ADDENDUM 1

RECENT PATENT INFRINGEMENT CASES ANALYSIS DETAIL

A. Overview

The patent infringement analysis referenced herein analyzes the outcomes of ten (10) major patent infringement litigation examples and provides key figures on damages sought by plaintiffs, initial court damage awards, final/adjusted damage awards or settlement amounts, and key case notes.

The awarded damages and out-of-court settlements detailed in this analysis provide a meaningful frame of reference in understanding the patent litigation landscape with particular respect to technology. The weighted average royalty (or settlement) as a percentage of apportioned profits of these ten cases is 9.88%. By contrast, the royalty rate the Voip-Pal has chosen for its Royalty Monetization analyses is only 1.25% (87% less than the weighted average rate).

For each infringement suit analyzed, key figures detailed include (i) initial damages sought (if applicable/if disclosed), (ii) initial court/jury damages awarded, (iii) adjusted/final damages awarded (or settlement amount if settled out of court), and (iv) the resulting award/settlement amount as a percentage of apportioned profits. Specific figures for each litigation example are detailed further below.

B. Case Analysis

1. VirnetX v. Apple, Inc. (6:12-CV-00855 (E.D. Texas))

VirnetX filed suit against Apple in August 2010 accusing infringement on its technology by the iPhone, iPod Touch and iPad. In November 2012, a Texas jury found that Apple infringed all four patents awarded VirnetX $368 million in damages; VirnetX filed additional suit that day for damages on products released since the first suit. In February 2013, U.S. District Judge Leonard Davis rejected VirnetX's request for a permanent injunction barring Apple from using the infringing features in its products, and severed VirnetX's request for an ongoing royalty from Apple into a separate cause of action. After the companies failed to reach a resolution, Judge Davis ordered apple to pay an ongoing royalty rate of 0.98% of revenue on infringing products.

In September 2014, the Federal Circuit affirmed the jury's finding of infringement, but threw out the $368 million damages award, and later in February 2015 vacated the ongoing royalty. In March, Texas Judge Robert Schroeder decides to combine the trials. On February 3, 2016, the jury found in favor of VirnetX across the board, awarding $290.7 million for the original infringement and $334.9 million in damages for the newer complaint. Such figures were based on a royalty of $1.41 per device (an estimated 0.48% of infringing device profits).

2. Wisconsin Alumni Research Facility (WARF) v. Apple (14-CV-0062 (W.D. Wis.))

WARF filed suit against Apple in February 2014 for $398.7 million alleging infringement of its patented technology in Apple's 2013 and 2014 iPhone and iPad products (a royalty of $2.74 per device). The patent, which expires in December 2016, covers a method for executing instructions in a microprocessor out of order so that it can perform tasks faster. The patent was issued to WARF in 1998 on behalf of Guri Sohi, a UW-Madison computer science professor, and three graduate students.

In October 2015, the jury found Apple guilty of infringing on the WARF patent. While Apple could have been required to pay up to $862 million in damages, the judge ultimately ruled that infringement was not willful, and therefore Apple was ordered to pay $234.3 million (**0.50%** of estimated infringing device profits).

3. Microsoft Corp. v. i4i Ltd. P'ship, 131 S. Ct. 2238, 180 L. Ed. 2d 131 (2011)

i4i filed suit against Microsoft in May 2007, claiming Microsoft was infringing on its XML software with various versions of its Word software, and seeking $200 million in damages. i4i argued that it was entitled to a 25.0% royalty on approximately 2.0% of some 100 million Microsoft Word licenses ($98.00 royalty per license).

After the Jury ruled in i4i's favor in May 2009, US District Judge Leonard David upheld the decision against Microsoft and decided that the infringement was willful and ordered additional compensation to i4i for damages – $37.1 million in post-trial interest & $40 million in punitive damages for a total of $290.6 million (0.73% of ~$40 billion of estimated profits). He further ordered Microsoft to halt all sales and support for any new copies of Word 2003 and Word 2007 in the U.S. for approximately 60 days. Microsoft appealed to the U.S. Supreme Court, but the decision was upheld in June 2011.

4. VirnetX v. Microsoft (6:07-cv-00080 (E.D. Texas))

VirnetX filed suit against Microsoft in 2007, claiming Microsoft was using its virtual private networking (VPN) patents without paying for their use. VirnetX cited Windows Server 2003, XP, Vista, Live Communications Server, Windows Messenger, Office Communicator and various versions of Office as infringing on two of its patents, and sought $242 million in damages.

After a contentious trial, in March 2010 a jury recommended Microsoft pay VirnetX $105.75 million for willfully infringing on two VirnetX networking patents. Microsoft officials said at that time they were appealing that ruling. However, VirnetX then filed an additional suit, claiming Microsoft's Windows 7 and Windows Server 2008 R2 also infringed on its networking patents.

In May 2010, the companies announced they had settled out of court for $200 million (approximately 2.24% of $8.9 billion in Microsoft profits from potentially infringing software).

5. Wisconsin Alumni Research Facility (WARF) v. Intel (08-C-78-C (W.D. Wis.))

WARF filed suit against Intel for an undisclosed amount in February 2008 alleging infringement of an invention that significantly improved the efficiency and speed of computer processing, utilized in some of Intel's processors (including Core & Core 2). The technology, patented in 1998, was developed by four researchers at UW-Madison, including former computer science department chair Professor Gurindar Sohi.

In October 2009, both sides notified the court that they had reached a settlement just days before trial was scheduled to begin. Terms were confidential, but the settlement amount paid to WARF was later revealed to be $110 million (approximately 3.61% of an estimated $3+ billion in Intel Core profits; terms were discovered in documents in WARF's litigation against Apple which was filed in February 2014).

6. Apple Inc. v. Samsung Electronics Ltd., Inc. (12-CV-00630-LHK (N.D. Cal))

Apple filed a second lawsuit against Samsung in February 2012 for nearly $2.2 billion in damages, alleging infringement by at least 21 Samsung smartphones, media players, and tablets released beginning August 2011 through August 2012. Samsung once again filed counterclaims against Apple, accusing the company of infringement on some of its own patents and arguing that Apple was trying to hurt competition by targeting it for litigation.

In May 2014, the jury ultimately found largely in favor of Apple in the amount of $119.6 million (**1.84%** of estimated infringed device revenue). The jury also found that Apple had infringed one of Samsung two patents (although Apple was ordered to pay Samsung a mere $158,400).

7. Apple Inc. v. Samsung Electronics Ltd., Inc. (11-CV-01846-LHK (N.D. Cal))

Apple filed a lawsuit against Samsung in April 2011 for over $2.5 billion in damages, accusing the company of infringing four of its design patents (iPhone, iPad and iOS) and three utility patents. Samsung counter-sued, arguing that Apple infringed on five of its patents, two of which are standard essential patents that have to do with 3G technology, which the company licenses out. Samsung demanded Apple pay a royalty rate of 2.4% on the "entire selling price" of its iOS devices for use of its patents. The jury ultimately found in favor of Apple, awarding $1.05 billion in damages, which was reduced to just under $930 million in a partial retrial.

On appeal of the $930 million verdict, the Federal Circuit affirmed the infringement by Samsung, but ultimately reduced the $930 million verdict by $382 million, stating that Apple's trade dress did not meet the "nonfunctional" requirement for protection under the Lanham Act. In the end, Samsung paid Apple ~$548 million, or 6.71% of the $8.61 billion in infringing device revenue.

8. Carnegie Mellon University v. Marvell Technology Group, Ltd. (09-CV-00290-NBF (W.D. Pa.))

Carnegie Mellon University (CMU) sued Marvell in March 2009 for infringing two patents related to hard-disk drives. A jury found in favor of CMU on infringement and validity, awarding damages of approximately $1.17 billion in reasonable royalties (based on a $0.50 per product royalty rate). The district court applied the $0.50 per product rate to all sales as of the date of judgment, and further awarded a 23% enhancement for willful infringement. Marvell appealed.

In August 2015, the Federal Circuit affirmed the judgment of infringement and validity, and affirmed the $0.50 royalty rate (22.56% of Marvell profit of $2.22 per chip) as a reasonable result based on a hypothetical negotiation. However, it vacated the original damages award (reducing damages to U.S. sales only) and ordered a partial new trial to determine whether chips that never entered the U.S. could be considered sales that occurred in the United States for damages purposes. This remains to be determined.

9. Summit 6, LLC v. Samsung Elecs. Co., 802 F.3d 1283 (Fed. Cir. 2015)

Summit 6 sued Samsung (as well as Research in Motion, Facebook and other defendants) in February 2011 asserting infringement of its "intelligent processing" web-based media submission tool, specifically regarding processing of digital content such as photos.

Summit's expert witness attributed 6.2% (based on costs) of Samsung's revenue from selling each phone ($14.15) to the camera's functionality. He further concluded that 20.8% of the $14.15 in revenue for including the camera component in each phone ($2.93) was due to infringing features. Based upon annual reports and other estimated figures, the Summit 6 expert concluded that because neither party had a stronger negotiating position, the parties would have in theory split the $0.56 evenly, thus deriving a reasonable royalty of $0.28 per device, or approximately $29 million based upon relevant device sales.

In April 2013, a jury ruled in Summit 6's favor, finding its five asserted claims not invalid and infringed, and awarded Summit $15 million in damages (~25.9% of an estimated $58 million of infringing profits) as a lump sum for past and future infringement. On appeal, the verdict against Samsung in both amount and form was upheld.

10. ActiveVideo Networks v. Verizon Communications (10-CV-0248 (E.D. Va.))

ActiveVideo sued Verizon in May 2010 alleging that Verizon's FiOS-TV video-on-demand service infringed five of its patents. In August 2011, a jury found Verizon liable for infringing four patents, and awarded in favor of ActiveVideo for $115 million in damages; the jury also found ActiveVideo infringed two Verizon patents, but pegged Verizon's damages at just $16,000. After trial, U.S. District Judge Raymond Jackson added $25 million in supplemental damages and interest, and further issued a rare injunction forcing Verizon to cease infringing the four patents. Although the injunction was stayed for eight months to give Verizon time to design

around the patents, during that time Verizon accrued $2.74 per month per FiOS-TV subscriber (a staggering 40% of Verizon's profits from Fios-TV) in “sunset royalties” owed to ActiveVideo, which brought Verizon's total liability to approximately $260 million.

On appeal, The Federal Circuit reversed the finding of infringement as to one patent, but affirmed as to the other three; it left the jury's verdict intact and ruled that the royalty payments were not in error. Verizon settled the case for the ~$260 million owed plus an unspecified additional cash amount (over 40% of relevant FiOS TV profits).

C. Conclusion

The cases, as detailed above, cover a broad spectrum of technology patent litigation, ranging from software to hardware, from processing to operating systems and even simple device appearance.

As illustrated below, the weighted average damage award as a percentage of court award or settlement amount the ten (10) cases analyzed is 9.88%. Comparatively, Voip-Pal has utilized a modest royalty rate of just 1.25% in its Royalty Monetization analyses, which represents an 87.3% discount to this weighted average figure.

Case #	Plaintiff	Defendant	Adj. Settlement / Court Award ($)	Award / Settlement % of Relevant Profit
6:12-CV-00855	VirnetX	Apple	$625,633,841	0.48%
14-CV-62	WARF	Apple	234,300,000	0.50%
07CV113	i4i	Microsoft	290,640,316	0.73%
607CV80 (LED)	VirnetX	Microsoft	200,000,000	2.24%
08-C-78-C	WARF	Intel	110,000,000	3.61%
12-CV-00630-LHK	Apple Inc.	Samsung Electronics Ltd. Inc.	119,625,000	14.27%
11-CV-01846-LHK	Apple Inc.	Samsung Electronics Ltd. Inc.	547,860,041	19.18%
09-CV-00290-NBF	Carnegie Mellon University	Marvell Technology Group, Ltd.	278,406,046	22.57%
11-CV-0367	Summit 6, LLC	Samsung Electronics Ltd. Inc.	15,000,000	25.86%
10-CV-0248	ActiveVideo Networks	Verizon Communications	115,000,000	40.77%
			WEIGHTED AVERAGI	**9.88%**