT G

Carnegie Mellon University's Presentation on Its Motion for Prejudgment and Post-Judgment Interest - Dkt. 788

May 1 - 2, 2013



Carnegie Mellon

Issues Addressed

Marvell's Concessions Limit the Issues To Be Addressed

The Court Should Award CMU Prejudgment Interest at One of the Three Rates Proposed by CMU

The Court Should Compound the Prejudgment Interest Quarterly

The Court Should Award Prejudgment Interest from March 6, 2003 through January 14, 2013

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Marvell concedes that:

- The Court should grant post-judgment interest at 0.14%, compounded annually
- The Court should grant CMU prejudgment interest on damages accruing on or after the date of suit. Marvell argues only that:
 - I. THIS COURT SHOULD EXERCISE ITS DISCRETION TO DENY PREJUDGMENT INTEREST ON PRE-SUIT DAMAGES

Dkt. 836 at 1

Compounding is appropriate for either the prime rate or T-bill rate:

to the extent a market rate is used to calculate interest (as is appropriate), interest

should be compounded on an annual basis.

Dkt. 836 at 1

Marvell's Concessions Limit the Issues To Be Addressed

In light of Marvell's concessions, the Court needs to decide:

- The applicable prejudgment interest rate
- Whether to compound and frequency of compounding
- The date prejudgment interest should begin to accrue

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Prejudgment interest is the rule, not the exception



35 U.S.C. § 284 provides, in relevant part:

"[T]he court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court."

 The purpose of prejudgment interest is to reimburse the patentee for the loss of the use of proceeds from royalty payments the infringer wrongfully withheld



"[P]rejudgment interest should ordinarily be awarded. In the typical case [it]... is necessary to ensure that the patent owner is placed in as good a position as he would have been had the infringer entered into a reasonable royalty agreement. An award of interest from the time that the royalty payments would have been received merely serves to make the patent owner whole, since his damages consist not only of the value of the royalty payments but also of the foregone use of the money between the time of the infringement and the... judgment."

Gen. Motors Corp. v. Devex Corp., 461 U.S. 648, 655-56 (1983)

CMU requests the Court award prejudgment interest calculated in one of three ways

- 1. Prejudgment interest at the Pennsylvania state statutory rate of 6%, compounded quarterly
- 2. In the alternative, prejudgment interest at the rate of CMU's investment returns, compounded quarterly
- 3. As a further alternative, prejudgment interest at the prime rate, compounded quarterly

CMU requests the Court award prejudgment interest calculated in one of three ways

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The Pennsylvania 6% statutory rate, compounded quarterly, is appropriate



"[T]he amount of prejudgment interest is not unique to patent law, [thus] the law of the appropriate regional circuit is applicable."

University of Pittsburgh v. Varian Med. Sys., Inc., No. 08-cv-1307, 2012 WL 1436569 at *9 (W.D. Pa. April 25, 2012) (citing Tronzo v. Biomet, Inc., 318 F.3d 1378, 1381 (Fed. Cir. 2003)); see also Transmatic, Inc. v. Gulton Indus., Inc., 180 F.3d 1343, 1347-48 (Fed. Cir. 1999)



"As 35 U.S.C. § 284 does not specify a rate to be used for prejudgment interest, courts often use the statutory interest rate of the state in which they sit."

Bowling v. Hasbro, Inc., 582 F. Supp. 2d 192, 208 (D.R.I. 2008); Bard Peripheral Vascular, Inc. v. W.L. Gore & Assocs., Inc., No. CV-03-0597, 2009 WL 920300 at *2 (D. Ariz. March 31, 2009), aff'd 670 F.3d 1171 (Fed. Cir. 2012), vac. in part on other grounds, 682 F.3d 1003 (Fed. Cir. 2012); Hall v. Meadwestvaco Corp., No. 03-30310, 2005 WL 1205554 at *5 (D. Mass. May 18, 2005)



Using the state statutory rate serves the interests of justice because it is the rate that "litigants in [Pennsylvania] invariably expect to pay."

Hall v. Meadwestvaco Corp., No. 03-30310, 2005 WL 1205554 at *5 (D. Mass. May 18, 2005); see also University of Pittsburgh v. Varian Med. Sys., Inc., No. 08-cv-1307, 2012 WL 1436569 at *10 (W.D. Pa. April 25, 2012)

The Pennsylvania 6% statutory rate, compounded quarterly, is appropriate



"Reference in any law or document enacted or executed heretofore or hereafter to 'legal rate of interest' and reference in any document to an obligation to pay a sum of money 'with interest' without specification of the applicable rate shall be construed to refer to the rate of interest of six per cent per annum." 41 P.S. § 202

 Courts in this circuit have applied (and the Federal Circuit has affirmed) the Pennsylvania statutory rate of 6%, compounded



"The Court finds that the statutory rate of interest in Pennsylvania, 6%, is appropriate... [It] adequately compensates [patentee] for not having access to its money during the period of infringement while not being punitive in nature.... it is in the interest of justice to have a consistent rate at which prejudgment interest is awarded, and... the local statutory rate is an appropriate benchmark."

University of Pittsburgh v. Varian Med. Sys., Inc., No. 08-cv-1307, 2012 WL 1436569 at *10 (W.D. Pa. April 25, 2012)

Marvell ignores this precedent

The Pennsylvania 6% statutory rate, compounded quarterly, is appropriate

Courts in this circuit have applied (and the Federal Circuit has affirmed) the Pennsylvania statutory rate of 6%, compounded



"In deciding the... rate for prejudgment interest in a lawsuit based on a federal claim, courts often use the statutory rate of the forum state. The... Federal Circuit has affirmed awards of prejudgment interest at the Pennsylvania statutory rate of 6%."

Air Vent, Inc. v. Vent Right Corp., No. 08-cv-146, 2011 WL 2117014 at *2 (W.D. Pa. May 24, 2011) (granting interest at that rate, *compounded monthly*)



"The Court finds that the 6% [Pennsylvania statutory] rate of interest is most reasonable and warranted by the facts of this case."

R. R. Dynamics, Inc. v. A. Stucki Co., 579 F. Supp. 353, 375 (E.D. Pa. 1983), aff'd, 727 F.2d 1506 (Fed. Cir. 1984); cert. denied, 469 U.S. 871 (1984)

Marvell ignores this precedent

The Pennsylvania 6% statutory rate, compounded quarterly, is appropriate

- The 6% statutory rate is lower than CMU's actual rate of return
- Marvell's supposed "substantial cash reserves" and its "willingness" to post a bond "sufficient to stay judgment pending appeal" do not dictate a lower rate. Dkt. 836 at 5
 - Marvell cites no authority holding that the cash reserves of a defendant with no executable U.S. assets render it a "low risk" for purposes of determining the prejudgment interest rate
 - Marvell cites no authority holding that posting a bond pending appeal has any bearing on determination of the prejudgment interest rate; all litigants seeking to stay judgments pending appeal are subject to such bonds

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CMU's rate of return on its long term investments, compounded quarterly, is an appropriate rate

Courts have recognized that the plaintiff's rate of return on its investments is an appropriate measure for prejudgment interest



An award of prejudgment interest below plaintiff's uncontroverted rate of investment return "was clearly erroneous" because the "purpose of prejudgment interest is to reimburse the claimant for the loss of the use of its investment or its funds from the time of the loss until judgment is entered."

Arco Pipeline Co. v. SS Trade Star, 693 F.2d 280, 281 (3d Cir. 1982) (remanding for "district court to set a rate of prejudgment interest consistent with the record and opinion of this court")



Prejudgment interest should be calculated in a manner consistent with plaintiff's rate of return when there was no evidence to contradict that "[p]laintiff would have invested the... funds in the same manner as the other... funds he invested during the same period...."

Klepeis v. J&R Equip., Inc., No. 10 Civ. 363, 2012 WL 2849390 at *2-3 (S.D.N.Y. May 31, 2012) (citing Diduck v. Kaszycki & Sons Contractors, Inc., 974 F.2d 270, 286 (2d Cir. 1992))

CMU's rate of return on its long term investments, compounded quarterly, is an appropriate rate

CMU presented evidence regarding its return rate on long-term investments:

- 11. I have calculated prejudgment interest based on CMU's investment rate of return on its LTP. I understand that Courts have used plaintiffs' investment returns as the metric for calculating prejudgment interest. I also understand that CMU makes all its long-term investments through its LTP. I have calculated prejudgment interest on the jury's verdict by applying CMU's investment rate of return, compounded quarterly, to the royalty amount for each quarter during the period March 6, 2003 through December 31, 2012.
- 12. The actual quarterly rates of return that CMU earned on its LTP have fluctuated over time, but the average annual return over the period March 6, 2003 through December 31, 2012, compounded quarterly, is 7.86%. calculations are contained in Exhibit B (Schedules B-1 (rates), and B-2 and B-3 (calculations)), attached hereto.

CMU's rate of return on its long term investments, compounded quarterly, is an appropriate rate

The Court should give little weight to Marvell's criticisms of using CMU's return rate

- Courts have broad discretion in setting the rate and should use a rate that comports with the purpose of the statute, i.e., to make the patentee whole and prevent the infringer from obtaining essentially an interest free loan
- Courts that have applied the patentee's rate of return require evidence (not speculation or hindsight) of actual investment activities
- If rate of return is negative, it would not be appropriate to apply such a rate in light of the purposes of the statute

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The prime rate, compounded quarterly, would be a legally acceptable alternative

Courts have awarded the prime rate



"The average prime lending rate for the time period in question [which ranged from 8.65% to 10.92%] is an appropriate measure of the prejudgment interest rate."

Ziggity Sys., Inc. v. Val Watering Sys., 769 F. Supp. 752, 831 (E.D. Pa. 1990)



Prime rate "is a readily ascertainable figure which provides a reasonable although rough estimate of the interest rate necessary to compensate plaintiffs not only for the loss of the use of their money but also for the risk of default. The defendant... is in effect a debtor of the plaintiff..."

Mobil Oil Corp. v. Amoco Chems. Corp., 915 F. Supp. 1333, 1372 n.24 (D. Del. 1994) (citing Gorenstein Enters., Inc. v. Quality Care-USA, Inc., 874 F.2d 431, 436 (7th Cir. 1989))



The court *rejected* infringer's argument "that the court should adopt the treasury bill rate" and instead awarded interest at the historical prime rate, compounded quarterly, noting that patentees need not show that they borrowed at prime "in order to be entitled to prejudgment interest at that rate."

Energy Transp. Group, Inc. v. Sonic Innovs., Inc., No. 05-422, 2011 WL 2222066 at *18-19 (D. Del. June 7, 2011)

The T-Bill rate is *not* appropriate



"In the context of patent infringement, the T-Bill rate is often inappropriate, as its lower rate of return has the potential to result in a windfall profit for the wrongful interloper, who would have the benefit of using the patent holder's money without fully compensating him for its use."

Bard Peripheral Vascular, Inc. v. W.L. Gore & Assocs., Inc., No. CV-03-0597, 2009 WL 920300 at *2 (D. Ariz. March 31, 2009), aff'd 670 F.3d 1171 (Fed. Cir. 2012), vac. in part on other grounds, 682 F.3d 1003 (Fed. Cir. 2012)



"[N]o one would make a long-term, voluntary loan [to an infringer] at the T-Bill rate."

Grain Processing Corp. v. Am. Maize-Prods. Co., 893 F. Supp. 1386, 1396 (N.D. Ind. 1995), vac. in part on other grounds, 108 F.3d 1392 (Fed. Cir. 1997)

Like the University of Pittsburgh, CMU effectively made an interest-free, "large, involuntary, unsecured loan to a debtor of uncertain credit-worthiness that is doing its utmost to avoid paying."

See University of Pittsburgh v. Varian Med. Sys., Inc., No. 08-cv-1307, 2012 WL 1436569 at *9 (W.D. Pa. April 25, 2012)

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Compounding interest comports with the purposes of 35 U.S.C. §284



"[A]n award of compound rather than simple interest assures that the patent owner is fully compensated."

Rite-Hite Corp. v. Kelley Co, Inc., 56 F.3d 1538, 1555 (Fed. Cir. 1995)



Compounding prejudgment interest at Pennsylvania state statutory rate is reasonable and provides ... "fully compensates" the patentee.

University of Pittsburgh v. Varian Med. Sys., Inc., No. 08-cv-1307, 2012 WL 1436569 at *10 (W.D. Pa. April 25, 2012)



District court's refusal to compound prejudgment interest was an abuse of discretion.

Dynamics Corp. of Am. v. United States, 766 F.2d 518, 519-20 (Fed. Cir. 1985)

The frequency of compounding should comport with the infringer's licensing practices



"[The infringer's] licenses with other companies show that quarterly reporting is its standard practice. Therefore, sales of the infringing products shall be aggregated by quarter and interest shall be compounded quarterly."

University of Pittsburgh v. Varian Med. Sys., Inc., No. 08-cv-1307, 2012 WL 1436569 at *10 (W.D. Pa. April 25, 2012)



"[P]rejudgment interest will be compounded quarterly so as to best approximate when [patentee] would have received the royalty payments..."

Rosco, Inc. v. Mirror Lite Co., No. CV-96-5658, 2009 WL 3587344 at *2 (E.D.N.Y. Oct. 26, 2009)



The court awards "prejudgment interest... calculated by spreading out the damages over the... quarterly royalty payments defendants would have made... and compounding the interest... on a quarterly basis."

Energy Transp. Group, Inc. v. Sonic Innovations, Inc., No. 05-422, 2011 WL 2222066 at *18 (D. Del. June 7, 2011)

The frequency of compounding should comport with the infringer's licensing practices



Marvell's *running-royalty* patent licenses all require quarterly payment of royalties

- c. The following Marvell patent license agreements, all of which provide for
 - quarterly payment of running royalties:

id.

- April 3, 2000 Hitachi Ltd.-Marvell Semiconductor, Inc. "License
 Agreement for Hard Disk Controller Technology" (MSI 1107637 –
 656, at 644). See Tr. (12/10/12) at 113 (testifying about this and other
 Marvell license agreements).
- April 28, 2000 DSP Group, Inc.-Marvell Technology Group "License Agreement" (MSI 005625502-581, at 510). See id.
- iii. April 23, 2001 ARM Limited-Marvell International Limited "Technology License Agreement" (MSI 1108471-517, at 510-11). See



Marvell's "no standard practice" argument fails

Thus, there is no "standard practice" (Brief at 6) for the timing of Marvell's royalty

Dkt. 836 at 12 payments. Accordingly, interest should be compounded annually. E.g., Apple, 2013 WL

- Marvell ignores the evidence that the only three running-royalty licenses before the Court provide for quarterly payments, suggesting that Marvell does have a standard practice for running-royalty licenses
- Marvell cites no authority for the proposition that annual compounding should be used when there is no standard practice
- In the only authority Marvell cites, the Apple case, the patentee requested annual compounding; quarterly compounding was not even considered

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CMU is entitled to prejudgment interest from March 6, 2003 - the start of the damages period



"An award of interest from the time that the royalty payments would have been received merely serves to make the patent owner whole, since his damages consist not only of the value of the royalty payments but also of the foregone use of the money between the time of the infringement and the... judgment."

Gen. Motors Corp. v. Devex Corp., 461 U.S. 648, 655-56 (1983)

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Mere passage of time does not justify the *exceptional* decision not to award prejudgment interest from the date of infringement:



"[A]bsent prejudice to the defendants, any delay by [the patentee] does not support the denial of prejudgment interest."

Crystal Semiconductor Corp. v. TriTech Microelecs. Int'l, Inc., 246 F.3d 1336, 1361-62 (Fed. Cir. 2001)



Although the patentee "waited a substantial period from the time it learned its patent was being infringed until it filed [suit]," withholding prejudgment interest was unjustified where the delay "did not prejudice the defendant."

Lummus Indus., Inc. v. D.M. & E. Corp., 862 F.2d 267, 274-75 (Fed. Cir. 1988) (vacating and remanding denial of prejudgment interest)



"Unless delay causes prejudice to the defendant," the court should not deny prejudgment interest.

Energy Transp. Group, Inc. v. Sonic Innovs., Inc., No. 05-422, 2011 WL 2222066 at *18 (D. Del. June 7, 2011)

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As set forth in CMU's response to Marvell's laches motion, Marvell cannot show that CMU unreasonably delayed or that any delay caused prejudice to Marvell because:

- Marvell failed to show that CMU knew or should have known of Marvell's infringement prior to filing suit
- Marvell did not change its position "because and as a result of" CMU's delay; to the contrary, Marvell knew of CMU's patent no later than 2002 and yet has continued to infringe even in the four years since CMU filed suit
 - An infringer cannot show prejudice where 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 claims of evidentiary prejudice are conclusory and belied by the record

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