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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**  
Washington, D.C. 20549

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**FORM 8-K**

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**CURRENT REPORT**  
**Pursuant to Section 13 or 15(d)**  
**of the Securities Exchange Act of 1934**

**Date of Report (Date of earliest event reported): September 23, 2013**

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**MARVELL TECHNOLOGY GROUP LTD.**

(Exact name of registrant as specified in its charter)

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**Bermuda**  
(State or other jurisdiction  
of incorporation)

**000-30877**  
(Commission  
File Number)

**77-0481679**  
(I.R.S. Employer  
Identification No.)

**Canon's Court**  
**22 Victoria Street**  
**Hamilton HM 12**  
**Bermuda**  
(Address of principal executive offices)

**(441) 296-6395**  
(Registrant's telephone number, including area code)

**N/A**  
(Former name or former address, if changed since last report.)

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Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligations of the registrant under any of the following provisions (see General Instruction A.2. below):

- ☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
  - ☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
  - ☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
  - ☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
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**Item 7.01 Regulation FD Disclosure.**

Marvell Technology Group Ltd. today posted a document related to the ongoing litigation with Carnegie Mellon University (“CMU”) and entitled “Frequently Asked Questions Concerning the September 23, 2013 Opinion in the CMU Litigation” (the “FAQs”) at [www.marvell.com](http://www.marvell.com). The full text of the FAQs, which is attached to this Current Report as Exhibit 99.1 is incorporated herein by reference. Due to the ongoing nature of the CMU litigation, Marvell may update the FAQs from time to time on Marvell’s website.

The information in this Current Report, including the accompanying exhibit, is being furnished and shall not be deemed “filed” for the purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), or otherwise subject to the liabilities of Section 18. The information in this Current Report shall not be incorporated by reference into any registration statement or other document filed pursuant to the Securities Act of 1933, as amended, or the Exchange Act, regardless of any general incorporation language contained in such filing.

**Item 9.01 Financial Statements and Exhibits.**

(d) Exhibits.

99.1 Frequently Asked Questions Concerning the September 23, 2013 Opinion in the CMU Litigation

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**SIGNATURE**

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Dated: September 26, 2013

MARVELL TECHNOLOGY GROUP LTD.

By: /s/ Brad D. Feller

Brad D. Feller

*Interim Chief Financial Officer*

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## EXHIBIT INDEX

Exhibit No.	Description
99.1	Frequently Asked Questions Concerning the September 23, 2013 Opinion in the CMU Litigation

**Marvell Technology Group Ltd.**  
**Frequently Asked Questions Concerning the September 23, 2013 Opinion in the CMU Litigation**

**Introduction**

As disclosed by Marvell Technology Group Ltd. (“Marvell”) in a press release dated December 27, 2012, on December 26, 2012, a jury in Pittsburgh delivered a verdict in a lawsuit brought by Carnegie Mellon University (“CMU”) against Marvell in the United States District Court for the Western District of Pennsylvania (the “Court”). The jury found that the two CMU patents at issue were literally and willfully infringed and not invalid, and awarded damages in the amount of \$1.17 billion. As stated in Marvell’s December 27 press release, Marvell believes that the evidence and the law do not support the jury’s findings and the award of damages. As a result, Marvell has sought to overturn the verdict in post-trial motions before the District Court and in view of the Court’s rulings, as discussed herein, plans to appeal to the U.S. Court of Appeals for the Federal Circuit in Washington, D.C.

On September 23, 2013, the Court issued an Order: (i) denying Marvell’s motion for judgment as a matter of law, or in the alternative, motion for new trial on non-damages issues, (ii) denying Marvell’s motion for judgment as a matter of law, new trial and/or remittitur with respect to damages, and (iii) and granting in part CMU’s motion for a finding of willful infringement enhanced damages, to the extent the Court found in favor of CMU on the issue of willful infringement. The Court reserved its further rulings on the issue of enhanced damages in CMU’s motion for a finding of willful infringement enhanced damages. The Court has also yet to rule on Marvell’s motion for laches, which is based on CMU’s unreasonable delay in filing this lawsuit, and which seeks to preclude CMU from recovering any pre-suit damages in this action. In addition, the Court has yet to rule on CMU’s motion for permanent injunction, ongoing royalties and supplemental damages, and on CMU’s motion for prejudgment interest and post-judgment interest.

Marvell is providing the following FAQs as of September 26, 2013 to provide additional information to Marvell stakeholders and partners regarding the September 23, 2013 Opinion in the CMU litigation. Marvell has compiled the following from publicly available sources including the proceedings of the litigation. Marvell believes that additional details regarding Marvell’s position regarding the jury verdict and the litigation may further clarify the status of the CMU litigation.

**Non-infringement****What did the Court find regarding infringement?**

The Court denied Marvell’s motion for judgment as a matter of law or a new trial as to non-infringement, finding there was adequate evidence upon which a reasonable jury could properly find a verdict in favor of CMU.

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Does Marvell intend to appeal the ruling?

Yes, Marvell's chips address media noise in a fundamentally different way than the claims in the two CMU patents at issue, U.S. Patent Nos. 6,201,839 and 6,438,180. Marvell's Media Noise Processor ("MNP") and Non-Linear Viterbi Detector ("NLD") features use a simple Viterbi detector, along with either pre- or post-processing. While CMU's patents claim a theoretical technique, this technique is so complex that it cannot be implemented in real-world silicon chips. Marvell developed its own unique approach, which could be implemented in actual chips. More specifically, Marvell's chips do not, as required by CMU's patent claims, determine branch metric values in a trellis by selecting a branch metric function from a set of functions and by applying the functions to a plurality of signal samples.

Marvell's simulation computer programs for its MNP and NLD features do not infringe for the same reasons. Moreover, a separate computer program designed by Marvell to simulate the theoretical performance of CMU's algorithm was used for evaluation purposes and as a benchmark tool and was not incorporated into any Marvell chips. None of these simulation computer programs infringe as they are not detectors that process signal samples, as required by CMU's patent claims, but rather are merely computer software programs that process data from text files.

Does Marvell have its own patents that cover its MNP feature and its NLD feature?

Marvell has sought and been awarded more than 100 patents on its read channel technologies, including U.S. Patent Nos. 6,931,585 and 7,155,660, which are directed to its media noise post-processor. For example, the '585 patent covering Marvell's MNP post-processor was jointly developed in-house at Marvell by co-inventors Dr. Zining Wu and Mr. Gregory Burd. Their work was based on an earlier Marvell post-processor architecture developed in 1998 and patented by Marvell's Dr. Andrei Vityaev. In addition, Marvell was awarded a patent on its NLD feature, U.S. Patent No. 8,160,181. The '181 patent was invented by Dr. Wu, Hongxin Song, Seo-How Low, and Panu Chaichanavong.

**Invalidity**

What did the Court find regarding invalidity?

The Court denied Marvell's motion for judgment as a matter of law or in the alternative for a new trial as to invalidity, finding that CMU had presented enough evidence upon which a reasonable jury could properly find that the asserted claims were not anticipated or obvious.

Does Marvell intend to appeal the rulings?

Yes, Marvell respectfully maintains that CMU's patents are anticipated by the prior work done by Seagate, including the work reflected in U.S. Patent No. 6,282,251. This prior art patent was invented by Mr. Glen Worstell, a Seagate engineer. The CMU patents stated that the difference between the prior art and the CMU patents was that the prior art methods took into account signal dependent noise in the Viterbi detector, but failed to take into consideration correlated

noise. See Col. 1:57-67 of U.S. Patent No. 6,201,839. This was incorrect. In fact, the Seagate patent took into consideration the correlation between noise samples in the read back signal. This is plain from the very title of Seagate's patent 6,282,251: "Modified Viterbi Detector Which Accounts For Correlated Noise." See also, for example, Column 2, lines 3-7 of the Seagate patent. The Seagate patent was filed on March 21, 1995, approximately 14 months before the CMU inventors, Drs. Kavcic and Moura, even conceived of their alleged invention.

What's more, Mr. Worstell informed CMU that he himself had done work on a "Viterbi detector modification to account for noise correlation." But CMU never informed the U.S. Patent Office about this communication from Seagate or about the work at Seagate. As a result, the U.S. Patent Office did not consider the work of Seagate in its examination of the CMU patent applications. Indeed, throughout the prosecution of both patents, CMU never cited a single prior art patent reference to the U.S. Patent Office, other than cross-referencing in the '180 patent the prior art patents already cited by the U.S. Patent Office in the '839 patent.

If the Seagate patent invalidates the CMU patent claims, why did the Seagate inventor say in an email that the CMU invention goes beyond his work and is probably more interesting?

The Seagate inventor reviewed an early invention disclosure of the CMU patent. The disclosure did not include any patent claims, and only included equations using covariance matrices. The Court granted Marvell's motion for summary judgment of non-infringement of several CMU patent claims that require the use of covariance matrices as Marvell's chips do not use such matrices. Even if the use of covariance matrices went beyond the Seagate patent or was probably more interesting, it has no bearing on the claims CMU was asserting at trial, which do not require the use of covariance matrices.

## **Damages**

What did the Court find regarding damages?

The Court found that CMU presented sufficient evidence from which the jury could have found that CMU is entitled to a reasonable royalty of \$0.50 per chip sold by Marvell, thus leading to an award of \$1.17B in damages. In particular, the jury in this case applied the \$0.50 royalty rate to the royalty base of every chip found infringing that Marvell has sold worldwide since March 6, 2003. The Court rejected Marvell's challenges to the royalty base and the royalty rate.

Does Marvell intend to appeal the rulings?

Yes, Marvell respectfully maintains that the damages verdict is wrong as a matter of law, does not rest on a legally sufficient evidentiary basis, and is against the weight of the evidence.

First, the sale of chips that are never used in the United States accounted for nearly 80 percent (or over \$935 million) of CMU's total damages figure. As a matter of law, damages cannot be awarded for overseas conduct. U.S. patent laws, like the laws of other countries, are geographically limited in scope. As a result, use of a method outside the U.S. does not infringe a U.S. method patent. The vast majority of Marvell's chips are sold overseas, and most of these

chips never enter the United States. Based on legal precedent, we believe the law does not allow for damages against products which are exclusively made, used, and sold overseas, and which never enter the U.S. This point was stated by the Federal Circuit in the recent *Power Integrations* case, which was decided after the jury in *CMU v. Marvell* reached its verdict. See *Power Integrations, Inc. v. Fairchild Semiconductor Int'l, Inc.*, 711 F.3d 1348 (Fed. Cir. 2013). Such “extraterritorial” conduct is simply beyond the scope of U.S. patent laws and U.S. courts, and Marvell believes it was erroneous for damages to be assessed against the entirety of Marvell’s overseas chip sales.

Second, Marvell does not believe that CMU has adduced sufficient evidence in support of a running royalty of \$0.50 per chip sold by Marvell. Marvell believes that the real-world licenses, offers, and projections involving the patents-in-suit do not support the form and amount of a reasonable royalty payment in this case. For example, CMU previously offered licenses to the patents in suit for as little as a one-time flat fee of \$200,000. Once this evidence is properly considered, Marvell believes it proves that even if any royalties are due to CMU (under the assumption Marvell used CMU technology) these royalties should be for far less than the amount reflected in this award.

CMU’s damages expert lacked the technical and industry expertise to reliably conduct the analysis used to arrive at the 50-cent number. For instance, the 50-cent royalty per chip that the jury adopted was derived from information relating to only one historical data point, which was for the sale of a small quantity of sample chips sold to one of Marvell’s smallest customers. Indeed, a royalty rate of 50 cents per chip yields a royalty that, as a percentage of the average sales price of a chip, far exceeds (perhaps by an order of magnitude or more) typical industry rates for much more significant technologies.

Third, the award fails to account for the fact that more than 80 additional features were included in Marvell’s chips at the same time the MNP feature was added. This failure to properly apportion damages between the allegedly infringing feature and other noninfringing features runs afoul of the law, including the recent decision by the Federal Circuit in *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1318 (Fed. Cir. 2011).

## **Willfulness**

### What did the Court find regarding willfulness?

The Court found that CMU showed by clear and convincing evidence that Marvell acted in disregard of an objectively high likelihood that its actions constituted infringement of a valid patent, and that CMU presented sufficient evidence on which a jury could have found that Marvell knew or should have known about the substantial risk of infringement.

### Does Marvell intend to appeal the ruling?

Yes, Marvell respectfully maintains that its numerous defenses require a finding that Marvell did not act in disregard of an objectively high likelihood that its actions constituted infringement of a valid patent.



First, Marvell demonstrated a strong invalidity case. In fact, the Court characterized Marvell’s motion for summary judgment of invalidity as a “close call.”

Second, Marvell pursued patents on its own technology and freely and voluntarily disclosed the CMU patents to the U.S. Patent Office while pursuing its own patents.

Third, the fact that CMU did nothing for six years after its solicitation letters to the industry failed to yield a single license suggests CMU’s technology was not commercially feasible – not willfully infringed. Moreover, at no time prior to filing its lawsuit in March 2009 did CMU communicate that it believed Marvell was infringing on its patents.

Finally, CMU’s inventor, Dr. Kavcic even described Marvell’s patented MNP technology as “novel” in an article that he co-authored. Kavcic, Aleksandar, and Ara Patapoutian. “The read channel.” Proceedings of the IEEE 96, no. 11 (2008): 1761-1774.

Regarding the subjective prong, Marvell believes that CMU did not present sufficient evidence to support the jury’s finding that Marvell knew or should have known about the substantial risk of infringement. For example, at trial, Marvell’s inventors explained that they did not copy CMU’s patents and detailed how they came up with their own independent solutions. In fact, Marvell believes that CMU failed to produce evidence that Marvell copied any part of the asserted patent claims.

What are the implications of the Court’s willfulness finding on the potential for enhanced damages?

The Court reserved its ruling on enhanced damages for a forthcoming opinion.

A finding of willful infringement does not mandate that damages be enhanced. *Read Corp. v. Portec, Inc.*, 970 F.2d 816, 826 (Fed Cir. 1992). Accordingly, courts frequently deny enhancement despite finding willfulness. *See, e.g., Funai Elec. Co., Ltd. v. Daewoo Elecs. Corp.*, 616 F.3d 1357, 1376-7 (Fed. Cir. 2010); *Brooktree Corp. v. Advanced Micro Devices, Inc.*, 977 F.2d 1555, 1581-82 (Fed. Cir. 1992).

**CMU’s Motion for Injunction**

Does Marvell anticipate that an injunction may be granted?

No. Marvell respectfully believes that it has raised strong grounds in opposition to CMU’s motion. For example, money damages are adequate to compensate CMU for any alleged harm. Further, since CMU does not make any products that compete with Marvell’s products, CMU is not suffering any “irreparable harm,” which is a prerequisite for an injunction. In addition, the balance of hardships favors Marvell, particularly since the parties are not competitors and there is no evidence that any other company has ever used the patented technology at issue in the case.

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## Next Steps/Appeal

### What are the immediate next steps in the case?

There are still a few post-trial motions pending decision, including Marvell's motion for judgment on laches, CMU's motion for permanent injunction, ongoing royalties and supplemental damages, CMU's motion for prejudgment interest and post-judgment interest, and CMU's motion for a finding of willfulness and enhanced damages, to the extent the Court reserved its ruling on enhanced damages for a forthcoming opinion. The Court will likely issue its ruling on these motions some time soon. At that time, Marvell intends to file an appeal to the Federal Circuit in Washington, D.C. The Federal Circuit is a specialized appellate court that has jurisdiction over all appeals in patent cases. The timing of an ultimate ruling from the Federal Circuit may vary depending on such factors as the status of the appellate court's docket and the time sensitivity of the issues that are being appealed.

### What are the grounds for appeal?

Marvell believes it has strong grounds for appeal. For example, under the correct claim construction, the asserted CMU patent claims are invalid and not infringed; and even if infringement were found, any damages should have been commensurate with the nominal license fees that CMU previously obtained from others, and further, damages should be limited to allegedly infringing use of Marvell chips in the United States.

## Forward-Looking Statements

These FAQs contain forward-looking statements that involve risks and uncertainties, including statements regarding the complex nature of the patents at issue in the CMU litigation; Marvell's non-infringement position; Marvell's own patents; the CMU patents at issue as to invalidity and infringement; reasonableness of the assessed damages; findings of the CMU damages expert; CMU's failure to meet the burden concerning the willfulness analysis and the jury's finding Marvell willfully infringed; matters related to the possibility of an injunction; statements about the nature and grounds for an appeal by Marvell; and statements about post-trial actions including motions and appeals processes. The forward-looking statements contained herein are subject to risks and uncertainties, which may cause the actual outcomes or results to vary from those indicated by the forward-looking statements. These risks and uncertainties include any adverse outcomes of any motions or appeals against Marvell that might result in enforcement of the existing verdict unchanged or with enhancements that CMU may be granted in post-trial motions and other risks and uncertainties, including those more fully described in Marvell's latest Quarterly Report on Form 10-Q for the quarter ended August 3, 2013, and other factors detailed from time to time in Marvell's filings with the SEC. Facts and circumstances referenced and asserted by Marvell are subject to change and Marvell undertakes no obligation to revise or update any of this information in respect of future events.