UNITED STATES BANKRUPTCY COURT
SOUTHERN DISTRICT OF NEW YORK

In re:	:	Case No. 17-10089 (SMB)
AVAYA INC., *et al.*[1]	:	Chapter 11
Debtors.	:	(Jointly Administered)

MEMORANDUM DECISION ESTIMATING CLAIM NO. 3533 BY SAE POWER INCORPORATED AND SAE POWER COMPANY

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[1] The Debtors in these chapter 11 cases include Avaya Inc.; Avaya CALA Inc.; Avaya EMEA Ltd.; Avaya Federal Solutions, Inc.; Avaya Holdings Corp.; Avaya Holdings LLC; Avaya Holdings Two, LLC; Avaya Integrated Cabinet Solutions Inc.; Avaya Management Services Inc.; Avaya Services Inc.; Avaya World Services Inc.; Octel Communications LLC; Sierra Asia Pacific Inc.; Sierra Communication International LLC; Technology Corporation of America, Inc.; Ubiquity Software Corporation; VPNet Technologies, Inc.; and Zang, Inc.

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STUART M. BERNSTEIN
United States Bankruptcy Judge:

The Debtors (collectively the "Debtor" or "Avaya") and Creditor SAE Power Incorporated and SAE Power Company (collectively, "SAE") stipulated to a procedure to estimate SAE's claim based primarily on the misappropriation of trade secrets (the "Misappropriation Claim"). The litigation pending between the parties in New Jersey state court was stayed by the filing of the chapter 11 petitions, but at some point, will continue and decide the question of liability and damages. For the reasons that follow, the Court estimates SAE's pre-petition Misappropriation Claim in the amount of $1.21 million, its fraud claim at zero, and declines to estimate SAE's breach of contract claim ("the Contract Claim"), leaving it to be resolved through the usual claims allowance process.

BACKGROUND

A. Introduction

Avaya is a technology company specializing in communications systems. SAE provides power supplies and other component parts for electronic equipment. The current dispute centers on Avaya's sale of the G650 Media Gateway ("Gateway"). The Gateway is a "centralized media server" that integrates traditional, land line telecommunications with Voice-Over-Internet Protocol networks. (*Expert Report of Mark N. Horenstein, Ph. D.*, dated Oct. 11, 2017 ("*Horenstein Report*"), at ¶¶ 39-42

(ECF Doc. # 1850)).[2] Each Gateway contains one or two power supply units, or PSUs, which convert AC electricity into DC voltages needed to power the Gateway. (*Id.* ¶¶ 19-20; 45.)

Initially, SAE manufactured the PSU (the "655A" or "SAE PSU") incorporated into the Gateway. SAE contends that the SAE PSU, a multi-component unit, incorporated two trade secrets. Trade Secret #1 related to SAE's strategy and approach to the SELV [Safety Extra Low Voltage] limits. (*Id.* ¶ 122). Trade Secret #2 related to SAE's current sharing technique. (*See id.* at ¶ 145.) The Misappropriation Claim asserts that when Avaya switched to another supplier of the PSU, it misappropriated these trade secrets.

B. Avaya's Selection of SAE

In September 2002, Avaya sent a request for quotation ("RFQ") to eight potential vendors, Artesyn, C&D, Delta Products Corp. ("Delta"), Lambda, Power-One, Tectrol, Tyco Electronics, and SAE, seeking a supplier for the 655A. (DX 2). The RFQ indicated that Avaya intended to approve more than one vendor. (DX 3). On December 20, 2002, Avaya notified SAE that it had been selected as supplier of the 655A based on several factors, including its price quotation, technical solution, historical delivery, service,

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[2] The *Horenstein Report* was originally annexed in redacted form as Exhibit 1 to the *Debtors' Opening Brief Regarding Estimation of Claim No. 3533 by SAE Power Incorporated and SAE Power Company*, dated Nov. 1, 2017 ("*Debtor Brief*") (ECF Doc. # 1437).) A version with fewer redactions was filed on Feb. 15, 2018 (ECF Doc. # 1850). In addition, another version of the *Debtor Brief* and certain exhibits with fewer redactions was docketed at ECF Doc. # 1626.

In this opinion, "DX" refers to the Debtor's exhibits and "SX" refers to SAE's exhibits. All of the Debtor's exhibits are attached to the *Debtor Brief*. SAE's exhibits are attached to the *Declaration of Rebecca Coll in Support of Trial Memorandum of SAE Power Incorporated and SAE Power Company*, dated Nov. 1, 2017. (ECF Doc. # 1625-1).)

flexibility and mutually agreeable contract terms. (DX 4.) SAE executed the notification, acknowledging and agreeing to "honor the terms of this business award, even in the event that Avaya elects to dual source the Dragonhold[3] power supply [and] to work with such alternate power supplier(s), as may be identified by Avaya, towards the mutual goal of implementing a successful power supply technology to support Avaya's Dragonhold program." (DX 4.)

A "signed contract" was a condition of SAE's selection. (DX 4.) According to Avaya, from 2003 to 2005, SAE and Avaya worked to reach a comprehensive agreement governing the purchase and sale of the SAE PSUs. (*Debtor Brief* ¶ 9.) The agreement was to run until March 31, 2008, and indicated that Avaya "may contract with other manufacturers and suppliers" for provision of 655A units. (DX 7 § 10.) It also stated that Avaya would be liable to SAE for "unused long lead-time parts and components" purchased by SAE to meet forecast demand. (DX 7 § 8.) The agreement, however, was never executed. SAE nonetheless supplied the PSUs, and Avaya began selling Gateways containing the 655A in December 2003. (DX 5.)

Avaya continued to look for a second supplier of PSUs. In February 2005, it selected Delta, (*see* DX 6), and gave Delta an initial go-ahead on September 7, 2006. (DX 19, at ¶ 46) (*Expert Rebuttal Report of Jonathan I. Arnold, Ph.D.*, dated Oct. 11, 2017 ("*Arnold I*").) Avaya issued another RFQ in February 2008. On April 4, 2008, it advised SAE that based on its response to the RFQ, Avaya would no longer purchase PSUs from SAE, (DX 10), and instead, Delta would be its supplier. (DX 9, at 11-12). In

[3] "Dragonhold" was the code name for the 655A. (*Debtor Brief* ¶ 8)

response, SAE demanded that Avaya purchase 6,480 additional PSUs in its inventory to liquidate SAE's inventory of excess materials, but the parties were unable to reach an agreement. (*Debtor Brief* ¶¶ 10-11.)

C. The Pre-Petition Litigation

On January 18, 2010, SAE filed suit against Avaya in the United States District Court for the District of New Jersey. The complaint, as amended, asserted claims, *inter alia*, for breach of contract, unjust enrichment, fraud, and misappropriation of trade secrets. The gravamen of SAE's claims was that Avaya misappropriated SAE's trade secrets by providing Delta with samples of SAE's PSU as well as SAE's plans and specifications to allow Delta to reverse engineer the PSU. The parties stipulated to a dismissal of the federal case on jurisdictional grounds, and SAE refiled the complaint in Superior Court of New Jersey, Essex County on January 26, 2011. (*New Jersey Complaint and Jury Demand*, dated Jan. 26, 2011, at ¶ 80.)[4]

On July 19, 2016, the New Jersey Superior Court granted partial summary judgment in favor of Avaya. The court found that the SAE PSU "and any information, technology, or trade secrets discernible therefrom were generally available to the public, and within the public domain, as of December 2003 and before the acts complained of by SAE," and dismissed SAE's claims against Avaya to the extent they "related to Avaya having provided SAE PSUs to Delta Products or Delta Products having received, opened, inspected, tested, studied, or copied such SAE PSUs." (*Debtor Objection*, Ex. J).

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[4] A copy of the New Jersey complaint is annexed as Exhibit D to the *Debtors' Objection to the Motion of SAE Power for Allowance and Payment of Administrative Expenses and to Proofs of Claim 3054 and 3533 Filed by SAE Power*, dated Aug. 16, 2017 ("*Debtor Objection*") (ECF Doc. # 959).)

However, the court denied summary judgment, pending further discovery, as to claims arising from Avaya allegedly "provid[ing] a document identified by SAE as the 'CB Test Report' or other confidential information to Delta Products." (*Id.*)[5]

D. The Bankruptcy Case

On January 19, 2017, Avaya and certain of its affiliates filed their voluntary chapter 11 petitions, automatically staying the New Jersey litigation. SAE filed a proof of claim against Avaya for $146,300,000 (claim no. 156) on March 9, 2017, based on "breach of contract, theft of trade secrets, [and] fraud." The claim was amended and superseded by SAE's second proof claim, claim no. 3054, which asserted a claim for $312,196,923.27. (*Debtor Objection*, Ex. C). On August 11, 2017, SAE filed a third proof of claim, claim no. 3533 (the "Claim") (*Debtor Objection*, Ex. K) which amended claim no. 3054, (*id.* at 1, ¶ 4), and increased the amount of the claim to $379,414,364.00, exclusive of interest, (*id.* at 2, ¶ 7), based on "breach of contract, theft of secrets, fraud." (*Id.* at 2, ¶ 8.)[6]

Avaya filed the *Debtor Objection* on August 16, 2017. At the September 13, 2017 hearing, the Court suggested that it would be appropriate to estimate the SAE claims for reserve purposes. Avaya agreed solely for the purpose of the estimation hearing that it was liable for the misappropriation of the two trade secrets as alleged, limiting the

[5] The CB Report "contained the whole power supply architecture of the 655A [...] and the unusual protection schemes used to prevent excess voltage hazards from SLEV output shorts to the non-SELV ringer output[...]" (DX 11, at 15).

[6] In addition to the increased claim amount, claim no. 3533 attached an addendum indicating that the amendment "reflects a change in the methodology of calculation of the amount in SAE's Proof of Claim in an effort to acknowledge the Debtor's [sic] methodologies of valuation and is not an assertion of a new claim." (*Debtor Objection*, Addendum to Ex. K). Otherwise, the claims are substantively identical.

proceeding to the question of damages. In support of its position regarding damages, Avaya submitted the *Horenstein Report* which included technical information relating to the ability to reverse engineer the trade secrets or develop them from scratch as well as the availability of alternative PSUs.

SAE filed a motion *in limine* to exclude Horenstein's testimony, arguing that his opinions on the technical aspects spoke to liability issues, rather than damages, and thus, were irrelevant for an estimation proceeding. (*SAE Motion in Limine to Preclude the Testimony and Expert Report of Avaya's Proposed Expert Witness*, dated Oct. 13, 2017 at ¶¶ 2-3 (ECF Doc. # 1322-1).) The parties subsequently agreed to present estimation evidence solely on the papers without testimony, SAE withdrew its motion *in limine* and agreed not to serve any additional expert reports and Avaya agreed not to file any motions to strike or exclude the opinions contained in the amended report of SAE's damages expert, Michael LoGiudice. (*Stipulation and Agreed Order*, dated Nov. 1, 2017 (ECF Doc. # 1432.))

Accordingly, the evidentiary record consists of the *Horenstein Report*, two reports by LoGiudice, two reports by the Debtor's damages expert, Jonathan I. Arnold, and the exhibits attached to the parties' trial briefs.

E. The Expert Reports

1. Horenstein

Horenstein offered an analysis of certain technical aspects of the trade secrets relevant to the estimation of SAE's damages. He addressed three issues of particular importance: (1) the significance of the trade secrets to the 655A; (2) the commercial

availability of alternatives to the trade secrets and the SAE PSU; and (3) Avaya's ability to reverse engineer the PSU, including the trade secrets, or develop a PSU from scratch. He opined that the trade secrets did not contribute to the communication function of the Gateway, and commercially available alternatives existed. Trade Secret #1 embodied a "well-known technique at the time," and was a "relatively small part of the overall 655A design." (*Horenstein Report* ¶ 126.) Horenstein identified several publicly known, alternative techniques available in 2002 that would have implemented the same protection as that provided by Trade Secret #1. (*Id*. ¶¶ 131-136.) Similarly, Trade Secret #2 was a "small portion" of the functionality of the complete 655A, and several well-known solutions existed in 2002 that could have satisfied the specifications Trade Secret #2 addressed. (*Id*. ¶ 145.)

As to the entire 655A (not just the trade secrets), Horenstein identified three examples of commercially available alternatives that would have met Avaya's specifications set forth in the RFQ. The Cisco RPS 300, a power supply used in Cisco's Catalyst Series of access gateway switches, competed directly with the Avaya Gateway. (*Id*. ¶ 159.) Released in 2001, it "implements all the features that SAE claims could only have been implemented using SAE's alleged trade secrets," (*id*. ¶ 160), and would have been made compatible with the Gateway with two modifications. (*Id*. ¶ 161.) Next, the Nortel Networks BayStack 10 was a power supply unit designed to power networking switches and routers, and was available in 2004. (*Id*. ¶ 162.) It was compliant with SELV requirements, and implemented a current sharing technique, satisfying the Avaya specifications for which Trade Secrets #1 and #2 were designed. (*Id*. ¶¶ 163-64.) Finally, the Puls AP534 power supply, available in May 2000, was also SELV compliant

and implemented a current sharing protocol. (*Id*. ¶ 166.) Horenstein opined that the costs of the three alternate units were similar to 655A.

Horenstein also noted that the SAE 655A PSU could be fully reverse engineered in approximately three to four weeks (360-480 person-hours) by a team of three engineers working full time in a reasonably well equipped lab. (*Id*. ¶¶ 97; 111.) Reverse engineering electronic devices like the 655A is a straightforward process, (*id*. ¶ 97), and most of the cost would result from labor — no unique or expensive equipment would be necessary. (*Id*. ¶ 111.) To independently develop a 655A meeting Avaya's specifications de novo, without knowledge of SAE's 655A, Horenstein estimated that a team of four electrical engineers of ordinary skill could complete a unique design and prototype in about three months (or, no more than 2000 person-hours), (*id*. ¶¶ 115-16), and the necessary materials and supplies would cost less than $50,000. (*Id*. ¶ 116.)

Horenstein's estimates were consistent with the amount of time it took SAE to design and create its 655A. SAE began preliminary work on the 655A in November 2002, and "the first cut at the complete electrical design" occurred at the end of January, 2003. (*Id*. ¶ 118) (quoting DX 14 (*SAE's Response and Objection to Debtors' Second Set of Interrogatories*, dated Sept. 28, 2017, at 15-16).) This period of time encompassed the development of Trade Secrets #1 and #2, and their incorporation into the 655A. (*Id*. ¶ 120 (citing DX 14, at 15-16).) Horenstein's estimates were also consistent with Avaya's expectations for development time, given that Avaya provided its potential vendors approximately three-and-a-half months to deliver a prototype PSU. (*Id*. ¶ 117.)

SAE did not submit a report from a technical expert to rebut any of Horenstein's conclusions.

2. LoGiudice

SAE proffered two reports authored by Michael LoGiudice, an expert on the valuation of damages, on the Misappropriation Claim and the Contract Claim. (*See* SX A (*Preliminary Expert Witness Assessment of Michael LoGiudice*, dated Oct. 5, 2017 ("*LoGiudice I*")); SX B (*Amendment 1 of Preliminary Expert Assessment of Michael LoGiudice*, dated Oct. 15, 2017 ("*LoGiudice II*"). Most of *LoGiudice I* and a sizeable part of *LoGiudice II* were devoted to a theory of damages based on the increase in Avaya's enterprise value resulting from the cash flow generated by the sale of Gateways using SAE's misappropriated trade secrets. Avaya, then a publicly traded company, was acquired in a "going private" transaction on October 26, 2007, for approximately $8.2 billion. (*Declaration of Eric Koza (I) in Support of First Day Motions and (II) Pursuant to Local Bankruptcy Rule 1007-2*, dated Jan. 19, 2017 ("*Koza Declaration*"), at ¶ 18 (ECF Doc. # 22).) LoGiudice referred to the sale as a "merger." (*LoGiudice I* at 5.) Concluding that the purchase price was 30.74 times Avaya's earnings before interest and taxes (EBIT), LoGiudice multiplied the cost difference between the SAE PSU and the Delta PSU ($101.82) plus allegedly corresponding service agreements ($58.04) by the number of Gateway/Delta PSU sold in 2007 (32,541), and then multiplied that product ($5,202,004) by the 30.74 EBIT multiplier. The result, $159,909,611, represented the increased merger value in 2007. (*Id.* at 11.) With interest computed by LoGiudice in the amount of $123,873,709, Avaya's increased merger value was $283,774,340. (*Id.* at 3.) Adding "pre-merger cost savings using SAE's trade secrets"

and additional damages in the sum of $1,108,494 based on the excess inventory held by SAE after Avaya terminated SAE as a supplier (*i.e.*, the Contract Claim), LoGiudice computed SAE's total damages in the amount of $301,456,382. (*Id.*) In *LoGiudice II* (Case 1), he reduced the damages as a result of the reduction of the cash flow attributable to the service contracts. (*See LoGiudice II* at 11-12.) Under the revised calculation, the damage to SAE based on Avaya's increased merger value in 2007 (plus the Contract Claim and interest) was $217,058,113. (*Id.* at 4.)

LoGiudice II included three other damage calculations omitted from *LoGiudice I*. Case 2A purported to measure damages in the amount of $274,046,126, plus interest. (*LoGiudice II* at 5.) LoGiudice assumed that Avaya sold 196,271 Gateways containing a Delta PSU through September 30, 2017, and projected an additional 1,547 sales through November 15, 2017 based on open purchase orders. (*Id.* at 10-11.) Pre-petition sales totaled 195,070. (*See id.* at 9-10.) He first estimated the profit margins Avaya realized on these sales (55%), (*id.* at 9), and the profit margin on sales of service contracts (35.9%), (*id.* at 13), entered into by the customers that purchased Avaya's Gateway from 2006 to the Petition Date and from April 2, 2017 to November 15, 2017. Using these profit margins, he calculated that Avaya earned profits of $274,046,126, inclusive of the Contract Claim, and with interest, $413,555,739. (*Id.* at 5.) Case 2 estimated lower damages. LoGiudice multiplied the product and service profits in Case 2A by 57.22% (the ratio of the stand-alone PSU value to the total product sale value), (*id.* at 13), and arrived at net damages of $157,293,588, inclusive of the Contract Claim, and with interest, $237,436,295. (*Id.* at 4.)

Case 3 measured SAE's damages at $95,808,090, excluding interest, based on a reasonable royalty, or hypothetical license fee. (*Id.* at 5.) LoGiudice assumed that SAE was the sole supplier of the PSU and had no competition in a limited market. (*Id.* at 16.) He opined that a reasonable royalty or license fee for the trade secrets would be SAE's 33.38% direct margin on the sale of the entire PSU. (*Id.*) Delta sold $283,664,144 worth of PSUs to Avaya between 2006 and November 2017, and the 33.38% margin resulted in a reasonable royalty of $94,699,596. When the Contract Claim and interest were added in, the claim under Case 3 totaled $147,058,196. (*Id.* at 15-16.)

3, Arnold

Avaya proffered Jonathan Arnold as its damages expert. (*See* DX 19 (*Arnold I*); DX 17 (*Supplemental Expert Rebuttal Report of Jonathan I. Arnold, Ph.D.*, dated Oct. 25, 2017 ("*Arnold II*").) Initially, Arnold computed a lower number of sales by Delta using the misappropriated SAE PSU. As noted, Avaya gave the initial go ahead to Delta on September 7, 2006. (*Arnold I* ¶ 46.) Assuming that Delta began selling PSUs to Avaya on September 8, 2006, the sales that LoGiudice included in *LoGiudice I* from 2003 through September 7, 2006 should have been excluded, and Arnold computed 180,369 pre-petition sales of Gateways incorporating a Delta PSU. (*Id.* ¶ 47, Ex. 3.) Avaya paid $101.82 less for each Delta unit compared to the SAE PSU, and its total savings was approximately $18.4 million, the maximum amount of SAE's unjust enrichment claim. (*Id.* ¶ 51.) Furthermore, the $18.4 million figure was based on the sale of the entire PSU, not just the two trade secrets. Finally, Arnold opined based on the *Horenstein Report* and SAE's document production that $628,015 reflected the maximum amount of reasonable costs Avaya avoided by misappropriating SAE's

purported trade secrets. (*Id*. ¶ 58.) This amount reflected the engineering costs borne by SAE in 2002 and 2003 to design the 655A. (*Id*.¶ 60.)

In his supplemental report, Arnold estimated the damages attributable to SAE's two trade secrets. Initially, it was improper to attribute the full $101.82/PSU savings to SAE's trade secrets because a portion of the savings was attributable to labor costs. (*Arnold II* ¶ 14.) An SAE 655A assembled in Canada in 2008 cost $343.25, a Delta 655A assembled in Slovakia cost $324.50, and a Delta 655A assembled in Thailand cost $257.76. (Id. ¶ 15.) The value of the trade secrets must be "contained" within the $18.75/PSU price difference between Canadian SAE PSUs and Slovakian Delta PSUs. (*Id*. ¶¶ 15-16.)

In addition, the damages must be apportioned based on the cost of the trade secrets relative to the entire cost of the PSU. (*Id*. ¶ 17.) All of the components in the SAE PSU cost $207.89. (*Id*. ¶ 20.) The total cost of the components attributable to Trade Secret #1 was $9.10, and the total cost of the components for Trade Secret # 2 was $4.00. (*Id*. ¶ 20 n. 15.) Thus, the cost attributable to the trade secrets was only 6.3% of the total cost of the components attributable to the entire SAE PSU, and SAE should receive no more than 6.3% of $18.4 million, or approximately $1.2 million. (*Id*. ¶ 22.)

Arnold also computed a reasonable royalty. Applying the *Georgia-Pacific* factors discussed below he placed a $1 million ceiling on what Avaya would pay SAE to license the trade secrets in a hypothetical negotiation. (*Id*. ¶ 50.)

DISCUSSION

A. Introduction

"The amount of damages recoverable in an action for misappropriation of trade secrets may be measured either by the plaintiff's losses . . . or by the profits unjustly received by the defendant. *A.F.A. Tours, Inc. v. Whitchurch*, 937 F.2d 82, 87 (2d Cir. 1991)(citations omitted); *accord E.J. Brooks Co. v. Cambridge Sec. Seals*, 858 F.3d 744, 748 (2d Cir. 2017); *LinkCo, Inc. v. Fujitsu Ltd.*, 232 F.Supp. 2d 182, 185 (S.D.N.Y. 2002); *Softel, Inc. v. Gragon Med. & Scientific Commc'ns Ltd.*, 891 F. Supp. 935, 942 (S.D.N.Y. 1995). A plaintiff's loss measures damages based on the value of the trade secret to the plaintiff. *See University Computing Co. v. Lykes-Youngstown Corp*, 504 F.2d 518, 535 (5th Cir. 1974). It may include the cost of developing the trade secret and the revenue a plaintiff would have made, but for the defendant's misappropriation. *LinkCo*, 232 F.Supp. 2d at 185. Conversely, a defendant's unjust enrichment measures damages based on the value of the trade secret to the defendant. *University Computing*, 504 F.2d at 536; *see also Electro-Miniatures Corp. v. Wendon Co., Inc.*, 771 F.2d 23, 27 (2d Cir. 1985). However, where these two measures provide inadequate compensation to a plaintiff, or where a plaintiff's damages are difficult to calculate, courts may employ a reasonable royalty measure of damages. *LinkCo*, 232 F. Supp. 2d at 186*; see Vermont Microsystems Inc. v. Autodesk, Inc.*, 138 F.3d 449, 450 (2d Cir. 1998) (upholding use of reasonable royalty where evidence was "too imprecise and speculative" to determine unjust enrichment); *University Computing*, 504 F.2d at 539 (use of reasonably royalty appropriate where damages uncertain); *see also* RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 45 cmt. g (1995) ("RESTATEMENT"). Here, SAE seeks damages based on Avaya's unjust enrichment or alternatively, a reasonable royalty. (*See Trial*

Memorandum of SAE Power Incorporated and SAE Power Company Memo, dated November 1, 2017 ("*SAE Memo*"), ¶¶ 25-26 (ECF Doc. #1625).) Avaya argues that a reasonable royalty is the appropriate measure of damages. (*See Debtor Brief* ¶ 38.)

Unjust enrichment is the traditional form of relief in an action for misappropriation of trade secrets. RESTATEMENT §45 cmt. f. It measures damages based on the "benefits, profits, or advantage gained by defendant in the use of the trade secret." *Int'l Indus., Inc. v. Warren Petroleum Corp.*, 248 F.2d 696, 699 (3d Cir. 1957). Though there are "many variations" in how the benefit to the defendant is measured, a plaintiff is normally entitled to recover the defendant's net profit on sales of the misappropriated product. *University Computing*, 504 F.2d at 536. Where a defendant's gain consists primarily of cost savings, however, courts may use a "standard of comparison" measure, which determines damages based on the defendant's actual costs compared to the costs the defendant would have incurred without the use of the appropriated trade secret. RESTATEMENT §45 cmt. f.

A reasonable royalty awards the plaintiff "the price that would be set by a willing buyer and willing seller for the use of the trade secret made by the defendant." RESTATEMENT § 45 cmt. g. Both Avaya and SAE agree that the reasonable royalty should be measured based on the fifteen non-exhaustive factors identified in *Georgia-Pac. Corp. v. U.S. Plywood Corp.*, 318 F. Supp. 1116 (S.D.N.Y. 1970), *modified sub nom. Georgia-Pac. Corp. v. U.S. Plywood-Champion Papers, Inc.*, 446 F.2d 295 (2d. Cir. 1971).[7] All of the factors are not necessarily relevant in a given case. *Whitserve, LLC v.*

[7] *Georgia Pacific* identified the following factors:

1. The royalties received by the patentee for the licensing of the patent in suit, proving or tending to prove an established royalty.

2. The rates paid by the licensee for the use of other patents comparable to the patent in suit.

3. The nature and scope of the license, as exclusive or non-exclusive; or as restricted or non-restricted in terms of territory or with respect to whom the manufactured product may be sold.

4. The licensor's established policy and marketing program to maintain his patent monopoly by not licensing others to use the invention or by granting licenses under special conditions designed to preserve that monopoly.

5. The commercial relationship between the licensor and licensee, such as, whether they are competitors in the same territory in the same line of business; or whether they are inventor and promoter.

6. The effect of selling the patented specialty in promoting sales of other products of the licensee; that existing value of the invention to the licensor as a generator of sales of his non-patented items; and the extent of such derivative or convoyed sales.

7. The duration of the patent and the term of the license.

8. The established profitability of the product made under the patent; its commercial success; and its current popularity.

9. The utility and advantages of the patent property over the old modes or devices, if any, that had been used for working out similar results.

10. The nature of the patented invention; the character of the commercial embodiment of it as owned and produced by the licensor; and the benefits to those who have used the invention.

11. The extent to which the infringer has made use of the invention; and any evidence probative of the value of that use.

12. The portion of the profit or of the selling price that may be customary in the particular business or in comparable businesses to allow for the use of the invention or analogous inventions.

13. The portion of the realizable profit that should be credited to the invention as distinguished from non-patented elements, the manufacturing process, business risks, or significant features or improvements added by the infringer.

14. The opinion testimony of qualified experts.

15. The amount that a licensor (such as the patentee) and a licensee (such as the infringer) would have agreed upon (at the time the infringement began) if both had been reasonably and voluntarily trying to reach an agreement; that is, the amount which a prudent licensee— who desired, as a business proposition, to obtain a license to manufacture and sell a particular article embodying the patented invention— would have been willing to pay as a royalty and yet be able to make a reasonable profit and which amount would have been acceptable by a prudent patentee who was willing to grant a license.

318 F. Supp. at 1120.

Computer Packages, Inc., 694 F.3d 10, 31 (Fed. Cir. 2012) ("We do not require that witnesses use any or all of the *Georgia–Pacific* factors when testifying about damages in patent cases."); *St. Clair Intellectual Prop. Consultants, Inc.*, 935 F. Supp. 2d 779, 781 (D. Del. 2013) ("[a]pplication of all the *Georgia–Pacific* factors is not mandatory.")

"[W]here an infringing product is a multi-component product with patented and unpatented components, apportionment is required." *Mentor Graphics v. EVE–USA*, 870 F.3d 1298, 1299 (Fed. Cir. 2017); *accord* RESTATEMENT § 45 cmt. f; *see also* CALCULATING INTELLECTUAL PROPERTY INFRINGEMENT DAMAGES § 2.2.2 (Am. Inst. of Certified Pub. Accountants 2006) ("AICPA Practice Guide") ("[T]he Copyright Act, the Lanham Act, and the [Uniform Trade Secrets Act] each provide that the intellectual property owner shall recover only the net profits of the infringer that are *traceable to the infringement.*") (emphasis in original). A plaintiff's recovery "must reflect the value attributable to the infringing features of the product, and no more." *Ericsson, Inc. v. D-Link Sys., Inc.*, 773 F.3d 1201, 1226 (Fed. Cir. 2014); *accord Garretson v. Clark*, 111 U.S. 120, 121 (1884) (plaintiff "must in every case give evidence tending to separate or apportion the defendant's profits and [plaintiff's] damages between the patented feature and the unpatented features"); *Finjan, Inc. v. Blue Coat Sys., Inc.*, 879 F.3d 1299, 1309 (Fed. Cir. 2018) ("When the accused technology does not make up the whole of the accused product, apportionment is required."); *VirnetX, Inc. v. Cisco Sys., Inc.*, 767 F.3d 1308, 1326 (Fed. Cir. 2014) ("No matter what the form of the royalty, a patentee must take care to seek only those damages attributable to the infringing features."); *see Waymo LLC v. Uber Techs., Inc.* No. C 17-00939 WHA, 2017 WL 5148390, at *6 (N.D. Cal. Nov. 6, 2017) ("It will suffice to simply point out one glaring problem in Wagner's

'analysis,' namely that he made no attempt to apportion the alleged acceleration of Uber's development timeline between legitimate benefits and trade secret misappropriation.") One method used to apportion the value of a trade secret is the "Apportionment Based on Cost" method, which apportions profits based on the cost or price of a component compared to the cost of the entire multi-component product. AICPA Practice Guide, § 2.4.6.2.1.

The duration of the trade secret further limits the plaintiff's potential recovery. Damages are only appropriate for the period of time during which the trade secret would remain a secret and be unavailable to the defendant absent misappropriation. *See* RESTATEMENT, *supra* § 45 cmt. h. "This period may be measured by the time it would have taken the defendant to obtain the information by proper means such as reverse engineering or independent development." *Id.*

B. SAE's Damage Estimate

The Court rejects SAE's damage estimates in their entirety for several reasons. First, SAE's damage estimate based on the increase in SAE's 2007 enterprise valuation lacks any basis in the law. According to SAE, the enterprise valuation approach calculates "the impact of cost savings which resulted from its misappropriation of SAE's trade secrets," and "cost savings can be used to ascertain the measure of damages." (*Reply of SAE Power Incorporated to Debtors' Trial Memorandum* ("*SAE Reply*"), Nov. 8, 2017, ¶ 17 (ECF Doc. # 1627) (citing *Int'l Indus.*, 248 F.2d at 702; *Macbeth-Evans Glass Co. v. L. E. Smith Glass Co.*, 23 F.2d 459, 461-462 (3d Cir., 1927); RESTATEMENT §45 cmt. f).) The authorities SAE cites do not discuss much less support the use of enterprise valuation as a proxy for cost savings.

Moreover, the higher merger price attributable to the increased cash flow identified by LoGiudice benefitted Avaya's shareholders but harmed Avaya. The 2007 transaction was essentially a leveraged buyout. Avaya's operations were valued at $8.2 billion, and the payments to the existing shareholders were tied to this valuation. As with LBOs generally, the majority of the payments were funded by the target, here Avaya, which incurred $5.3 billion in debt to fund the acquisition. (*Koza Declaration* ¶ 18.) At the time of the chapter 11 filings, Avaya's funded debt was $6.0 billion, the majority of which was attributable to the 2007 transaction. (*Id.* at ¶ 36.) The debt assumed by Avaya to finance its own acquisition was a significant contributing factor that drove Avaya into bankruptcy.

Second, all of SAE's damage estimates assume that but for the misappropriation of its trade secrets, Avaya would not have sold *any* Gateways. (*See LoGiudice I*, at 12 ("SAE alleges that without using SAE's trade secrets, Avaya's alternate lower-cost supplier could not have made a working power supply unit ("PSU") for Avaya's products."); *LoGiudice II* at 16 ("Since there was no competition and a limited market for the PSU and SAE had excess capacity to meet demand, the likely reasonable license fee for the trade secrets would be SAE's direct margin percentage."); *SAE Memo* ¶ 25 ("Case 2A is predicated on the fact (which is assumed to be true for purposes of estimation) that Avaya could not have obtained a 655A PSU which met its rigorous specifications and regulatory requirements without the trade secrets provided by SAE, and that without a 655A PSU which met Avaya's specifications, Avaya could not have sold any G650s, and, finally, that if Avaya had not sold any G650s, it would not have

sold any follow-on services.").)[8] This assumption is belied by the proof. Horenstein provided unrefuted evidence that at least three other companies made a competitive product. Alternatively, Avaya could have reverse engineered the SAE PSU or developed one from scratch within a short period of time and at minimal expense just as SAE had done.

Third, as with Case 1, SAE assumes that every dollar that Avaya saved buying the PSUs from Delta was attributable to the misappropriated trade secrets. As noted, however, the cost of the components attributable to the trade secrets was only 6.3% of the cost of all of the components for the entire SAE PSU. Arnold properly measured the unjust enrichment by apportioning the value of the trade secrets to the entire PSU based on the cost of their components. This approach was consistent with the rule of apportionment stated above.

SAE responds that apportionment is inappropriate because the Gateway "could not operate and meet regulatory requirements" without SAE's "uniquely designed" 655A. (*SAE Reply* ¶¶ 8, 14) (citing *Ericsson*, 773 F.3d at 1226 ("[I]f a patentee can show that his invention makes up 'the entire value of the' standard, an apportionment instruction probably would not be appropriate."); AICPA Practice Guide, § 2.4.6.2.1 ("[c]ost-based apportionment is inappropriate if the cost of some elements may not

[8] SAE contends that this premise must be accepted for the purpose of the estimation proceeding. (*See SAE Memo* ¶¶ 25, 35.) This is incorrect. Avaya conceded for the purpose of the estimation proceeding that it was liable for misappropriation. It never conceded the amount of its liability — that was the reason for the estimation proceeding. Moreover, Avaya adduced Horenstein's expert testimony relating to the existence of other suppliers, reverse engineering and developing a PSU from scratch, subjects relevant to the computation of damages. Thus, SAE was on notice of Avaya's intention to proffer this proof. SAE initially moved *in limine* to exclude his testimony, but then withdrew its motion and failed to offer an expert report to rebut Horenstein's opinions.

represent their value.").) In other words, the entire value of the SAE PSU is wrapped up in the value of the trade secrets. But SAE offered no technical evidence to establish that its trade secrets were of such importance as to render apportionment inappropriate, and Horenstein opined that the trade secrets were not critical to the appropriate functioning of the 655A.

Fourth, SAE assumes that its trade secrets would remain secret forever. Again, it ignores Horenstein's unrefuted expert testimony that Avaya could have reverse engineered the SAE PSU or developed a substitute from scratch within a few months for less than $1 million in costs as SAE had done.

Fifth, SAE increased its damage estimate by service contract income Avaya supposedly realized from customers that purchased a Gateway with a Delta PSU. According to LoGiudice, 80% of the customers who buy Avaya products purchase a three year service contract, and 90% of those customers renew their service contract for the life of the product. (*LoGiudice II* at 13.) He estimated that the service contract income unjustly enriched Avaya by between $66,907,346 under Case 2, (*LoGiudice II* at 4), and $116,922,351 under Case 2A. (*Id.* at 5.)

The estimate is based on the flawed assumption that these customers would not have purchased an Avaya service contract but for their purchase of a Gateway. Avaya does not sell service contracts on a product-by-product basis, and there is no evidence that it sold a service contract specifically covering the Delta PSU. (*Arnold II* ¶ 40.) Avaya sells many different products, (*see* DX 5), and anyone who purchased a Gateway

may have also purchased other Avaya products and entered into a service contract for that reason.

Sixth, the SAE damage estimates are obviously inflated and defy common sense. LoGiudice's damage estimates based on the sales that included the Delta PSU and the service contracts ranged between $94,699,596 and $272,937,632, exclusive of interest, under Cases 1, 2 and 2A. (*See LoGiudice II* at 4-5.) According to SAE, Avaya sold 196,271 Gateways containing a Delta PSU through November 15, 2017. Thus, LoGiudice contends that SAE is entitled to between $482.49 (SAE's reasonable royalty measure under Case 3) and $1,390.62 (Avaya's profit under Case 2A) for every Gateway sold with a Delta PSU. Avaya could have purchased the entire PSU from SAE for $353 per unit, and kept all of the profit (and service income) related to those sales.

C. Avaya's Damage Estimates

In contrast, Avaya based its estimates on established methodologies, supported by expert testimony on the relevant technical aspects of the trade secrets. In considering a reasonable royalty, I note that several of the *Georgia-Pacific* factors ("GF") are either not relevant, were not considered or there is no evidence offered. These include royalties received by SAE or any other PSU manufacturer for the licensing of their trade secrets, (GF 1, 2), the exclusive or non-exclusive nature of the hypothetical license, (GF 3), SAE's policies or efforts to preserve the trade secrets, (GF 4), or proof that the trade secrets promoted the sales of Avaya's or SAE's products. (GF 6.)

The relevant *Georgia-Pacific* factors put downward pressure on the hypothetical royalty. SAE and Avaya are not competitors, (GF 5), and the duration of the trade

secrets was limited due to reverse engineering or development of a PSU from scratch by Avaya. (GF 7.) Moreover, the trade secrets were neither technically unique nor critical to the PSU. There were alternatives for dealing with the problems they addressed, (*see Horenstein* ¶¶ 126-37, 145-49), "[t]he input filtering, AC-DC conversion, DC-DC conversion, power-factor conversion, and output filtering are unrelated to the alleged trade secrets," (*id* ¶ 155), and "[a] power supply that does not practice Trade Secret No. 1 or Trade Secret No. 2, or their equivalents, would have essentially the same abilities and uses." (*Id*. ¶ 153.) In other words, the PSU would have served its essential function with one of the alternatives or without the trade secrets at all. (GF 9, 10.) Furthermore, only 6.3% of the price difference between an SAE PSU and a Delta PSU was attributable to the trade secrets. (GF 12, 13.)

Furthermore, the value of the misappropriated trade secrets to Avaya cannot be the $482.49 per PSU which LoGiudice opined was a reasonable royalty. In addition to paying this royalty, Avaya would also have to pay Delta approximately $250 per PSU. I doubt that Avaya would have agreed in a hypothetical negotiation to pay a $482.49 royalty plus $250 to Delta for each PSU unit when it could buy the an entire SAE PSU for $353, and or could have reverse engineered or designed a PSU from scratch, in each case, for less than $1 million. (GF 11.)

Finally, Avaya offered the expert testimony of Horenstein and Arnold to establish the availability of alternative PSUs, the time and expense required to reverse engineer or develop a PSU de novo, and the portion of the price difference between the SAE PSU and the Delta PSU attributable to the trade secrets. (GF 14.) SAE did not offer a technical expert to refute Horenstein, and LoGiudice's damages estimates were based on

several erroneous assumptions, including Avaya's inability to sell any Gateways without the SAE PSU, the absence of any basis to apportion sales or damages and the tie in between sales of the Delta PSU and service contracts. Moreover, LoGiudice did not even consider the factors set out in *Georgia-Pacific*, which SAE acknowledges is the "seminal case" in this district and is widely cited in other jurisdictions, including New Jersey. (*SAE Memo* ¶ 10.)

Arnold estimated that Avaya's total, unapportioned cost savings obtained by switching to Delta PSUs was $18.4 million, based on his figure of 180,369 PSUs purchased from Delta pre-petition, at a savings of $101.82/PSU. Given the dispute relating to the actual number of sales, I will estimate that Avaya sold 190,000 Gateways pre-petition that incorporated a Delta PSU, yielding a total cost savings of $19.3 million. However, only 6.3% of the total savings, or $1.21 million, was attributable to SAE's trade secrets, based on the relative cost of all materials in the 655A compared to the cost of the trade secret components. This is the upper value of a royalty a hypothetical licensee would be willing to pay for use of the trade secret and still retain a profit. (GF 15.) The hypothetical licensee could develop an alternative at a lower cost. For this reason, it would also likely be acceptable to the hypothetical licensor, knowing that the licensee could develop an alternative in-house or find another supplier. In either case, the hypothetical licensor would not sell any PSUs (beyond the development period).

Accordingly, the Court concludes that a reasonable royalty is the appropriate measure of damages, and the parties would be willing to agree to a royalty of $6.41 for each Delta PSU sold containing SAE's trade secrets, and estimates the Misappropriation Claim in the sum of $1.21 million, exclusive of interest. While the Misappropriation

Claim does not include post-petition sales, SAE is entitled to the same royalty on those sales, whatever that number may be. Avaya continues to benefit from the hypothetical license to use SAE's trade secrets, and SAE remains entitled to a royalty based on that use except to the extent that SAE may have waived a right to an administrative expense by failing to make a timely request.

D. SAE's Other Claims

The Claim also stated that it was based on fraud and breach of contract. There was no proof of fraud or evidence needed to calculate damages based on fraud. I estimate the fraud claim at zero.

The Contract Claim raises difficult questions, and ultimately, is not the appropriate subject of estimation. The parties did not sign a contract. Assuming that SAE is entitled to recover damages based on an implied contract or under a quasi-contract theory, the terms of that alternative contract have not been proved. If the terms are the same as the unexecuted agreement, Avaya would not necessarily be liable for SAE's inventory. It would be liable for "Long-Lead Time" parts identified in Appendix E that SAE purchased based on Avaya's twelve month forecasts and cannot otherwise use or sell, (*see* DX § 8), and certain costs, including those relating to "MATERIALS," incurred by SAE in connection with cancelled purchase orders that SAE cannot otherwise sell or use. (DX § 67.)

In addition, a court may estimate a claim if it is contingent or unliquidated, and the fixing or liquidation of the claim will unduly delay the administration of the case. 11 U.S.C. § 502(c). The Contract Claim is not unliquidated or contingent. Moreover, these

cases have been confirmed, and given the size of the Contract Claim compared to the size of the bankruptcy cases, reserving for the amount asserted by SAE will not unduly delay the administration of the bankruptcy cases. Moreover, the Misappropriation and Contract Claims raise different factual and legal issues. Accordingly, even if I could estimate the Contract Claim, I decline to do so. Instead, I will liquidate it as part of the claims allowance process.

E. Applicable Interest Rate

Finally, the parties also dispute the appropriate interest rate that should be applied to the Misappropriation Claim. Avaya contends that New Jersey law governs the calculation of interest, and that the interest rate set by Rule 4:42-11 of the New Jersey Rules of Court controls. (*Debtors Brief* ¶ 58.) SAE asserts that the Court should use SAE's borrowing rate of 5.7%, capitalized monthly, because this rate will return SAE to the position it would have been in but for Avaya's misappropriation. (*SAE Reply* ¶¶ 21, 22.)

New Jersey courts treat prejudgment interest as matter of procedural, rather than substantive law. *See N. Bergen Rex Transp., Inc. v. Trailer Leasing Co.*, 730 A.2d 843, 848 (N.J. 1999). Rule 4:42-11 of the New Jersey Rules of Court governs the computation of interest on tort claims, and is the interest rate that the New Jersey state court would presumably apply if it enters judgment for SAE on the Misappropriation Claim. It is, therefore, the appropriate measure of interest on that claim.

The determination of the precise rate and how to apply is not straightforward in this case. The Debtor's computation is set forth in Exhibit 4 of *Arnold I*, but because the

Debtor did not know the amount of the estimated damages, it could not set forth a specific amount of interest. Instead, the Debtor applied a varying cumulative interest factor to each year selecting October 1, 2010 as the beginning date,[9] through October 23, 2017, but SAE is not entitled to post-petition interest on the Misappropriation Claim. *See* 11 U.S.C. § 502(b)(2).

Accordingly, the parties are directed to submit a consensual form of order, or Avaya is directed to settle a proposed form of order, that will estimate the -pre-petition Misappropriation Claim in the sum of $1.21 million, and attach a statement that shows the computation of interest up to the Petition Date. The Court has considered the parties' remaining arguments and concludes that they lack merit.

Dated: New York, New York
April 23, 2018

/s/ *Stuart M. Bernstein*
STUART M. BERNSTEIN
United States Bankruptcy Judge

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[9] Per Rule 4:42-11(b) of the New Jersey Rules of Court, interest begins to accrue from the date of the institution of the action or six months after the cause of action arises, whichever is later. The Debtor initially asserted the Misappropriation Claim in the First Amended Complaint filed in the New Jersey Federal Court on or about October 1, 2010. (*Debtors Objection*, Ex. G.)