EXHIBIT A
REDACTED VERSION

ORACLE USA, INC., ET AL

V.

SAP AG, ET AL

CASE NO. 07-CV-01658

SUPPLEMENTAL EXPERT REPORT OF PAUL K. MEYER

TM FINANCIAL FORENSICS, LLC.
FEBRUARY 23, 2010

PAUL K. MEYER

I. Introduction

A. Background and Experience

1. I am the President of TM Financial Forensics LLC ("TMF") and the leader of the intellectual property practice. TMF is a business, economic, financial and damages consulting company that provides services to government agencies, corporations and counsel.

2. I am a Certified Public Accountant (CPA), Certified Fraud Examiner (CFE), Certified in Financial Forensics (CFF) and accredited in business valuation (CPA-ABV). I am a Consulting Professor at Stanford University in the Graduate School of Engineering, where I have been teaching a course covering accounting, quantitative methods and financial issues for over fifteen years. I am also a member of the Advisory Board for the McIntire School of Commerce at the University of Virginia. I graduated from the University of Virginia in 1979. I lecture on intellectual property valuation, including at the Sedona Patent Conference, the USC Intellectual Property Institute, the Licensing Executive Society and Law Seminars International.

3. Prior to founding TMF, I was a Managing Director at Navigant Consulting, Inc. ("NCI") and a co-leader of NCI's national intellectual property practice. NCI is an international consulting company. Before joining NCI in February 2004, I was co-founder and President of Tucker Alan Inc. Tucker Alan Inc. was a business, economic, financial and damages consulting company with approximately 350 employees and 13 offices in the United States. Prior to founding Tucker Alan Inc. in July 1994, I was employed by Peterson Consulting, an international consulting firm. At Peterson Consulting, I held various positions including Executive Vice President and Member of the

Board of Directors. Before joining Peterson Consulting in 1981, I worked for an international public accounting and consulting firm.

4. I have over twenty-five years of experience consulting on financial, accounting, economic and damages matters. I am experienced in financial, economic, damage, and accounting matters related to the scope of my work, analysis and study on this matter. I have consulted on numerous intellectual property infringement, misappropriation, valuation and licensing-related matters. I have analyzed hundreds of claims for lost profits and other financial and economic impacts, and have analyzed and determined reasonable royalty rates. I have consulted on matters involving software including operating systems, natural language search software, ETL software, Unicenter software, mainframe application development tools, business analytics software, CAD verification software, sales management application software, hard drive partitioning software and server synchronization software, among others. I have consulted on numerous matters related to claims of copyright infringement including software, audio streaming, training materials, hardware service manuals, online business methods, website designations and architectural plans, as examples. I have testified in over two hundred depositions and approximately seventy trials and major arbitrations, including over thirty jury trials.

Table 1: Summary of Damages[15] Fair Market Value of SAP's Infringement of Oracle's Copyrights	
1. PeopleSoft/J.D. Edwards Fair Market Value[16]	No less than $2.0 billion
2. Oracle Database Fair Market Value[17]	$55.6 million
3. Siebel Fair Market Value[18]	No less than $100 million
4. Oracle's Lost Profits – During TomorrowNow Service Period	$99.6 million
5. Oracle's Lost Profits – Through May 2015	$349.0 million
6. SAP's Unjust Enrichment/Avoided Costs	$1.1 to 3.5 billion
7. SAP's Unjust Enrichment/Database License	$55.6 million
8. Additional Oracle Costs:	
• Investigation Costs[19]	$0.3 million
• Damages To Oracle's Data/Systems	Not quantified

[15] Table 1 reflects the values for elements of damages which I have been asked to quantify to date. I have not included in the table my assessment for infringers profits which is presented in Section X. I may also be asked to provide opinions and/or quantify pre-judgment interest, Oracle's attorney's fees and costs, and punitive damages. Elements in Table 1 represent different remedies for Oracle's allegations and certain elements may not be additive.

[16] *See* Sections VI.A.-D. and Table 8.

[17] *See* Section VII and components described in Tables 9, 10 and 10A.

[18] *See* Section VIII and Table 12.

[19] **SCHEDULE 43.SU.**

B. Oracle's Acquisition of PeopleSoft

29. On June 6, 2003, Oracle initiated a tender offer for PeopleSoft, a leading provider of enterprise software to large and medium-sized organizations for customer relationship management, human capital management, financial management and supply chain management, along with a variety of industry-specific products.[37] In August 2003, PeopleSoft acquired J.D. Edwards and Company ("J.D. Edwards"), a provider of enterprise applications software for companies in manufacturing, distribution and asset intensive industries.[38]

30. Oracle sought to acquire PeopleSoft in order to gain PeopleSoft's existing and in process application software technology and intellectual property, its customer base, perpetual support revenue and research and development ("R&D") investments to become "more competitive against Microsoft, IBM, SAP and others in EAS [Enterprise Application Software] and broader technology stack."[39] Larry Ellison, Oracle's CEO, stated that Oracle's goal for the PeopleSoft acquisition was "to expand our applications business."[40] Safra Catz, Oracle's Co-President, testified that Oracle wanted to acquire PeopleSoft in order to have "a much larger customer base and a much larger maintenance base so we could spend more on R&D and so that we could sell more to this larger customer base of our other products."[41] Ms. Catz stated that "having

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[37] "Oracle Corporation: Estimation of the Fair Value of Certain Assets and Liabilities of PeopleSoft, Inc. as of December 28, 2004 dated June 23, 2005," ORCL00313160-253, at 169 and 171.

[38] PeopleSoft Annual Report for the fiscal year ended December 31, 2003, pg. 2. Throughout this Expert Report references to PeopleSoft products include J.D. Edwards software products unless indicated specifically.

[39] Goldman Sachs Oracle Presentation dated November 9, 2004 from http://sec.gov/archives, pg. 13; Discussion with Safra Catz.

[40] Deposition of Larry Ellison (Oracle CEO and Executive Board Member), May 5, 2009, pg. 58.

[41] Deposition of Safra Catz (Oracle Co-President), March 27, 2009, pgs. 77-78.

more customers, would also make us much more competitive against SAP."[42] Charles Phillips, Oracle's Co-President, stated that acquiring PeopleSoft was intended to help "achieve scale in our core ERP business," by "spend[ing] more on the products and charg[ing] less across a lot of customers."[43] Oracle understood that much of the software technology of PeopleSoft would be subject to copyright and other intellectual property protection.[44] Oracle's software technology is subject to copyright and other intellectual property protection, and Oracle, including as successor through acquisition to PeopleSoft, J.D. Edwards and Siebel, has registered numerous versions of PeopleSoft, J.D. Edwards, Siebel and Oracle Database software applications with the United States Copyright Office.[45] I understand that TomorrowNow could not have offered the advertised "comparable" or "superior" support it did, at the price it did, in the manner it did, and in the time it did, to Oracle's PeopleSoft or J.D Edwards applications customers without access to the Oracle-owned PeopleSoft or J.D. Edwards application Software and Support Materials and, for the subset of PeopleSoft and J.D. Edwards customers running on the Oracle database, without the copies of the Oracle databases it used.[46]

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[42] Deposition of Safra Catz (Oracle Co-President), March 27, 2009, pg. 78.

[43] Deposition of Charles Phillips (Oracle Co-President), April 17, 2009, pgs. 36-37.

[44] Discussion with Safra Catz. *See* also, eweek.com article, January 26, 2005, "Oracle Warns SAP to Step Lightly." In this article, Larry Ellison, Oracle CEO, is quoted as saying that SAP has every right to provide support for PeopleSoft applications as long as they don't violate Oracle intellectual and contractual property rights.

[45] Oracle USA, Inc. et al v SAP AG et al, Fourth Amended Complaint in Case No. 07-CV-01658 dated August 18, 2009, pgs. 51-56; Plaintiffs' Fifth Amended and Seventh Supplemental Responses and Objections to Defendant TomorrowNow, Inc.'s Interrogatory No. 13, December 4, 2009 (see, e.g., pgs. 76-145 and 184-188 (PeopleSoft/J.D. Edwards), pgs. 146-178 (Siebel) and pgs.178-184 (Database)).

[46] Discussions with Kevin Mandia; February 12, 2010 Supplemental Expert Report of Kevin Mandia, pgs. 1, 3, 25 and 32. *See* also, SAP email from John Zepecki to Arlen Shenkman and other SAP personnel with attached document "Peoplesoft 1-2-3 01 05 05.doc", SAP-OR00004991-5007 (Shenkman Exhibit 225), at 999 and 002 (indicating that one

31. PeopleSoft's support contracts gave its customers the right to software support and upgrades, and Oracle hoped to retain a majority of these contracts.[47] PeopleSoft's annual support revenue opportunity was a driving force for Oracle's acquisition of PeopleSoft. Charles Phillips, stated "we are retaining [PeopleSoft's] very valuable maintenance revenue, again that's the real revenue stream behind this that makes this transaction work for us."[48]

32. The definitive merger agreement between Oracle and PeopleSoft was entered into on December 12, 2004 at $26.50 per share, for a total acquisition price of $11.1 billion (see Table 3 below) on the acquisition date, December 29, 2004.[49] Oracle retained Standard & Poor's to determine the fair value of certain assets and liabilities of PeopleSoft as of the valuation date (December 28, 2004).[50] Table 3 sets forth the allocation of the PeopleSoft acquisition price between tangible and intangible assets.

of the "Challenges" of providing support services is "Access to PeopleSoft systems to create and deliver software fixes"); Deposition of Jesper Andersen (Former Oracle Senior Vice President – Applications Strategy), June 10, 2009, pgs. 48-49 [access to PeopleTools source code was necessary to provide some support services]; eweek.com article, January 26, 2005, "Analysts: Ellison Playing Hard Ball with Intellectual Property," p. 2 (addressing the need for source code in order for TomorrowNow to offer upgrades for bug fixes and regulatory enhancements); Deposition of Edward Screven (Oracle Chief Corporate Architect), November 30, 2009, pgs. 57 and 59-60 (explaining that PeopleTools and SiebelTools code are included in the installation of PeopleSoft and Siebel applications).

[47] Discussions with Safra Catz, Larry Ellison, Charles Phillips. *See* also, Los Angeles Times, January 19, 2005 article, "Oracle CEO Gives Pep Talk to Former PeopleSoft Customers," (addressing Larry Ellison, Oracle CEO's statements that he anticipated hanging on to the majority of PeopleSoft customers and that uncertain customers were more likely to leave during the 19 months Oracle had tried to acquire PeopleSoft, than after the acquisition.)

[48] PeopleSoft Investor Presentation dated December 2004, ORCL00312888-939, at 930.

[49] Oracle Annual Report for the fiscal year ended May 31, 2005, pgs. 72-74.

[50] "Oracle Corporation: Estimation of the Fair Value of Certain Assets and Liabilities of PeopleSoft, Inc. as of December 28, 2004," dated June 23, 2005, ORCL00313160-253, at 161 and 205.

Table 3: Oracle's Acquisition Price of PeopleSoft[51] ($ In Millions)		
Tangible Net Assets	$	1,209
Goodwill		6,487
Other Intangible Assets		3,384
Total	$	11,080

33. On January 18, 2005, Oracle unveiled the combined Oracle/PeopleSoft organization and announced its pledge to provide support to PeopleSoft and J.D. Edwards products through at least 2013.[52] Oracle also then announced it planned to release new PeopleSoft software products through at least 2006.[53]

C. Oracle's Acquisition of Siebel Systems

34. In June 2005, Oracle began discussions with Siebel management regarding the possibility of purchasing Siebel, the then current leader in the customer relationship management (CRM) segment of the enterprise software industry.[54] Siebel had over $1.0 billion in revenue in 2004, and 10.7% revenue

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[51] "Oracle Corporation: Estimation of the Fair Value of Certain Assets and Liabilities of PeopleSoft, Inc. as of December 28, 2004," dated June 23, 2005, ORCL00313160-253 at 161, 205 and 210; Oracle Annual Report for the fiscal year ended May 31, 2005, pgs. 16, 72-74 . *See* **SCHEDULE 3.** S&P's valuation of PeopleSoft's intangible assets totaled $3.6 billion. Oracle's financial statement disclosures exclude the support agreements valued at $208 million for which PeopleSoft had not been paid as of the acquisition. Additionally, In-Process Technology valued at $33 million was recorded as "In-process research and development" in the financial statement disclosures and not included in the total identified intangible assets valuation. These two adjustments reduce the intangible asset valuation to $3.4 billion ($3,625 – $208 - $33 = $3,384).

[52] "Oracle CEO: Stop Worrying," dated January 18, 2005, Thestreet.com. [S*ee also*, Email from Fred Studer to John Wookey with attached document: "Oracle Third Party Support Competitive Update dated May 12, 2005," ORCL00032592 - 621 (Cummins Exhibit 45), at 597].

[53] "Oracle CEO: Stop Worrying," dated January 18, 2005, Thestreet.com. [*see also*, Email from Fred Studer to John Wookey with attached document: "Oracle Third Party Support Competitive Update dated May 12, 2005," ORCL00032592 - 621 (Cummins Exhibit 45), at 597].

[54] "Oracle Corporation: Estimation of the Fair Market Value of Certain Assets and Liabilities of Siebel Systems, Inc. as of January 31, 2006," dated July 20, 2006, ORCL00312747 – 819, at 755-6.

48. SAP's Supervisory and Executive Boards both reviewed and agreed to the TomorrowNow acquisition.[115] On January 4, 2005, SAP made its initial offer to TomorrowNow of $8 million. TomorrowNow countered with $15 million, and internally SAP's CFO indicated that TomorrowNow's counter offer of $15 million "was not the issue" so much as concern over SAP's acquisition of risks "in the light of SOX."[116] After further negotiations between the parties, SAP acquired TomorrowNow for $10 million on January 19, 2005.[117]

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[115] Deposition of Hasso Plattner (SAP AG Supervisory Board Chairman), June 2, 2009, pgs. 11-12; SAP email re: Confidential, dated December 16, 2004, SAP-OR00091570-572 (Shenkman Exhibit 209), at 571.

[116] SAP email from Gerhard Oswald to Thomas Ziemen Re: Potential acquisition of TomorrowNow, dated January 5, 2005, SAP-OR00002890-892 (Ziemen Exhibit 448), at 890-892.

[117] "SAP Provides Safe Passage For Its Customers Running PeopleSoft and JD Edwards Solutions," dated January 19, 2005 (Hurst Exhibit 154), at pg. 1; "SAP Purchase Price Allocation as of January 19, 2005," dated April 4, 2005, SAP-OR00005574-589, at 589.

55. Disrupting Oracle's business was a primary goal of SAP's acquisition of TomorrowNow. A few days after the emails discussing TomorrowNow as an acquisition candidate in mid-December 2004, John Zepecki, SAP Senior Vice President of Development, communicated SAP's "PeopleSoft 1-2-3" plan on December 21, 2004 to Shai Agassi.[134] Later, in January 2005, this plan is distributed more widely by Mr. Zepecki to Arlen Shenkman, James Mackey and other SAP employees.[135] This plan addressed the three steps SAP would take "to disrupt Oracle's software maintenance business and ultimately capture Peoplesoft customers as SAP customers:" 1) provide current SAP customers PeopleSoft support, 2) drive incremental revenue through composite applications and 3) upgrade PeopleSoft customers to mySAP ERP.[136] The plan also states that, "Even if SAP does not convert all Peoplesoft customers, SAP may force Oracle to change its behavior or plans around pricing or positioning."[137]

56. Leo Apotheker, SAP Executive Board Member and Co-CEO, testified that he wanted the TomorrowNow deal to close as a way to "inflict some pain on

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[134] SAP email from Arlen Shenkman to James Mackey Re: Peoplesoft 1-2-3, SAP-OR00091723-1728 (Shenkman Exhibit 210), at 725-727.

[135] SAP email from John Zepecki to Arlen Shenkman and other SAP personnel Re; TomorrowNow/PSFT related background info with attached document "Peoplesoft 1-2-3 01 05 05.doc", SAP-OR00004991-5007 (Shenkman Exhibit 225), at 991.

[136] SAP email from John Zepecki to Arlen Shenkman and other SAP personnel Re; TomorrowNow/PSFT related background info with attached document "Peoplesoft 1-2-3 01 05 05.doc", SAP-OR00004991-5007 (Shenkman Exhibit 225), at 998-003.

[137] SAP email from John Zepecki to Arlen Shenkman and other SAP personnel Re; TomorrowNow/PSFT related background info with attached document "Peoplesoft 1-2-3 01 05 05.doc", SAP-OR00004991-5007 (Shenkman Exhibit 225), at 998.

Oracle."[138] Henning Kagermann, SAP Executive Board Member and Co-CEO, testified that the TomorrowNow acquisition strategy was to "interrupt Oracle's acquired maintenance income stream, making it difficult for them to invest in development of their fusion platform."[139] SAP's acquisition of TomorrowNow sought to: "Disrupt Oracle's ability to pay for the [PeopleSoft] acquisition out of cash flow; Shrink [Oracle's] share of the application market; Discredit [Oracle's] efforts to create a next-generation application platform."[140] Gerhard Oswald, SAP Executive Board Member, testified that a metric regularly used to assess TomorrowNow's value after the acquisition was the amount of revenue taken from Oracle.[141] Mr. Oswald also testified that up until the eve of Oracle's lawsuit, TomorrowNow was integral to SAP's efforts to attack Oracle.[142]

57. While SAP would benefit if customers purchased support from TomorrowNow, converting the customer to an SAP application was the ultimate goal.[143] SAP forecasted that TomorrowNow would be providing

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[138] Deposition of Leo Apotheker (SAP Executive Board Member and Co-CEO), October 2, 2008, pgs. 191-192; SAP email from Leo Apotheker to Bill McDermott Re: TomorrowNow, SAP-OR00206525 (Apotheker Exhibit 487), at 525.

[139] Deposition of Henning Kagermann (SAP Executive Board Member and Co-CEO), September 25, 2008, pgs. 121-122; Email from Michael Wendell to Gregory McStravick Re: "CLEAR SAILING" SYLT 2005, SAP-OR00126416-417, SAP-OR00147894-919, SAP-OR00147924-934, SAP-OR00182303-306 (Kagermann Exhibit 413), at 928.

[140] "Safe Passage: Winning Customers and Markets From Oracle-PeopleSoft-J.D. Edwards," dated January 20, 2004, SAP-OR00299495-518 (Oswald Exhibit 595), at 500.

[141] Deposition of Gerhard Oswald (SAP Executive Board Member), December 11, 2008, pg. 259; "Business Case TomorrowNow 2006," dated November 16, 2005, SAP-OR00136760-68 (Oswald Exhibit 608) at 762; "Supervisory Board Meeting TomorrowNow Status Update," dated February 2007, SAP-OR00141570-581 (Kagermann Exhibit 436), at 571; "TomorrowNow Status Update, Status: November 9, 2006," SAP-OR00155970-994 (Oswald Exhibit 599), at 974 and 982.

[142] Deposition of Gerhard Oswald (SAP Executive Board Member), December 11, 2008, pgs. 293-294.

[143] SAP email from John Zepecki to Arlen Shenkman and other SAP personnel Re; TomorrowNow/PSFT related background info with attached document "Peoplesoft 1-2-3 01 05 05.doc," SAP-OR00004991-5007 (Shenkman Exhibit 225), at 997.

support to 500 customers in 2005 and 1,000 customers in 2006.[144] However, Shai Agassi testified that SAP's Executive Board was more interested in converting customers to SAP software than continuing to collect support revenues.[145] SAP's "Peoplesoft 1-2-3" plan indicates that, "Freezing a Peoplesoft customer "forever" is not an end goal for SAP. SAP ultimately wants to sell more software and upgrade a customer to mySAP."[146]

58. SAP planned to provide support of PeopleSoft software until 2009, by which point customers would be switched over to SAP software.[147] Nam Bui, TomorrowNow CFO, indicated that TomorrowNow would help "SAP take advantage of the new enterprise software market dynamics by increasing and accelerating defection rates from Oracle/PeopleSoft to SAP."[148] An SAP Executive Board presentation indicates that "TomorrowNow is a strategic investment and serves as a strategic weapon against Oracle."[149]

59. Leo Apotheker testified that "[t]he acquisition of TomorrowNow was meant to facilitate the movement of customers who so desired to moved away from PeopleSoft -- from PeopleSoft software in that particular case to SAP."[150] SAP

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[144] "TomorrowNow Integration Meeting," SAP-OR00009794-819 (Ziemen Exhibit 455), at 817; SAP email from Gerhard Oswald to Shai Agassi Re: Business Case TomorrowNow with attached document "Board_BC_TNow.ppt," SAP-OR00502277-292 (Agassi Exhibit 742), at 279 and 286; Deposition of Shai Agassi (Former SAP CTO and Executive Board Member), January 5, 2009, pgs. 344-345.

[145] Deposition of Shai Agassi (SAP Former Executive Board Member), January 5, 2009, pg. 310.

[146] SAP email from John Zepecki to Arlen Shenkman and other SAP personnel with attached document "Peoplesoft 1-2-3 01 05 05.doc", SAP-OR00004991-5007 (Shenkman Exhibit 225), at 997.

[147] SAP email from Thomas Ziemen to Leo Apotheker Re: PeopleSoft Attack Program with attached document "PS_Attack_Program_12_2004_V6.ppt", SAP-OR00253278-301 (Ziemen Exhibit 447), at 283.

[148] SAP email from Gerhard Oswald to Thomas Ziemen Re: Potential acquisition of TomorrowNow, SAP-OR00002890-892 (Ziemen Exhibit 448), at 891; SAP email from Chuck Mulloy to Gerhard Oswald and other SAP personnel with attached document "Safe Passage v6.ppt," SAP-OR00092046- 070 (Shenkman Exhibit 236), at 050.

[149] "TomorrowNow Acquisition Monitoring Status Update," dated December 1, 2006, TN-OR00601257-271, at 258.

[150] Deposition of Leo Apotheker (SAP Executive Board Member and Co-CEO), October 2, 2008, pg. 83.

set a goal to convert approximately 50% of PeopleSoft and J.D. Edwards customer installations to SAP.[151] Shai Agassi testified that SAP could have done better than 50% and could have won approximately 60% of Oracle's PeopleSoft business.[152]

60. SAP planned to charge 10% of Oracle's license fee for basic TomorrowNow support (less than half of what Oracle charges, 22% of the license fee) or allow customers to upgrade to SAP standard support, which included some advanced service options, for 17% of Oracle's license fee.[153] SAP projected this business opportunity of obtaining maintenance, "cross-sell" and "up-switch" revenue from PeopleSoft customers, for the 3 year period from 2005 through 2007, to be valued at $897 million.[154] Within the first half of 2005, SAP reported €8.5 million[155] in TomorrowNow maintenance contract volume taken away from Oracle, and TomorrowNow's install base grew to a total of 98

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[151] "Safe Passage: Winning Customers and Markets From Oracle-PeopleSoft-J.D. Edwards," dated January 20, 2004, SAP-OR00299495-518 (Oswald Exhibit 595), at 500; Deposition of Shai Agassi (SAP Former Executive Board Member), January 5, 2009, pgs. 315-318.

[152] Deposition of Shai Agassi (SAP Former Executive Board Member), January 5, 2009, pgs. 311-312. Mr. Agassi testified that "I thought that if Oracle would do a bad job, we could see a similar distribution of the customers as the share of customers between SAP and Oracle."

[153] "Service Deliveries for PSFT Customers," dated January 16, 2005, SAP-OR 00000927-38 (Shenkman Exhibit 234), at 928.

[154] SAP email from Thomas Ziemen to Leo Apotheker Re: PeopleSoft Attack Program with attached document "PS_Attack_Program_12_2004_V6.ppt", SAP-OR00253278-301 (Ziemen Exhibit 447), at 288. Thomas Ziemen defined "up-switch" as the moving of a customer off of Oracle to an SAP application, and explained "cross-sell" as the sale of other software components that are integrated with SAP's NetWeaver environment (Deposition of Thomas Ziemen (SAP Vice President of Service Solution Management), September 30, 3008, pgs. 72-74). SAP has admitted that the $897 million value "does not 'project a customer's value over the lifecycle of a customer as, for example, it only includes assumptions for the years 2005-2007." [Defendants' Ninth Amended and Supplemental Response to Plaintiffs' Fourth Set of Interrogatories to Defendant TomorrowNow, Inc. and Third Set of Interrogatories to Defendants SAP AG and SAP America, Inc., Second Supplemental Response to Interrogatory 69, pgs. 21-22; Email from Bernd Welz to Bernd-Michael Rumpf Re: PeopleSoft Attack Program, with attached presentation, "A Roadmap for PSFT Customers to SAP", SAP-OR 00493900-923 (Scholten Exhibit 1782), at 910].

[155] $10,027,450 in year 2005, currency converted using exchange rate of $1.1797 to €1, per the SAP Annual Report for the fiscal year ending December 31, 2005, pg.98.

customers taken away from Oracle.[156] SAP's primary goal with TomorrowNow was not to generate PeopleSoft software support revenues. In fact, SAP offered TomorrowNow support for free, as a loss leader in order to attract more customers to its Safe Passage program.[157]

61. The below list summarizes some of SAP's stated reasons for acquiring TomorrowNow.

- "Disrupt Oracle's ability to pay for the acquisition out of cash flow; Shrink their share of the application market; discredit their efforts to create a next-generation application platform" and "affecting Oracle's ability to maintain this revenue stream could impact the ROI assumptions of the Oracle/PeopleSoft deal"[158]
- "Inflict some pain on Oracle"[159]
- "Interrupt Oracle's acquired maintenance income stream, making it difficult for them to invest in development of their Fusion platform."[160]
- Take away Oracle's maintenance revenue stream[161]

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[156] SAP email from Ina Daniela Weber to Christian Walter Re: Safe Passage Updates with attached documents "Apollo Program Update_Leo.ppt" and "Safe_Passage_Update_Board_Meeting_Paris_Gerd.ppt", SAP-OR00139918-969 (Kagermann, Exhibit 418), at 958.

[157] SAP email from Thomas Ziemen to Gerhard Oswald Re: Q1 Oracle Disruption Plan, SAP-OR 00156241-242 (Ziemen Exhibit 454).

[158] SAP email from John Zepecki to Arlen Shenkman and other SAP personnel with attached document "Peoplesoft 1-2-3 01 05 05.doc", SAP-OR00004991-5007 (Shenkman Exhibit 225), at 993 and 998; "Safe Passage: Winning Customers and Markets From Oracle-PeopleSoft-J.D. Edwards," SAP-OR00299495-518 (Oswald Exhibit 595), at 500.

[159] Deposition of Leo Apotheker (SAP Executive Board Member and Co-CEO), October 2, 2008, pgs. 191- 192; SAP email from Leo Apotheker to Bill McDermott Re: TomorrowNow, SAP-OR00206525 (Apotheker Exhibit 487), at 525.

[160] Deposition of Henning Kagermann (SAP Executive Board Member and Co-CEO), September 25, 2008, pgs. 121-122; SAP email from Michael Wendell to Gregory McStravick Re: "CLEAR SAILING" SYLT 2005, SAP-OR00126416-417, SAP-OR00147894-919, SAP-OR00147924-934, SAP-OR00182303-306 (Kagermann Exhibit 413), at 928.

- Earn maintenance revenue[162]
- "Act as a significant deal funnel for SAP's worldwide license salesforce"[163]
- "Announce a dramatic, market changing PeopleSoft and J.D. Edwards support and upgrade offering"[164]
- Sell software licenses[165]
- A "public relations win" to have "[t]he bragging rights for having more PSFT customers under service than Oracle"[166]
- Oracle's "share price will probably go down by 10%"[167]

4. SAP Claimed to Provide at Least Comparable Level of PeopleSoft/J.D. Edwards Service With TomorrowNow / Oracle's Software and Software and Support Materials Were Critical to Providing This Level of Service

62. To take advantage of the fear, uncertainty, and doubt of PeopleSoft customers resulting from Oracle's hostile takeover as well as the fear, uncertainty and doubt that SAP continued to generate in early 2005, SAP had to position TomorrowNow as comparable service to Oracle. Terry Hurst, SAP Director of Competitive Programs, testified at deposition that in marketing the Safe

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[161] SAP email from James Mackey to Shai Agassi Re: TomorrowNow, SAP-OR00004915 (Shenkman Exhibit 208), at 915.

[162] Deposition of James Mackey (SAP Vice President of Corporate Finance), July 15, 2008, pgs. 80-81 and 319-320.

[163] Email from Nam Bui to Arlen Shenkman Re: Follow-Up Items, SAP-OR00005015-018 (Shenkman Exhibit 223), at 017.

[164] SAP email sent from Chuck Mulloy to Gerhard Oswald and other SAP personnel with attached document "Safe Passage v6.ppt," SAP-OR00092046-SAP-0R00092070 (Shenkman Exhibit 236), at 050.

[165] Email from Nam Bui to Arlen Shenkman Re: Follow-Up Items, SAP-OR00005015-018 (Shenkman Exhibit 223), at 017.

[166] Deposition of Shai Agassi (SAP Former Executive Board Member), January 5, 2009, pgs. 144-146, 248; SAP email from Shai Agassi to Arlen Shenkman re: TomorrowNow Financials (Confidential), SAP-OR00004970-972 (Shenkman Exhibit 213), at 970; "Business Case – TomorrowNow, Inc. January 7, 2005," SAP-OR00004763-771 (Shenkman Exhibit 220), at 764 (Plattner Exhibit 1400 in native form SAP-OR00136127 from native- at 132).

[167] SAP email from Shai Agassi to James Mackey re: TNow, SAP-OR00503908-909 (Agassi Exhibit 734), at 908.

Passage program, TomorrowNow was always indicated to be superior or better support than Oracle at 50% off Oracle's support price.[168]

63. Even before SAP acquired TomorrowNow, SAP was aware that to provide the level of support TomorrowNow offered, it would need access and use of Oracle's proprietary software applications and Software and Support Materials. For example, in January 2005, John Zepecki wrote a "Peoplesoft 1-2-3" memo which indicated that "Expertise and access to Peoplesoft systems are significant barriers to providing Peoplesoft support."[169] In addition, as discussed below, SAP was aware that TomorrowNow's access and use of Oracle's intellectual property was likely violating intellectual or contractual property rights.

64. SAP's backing made TomorrowNow a higher threat to Oracle's ability to maintain its PeopleSoft support customer base. SAP acknowledged that TomorrowNow's standalone financial performance would be enhanced by SAP's ownership.[170] Additionally, TomorrowNow's ability to win new customers would be enhanced by SAP's ownership.[171]

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[168] Deposition of Terry Hurst (SAP Director of Competitive Programs), April 30, 2008, pgs. 155-163; SAP-OR00019808-826 (Hurst Exhibit 168), at 816.

[169] SAP email from John Zepecki to Arlen Shenkman and other SAP personnel with attached document "Peoplesoft 1-2-3 01 05 05.doc," SAP-OR00004991-5007 (Shenkman Exhibit 225), at 999.

[170] Deposition of Shai Agassi (SAP Former Executive Board Member), January 5, 2009, pgs. 341-345 and SAP-OR00502277-292 (Agassi Exhibit 742), at 279 and 286.

[171] Deposition of Steven Brazile (Sara Lee Corporation), October 14, 2009, pgs. 58-59, 79-80 (addressing that Sara Lee considered TomorrowNow solely because it was owned by SAP and did not consider any other third party); Deposition of Mark Anderson (Travel Centers Manager of IT for PeopleSoft, SAP, BW and Cognos Business Intelligence), dated June 8, 2009, pgs. 35-36.

5. TomorrowNow Was an Integral Part of SAP's Safe Passage / Conversion of PeopleSoft and J.D. Edwards Customers to SAP Platform

65. The TomorrowNow acquisition allowed SAP to offer application software support for non-SAP systems applications as part of SAP's "Safe Passage" program.[172] A key goal of the Safe Passage program was to capture a percentage of the PeopleSoft and J.D. Edwards customer base and convert them to SAP products.[173] Approximately nine months after the TomorrowNow acquisition, Henning Kagermann, SAP Executive Board Member and Co-CEO, was quoted in a Business Week article as saying that TomorrowNow had been "'instrumental' in the success" of Safe Passage.[174] Colin Sampson, SAP Asia Pacific Senior Vice President and Chief Operating Officer, stated that the TomorrowNow acquisition was "an integral part of SAP's safe passage" program.[175] With the acquisition of TomorrowNow, SAP had an opportunity to sell PeopleSoft customers SAP software applications, increase SAP's market share and capture support revenue of existing PeopleSoft customers.[176] The Safe Passage program was an immediate revenue opportunity for SAP and an immediate opportunity to disrupt Oracle's business.[177] In February 2007, shortly before Oracle filed its complaint in this

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[172] SAP AG Annual Report for fiscal year ending December 31, 2005, pgs. 2 and 66.

[173] SAP email sent from Chuck Mulloy to Gerhard Oswald and other SAP personnel with attached document "Safe Passage v6.ppt," SAP-OR00092046-070 (Shenkman Exhibit 236), at 048 and 050.

[174] "SAP's End Run Around Oracle," dated October 24, 2005 (Kagermann Exhibit 435), pg. 1.

[175] "SAP Brings PeopleSoft Services Arm to Asia-Pacific," dated June 30, 2005, pg. 1.

[176] Deposition of James Mackey (SAP Vice President of Corporate Finance), July 15, 2008, pg 319; Deposition of Gerhard Oswald (SAP Executive Board Member), December 10, 2008, pgs. 93-94; Deposition of Henning Kagermann (SAP Executive Board Member and Co-CEO), September 25, 2008, pgs. 39-41.

[177] SAP email from John Zepecki to Arlen Shenkman and other SAP personnel with attached document "PeopleSoft 1-2-3 01 05 05.doc," SAP-OR00004991-5007 (Shenkman Exhibit 225), at 998 and 002; "Safe Passage: Winning Customers and markets From Oracle-PeopleSoft-J.D. Edwards," SAP-OR00299495-518 (Oswald Exhibit 595), at 500; Deposition of Henning Kagermann (SAP Executive Board Member and Co-CEO), September 25, 2008, pgs. 121-122;

matter, SAP's Supervisory Board was told in a presentation from Henning Kagermann, SAP's Co-CEO and Executive Board Member, that TomorrowNow was established as a cornerstone of the SAP Safe Passage Program.[178]

SAP email from Michael Wendell to Gregory McStravick Re: "CLEAR SAILING" SYLT 2005, SAP-OR00126416-417, SAP-OR00147894-919, SAP-OR00147924-934, SAP-OR00182303-306 (Kagermann Exhibit 413), at 928.

[178] Deposition of Thomas Ziemen (SAP Vice President Service Solution Management), October 1, 2008, pgs. 319-326; "Supervisory Board Meeting TomorrowNow Status Update," dated February 2007, SAP-OR00141570-581(Kagermann Exhibit 436), at 571.

affiliates, and ultimate parent and SEC Registrant, Oracle Corporation. I understand this approach is consistent with the *Union Carbide Chemicals and Plastics Technology Corporation, et al., v Shell Oil Company et al*., matter.[265]

95. As addressed below, I have determined SAP's "value of use" of the copyrighted materials in suit based on commonly accepted valuation methodologies: the market approach, income approach and cost approach. I have also evaluated relevant financial, economic and other factors, consistent with determination of the fair market value under the framework of the well-known patent case, *Georgia-Pacific Corp. v. U.S. Plywood Corp. ("Georgia-Pacific"),* for determining the outcome of a hypothetical license negotiation for the copyrighted materials.

96. I have employed these valuation methodologies throughout my twenty five years of experience in consulting on financial, accounting, economic and damages matters, and specifically as it relates to the valuation of intellectual property and related financial damages. I have testified at trial, arbitration and deposition on the determination of financial damages using valuation techniques including the determination of reasonable royalties in the context of a hypothetical negotiation based on the evaluation of economic and other factors, including the *Georgia-Pacific* factors. I have offered expert witness testimony on the valuation of intellectual property, including copyrighted works, after considering and using the cost, market and income valuation approaches. I have analyzed, and testified to, the damages for copyright

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[265] *Union Carbide Chemicals & Plastics Technology Corp., et al., v. Shell Oil Company, et al*., 425 F. 3d 1366. *Union Carbide* is a patent case where the federal circuit upheld the district court's admission of evidence regarding the impact of infringer's sales on the parent of a holding company that holds the title to the intellectual property. The federal circuit found "Simply put, the holding company would not enter any negotiation without considering the competitive position of its corporate parent."

infringement based on the above described framework of a hypothetical license negotiation as well as using accepted valuation methodologies.

1. Market Approach

113. The market approach provides a determination of fair market value based on a comparison of the subject intellectual property to relevant licensing and sales transactions involving the subject intellectual property and/or transactions involving the parties in suit or comparable transactions within the industry. In the market approach, I consider market transactions involving sales of all or part of the subject intellectual property, the consideration paid by Oracle to PeopleSoft to acquire the property and other market transactions involving software.

a. Oracle's Acquisition of PeopleSoft

114. Theoretically, in lieu of illegally accessing the copyrighted materials in suit, SAP could have entered into a fair market value transaction and acquired a portion of the PeopleSoft/J.D. Edwards customer base and the associated revenue stream. The value that Oracle paid on a per customer basis for PeopleSoft/J.D. Edwards reflects an arm's length transaction to acquire those customer relationships, revenue and future business opportunities. Oracle

acquired the entire PeopleSoft, Inc. company for $11.1 billion in January 2005.[286] As part of Oracle's acquisition of PeopleSoft, Oracle acquired the intellectual property of PeopleSoft, including the PeopleSoft copyrighted materials in suit related to: PeopleSoft Enterprise, J.D. Edwards Enterprise One and J.D. Edwards World software applications and then existing software and support materials.[287] In addition, Oracle acquired access to approximately 9,920 PeopleSoft customers who were, at the time of acquisition, under support contracts with PeopleSoft.[288] PeopleSoft projected 2004 total revenues, including license and services, of $2.7 billion.[289] Oracle's acquisition price was approximately 4 times PeopleSoft's then-reported annual revenues.[290]

115. As discussed in section III.B above, Oracle Senior Executives viewed the PeopleSoft acquisition as providing important new or deepened access to PeopleSoft's customer base and technology. The $11.1 billion acquisition price equates to an investment of approximately $1 million per customer, on average. Oracle Senior Executives have indicated that one way they would consider the impact of a hypothesized PeopleSoft/J.D. Edwards license to SAP would be to consider the volume of customers they would have expected to lose to SAP as a result of the license. For example, if 30% of support customers would be lost to SAP, Oracle Senior Executives would consider the fair market

[286] Oracle Annual Report for the fiscal year ended May 31, 2005, pgs. 72-74.

[287] Oracle Annual Report for the fiscal year ended May 31, 2005, pgs. 72-74.

[288] "Oracle Corporation: Estimation of the Fair Value of Certain Assets and Liabilities of PeopleSoft, Inc. as of December 28, 2004," ORCL00313160-253, at 188.

[289] **SCHEDULE 2.SU**

[290] **SCHEDULE 2.SU**

value of that loss to be approximately $3.33 billion, or 30% of PeopleSoft's acquisition price.[291]

116. Oracle acquired significant intangible asset value with the PeopleSoft acquisition. Oracle retained Standard & Poor's ("S&P") to value certain PeopleSoft assets and liabilities acquired and allocate the $11.1 billion acquisition price for financial reporting purposes.[292] S&P determined that the intangible assets were worth approximately $9.9 billion, including the value of goodwill, patents/core technology, maintenance agreements and related customer relationships and tradenames/trademarks.[293] The purpose of S&P's valuation was to provide individual asset category values which could be recognized as separate assets in Oracle's financial reporting resulting from the acquisition. Table 6 summarizes the intangible asset valuation for Oracle's acquisition of PeopleSoft as reported on Oracle's financial statements.

291 Discussions with Larry Ellison (Oracle CEO and Executive Board Member), Safra Catz and Charles Phillips (Oracle Co-Presidents and Executive Board Members).

292 "Oracle Corporation: Estimation of the Fair Value of Certain Assets and Liabilities of PeopleSoft, Inc. as of December 28, 2004," ORCL00313160-253, at 161 and 205.

293 "Oracle Corporation: Estimation of the Fair Value of Certain Assets and Liabilities of PeopleSoft, Inc. as of December 28, 2004," ORCL00313160-253, at 249.

Table 6: Intangible Asset Valuation[294] Oracle's Acquisition Price of PeopleSoft ($ In Millions)		
Goodwill	$	6,487
Other Intangible Assets:		
Existing Technology		614
Patents/Core Technology		349
Maintenance Agreements and Customer Relationships		2,101
Customer Relationships		250
Tradenames/Trademarks		70
Subtotal Other Intangible Assets	$	3,384
Total	$	9,871

117. S&P's valuation of PeopleSoft's intangible assets provides a contemporaneously prepared indication of the fair market value of the PeopleSoft/J.D. Edwards-related copyrighted materials in suit. While S&P did not specifically value solely the copyrighted materials in suit, relevant portions of the S&P intangible asset valuation include the value of using the

[294] Amounts in Table 6 reflect Oracle's financial statement disclosures regarding the accounting for the acquisition. S&P's allocation of acquisition value to intangible assets varies slightly from the accounting in the financial statements [*See* Oracle Annual Report for the fiscal year ended May 31, 2005, pgs. 16 and 72-74; **SCHEDULE 3]**; "Oracle Corporation: Estimation of the Fair Value of Certain Assets and Liabilities of PeopleSoft, Inc., as of December 28, 2004," ORCL00313160-253, at 204. S&P's valuation of PeopleSoft's other intangible assets, excluding goodwill, totaled $3.6 billion. Oracle's financial statement disclosures recorded certain support agreements, valued at $208 million, for which PeopleSoft had not been paid as of the acquisition, within prepaid expenses and other current assets, rather than in intangible assets. Additionally, In-Process Technology valued at $33 million was recorded as "In-process research and development" in the financial statement disclosures and not included in the total identified intangible assets. These two adjustments reduce the intangible asset value on the financial statements to $3.4 billion [$3,625 (S&P) less $208(prepaid expense) less $33 (R&D) = $3,384]. S&P's asset valuation includes $2.3 billion for maintenance agreements and customer relationships. I have used $2.1 billion for these intangible assets in this report based on S&P's valuation excluding consideration of $208 million of support contracts mentioned above.

copyrighted materials in suit to provide service and enhance customer relationships. S&P's separate valuations performed for the following intangible asset categories include value attributable to the copyrighted materials in suit: maintenance agreements and related customer relationships, the cost to replace customer relationships, and residual value attributable to goodwill.[295] As addressed earlier in this Report, SAP acknowledged that it required PeopleSoft's software and support materials in order to solicit comparable or better support services to PeopleSoft customers.[296] Without the PeopleSoft copyrighted materials that SAP obtained without a license from Oracle, SAP would not be able to represent to PeopleSoft customers that it could meet the support service contract requirements, nor garner the customer referrals that eased customer concerns about the quality of service.[297] The illegally obtained copyrighted materials in suit enabled SAP to provide customer support.

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[295] S&P's valuation of Existing and In-Process Technology is not relevant to the determination of the copyright value in this matter because it measures the capability of the technology to generate new license revenues for that technology. In these circumstances, since SAP would not be selling licenses for the copyrighted software applications, this measure of value is unrelated to the alleged improper actions of SAP and TomorrowNow. Although, I understand that in some cases, TomorrowNow may have or did distribute CD's, instruction manuals and/or other items containing PeopleSoft trade names or trademarks, for purposes of this valuation, I have excluded any value associated with those alleged actions. SAS-TN-OR04446719-OR-00220 – 238 (Baugh Exhibit 1537); WMIFIX-TN-OR-01823634-OR-00039 – 51 (Russell Exhibit 304); SAS-TN-OR00009569-OR-00221 – 226 (Hyde Exhibit 116); TN-OR00809640-760 (Hyde Exhibit 118).

[296] *See* section IV.B.4 of this Report.

[297] The importance of getting client references was regularly noted in TomorrowNow "Win" announcements. Deposition of Andrew Nelson (Co-Founder of TomorrowNow), February 26, 2009, pgs. 202-203. *See*, as examples, TomorrowNow email from Bob Geib to all TomorrowNow employees, Re: TomorrowNow WINS! High Industries (PeopleSoft) Part TWO, TN-OR00061877-78 (Hurst Exhibit 167), at 78; TomorrowNow email from Andrew Nelson to all TomorrowNow employees, Re: TomorrowNow WINS AGAIN! Telapex, Inc., TN-OR 03752526 (A. Nelson Exhibit 1022). Lesley Loftus, TomorrowNow Vice President of Global Marketing, testified that customer referrals were important because "it's a good foundation for a decision." [Deposition of Lesley Loftus, June 13, 2008, pg. 196]. As part of its marketing of the Safe Passage program, SAP sought to get TomorrowNow customer testimonials [Deposition of Terry Hurst (SAP Director of Competitive Programs), April 30, 2008, pg. 145-146; Home Depot reference quotes, SAP-OR00066889-91 (Hurst Exhibit 163)].

118. S&P's analysis provides separate values for each asset category. S&P valued PeopleSoft acquired maintenance agreements and related customer relationships at $2.1 billion. S&P used a discounted cash flow approach that considered projections through May 31, 2015 of future support revenues and costs resulting from Oracle's use of the copyrighted materials in suit to service the 9,920 customers of PeopleSoft software as of the date of Oracle's acquisition.[298] S&P's valuation deducts costs from projected support revenues related to providing service. The cash flow from operations is then discounted to January 2005 at 10%, resulting in a present value of cash flows of $1.86 billion.[299]

119. For the "market approach," I have considered the value assigned to the ongoing and future servicing of PeopleSoft customers, which have been valued at $2.1 billion. While the $2.1 billion valuation includes Oracle's rights to these annual agreements as well as the copyrighted materials, SAPs access and use of Oracle's copyrighted materials in suit enabled SAP to attempt to supplant Oracle as the support provider and, if successful, to receive the benefit of the support agreements which Oracle understood it was acquiring in the transaction (which were protected by PeopleSoft copyrights). Because the support contracts renew annually, SAP could dislodge Oracle at any time the contracts were up for renewal by offering comparable levels of service at discounted prices. Because the contemplated license terms presume that SAP would only be using the copyrighted materials in suit until October 2008, SAP would not dislodge all of Oracle's PeopleSoft support customers, and

[298] "Oracle Corporation: Estimation of the Fair Value of Certain Assets and Liabilities of PeopleSoft, Inc. as of December 28, 2004," ORCL00313160-253, at 229.

[299] "Oracle Corporation: Estimation of the Fair Value of Certain Assets and Liabilities of PeopleSoft, Inc. as of December 28, 2004," ORCL00313160-253, at 229.

therefore some downward adjustment from the entire intangible asset value related to customer support contracts is warranted. My analysis takes this into consideration by apportioning the total value down to Oracle's anticipated customer loss.

120. S&P separately valued the cost to replace its estimate of approximately 4,200 new customer relationships Oracle acquired from PeopleSoft at $250 million.[300] This valuation assumes that by acquiring the customer base, Oracle avoided the cost of a 6 month sales cycle required to place a customer in a PeopleSoft license. Although SAP's use of the copyrighted materials was such that it was still required to solicit and attempt to establish TomorrowNow support relationships (e.g., TomorrowNow would still need to solicit the customer to obtain a support contract), SAP avoided the time and effort to get the customer to license PeopleSoft, instead spending a much shorter time to convince the customer to switch support providers. However, SAP indicates that it had less customer overlap with the PeopleSoft customer base than Oracle. A SAP presentation indicates that SAP's customer base overlapped with only approximately 2,000 PeopleSoft customers. Therefore, approximately 7,900 PeopleSoft customers would be new to SAP. I have considered that the $250 million fair market value for customer relationships represents the value of fewer customers than SAP would gain access to (4,200 versus 7,900), but will involve less SAP effort and time to complete the sales cycle than what was assumed for Oracle. Since those two considerations would have inverse impacts on the $250 million valuation, I conclude that using the $250 million as the fair market value for SAP's access to new

[300] "Oracle Corporation: Estimation of the Fair Value of Certain Assets and Liabilities of PeopleSoft, Inc. as of December 28, 2004," ORCL00313160-253, at 193-194.

customer relationships would be relevant and additive to the fair market value of the support contracts discussed previously in valuing the fair market value of SAP's use of the copyrighted materials in suit. As with the fair market value of the support contracts, the total customer relationship value would have to be apportioned for an appropriate number of relevant customers.

121. The residual value of $6.5 billion for goodwill[301] includes value related to the copyrighted materials in suit as they provide for the generation of support revenues from customers that will purchase PeopleSoft products after Oracle's acquisition date, as well as revenues from sales of other Oracle software to PeopleSoft customers.[302] As addressed in section IV.B.3 of this Report, a primary benefit to SAP of supplanting Oracle in providing support for PeopleSoft and J.D. Edwards customers was SAP's ability to market and sell SAP software. As such, a portion of the goodwill Oracle recorded from the acquisition also reflects the value of SAP's use of Oracle's copyrighted materials in suit.

122. In order to determine the fair market value of Oracle's copyrighted materials for SAP's use in providing PeopleSoft support services, and new or enhanced customer relationships, the following indicators from Oracle's acquisition of PeopleSoft are relevant:

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301 Goodwill is the excess of the purchase price paid for PeopleSoft over the value of the separately identified acquired assets.

302 I consider the value of the copyrighted materials in suit in terms of their ability to generate sales of other Oracle products not to quantify the lost profits associated with Oracle's lost cross-sell and up-sell opportunities to TomorrowNow support customers, but as considerations that would inform and be relevant to the fair market value of Defendants' use of the allegedly infringed materials. I understand from Oracle's counsel, Defendants specifically did not seek preclusion of this measure of Oracle's copyright damages in its Motion for Sanctions Pursuant to Fed. R. Civ. P. 37(c) and 16(f).

- The Oracle acquisition of PeopleSoft was contemporaneous, in the same software market, involved the copyrighted materials in suit, and is a directly relevant market metric to determining the economic value gained by SAP.
- The copyrighted materials are key and enabling to providing support services and maintaining customer relationships. Additionally, the copyrighted materials or comparable independently developed materials are required resources to meet Oracle/PeopleSoft-related customer support contract commitments.
- The copyrighted materials fair market value would include a portion of $8.85 billion, which includes the fair market value of all PeopleSoft support agreements and related customer relationships at the time of acquisition ($2.1 billion), the avoided cost of developing certain new customer relationships ($250 million) and Oracle's recorded goodwill ($6.5 billion).
- SAP's business strategy at the time of the alleged access to the Oracle copyrighted materials indicated that it planned to convert 3,000 PeopleSoft customers to SAP/TomorrowNow support services. Comparing the 3,000 customers to the total PeopleSoft customers of 9,920 indicates a targeted percentage of 30.2%. Applying this percentage to the value of the total support contracts, customer relationships and goodwill of $8.85 billion indicates a fair market value of the copyrighted

materials of $2.67 billion.[303] Applying the percentage that would result from 2,000 customers converting to SAP would result in a valuation of $1.78 billion.[304]

- Theoretically, in lieu of accessing the copyrighted Oracle materials, SAP could have entered into a fair market value transaction and acquired a portion of the PeopleSoft customer base and the associated support revenue stream. The value that Oracle paid on a per customer basis for PeopleSoft of approximately $1 million reflects an arm's-length transaction to acquire those customer relationships, existing support revenue and future revenue expansion opportunities.[305]
- Although SAP targeted 3,000 PeopleSoft customers to convert to support contracts, using 2,000 potential customer relationships (enabled by the alleged copyright infringement) at $1 million per customer indicates a $2 billion valuation of the copyrighted materials.

123. The above factors and consideration indicate that the fair market value of SAP's alleged use of Oracle's copyrighted material for use in providing PeopleSoft's customer support services would be no less than $2 billion.

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[303] $8.85 billion * 30.2% = $2.67 billion. The income approach in the following section of this Report provides another perspective to the valuation estimate for the support agreements and related customer relationships.

[304] $8.85 billion * 20.16% = $1.78 billion.

[305] Oracle acquired PeopleSoft and its 9,920 customers for $11.1 billion, or approximately $1.1 million per customer. Data related to Oracle's acquisition of PeopleSoft provides directly comparable metrics of the fair market value for the copyrighted materials in suit.

b. PeopleSoft Acquisition of J.D. Edwards

124. On July 18, 2003, PeopleSoft acquired J.D. Edwards, a leading provider of enterprise software as well as related consulting, education and support services, for $2 billion.[306] For 2003, PeopleSoft reported revenues of $309.4 million for license, maintenance and professional services attributed to J.D. Edwards acquired software products.[307] PeopleSoft's acquisition price was approximately 6 times annual revenues.[308] PeopleSoft's acquisition of J.D. Edwards provides relevant market comparable information as it was an arms-length transaction that included a portion of the copyrighted materials in suit. PeopleSoft allocated $532.6 million of the acquisition price to J.D. Edwards intangible assets, and separately $951.0 million to goodwill.[309] The intangible asset value included $411 million of value attributable to customer contracts, maintenance agreements and related relationships.[310] As an alternative to the illegal acquisition of the copyrights in suit, SAP could have paid for access to the intellectual property either through purchasing all, or part, of J.D. Edwards. This transaction provides relevant information towards determining the fair market value of SAP's use of the J.D. Edwards copyrights in suit of up to $1.36 billion.[311] I have considered that this value would not only relate to the J.D. Edwards-related copyrighted materials in suit, but would also include the value of all J.D. Edwards customer contracts, maintenance agreements and related relationships projected beyond October

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[306] PeopleSoft Form 10-K for the fiscal year ended December 31, 2003, pg. 30.

[307] PeopleSoft Form 10-K for the fiscal year ended December 31, 2003, pg. 21.

[308] $2,000 million ÷ $309.4 million = 6.46.

[309] PeopleSoft Form 10-K for the fiscal year ended December 31, 2003, pg. 31.

[310] PeopleSoft Form 10-K for the fiscal year ended December 31, 2003, pg. 32.

[311] $951.0 million + $411 million = $1.36 billion.

2008, as well as goodwill. The transaction included a large revenue multiplier, significant goodwill, and included some of the copyrighted materials in suit.

c. SAP Acquisition of Business Objects

125. In 2008, SAP acquired Business Objects, a business intelligence software and services company for $7.1 billion.[312] For the year ended December 31, 2006, Business Objects' reported revenues were $1.25 billion.[313] SAP's acquisition price was approximately 6 times annual revenues.[314] SAP allocated [redacted] of the acquisition price to Business Objects' intangible asset value including goodwill.[315] SAP's acquisition of Business Objects provides some relevant market information as it is an arm's length transaction in the software industry (broad portfolio of software tools and applications designed to optimize across business networks), involving one party to the suit. The considerable acquisition price of Business Objects demonstrates that SAP was willing to pay significant amounts to secure software license and support services revenue streams, intangible assets and related technology.[316] Table 7 summarizes the intangible asset valuation for the Business Objects acquisition.

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[312] "SAP AG Fair Value of Certain Assets, Liabilities and Legal Entities of Business Objects S.A. As of January 21, 2008," SAP-OR 00832546-721, at 547.

[313] "SAP AG Fair Value of Certain Assets, Liabilities and Legal Entities of Business Objects S.A. As of January 21, 2008," SAP-OR 00832546-721, at 561.

[314] $7.1 billion ÷ $1.25 billion = 6.

[315] "SAP AG Fair Value of Certain Assets, Liabilities and Legal Entities of Business Objects S.A. As of January 21, 2008," SAP-OR 00832546-721, at 556.

[316] EWeek.com article, "SAP Touts Synergies in Business Objects Deal," October 8, 2007 (Addresses that with forty percent overlap in SAP and Business Objects' customers, SAP can expand its customer base and exploit up-selling opportunities); *See* also, The Channel Insider.com article, "SAP Cautious on 2008 Outlook," January 30, 2008 (addressing SAP's willingness to make other large acquisitions if the right opportunity were to present itself, despite acquisitions not being SAP's general strategy.)

Table 7: Intangible Asset Valuation[317] SAP's Acquisition Price of Business Objects ($ In Millions)	
Goodwill	[redacted]
Developed Product Technology	[redacted]
In-Process R&D	[redacted]
Customer Relationships	[redacted]
Tradenames	[redacted]
Total	[redacted]

126. The categories of asset valuation most relevant for comparison to the fair market value of SAP's value of use would be the value of customer relationships at [redacted] and the goodwill at [redacted] Customer relationships related to maintenance contracts were valued using a discounted cash flow method at [redacted] projecting cash flow for 16 years, through 2023, and including a terminal value.[318] At the time of SAP's acquisition, Business Objects was generating about half the revenue of PeopleSoft when PeopleSoft was acquired by Oracle.

d. Summary: Fair Market Value Using The Market Approach

127. After considering the three transactions described above, and focusing on the valuation of Oracle's acquisition of PeopleSoft, in my opinion, the Market Approach indicates a fair market value of SAP's use of Oracle's copyrighted materials in suit of no less than $2 billion.

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[317] "SAP AG Fair Value of Certain Assets, Liabilities and Legal Entities of Business Objects S.A. As of January 21, 2008," SAP-OR 00832546-721, at 556.

[318] "SAP AG Fair Value of Certain Assets, Liabilities and Legal Entities of Business Objects S.A. As of January 21, 2008," SAP-OR 00832546-721, at 638 (Exhibit A.4A).

2. Income Approach

128. The income approach values intellectual property based upon the additional cash flows a business is expected to generate in the future from the exploitation of the technology at issue. The income approach measures the net present value of these future cash flows as of the date of the valuation. I have employed the income approach by determining the incremental net cash flows Oracle would expect to lose to SAP as a result of licensing the copyrighted materials in suit. I have also considered in the income approach analyses performed contemporaneously by SAP or TomorrowNow indicating either the revenues they expected to receive or the amount of Oracle's business they expected to displace.

a. Income Approach Applied To Oracle's Expected Losses

129. S&P's overall valuation of Oracle's PeopleSoft acquisition was measured using a discounted cash flow model for revenues and profits from PeopleSoft's support customers lost to TomorrowNow and SAP (post-October 2008), lost incremental license revenue (up-sell) and related support, and lost new license revenue (cross-sell) and related support. In modeling the incremental value of customers Oracle would expect to lose under a license to SAP, I have used various assumptions from the S&P valuation, including the size of the PeopleSoft customer base acquired, annual attrition rates, average annual maintenance fees, duration of the model to at least 2014, cost of sales and certain other expenses, and present value factors. I have also considered the terminal value of losing support customers, and incremental licenses and support as a result of licensing the copyrighted materials in suit to SAP.

130. I have addressed three scenarios varying the number of customers that switch their applications to SAP; one model assumes 1,375 customer switches;

another model assumes 2,000 customer switches; and lastly, a model with 3,000 customer switches. In each case I have assumed that Oracle would lose 3,000 of its PeopleSoft support customers to SAP and TomorrowNow between January 2005 and October 2008, with terminal value of up-sell license and support revenue losses through December 31, 2014.[319] Based on estimates of incremental costs including cost of goods and sales related expenses, I have deducted costs from the revenues at 20% for cost of support revenues, 30% for cost of incremental license sales to existing customers, and 50% for cost of new license revenues.[320] I have used a terminal value based on lost license and support profits, capitalized at 8.3%, to estimate the ongoing loss to Oracle of customers that would switch to SAP as a result of licensing the copyrighted materials in suit.[321] All amounts have been discounted to January 2005.

131. The results of these calculations are summarized in **SCHEDULES 11.SU-13.SU**, and indicate the fair market value under various assumptions regarding the number of customers Oracle would lose to SAP as a result of licensing the copyrighted materials in suit, of between $2.0 billion and $3.8 billion, assuming terminal value.[322]

b. Income Approach Applied To SAP's Expected Gains

132. Separately, SAP valued the access and use of the PeopleSoft copyrighted materials in suit. In December 2004, SAP prepared a "Business Opportunity" projecting that as a result of its "PeopleSoft Attack Program," of which TomorrowNow was a key part, it would obtain 3,000 PeopleSoft maintenance

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[319] *See* **SCHEDULES 11.SU-13.SU.**

[320] *See, e.g.* **SCHEDULES 11.1** and **11.2SU**.

[321] *See, e.g.* **SCHEDULE 11.1**. "Oracle Corporation: Estimation of the Fair Value of Certain Assets and Liabilities of Siebel Systems, Inc. as of January 31, 2006, dated July 20, 2006, ORCL00312747 – 819 at 812.

[322] *See* **SCHEDULES 11.SU-13.SU.**

customers by 2007, 2,250 of which would have purchased other SAP applications software ("cross-sell") by 2007 (at an average deal size of $70K), and 1,375 of which would purchase an SAP application to replace, at some point, their PeopleSoft application with a SAP application ("up-switch").[323] SAP's revenue projection for 2005 through 2007 using these metrics was $897 million.[324]

133. I have used SAP's projections estimating $897 million in revenue over 3 years to construct three scenarios. All three calculations assume TomorrowNow gains 3,000 PeopleSoft support customers. One calculation assumes SAP gains 1,375 new customers that purchase a mySAP license. The other two calculations assume SAP gains 2,000 new customers that purchase mySAP licenses. I have also determined the terminal value of the support revenues from the new mySAP licenses. In all calculations, I have deducted costs from revenues at 30%, based on 20% of incremental cost to provide licenses and support services, and 10% of incremental sales and marketing expense as supported by SAP's financial statements.[325] In addition, I have discounted SAP's profits back to January 2005 using a 14% discount rate based

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[323] SAP email, December 23, 2004, Subject: PeopleSoft Attack Program with attached document, "PS_Attack_Program_12_2004_v6.ppt", SAP-OR00253278-301 (Ziemen Exhibit 447), at 288; Deposition of Thomas Ziemen (SAP Vice President, Service Solution Management), September 30, 2008, pgs. 85-86.

[324] SAP email, December 23, 2004, Subject: PeopleSoft Attack Program with attached document, "PS_Attack_Program_12_2004_v6.ppt", SAP-OR00253278-301 (Ziemen Exhibit 447), at 288. Other financial projections include a April 25, 2006 email from Andrew Nelson to Lon Fiala, which projects TomorrowNow eventually taking $1.1 billion in maintenance revenues from Oracle between 2005 and 2014, with an assumption that TomorrowNow will capture 15% of PeopleSoft support customers. TN-OR00591548 (Nelson Exhibit 1019). SAP has admitted that the $897 million value "does not 'project a customer's value over the lifecycle of a customer as, for example, it only includes assumptions for the years 2005-2007." [Defendants' Ninth Amended and Supplemental Response to Plaintiffs' Fourth Set of Interrogatories to Defendant TomorrowNow, Inc. and Third Set of Interrogatories to Defendants SAP AG and SAP America, Inc., Second Supplemental Response to Interrogatory 69, pgs. 21-22; Email from Bernd Welz to Bernd-Michael Rumpf Re: PeopleSoft Attack Program, with attached presentation, "A Roadmap for PSFT Customers to SAP", SAP-OR 00493900-923 (Scholten Exhibit 1782), at 910].

[325] **SCHEDULES 15.SU, 15.1.SU, 16** and **19**.

on the discount rates used in the asset valuation performed for SAP's acquisition of Business Objects.[326]

134. The results of my three scenarios are included as **SCHEDULES 15.SU, 15.1.SU** and **16**, and indicate anticipated gains of SAP ranging between $881 million and $2.7 billion.

135. TomorrowNow estimated that $1 of TomorrowNow revenue equaled $10 of SAP strategic license revenue pipeline.[327] TomorrowNow estimated that at 15% of PeopleSoft customer base, approximately 1,500 customers, SAP's strategic license revenue pipeline would increase by $1 billion. This computation assumes an approximate $600,000 license opportunity per customer. With support revenues priced at 17% of license fees, over a 10 year period this would result in a $600,000 license plus $1.0 million in support revenues, or a $1.6 million per customer, revenue projection. At a 30% margin that is a $1.1 million per customer profit projection.[328] These calculations provide additional indication that estimating SAP's value of use at $1 million per customer residual value is reasonable.

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326 A 14% discount rate is consistent with the rate used in SAP's valuation of its acquisition of Business Objects "SAP AG Fair Value of Certain Assets, Liabilities and Legal Entities of Business Objects S.A. As of January 21, 2008," SAP-OR00832546-721, at 605.

327 TN-OR00609470-471 (Nelson Exhibit 1018) ["It allows us to build $10 of strategic future SAP license pipeline for every $1 of TN Stand-alone business we get through this independence. By winning these customers, TN rips away Oracle's 'home-field advantage' jacking up the likelihood of SAP eventually replacing these Oracle-owned systems."].

328 Email from Andrew Nelson to Lon Fiala Re: Working financial Impact notes, TN-OR 00591548 (A. Nelson Exhibit 1019). $600,000 + ($600,000 * 17% * 10 years) = $1,620,000 * 0.7 = $1.134 million. Various documents indicate that an ongoing customer relationship has a present value of one million dollars or greater. "Update TomorrowNow Status: January 30, 2006," TN-OR00608668-691, at 671; Email from Juergen Viehl to Bernd Welz, et al. Re: Service Initiatives Reports – October 2007 – UPDATE, and attached 071017_Services_Initiatives_Reporting_update.zip, SAP-OR000565364-431, at 422; January 11, 2005 Bernstein Research Call "ORCL: A Look at the Combined ORCL-PSFT – Concerns and Uncertainties Abound Pending Details from Management," pgs. 3-4.

136. TomorrowNow also estimated that $1 of TomorrowNow revenue equaled an $18 to $20 impact on Oracle revenues.[329] Using SAP's Business Opportunity as a Base Case, which assumes that 3,000 customers have left for TomorrowNow by 2007 with an annual support revenue stream of $102 million (adjusted for TomorrowNow 50% price discount), the value multiplier of $18 would equate to approximately $1.8 billion revenue loss for Oracle.[330] Using a 80% profit margin, based on a 15% cost of support services and a 5% cost of sales support per Oracle financial documents, would result in $1.47 billion loss of profits to Oracle.[331]

137. SAP regularly monitored TomorrowNow's performance against SAP's goal of taking revenue away from Oracle. In its regular reporting of TomorrowNow results, one of the "key performance indicators" tracked and reported to SAP executives was the amount of support and license revenue

[329] April 25, 2006 email from Andrew Nelson to Lon Fiala, Re: Working financial impact notes , which indicates $1 of TomorrowNow revenue is equivalent to $20 of Oracle support revenues taken from a "10-year maintenance-based justification for the PeopleSoft/JDE takeover" [TN-OR00591548 (Nelson Exhibit 1019)]. A March 26, 2006 email from Andrew Nelson to Lon Fiala, et al, (with cc to SAP Co-Chief Executive Officer and Executive Board Member, Leo Apotheker) indicates that "$1 of TN Stand-alone revenue this year represents $18 of originally expected Oracle revenue" [TN-OR00609470-471 (Nelson Exhibit 1018)]. Mr. Apotheker did not disagree or contradict Mr. Nelson's analysis [Deposition of Andrew Nelson (Co-Founder of TomorrowNow), February 26, 2009, pgs. 163-166].

[330] **SCHEDULE 21.1.SU**. Email from Andrew Nelson to Lon Fiala, Re: TN Standalone deals to Safe Passage, dated 3/26/06, TN-OR00609470-471 (Nelson Exhibit 1018), at 470.

[331] **Schedule 21.1.SU**. Mr. Nelson and SAP employees created, discussed, and routed externally, including to the investment community, estimates that TomorrowNow would take $1.1 billion from Oracle in maintenance revenue alone. Those estimates are based on the assumption that, on average, customers are worth at least $100,000 annually or $1 million over a ten year period. See, for example: Email from Andrew Nelson to Lon Fiala Re: Revised PDF with attached document "Financial Impact on Maintenance Revenue over 10 years.pdf," TN-OR07165549-550, at 550. Email from Anke Mongannam (TomorrowNow Director of Marketing, Americas) to Michael Myers (SAP Analyst Relations Manager, Services, SAP Global Communications), TN-OR00141848-849; Email from Lon Fiala to Michael Prosceno (SAP Global Communications) Re: Impact on Vendor, TN-OR07160446; Email from Lon Fiala to J. Bonasia (Investors.com) with attached document "Financial Impact on Maintenance Revenue over 10 years.pdf," TN-OR07162308; Emails between Bob Geib (TomorrowNow Senior Vice President) and Daniel Jay (TomorrowNow Manager Services Marketing, Americas), TN-OR02774870-871; Email from Anka Mongannam (TomorrowNow Director of Marketing, Americas) to Mandy Wheller (Assistant to Andrew Nelson) with attached document "Brent_Thill_060504_VED_edits.doc," TN-OR07163894-899, at 896 and 899.

"taken away from Oracle."[332] For the period of 2005 through September 2007, SAP reported $142.7 million in support revenue taken from Oracle by TomorrowNow, and amounts ranged up to $631.5 million in license volume taken from Oracle through its Safe Passage program.[333] The $631.5 million amount that SAP claims to have taken from Oracle does not include the on-going support revenue associated with those licenses.

138. I have also reviewed other sources for SAP license and other revenues per customer that support a value even higher than the $1 million terminal value of a customer used in my analysis above. First, I have reviewed the information reported related to Signed Safe Passage Deals for the period 2005 through September 2007. This information indicates that, on average, customers purchased Safe Passage Licenses with fees exceeding $1.0 million per customer and ranging to average annual per customer fees of as high as $1.6 million.[334]

139. I have also reviewed the information provided to date by SAP regarding 86 of the 93 customers that SAP acknowledges purchased SAP software or service either simultaneously with purchasing TomorrowNow support services, or that were existing TomorrowNow customers at the time that they purchased new SAP software or service.[335] The SAP revenue data produced

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[332] For example, see "Business Case TomorrowNow 2006," November 16, 2005, SAP-OR00136760-768 (Oswald Exhibit 608), at 762.

[333] **Schedule 8.U**. 3Q 2007 was the latest period for which I have seen TomorrowNow and Safe Passage financial metrics reported.

[334] SAP email from Juergen Viehl to Bernd Welz, October 17, 2007 and attachment "071017_Service_Initiatives_Reporting_update.zip"; SAP-OR00565364-431 (Bamberger Exhibit 792) at 422 and Table 17: "SAP Safe Passage Program Results" at paragraph 443, herein.

[335] I understand that Defendants' list of relevant overlapping TomorrowNow/SAP customers has changed over time. I have based my calculations on the latest version provided to me, which I understand was served by Defendants on July 15, 2009 (a list of 83 customers), and supplemented on October 17, 2009 to add 3 additional customers. See SAP

for these customers indicates that over a 4 year period from 2005 through 2008, the customers purchased in total [redacted] in SAP software licenses, support, training and other services.[336] This equates to revenues per customer over the period of [redacted] or annualized revenue per customer of [redacted].[337]

140. These sources indicate that SAP would expect to achieve average annual customer purchases of $1 million to $4.0 million, and indicate that the $1 million customer terminal value that I use in my scenario described above, would tend to underestimate the value to SAP of obtaining new SAP licenses and associated support contracts with former PeopleSoft customers.

c. Summary: Fair Market Value Using Income Approach

141. In my opinion, the income approach would indicate a fair market value of SAP's use of Oracle's copyrighted materials in suit of between $881 million and $3.8 billion, depending on different expectations of the impact on Oracle and the benefits inuring to SAP.

3. Cost Approach

142. The cost approach attempts to measure the future benefit of the intellectual property by quantifying the cost to develop alternative technology or replace the technology being valued. The underlying assumption is that the cost to buy or develop alternative intellectual property is commensurate with

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file: List of 83.xls; Email from Jason McDonnell (Jones Day) to Geoff Howard, et al. (Bingham McCutchen) Re: Customer list adds, October 17, 2009; Letter from Jason McDonnell (Jones Day) to Geoff Howard (Bingham McCutchen) Re: List of 86, November 3, 2009. On November 3, 2009 Defendants identified seven more TomorrowNow customers who purchased SAP applications though they have not produced relevant SAP purchase information. See November 10 Joint Discovery Conference Statement at Section 5, p.19-20. I understand Oracle has asked for this information and it was not forthcoming. I reserve the right to revise this section of the report and schedules accordingly if additional information becomes available.

[336] **SCHEDULE 24.U**.

[337] **SCHEDULE 24.U.**

the economic benefit, or value, of the intellectual property. In this circumstance, I have considered the acquisition cost to Oracle of purchasing the subject intellectual property as well as the investment in research and development by Oracle in the copyrighted materials in suit since the acquisition. I have also considered the amounts PeopleSoft and J.D. Edwards spent on research and development of their intellectual property (which Oracle subsequently acquired), and the estimates of Oracle's expert, Paul Pinto, on the costs SAP would have incurred had it independently developed certain of the copyrighted materials in suit.

143. In the valuation of intellectual property, the cost approach presents certain limitations. For example, the cost approach does not directly measure the magnitude or expected duration of the potential future benefit. In addition, the cost approach also does not directly account for the risk associated with receiving the potential future benefits (i.e., it is assumed that the expected benefits justify the expense). While the cost to develop or replace intellectual property may not reflect the full potential future benefits of the resulting intellectual property, it may serve as a reasonableness check on the valuations derived from the other approaches.

a. Oracle Application Software and Support Research And Development Cost

144. As discussed above, Oracle acquired the rights to developed PeopleSoft technology and its installed customer base for $11.1 billion in 2005. Since 2005, Oracle has continued to incur development expenses related to PeopleSoft products, including development efforts primarily for support or "sustaining" the existing products, as well as other development efforts primarily related to updates or new product versions. The identifiable research and development

efforts for applications and the specific products covered by the copyrights in suit are addressed in the remainder of this section of the Report.

145. For Oracle's fiscal years 2005 through 2009 (June 1, 2005 through May 31, 2009), Oracle recorded total company research and development expense of over $11 billion for applications, middleware and database software and support materials.[338] For comparison purposes, for the calendar years 2005 through 2008, SAP recorded research and development expenses of $7.4 billion.[339]

146. Oracle recorded research and development expenses broken down by general product categories: application, database, middleware. Oracle recorded expenses of $1.3 billion for application software development for PeopleSoft, J.D. Edwards and Siebel applications for the period December 2004 through August 2008.[340]

147. For the period December 2004 through August 2008, (3.75 years), Oracle personnel prepared reports identifying direct research and development expenses by product line, with allocations of associated overhead. These reports provide development expenses for the PeopleSoft products including Enterprise, World, and EnterpriseOne. Over this period, Oracle spent $1.1 billion on PeopleSoft product applications development.[341] On average, Oracle spent approximately $290 million a year developing PeopleSoft software application and software and support materials.[342]

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[338] *See* **SCHEDULE 1**.

[339] *See* **SCHEDULE 5.**

[340] *See* **SCHEDULE 10.**

[341] *See* **SCHEDULE 10.**

[342] $1,087.7 million/3.75 years = $290.1 million per year.

148. Although Oracle's financial systems historically have not tracked research and development employee time by task, Oracle employees have analyzed the percentage of resources Oracle devotes to maintenance-related, as opposed to new product-related, research and development.[343] I understand that based on these analyses, Oracle has estimated that 60-65% of its research and development expense of its applications products related to support-related development efforts.[344] Therefore, for the period of December 2004 through September 2008, support-related research and development expense for PeopleSoft and J.D. Edwards products was approximately $660 million to $715 million.[345] However, given that TomorrowNow copied Oracle's PeopleSoft and J.D. Edwards support materials, as well as underlying applications, such apportioning of research and development expense between new product and support-related efforts is not necessary.

b. SAP Research And Development Costs

149. SAP produced reports containing amounts identified as "SAP Cost of Support Development." This account is described as "collect the costs provided for maintenance (code corrections) of existing software after Release to customer."[346] This account appears most directly correlated to the costs to provide sustaining development for application software. Although not identifiable to a particular software application or product family, I have totaled expenses included in this account for the period 2005 through 2008.

[343] Discussion with Houman Behazadi (Oracle Director of Business Planning and Operations).

[344] *See, e.g.,* Oracle Presentation: "Applications Strategy – November 2007,"ORCL 00560527-566, at 533. Fusion research and development expenses are excluded from this analysis [Discussion with Houman Behazadi (Oracle Director of Business Planning and Operations)].

[345] $1.1 billion * 60% = $660 million; $1.1 billion * 65% = $715 million.

[346] SAP Presentation: "Research, Development, Maintenance Costs and Headcount," SAP-OR00842955-980, at 959-961.

During this period, SAP spent over [redacted] on support development for its own software applications, indicating that SAP would be well aware of the significant cost associated with providing support to an existing installed base of software licensees at the time of its negotiation with Oracle.[347]

c. Estimated Costs To Independently Create PeopleSoft/J.D. Edwards Copyrighted Materials in Suit

150. I understand that Oracle's expert Paul Pinto was retained to estimate the costs that Defendants would have had to incur to independently develop the Oracle copyrighted materials in suit that Defendants allegedly illegally accessed, copied and misused. I understand that Mr. Pinto has concluded that it would have cost Defendants approximately $1.275 billion with a range of $936 million to $2.903 billion to develop 7 specific PeopleSoft and J.D. Edwards software applications.[348]

151. Additionally, I understand that Mr. Pinto has concluded that, if it were possible to be completed in two years, it would take Defendants 2,374 appropriately-trained personnel to complete the development of the 7 PeopleSoft/J.D. Edwards software applications he analyzed.[349] As explained in section IV.B.2 of this Report, the timing of SAP's offering of TomorrowNow support services was critical to its overall strategy to disrupt Oracle's business and convert Oracle's PeopleSoft, J.D. Edwards and Siebel customer base over

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[347] **Schedule 28.SU.**

[348] Discussion with Paul Pinto (Sylvan VI, Inc.); November 16, 2009 Expert Report of Paul Pinto, pg. 43 ($320 million for JDE Enterprise One + $707 million for PeopleSoft + $248 million for JDE World = $1.275 billion. $221 million + $543 million + 172 million = $936 million. $749 million + $1,573 million + 581 million = $2.903 billion).

[349] Discussion with Paul Pinto (Sylvan VI, Inc.); November 16, 2009 Expert Report of Paul Pinto, pgs. 42 and 44. 67,863 total person months effort, less 10,890 Siebel person months, divided by 24 months = 2,373.9. According to Mr. Pinto, "A development effort of this scope and complexity would be an extremely large project, very aggressive, and of high-risk to be pursued within this timeframe." [November 16, 2009 Expert Report of Paul Pinto, pg. 7].

to SAP (i.e., it was critical for SAP to announce its offering of support on Oracle products immediately following Oracle's acquisitions of PeopleSoft and Siebel). If faced with a multi-year development timeframe in lieu of using Oracle's copyrighted property, SAP may have determined that offering TomorrowNow support services as an integral part of its Safe Passage program was not an attractive business decision. Therefore, SAP would likely be willing to pay more than the cost to independently develop the intellectual property in order to receive a time to market advantage and to avoid the risk of unsuccessful development.

d. Summary: Fair Market Value Using Cost Approach

152. In my opinion, the cost approach would indicate a fair market value of SAP's use of Oracle's copyrighted materials in suit of no less than $936 million, with other considerations indicating that development costs, and the risks of development failure, would be much higher. I am relying on Mr. Pinto, who has estimated the costs to independently develop certain software applications that were accessed by TomorrowNow and SAP.[350]

B. Summary: "Value of Use" of PeopleSoft/J.D. Edwards Copyrighted Materials Based on Market, Income and Cost Approaches

153. Table 8 summarizes the fair market values of the PeopleSoft/J.D. Edwards copyrighted materials in suit based on the market, income and cost approaches. In my opinion, these metrics and the valuation analysis previously described indicate that no less than $2 billion is the fair market value for the PeopleSoft/J.D. Edwards copyrighted materials in suit.

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[350] Discussions with Paul Pinto; November 16, 2009 Expert Report of Paul Pinto (see Mr. Pinto's explanation of his assignment and summary of opinions at pgs. 1-2).

Table 8: Copyrighted Software and Support Materials PeopleSoft/J.D. Edwards Fair Market Values With Projections of Up To 3,000 Oracle Lost Customers ($ In Millions)	
<u>Market Approach</u>	
Based on PeopleSoft Acquisition	$1,780 - $2,670
<u>Income Approach</u>	
Oracle Potential Losses	$1,979 - $3,762
SAP Potential Gains	$881 - $2,690
SAP Projected Impact On Oracle Profits	$1,468
<u>Cost Approach</u>	
Avoided Development Costs (Mr. Pinto)	$ 936 - $2,903
Fair Market Value	No less than **$2,000**

C. PeopleSoft / J.D. Edwards Copyright Infringement – Determination of SAP's "Value of Use" Based on Hypothetical Negotiation Approach to Establishing Intellectual Property Value

1. Methodology

154. As set forth above, I understand the hypothetical negotiation concept for copyright infringement is recognized by the Ninth Circuit and other courts. The relevant financial, economic and other factors considered are reflected in case law and the Ninth Circuit's relevant jury instruction. They are likewise articulated in the *Georgia-Pacific Corp v. US Plywood Corp.*[351] opinion, which identifies fifteen factors for consideration in determining a reasonable royalty for a patent license. The *Georgia-Pacific* factor format is an appropriate

[351] *Georgia Pacific Corp. v. U.S. Plywood Corp.*, 318 F. Supp. 1116, (S.D.N.Y. 1970), modified, 446 F.2d 295, 170 USPQ 369 (2d Cir. 1971), cert. denied (1971).

structure to use for determining the value of intellectual property in addition to patents. I have considered those same fifteen factors in my analysis of SAP's "value of use" of the copyrighted PeopleSoft and J.D. Edwards materials at issue. Those factors are relevant to this case in the determination of what SAP – as a willing buyer – would reasonably pay Oracle – as a willing seller, as of the time of first infringement. The fifteenth *Georgia-Pacific* factor (which sets forth the theoretical construct for the hypothetical negotiation) uses essentially the same test as the above cited Ninth Circuit copyright infringement actual damages model jury instruction:

> "The amount that a licensor (such as the [plaintiff]) and licensee (such as the [infringer]) would have agreed upon (at the time the [copyright] 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 [copyrights]—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 [licensor] who was willing to grant a license." [352]

155. The following paragraphs address the fifteen *Georgia-Pacific* factors, (which are relevant in copyright cases and in the other IP valuation approaches described above) and summarize facts and issues relevant to determining SAP's value of use for Oracle's copyrighted property related to PeopleSoft and J.D. Edwards software. A hypothetical negotiation framework assists in determining the value that, under these circumstances, SAP reasonably should be willing to pay to Oracle, and the amount that Oracle

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[352] *Georgia Pacific Corp. v. U.S. Plywood Corp.*, 318 F. Supp. 1116, (S.D.N.Y. 1970), modified, 446 F.2d 295, 170 USPQ 369 (2d Cir. 1971), cert. denied (1971). It should be noted that "copyright" replaces "patent."

should be willing to accept from SAP, for use of Oracle's copyrighted property, and provides another measure of SAP's "Value of Use" damages.

156. This negotiation will determine the value to allow SAP to use Oracle's PeopleSoft and J.D. Edwards software applications and support materials exactly as SAP and TomorrowNow actually did. I assume that the hypothetical negotiation would take place between Oracle and SAP, as rational and willing parties.[353] The negotiation would occur on or about January 2005,[354] with both parties knowledgeable of key relevant facts, such as the duration of the license, the scope of what can be copied and any use restrictions, the expectations the parties have for themselves at the commencement of the license (including monetary and non-monetary benefits), and the likely cost and time delays SAP avoids by licensing. I understand that the copyrighted property that is the subject of this matter is fundamental to providing the support of PeopleSoft's software applications in the manner that TomorrowNow did (and that it advertised), and without the

[353] I understand that the hypothetical negotiation would be conducted by a willing licensor (Oracle) and a willing licensee (SAP) acting in a rational manner in January 2005. I have assumed that the particular Oracle and SAP signatories to the license would include the entities and/or subsidiaries necessary to grant use rights consistent with the actual infringing use by SAP. Oracle senior executives Larry Ellison and Safra Catz have attested to their involvement with any such negotiations [Declaration of Larry Ellison in Support of Oracle's Opposition to Defendants' Motion for Partial Summary Judgment Regarding Plaintiffs' Hypothetical License Damages Claim, September 22, 2009; Declaration of Safra Catz in Support of Oracle's Opposition to Defendants' Motion for Partial Summary Judgment Regarding Plaintiffs' Hypothetical License Damages Claim, September 22, 2009]. I understand that some SAP witnesses have testified that TomorrowNow may be negotiating the hypothetical license directly with Oracle. However, given the significant dollars at stake, the strategic importance of SAP's access to Oracle's copyrighted materials at issue, and the SAP board-level involvement in the monitoring of TomorrowNow's activities, I would expect that SAP would be at the negotiating table with Oracle. SAP CFO, Werner Brandt, reluctantly agreed that he would be involved [Deposition of Werner Brandt (SAP CFO), November 12, 2008, pgs. 56-61].

[354] As explained in section VI.A. of this Report, above, the date of the hypothetical negotiation between Oracle and SAP would be on or around January 2005, the date of SAP's alleged first infringement (by virtue of its acquisition of TomorrowNow).

copyrighted property, SAP and TomorrowNow would not have a support service offering comparable to Oracle's/PeopleSoft's service offering.[355]

157. I understand that Oracle alleges that TomorrowNow began downloading PeopleSoft enterprise software applications and support materials starting in early 2002, prior to SAP's acquisition of TomorrowNow.[356] Consequently, a hypothetical negotiation would also take place between PeopleSoft and TomorrowNow in the early 2002 timeframe, before the alleged infringement first occurred. The license fee resulting from this hypothetical negotiation would reflect the value that TomorrowNow and PeopleSoft would have willingly agreed upon for TomorrowNow's use of PeopleSoft's copyrighted property between 2002 and January 2005.[357] However, I also understand that, as a legal matter, SAP would have had to negotiate with Oracle concerning a hypothetical license allowing TomorrowNow to use the PeopleSoft intellectual property, because SAP purchased TomorrowNow and non-exclusive copyright licenses are personal and non-assignable without the consent of the licensor (in this case, Oracle - PeopleSoft's successor in interest).[358] Therefore, a separate hypothetical negotiation would have occurred between Oracle and SAP at or around the time SAP acquired TomorrowNow in January 2005.

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[355] Discussions with Kevin Mandia; February 12, 2010 Supplemental Expert Report of Kevin Mandia, pgs. 1, 3, 25 and 32. As described in section IV.B.4 of this Report, TomorrowNow and SAP acknowledged that access to Oracle's intellectual property was critical to providing PeopleSoft and J.D. Edwards support at the level of service and cost offered by TomorrowNow.

[356] Oracle USA, Inc. et al v SAP AG et al, Fourth Amended Complaint in Case No. 07-CV-01658 dated August 18, 2009, pg. 7.

[357] For purposes of this report, I have not determined the amount that PeopleSoft and TomorrowNow would have negotiated for a license for TomorrowNow's use of PeopleSoft's intellectual property since the license would not have covered the same scope of use and would not be transferrable to an acquiring entity.

[358] *See, e.g., Everex Sys., Inc. v. Cadtrak Corp. (In re CFLC Inc.)*, 89 F. 3d 673 (9th Cir. 1996); *SQL Solutions, Inc. v. Oracle Corp.*, 1991 U.S. Dist. LEXIS 21097 (N.D. Cal. 1991).

158. I have considered the opinions and relevant information of Oracle Senior Executives as to what Oracle would be willing to consider for a license fee paid by SAP to license the copyrighted materials in suit and understand, as a matter of law, that this is appropriate.[359] I also understand that although these parties are direct competitors, and even though Oracle has not before licensed the infringed material to a competitor, a fair market value for a license is an available damage remedy. This remedy is based on establishing the appropriate consideration given up and received by both sides under the relevant factors.[360]

2. PeopleSoft / J.D. Edwards Copyright Infringement: Hypothetical Negotiation Factor Analysis

159. For purposes of my analysis, I have grouped relevant financial, economic and other factors into the following categories: (A) the nature, scope and duration of the hypothetical license;[361] (B) the past licensing practices of the parties for similar intellectual property, or lack thereof;[362] (C) the nature of the

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[359] *See Polar Bear Prods., Inc. v. Timex Corp.* 384F.3d 700 (9th Cir. 2004). I understand that some of the relevant factors that would be considered by Oracle executives are stated in the declarations of Larry Ellison and Safra Catz in support of Oracle's Opposition to Defendants' Motion for Partial Summary Judgment [Declaration of Larry Ellison in Support of Oracle's Opposition to Defendants' Motion for Partial Summary Judgment Regarding Plaintiffs' Hypothetical License Damages Claim, September 22, 2009; Declaration of Safra Catz in Support of Oracle's Opposition to Defendants' Motion for Partial Summary Judgment Regarding Plaintiffs' Hypothetical License Damages Claim, September 22, 2009].

[360] That Oracle and SAP could have reached an agreement on the fair market value for the license to the PeopleSoft/J.D. Edwards copyrighted materials at issue is supported by the fact that, although Oracle is aware that SAP promotes other database vendors such as Microsoft and IBM, and sells its own database product, Oracle and SAP have had a long-standing license for SAP to resell Oracle's database products. *See* Reseller Sublicense Addendum between SAP and Oracle Corporation dated November 30, 1999, ORCL00669957-964; Reseller Agreement Between Oracle Deutschland GmbH and SAP AG dated August 1, 1994, ORCL00670076-87; Declaration of Larry Ellison in Support of Oracle's Opposition to Defendants' Motion for Partial Summary Judgment Regarding Plaintiffs' Hypothetical License Damages Claim, September 22, 2009, pg. 3.

[361] The consideration and analysis of this factor is consistent with *Georgia-Pacific* factors 3 and 7.

[362] The consideration and analysis of this factor is consistent with *Georgia-Pacific* factors 1, 2 and 4.

commercial relationship of the parties;[363] and (D) market and financial considerations that would impact the parties' respective negotiating positions.[364] I have already discussed much of the documentation and other valuation evidence in this matter related to these factors, as it was also relevant to the determination of the fair market value of the copyrighted materials at issue upon considering the Market, Income or Cost valuation approaches as described above.

a. Nature, Scope and Duration of the Hypothetical License (*Georgia-Pacific* Factors 3 and 7)

160. This section addresses *Georgia-Pacific* factors 3 and 7 which generally concern the nature, scope and duration of the hypothetical license. (*See Georgia-Pacific* factors at **SCHEDULE 29)**

161. The license agreement between SAP and Oracle for the copyrighted materials in suit would be a non-exclusive, non-transferable license allowing SAP to reproduce, distribute and create derivative works in all geographies where and when SAP actually used the PeopleSoft and J.D. Edwards copyrighted materials-in-suit.[365] The license would be non-exclusive, as the parties would understand that Oracle would continue to provide software and software support to its own customers using those materials. For example, at the time of Oracle's acquisition of PeopleSoft, Larry Ellison confirmed that it would continue to support PeopleSoft products for ten years from the 2005

[363] The consideration and analysis of this factor is consistent with *Georgia-Pacific* factor 5.

[364] The consideration and analysis of this factor is consistent with *Georgia-Pacific* factors 6 and 8 through 13.

[365] TN-OR06125333_TN Customer Report Revised.xls. The scope of the hypothetical license between Oracle and SAP would be worldwide, as I understand that SAP's sale and execution of TomorrowNow services outside of the United States was dependent upon its reproduction and distribution of the misappropriated copyrighted materials that took place in and from the United States [*See* section IV.B.7 of this Report, citing, among other things, Oracle's technical experts]. Reliance on the testimony of qualified experts is consistent with *Georgia-Pacific* factor 14.

date of acquisition.[366] Oracle has continued to support PeopleSoft and J.D. Edwards products throughout the term of the PeopleSoft/J.D. Edwards hypothetical license at issue. The license would include grant terms that would reflect SAP's alleged infringing behavior.

162. While the license would not allow SAP or TomorrowNow to advertise or promote themselves as authorized service providers or Partners with Oracle for providing service for PeopleSoft or J.D. Edwards products, the scope of the license would allow for TomorrowNow:[367]

- To reproduce, distribute and prepare modified versions of the Registered Works, including creating thousands of copies of the Registered Works in the form of whole or partial "environments" on local systems, including backup copies. The environments include copies of individual code objects which may be copied and/or modified for the purposes of developing fixes for and otherwise servicing PeopleSoft/J.D. Edwards customers (*i.e.*, for development, testing, replication, research, training, trouble-shooting, and reference).
- To reproduce, distribute and prepare modified versions of a substantial amount of the Registered Works from software provided by any specific customer to provide support for that customer and/or other customers, depending on convenience,

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[366] January 18, 2005 Video Presentation "Oracle and PeopleSoft – Better Together," ORCL00223497-531 (Ellison Exhibit 400), at 501.

[367] *See, e.g.*, February 12, 2010 Supplemental Expert Report of Kevin Mandia, pg. 10, 98-99; I understand that newer versions of PeopleSoft and J.D. Edwards applications incorporate almost all of the code of the older versions [Deposition of Edward Screven (Oracle Chief Corporate Architect), November 30, 2009, pgs. 31-32]. "Registered Works" as used in this Report is consistent with the definition as set forth in the February 12, 2010 Supplemental Expert Report of Kevin Mandia, pg. 14.

availability, standard procedures, code line match, or other efficiency considerations.

- To retain backup copies of certain Registered Works from various points in time available to restore to support either the customer who provided the software or other customers and/or to provide a more seamless transition to any returning customers.
- To reproduce millions of copies of portions of the Registered Works, and substantial numbers of entire Registered Works, in the form of downloads taken by TomorrowNow from Customer Connection/Metalink including for the following purposes:
    - To apply to certain of the environments referenced above to create modified versions of those environments for various purposes, including to keep support code line current to more easily support groups of customers (i.e. fix-mastered);
    - To create and maintain master download "pools" in part to access for the purpose of creating modified environments;
    - To make multiple copies of the downloads in the "pools" as a way to create customer-labeled support download libraries with downloads from other customers;

- To create partial and/or "exploded" copies of the downloads to index them for searching to assist with the activities described above;
- To copy certain non-code based (documentary) Registered Works in whole or in part verbatim, to provide support to customers and take advantage of Oracle's efforts and to provide customers with a familiar look and feel for TomorrowNow products.

- To create modified versions of the Registered Works in the following forms:
  - Fixes and updates derived from combinations of the environments and/or downloads referenced above, to service customers using PeopleSoft and J.D. Edwards software;
  - Modified local environment copies created by applying the derivative fixes and updates referenced above;
  - Modified documentation created from the documentation described above.
- To distribute the Registered Works to customers using PeopleSoft and J.D. Edwards software in the following forms:
  - Providing downloads from the download "pools" to customers without reference to the credentials used to obtain such downloads;
  - Providing environment backups to customers for various reasons, including that the customer was

terminating support with TomorrowNow, without regard to whether such environments might include copies and/or derivative works mentioned above; and,

  - Delivering copies of, or facilitating the creation of, environments copied from a substantial amount of the Registered Works, and/or which are modified by application of fixes created with copies environments and downloads from a different customer.

- To publicly display the works derived from copyrighted Oracle works, including the Daylight Savings Time copyrighted material.

163. Under the terms of the hypothetical license, SAP or TomorrowNow's use would be restricted as follows:

- SAP and TomorrowNow are not permitted to advertise or promote TomorrowNow or SAP as a licensed service provider or Partner with Oracle for providing service for PeopleSoft and J.D. Edwards products, or otherwise in a manner inconsistent with the rights otherwise accorded by a particular customers' license agreement with Oracle.
- SAP and Tomorrow Now cannot use Oracle's copyrighted information in any manner not expressly permitted under the hypothetical license.
- SAP and Tomorrow Now would not receive any intellectual property rights related to the infringed materials.

164. The broad scope of the contemplated hypothetical licenses puts upward pressure on the license fee amount.

165. While the hypothetical license would end in October 2008, coinciding with the TomorrowNow dissolution,[368] Oracle would consider the long term financial implications of providing the above described license to the copyrighted materials to a larger direct competitor.[369] While the duration of the license is relatively short, which would generally put some downward pressure on a license fee, several key circumstances in this situation should be considered.

166. First, the timing of the license would be critical to both parties: Oracle had just agreed to pay multiple billions of dollars to acquire PeopleSoft; SAP wanted to take advantage of the fear, uncertainty and doubt of PeopleSoft customers at that time, and knew that it had to strike quickly, which the TomorrowNow acquisition allowed them to do.

167. Second, Oracle would consider and extract a price for the financial impact on Oracle of licensing to a competitor that has abundant resources to directly compete with Oracle in providing a level of PeopleSoft and J.D. Edwards service that has little, to no other, competition.

168. Third, SAP's own documents, as well as deposition testimony of SAP senior executives and board members, acknowledge that SAP's intention was not simply to receive revenue from the provision of TomorrowNow support services, but rather was to use its TomorrowNow offering to drive the conversion of Oracle's application customers to SAP's platform. In other

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[368] SAP Annual Report for fiscal year ending December 31, 2008, pg. 173.

[369] Discussions with Oracle executives: Larry Ellison, Safra Catz and Charles Phillips.

words, SAP's objective was (and likewise Oracle's expectation would be) that some portion of TomorrowNow's customers obtained through October 2008 would switch to the SAP software platform, causing Oracle to lose license and maintenance revenue into the future.[370]

169. These factors significantly outweigh the relatively short duration of the license and result in net upward pressure on the amount of the license fee.

b. Past Licensing Practices of the Parties for Similar Intellectual Property, or Lack Thereof (*Georgia-Pacific* Factors 1, 2 and 4)

170. This section addresses *Georgia-Pacific* factors 1, 2 and 4 which generally concern the licensing history of the parties and Oracle's licensing policies. (*See Georgia-Pacific* factors at **SCHEDULE 29)**

i. Oracle Licensing History

171. I am not aware of any specific agreements where license fees or royalties were received by Oracle for licensing the PeopleSoft/J.D. Edwards copyrighted materials in suit that would provide an established royalty. I understand that Oracle has never "licensed out" to a third party its copyrighted materials in suit or other intellectual property related to its PeopleSoft or J.D. Edwards software and support materials enabling other entities to provide support for PeopleSoft customers and compete directly with Oracle and/or PeopleSoft.[371] I understand from discussions with Oracle senior executives that to license the

[370] For example, "Step 3" of SAP's "PeopleSoft 1-2-3" plan was to "Upgrade PeopleSoft customers to mySAP ERP." Email from John Zepecki to Arlen Shenkman, Re: TomorrowNow/PSFT related background info, January 5, 2005, with attached document "PeopleSoft 1-2-3 01 05 05.doc," SAP-OR00004991-5007 (Shenkman Exhibit 225), at 003. *See also*, section IV.B.3 of this Report.

[371] Oracle's Opposition to Defendants' Motion to Compel Discovery Concerning Third Party Support Provided by Oracle's Partners, January 23, 2009, pgs. 8-9. I understand that Oracle does have partners who sell software licenses as resellers for Oracle. I understand that these partners, however, do not sell support renewal contracts, and do not provide customers with support [Deposition of Charles Philips (Oracle Co-Chief Executive Officer), April 17, 2009, pgs. 46-47.

copyrighted materials in suit to Oracle's strongest direct competitor would undermine Oracle's business model.[372] Oracle's reluctance, for business reasons, to license these materials illustrates the significant value to Oracle of what SAP allegedly stole. That being said, while Oracle has not licensed the PeopleSoft copyrighted materials in suit to third parties in comparable or instructive situations, Oracle did acquire the copyrighted materials in an arm's length transaction. The value to Oracle of the copyrighted materials and the use of those materials to provide service to its customers is evident in the amounts that it paid to acquire and develop that intellectual property.[373]

172. Additionally, Oracle does not pay royalties to any third party on its PeopleSoft or J.D. Edwards software and support materials (i.e., "licensing in"). In some cases, third party software is embedded or works in conjunction with PeopleSoft applications. In those cases, Oracle may have licenses with those software providers and pay royalties associated with those software components, but those licenses do not contain provisions for Oracle to provide complete levels of support for the third party software, or for other software companies to provide complete levels of support for Oracle software.[374]

173. Oracle licenses the copyrights that protect the copyrighted materials in suit to customers who purchase software licenses and support contracts

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[372] Discussion with Oracle senior executives: Larry Ellison, Safra Catz and Charles Phillips.

[373] Oracle's acquisition cost per PeopleSoft customer of $1.0 million provides a fair market value license fee metric for the copyrighted materials, as those copyrighted materials enable and protect customer support revenues. The acquisition metric resulted from an arm's-length transaction in the same month as the hypothetical.

[374] Discussion with Maria Hirsch (Oracle Manager, Inbound License Royalty Administration), Margaret Deacon (Oracle Senior Royalty Analyst, Accounting Lead) and John Machusic (Oracle Vice President, Corporate Development).

through Oracle.[375] I understand that there are restrictions prohibiting use of the customer's software for any reason other than supporting that customer's internal business operations.[376] Customer licenses are not instructive as to a license between SAP and Oracle, as the scope, nature and purpose of customer licenses (which are designed to facilitate the Oracle/customer relationship) are significantly different than the contemplated hypothetical license.

174. OIC licenses or sublicenses the copyrights that protect much of the copyrighted materials in suit to other Oracle entities.[377] In particular, OIC's licenses to Oracle USA, OCAPAC Research Company, Oracle Technology Corporation and other Oracle affiliates are not instructive for determining the amount of a license between Oracle and SAP under the hypothetical negotiation. Together, Oracle affiliates support and expand the business of Oracle's consolidated operations and family of entities, and do not compete or in any way use the Oracle intellectual property to diminish Oracle's license or support revenue streams, as the hypothetical license with SAP would be contemplated to do.

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[375] *See, e.g.*, License Agreement between PeopleSoft USA, Inc. and RentWay, Inc., ORCL00048994-9009, at 994. Oracle licenses refer also to licenses entered into with customers by Oracle's predecessors in interest.

[376] 30(b)(6) Deposition of Richard Allison (Oracle Senior Vice President of Global Practices and Risk Management), November 12, 2009, pgs. 58-60; Software License and Services Agreement between Ace Parking and PeopleSoft, ORCL00017200-206, 211, 214-215 at 200(Allison Exhibit 810); Software License and Services Agreement between Yazaki NA and J.D. Edwards, ORCL00007246-56, ORCL00007383-92, ORCL00096824-29 at 246 (Allison Exhibit 812); Oracle License and Services Agreement between Basler Electric Company and Oracle USA, Inc., ORCL00020910-924, 949-959 at 910(Allison Exhibit 813) ; see also Customer License Agreements (Allison Exhibit 839), at ORCL 00024672-75 (Caterpillar), ORCL 00007197-200 (Westcon), ORCL 00024968-973 (Central Garden Pet Company), ORCL 00000716-720 (Berri Limited), ORCL 00006448-453 (Texas Medical Association), ORCL 000045728-735 (Mutual of Omaha), TN-OR 03568025-035 (Getting Information Knowledge Enterprise), ORCL 00522252-54; *see also, e.g.*, License Agreement between PeopleSoft USA, Inc. and RentWay, Inc., ORCL 00048994-49002, at 48994.

[377] Deposition of Ann Kishore (Oracle Director, Tax Department, Mergers and Acquisitions), April 14, 2009, pgs. 133-135.

175. Colleen Kelly, Oracle's Senior Director of Global Practices, explained in a declaration in this matter that Oracle contracts with a small percentage of companies in its global "Oracle Partner Network" or "Alliances and Channels" to provide support services on PeopleSoft or J.D. Edwards applications.[378] These arrangements govern overseas activities, and support Partners are only licensed to provide first and, in some cases, second level support.[379] Partners are not licensed to create patches, fixes or updates, nor are they allowed to copy Oracle's Software and Support Materials in order to create patches, fixes or updates for customers.[380] Oracle has not licensed any Partner to provide support for de-supported releases of PeopleSoft or J.D. Edwards products.[381] Oracle's contracts with its Partners are not instructive as to a license between SAP and Oracle as the scope, nature and purpose of these contracts and business relationships are significantly different than that contemplated by the hypothetical negotiation.[382]

[378] Declaration of Colleen A. Kelly In Support of Oracle's Opposition To Defendants' Motion To Compel Discovery Concerning Third Party Support Provided By Oracle's Partners dated January 23, 2009, pg. 1.

[379] Declaration of Colleen A. Kelly In Support of Oracle's Opposition To Defendants' Motion To Compel Discovery Concerning Third Party Support Provided By Oracle's Partners dated January 23, 2009, pg. 1. Ms. Kelly defined support as, "First level support typically involves responding to telephone, email or web-based requests for support, incident tracking and resolving customer issues. Second level support may include the same services provided in first level of support, but could involve more complex issues, and might also involve the partner helping the customer create and manage an incident request that is sent to Oracle's support team seeking Oracle's assistance."

[380] Declaration of Colleen A. Kelly In Support of Oracle's Opposition To Defendants' Motion To Compel Discovery Concerning Third Party Support Provided By Oracle's Partners dated January 23, 2009, pg. 2.

[381] Declaration of Colleen A. Kelly In Support of Oracle's Opposition To Defendants' Motion To Compel Discovery Concerning Third Party Support Provided By Oracle's Partners dated January 23, 2009, pg. 2.

[382] I understand that Defendants have speculated that CedarCrestone, an Oracle reseller (not a support partner) provides support to Oracle applications customers in competition with Oracle [Motion to Compel Discovery Concerning Third Party Support Provided by Oracle's Partners, January 15, 2009]. Oracle's declaration confirms that it is unaware of CedarCrestone as a support competitor and it never licensed Oracle intellectual property to allow it to be one [Declaration of Colleen A. Kelly In Support of Oracle's Opposition To Defendants' Motion To Compel Discovery Concerning Third Party Support Provided By Oracle's Partners dated January 23, 2009].

176. While Oracle has not licensed the copyrighted materials in suit to third parties in comparable or instructive situations, Oracle did acquire the copyrighted materials in an arm's length transaction. The value to Oracle of the copyrighted materials in suit, and the use of those materials to provide service to its customers, is evident in the consideration that Oracle paid to acquire and develop the intellectual property. As discussed above in the market approach, Oracle invested significant capital, over $11.1 billion to acquire PeopleSoft, including the PeopleSoft/J.D. Edwards copyrighted materials in suit. Oracle valued the intangible assets at approximately $9.9 billion, including the value of goodwill, technology, maintenance contracts and customer relationships (see section III.B of this Report).

177. Additionally, as explained above in the cost approach, since its acquisition of PeopleSoft, Oracle has continued to invest in its intellectual property, spending $1.1 billion in additional research and development to create new releases of PeopleSoft/J.D. Edwards software applications, as well as develop additional software and support materials including bug fixes, tax and regulatory updates, patches, customer solutions and instructional documents (see section VI.A.3 of this Report).

ii. Oracle Licensing Policies / Protection of Copyrighted Materials At Issue

178. As set forth above, Oracle and its predecessor company at issue (PeopleSoft) did not and does not license the copyrighted materials in suit to third parties; it licenses them only to its customers for their own use. Customers purchase licenses that grant them limited rights to use specific software programs created or owned by Oracle (or its predecessor, PeopleSoft), while Oracle (itself or as successor to PeopleSoft) retains all

intellectual property rights in these works. The above-referenced Oracle license agreements with customers typically contain terms designed to preserve the intellectual property of the licensing company. Customers are generally prohibited from distributing, disclosing, using, marketing, renting, leasing or transferring licensed software to third parties. Oracle customers may engage third parties to help them install or maintain Oracle software, but only subject to the terms of the license agreement between the customer and Oracle, which often have explicit restrictions on how and where third party service can be performed and access and use rights.[383]

179. In addition, Oracle's license customers can purchase software support services which give those customers the right to obtain product updates such as software upgrades, bug fixes and patches during the term of the support contract.[384] Oracle customers on active support contracts are able to access

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[383] 30(b)(6) Deposition of Richard Allison (Oracle Senior Vice President of Global Practices and Risk Management), November 12, 2009, pgs. 42-44, 63-66, 72-75, 86-87, 91-92, 94-96, 98-100, 111-112, 118-121, 143-145; Software License and Services Agreement between Ace Parking and PeopleSoft, ORCL00017200-206, 211, 214-215 (Allison Exhibit 810), at 200; Software License and Services Agreement between ABF Grain and PeopleSoft UK Limited, ORCL00086191-197, ORCL00086204-210, ORCL00139191-204 (Allison Exhibit 811), at 192-193; Software License and Services Agreement between Yazaki NA and J.D. Edwards, ORCL00007246-56 (Allison Exhibit 812), at 246; Oracle License and Services Agreement between CIBER Inc. and Oracle USA, ORCL00611142-53 (Allison Exhibit 820), at 142; Oracle License and Services Agreement between AON Corporation and Oracle Corporation., ORCL00610003-008 at 006 (Allison Exhibit 817); Amendment Three to Software License and Services Agreement between AON Corporation and Oracle Corporation, ORCL00610080, (Allison Exhibit 818); see also Customer License Agreements (Allison Exhibit 839) at ORCL00024672-75 (Caterpillar), ORCL00007197-200 (Westcon), ORCL00024968-973 (Central Garden Pet Company), ORCL00000716-720 (Berri Limited), ORCL00006448-453 (Texas Medical Association), ORCL000045728-735 (Mutual of Omaha), ORCL00006771-778 (Wabash National Corp.); TN-OR03568025-035 (Getting Information Knowledge Enterprise), Siebel End User License Agreement, ORCL00522252-54 at 52; *See also,* Deposition of Charles Phillips (Oracle President and Board Member), April 17, 2009, pgs. 42-44.

[384] 30(b)(6) Deposition of Richard Allison (Oracle Senior Vice President of Global Practices and Risk Management), November 12, 2009, pgs. 45, 103-104; Software License and Services Agreement between Ace Parking and PeopleSoft, ORCL00017200-206, 211, 214-215 (Allison Exhibit 810), at 203; Software License and Services Agreement between ABF Grain and PeopleSoft UK Limited, ORCL00086191-197, ORCL00086204-210, ORCL00139191-204 (Allison Exhibit 811), at 192; Software License and Services Agreement between Yazaki NA and J.D. Edwards, ORCL00007246-256, ORCL00007383-392, ORCL00096824-829 (Allison Exhibit 812), at 7247; Oracle License and Services Agreement between Basler Electric Company and Oracle USA, Inc., ORCL00020910-924, 949-959 (Allison Exhibit 813), at 958; see also Customer License Agreements (Allison Exhibit 839) at ORCL00024673 (Caterpillar), ORCL00007197-198 (Westcon), ORCL00024968-969 (Central Garden Pet Company), ORCL00000716 (Berri Limited),

software updates and support materials through its Customer Connection website.[385] The Terms of Use of the website, which pop up and require click through acceptance by the user, expressly prohibits the user from accessing support materials for programs for which they do not hold a supported license from Oracle.[386] Additionally, customers must agree to accept and comply with Special Terms of Use when accessing secured areas of the website, and must specifically agree to additional terms of use and restrictions prior to downloading software and support materials.[387] The terms of use indicate the confidential and proprietary nature of the software and support materials accessible on the website.[388]

ORCL00006448-50 (Texas Medical Association), ORCL000045730, 733-735, 742,761-765, ORCL00046121-122 (Mutual of Omaha), ORCL00006771, 777 (Wabash National Corp.), TN-OR03568025-026, 031-035 (Getting Information Knowledge Enterprise), ORCL00522252, 254.

[385] 30(b)(6) Deposition of Richard Allison (Oracle Senior Vice President of Global Practices and Risk Management), November 12, 2009, pg. 161.

[386] 30(b)(6) Deposition of Richard Allison (Oracle Senior Vice President of Global Practices and Risk Management), November 12, 2009, pgs. 160-161, 163-167, 178-180, 225-228; Customer Connection Terms of Use, ORCL00051977-78, (Allison Exhibit 822); Binder of Various Terms of Use (Allison Exhibit 823) at Tab 1, Oracle Download, ORCL00051972-73; Tab 2, Oracle Customer Connection, ORCL00051977-78; Tab 3, Customer Connection dated 2/19/07; Tab 4, Customer Connection dated 3/01/08; Tab 5, Customer Connection redline; Tab 6, Redline of Customer Connection dated 2/19/07; Tab 7, Redline of Customer Connection dated 3/01/08; Tab 8, Oracle download, ORCL00051974-75; Tab 9, PeopleSoft Special Terms of Use, ORCL00051971; Tab 10, PeopleSoft Legal Disclaimer, ORCL00051976; Tab 11, PeopleSoft Customer Connection, ORCL00051969-70. *See also*, Deposition of Charles Phillips (Oracle President and Board Member), April 17, 2009, pg. 45.

[387] 30(b)(6) Deposition of Richard Allison (Oracle Senior Vice President of Global Practices and Risk Management), November 12, 2009 pgs. 182-184; PeopleSoft Special Terms of Use, ORCL00051971 (Allison Exhibit 826)

[388] Oracle USA, Inc. et al v SAP AG et al, Fourth Amended Complaint in Case No. 07-CV-01658 dated August 18, 2009, pgs. 17-19; 30(b)(6) Deposition of Richard Allison (Oracle Senior Vice President of Global Practices and Risk Management), November 12, 2009, pgs. 167-168; Metalink Terms of Use, ORCL00672426-427 at 427 (Allison Exhibit 831); Metalink Terms of Use, ORCL00672419-420 at 420, (Allison Exhibit 834); Oracle SupportWeb Terms of Use ORCL00672428-429 at 429 (Allison Exhibit 830); Metalink Terms of Use, dated 3/1/2008, ORCL00672422-423 at 423 (Allison Exhibit 833); PeopleSoft Special Terms of Use, ORCL00051971 (Allison Exhibit 826); Metalink Terms of Use, dated 2/19/2007, ORCL00672424-425 at 425 (Allison Exhibit 832); Customer Connection Terms of Use, ORCL00051977-978 at 978 (Allison Exhibit 822); SupportWeb Terms of Use, ORCL00672430-431 (Allison Exhibit 829); Oracle Customer Connection Terms of Use, dated 3/1/2008, ORCL00672413-414 at 414 (Allison Exhibit 825); Oracle Customer Connection Terms of Use, dated 2/19/2007, ORCL00672415-416 at 416 (Allison Exhibit 824).

180. TomorrowNow's alleged use of Oracle's support website to support any customer other than the customer who has access rights, downloading of materials using a customer's access rights for which the customer has no license, use of a customer's access rights to take materials to be used in a master library to support other customers, use of software for which one customer is licensed to create support materials or environments for use with other customers has never been allowed under Oracle's license agreements or approved as an exception to them.[389]

181. Oracle's license support contracts are completely voluntary (i.e., customers can choose whether they want to buy Oracle support for their Oracle-owned applications).[390] However, substantially all of Oracle's customers choose to purchase software license updates and product support when they acquire new software, and renew those contracts annually.[391] Oracle's business model is built around the maintenance revenue from its installed customer base actively funding ongoing improvements to its

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[389] 30(b)(6) Deposition of Richard Allison (Oracle Senior Vice President of Global Practices and Risk Management), November 12, 2009 at pg. 228-231.

[390] Deposition of Juergen Rottler (Oracle Executive Vice President, Customer Services), dated May 13, 2009, 30(b)(6), pg. 208. Deposition of Richard Allison (Oracle Senior Vice President of Global Practices and Risk Management), November 12, 2009, pg. 101; Software License and Services Agreement between Ace Parking and PeopleSoft, ORCL00017200-206, 211, 214-215 at 205 (Allison Exhibit 810); Software License and Services Agreement between Yazaki NA and J.D. Edwards, ORCL00007246-56, ORCL00007383-92, ORCL00096824-29 at ORCL00007247 (Allison Exhibit 812); Oracle License and Services Agreement between Basler Electric Company and Oracle USA, Inc., ORCL00020910-924, 949-959 at 958 (Allison Exhibit 813); see also Customer License Agreements (Allison Exhibit 839) at ORCL00024672-75 (Caterpillar), ORCL00007197-200 (Westcon), ORCL00024968-973 (Central Garden Pet Company), ORCL00000716-720 (Berri Limited), ORCL 00006448-453 (Texas Medical Association), ORCL 000045728-735 (Mutual of Omaha), TN-OR03568025-035 (Getting Information Knowledge Enterprise), ORCL 00522252-54 thereto; *see also*, *e.g*. ORCL 00048994-49002(RentWay Agreement).

[391] Oracle Annual Report for fiscal year ending May 31, 2008, pg. 8. According to industry analyst, Gartner Group, less than 1% of ERP software customers purchased support from a company different than their software providers [SAP email from Arlen Shenkman to Shai Agassi, dated December 17, 2004, SAP-OR00091570-572 (Shenkman Exhibit 209), at 570].

software and support materials.[392] As a result, it is important to Oracle to keep customers and maintain its pricing on service contracts to protect revenues as an annuity stream to fund research and development.[393]

182. As a willing licensor, Oracle would not license its copyrighted property to SAP without SAP paying significant consideration because SAP (as a well-resourced direct competitor) would be expected to have a major impact on Oracle's future sales levels and profit margins.[394]

183. Although as explained above, a customer may hire a third party servicer as its own agent to step into its shoes under its agreements and provide consulting or support services in accordance with the customer's license,[395] if the provider wants to provide support for a customer who no longer has access rights to Oracle's updated support services and materials at a level "comparable" or "superior" to support provided by Oracle it would require the third party support provider to either have a license to Oracle's intellectual property or invest a significant amount of money to legally recreate it in a clean room environment.[396] While third party support competitors can offer some support services to PeopleSoft and J.D. Edwards customers without

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[392] Deposition of Juergen Rottler Oracle Executive Vice President, Customer Services), dated May 13, 2009, pg. 208.

[393] Deposition of Richard Cummins (Oracle Senior Director, Support Renewals for North America), Vol. 2, dated September 23, 2008, pg. 332.

[394] Discussion with Oracle executives: Larry Ellison, Safra Catz and Charles Phillips.

[395] 30(b)(6) Deposition of Richard Allison (Oracle Senior Vice President of Global Practices and Risk Management), November 12, 2009, pgs. 65-66, 73, 120-121, 144-145; Software License and Services Agreement between Ace Parking and PeopleSoft, ORCL00017200-206, 211, 214-215 at 201 (Allison Exhibit 810); Oracle License and Services Agreement between Basler Electric Company and Oracle USA, Inc., ORCL00020910-924, 949-959 at 910 (Allison Exhibit 813); Amendment Three to Software License and Services Agreement between AON Corporation and Oracle Corporation, ORCL00610080, (Allison Exhibit 818).

[396] Oracle USA, Inc. et al v. SAP AG et al, Fourth Amended Complaint in Case No. 07-CV-01658 dated August 18, 2009, pg. 17; Discussions with Kevin Mandia and Paul Pinto. According to Mr. Pinto, it would cost approximately $1.275 billion, with a range of $936 million to $2.903 billion, for SAP to develop the PeopleSoft and JDE software applications that he analyzed [November 16, 2009 Expert Report of Paul Pinto, pg. 43].

infringing Oracle's copyrighted property, the level of support provided would be limited without significant capital investment and the risk associated with the potential failure of research and development efforts.[397] Although he had no direct evidence of TomorrowNow's wrongdoing, Juergen Rottler, Oracle's Executive Vice President of Customer Services, believed that TomorrowNow's business model, providing full service support, was not financially sustainable without access to Oracle's intellectual property.[398]

184. Oracle would consider the price it paid to acquire and develop the copyrighted material in suit in the hypothetical negotiation. The significant acquisition price and intangible asset value involved with Oracle's acquisition of PeopleSoft software applications and support materials, as well as Oracle's subsequent investments, are instructive to determining the fair market value of the PeopleSoft/J.D. Edwards copyrighted materials in suit, and put significant upward pressure on the license amount.

iii. SAP Licensing History / Acquisitions / IP Policies

185. I am not aware of license fees paid by SAP for the use of copyrighted material that is comparable to the intellectual property at issue in this case. I have reviewed licenses selected by Defendants related to Oracle's motion to compel the six largest SAP intellectual property licenses with third parties (three where SAP is grantee, three where SAP is the grantor). None of these licenses provide comparable rights as those contemplated by the hypothetical

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[397] Deposition of Juergen Rottler (Oracle Executive Vice President, Customer Services), dated May 13, 2009, pg. 67-68; Discussions with Kevin Mandia and Paul Pinto; November 16, 2009 Expert Report of Paul Pinto, pg. 6. *See also*, discussion of third party servicers in section IX.B.4. of this Report below.

[398] Deposition of Juergen Rottler (Oracle Executive Vice President, Customer Services), dated May 13, 2009, pgs. 67-68.

license.[399A] Of the three licenses where SAP is the grantee, two are patent cross-licenses with international software companies with strong patent portfolios with limitations on use, and do not convey copyright grants. The third agreement is a license and distribution agreement for products that have the licensor's product integrated into a unified solution, and contains numerous limitations on the reproduction and distribution of the licensor's product. The three licenses where SAP is the grantor are all licenses of SAP software to SAP customers for the customers' use in their business. None of these licenses are instructive for determining a license fee under the hypothetical license. Indeed, Defendants' have admitted in Court filings that "SAP has not entered into any licenses with independent (non-affiliated, non-partner) software support service providers for SAP-branded software applications or any licenses that are comparable to the type of license that is alleged to have been required between Oracle and TomorrowNow for the type of activities engaged in by Defendants."[399B] SAP's admission that it does not license its software to independent service providers is instructive in confirming the significant value assigned to the rights at issue in the hypothetical license.

186. SAP and Oracle have a reseller contract and related amendments that governs SAP's ability to sell Oracle databases and to use Oracle's database software to allow it to work with SAP's own applications.[399] While this

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[399] *See* Oracle's Reseller Agreement with SAP dated August 1, 1994 for a description of the Licenses Granted (Section 2), ORCL00670076 – 082, and the Reseller Sublicense Addendum dated November 30, 1999, ORCL00669957-64; SAP Annual Report for the fiscal year ended December 31, 2005, pg. 82.

[399A] See, e.g., SAP-OR00861047-1390 containing numerous contracts including, "First Amended And Restated Microsoft Independent Software Vendor Royalty License And Distribution Agreement" between Microsoft and SAP, and "my SAP Business Suite usage and Maintenance Agreement" between SAP and Siemens, as examples.

arrangement supports that fact that Oracle and SAP could come to an agreement if an arrangement made business sense, it is not instructive to determining the amount of the hypothetical license at issue, as it does not provide SAP with rights that would allow it to compete for Oracle's application software or service revenue. Furthermore, Oracle's reseller arrangement with SAP does not involve the re-branding of Oracle products as if they were created by SAP.[400] However, the multiple contractual protections that prevent SAP from using Oracle's database software outside the confines of the parties' arrangement demonstrate the high value Oracle places on its intellectual property, which is instructive.[401]

187. SAP admitted that neither SAP nor TomorrowNow ever purchased a license for Oracle Database from Oracle or SAP (through the Reseller's Agreement) for TomorrowNow to use to provide support services to customers, although TomorrowNow had directed some inquiries to SAP employees regarding the manner, method, and means for purchasing a license for at least one Oracle database product.[402]

188. SAP's historical acquisitions indicate its willingness to pay significant sums to acquire customers and intellectual property. From 2005 to 2007, SAP made 18 acquisitions for total consideration of approximately €1.3 billion net

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[399B] Defendants' Seventh Amended And Supplemental Response To Plaintiffs' Fourth Set of Interrogatories To Defendant TomorrowNow, Inc. and Third Set Of Interrogatories To Defendants SAP AG and SAP America, Inc. December 4, 2009, pgs. 42-43.

[400] Discussion with Michael Poplack (Oracle Vice President, Associate General Counsel).

[401] *See* Fourth Supplemental Response to Interrogatory 3(a) of Plaintiffs' Fourth Amended and Supplemental Responses and Objections to Defendant TomorrowNow, Inc.'s First Set of Interrogatories (Database), November 11, 2009.

[402] Defendants' Response To Plaintiffs' Fourth Set of Requests For Admission To Defendants TomorrowNow Inc., SAP AG, and SAP America, Inc. pgs. 8, 11-12.

cash.[403] In October 2007, SAP announced its intention to acquire Business Objects, a world leader in business intelligence software, for $7.1 billion.[404] In addition to Business Objects, SAP acquired three more companies in 2008 for total consideration of €91 million in cash.[405] These transactions indicate that SAP will commit significant capital resources to expand its software portfolio and customer base when strategically warranted.

189. The $10 million SAP paid to acquire TomorrowNow is not instructive as to the fair market value of a license to Oracle's PeopleSoft/J.D. Edwards copyrighted materials at issue, as SAP was aware that they were not acquiring any intellectual property in its acquisition of TomorrowNow.[406] Moreover, acquiring intellectual property from the owner (i.e., Oracle) is far more secure and expedient than acquiring or developing work-arounds (both technically and as a matter of litigation risk).[407] That technical advantage was touted by Oracle when it marketed against TomorrowNow.[408] As described in section IV.B.6 of this Report, SAP repeatedly acknowledged the litigation risk

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[403] SAP Annual Report for the fiscal year ended December 31, 2007, pgs. 143-145; SAP Annual Report for the fiscal year ended December 31, 2005, pg. 106. €671 million in year 2007, €491 million in year 2006, €176.8 million in year 2005.

[404] "SAP to Acquire Business Objects in Friendly Takeover; Combined Companies to Accelerate Leadership for Business User Applications" press release dated October 7, 2007, pgs. 1-2. €4.8 billion in year 2007, currency converted using exchange rate of $1.4721 to €1, per the SAP Annual Report for the fiscal year ended 2008, pg. 145. 4.8 * 1.4721 = 7.066.

[405] SAP Annual Report for the fiscal year ended December 31, 2008, pgs. 158-160.

[406] TomorrowNow Due Diligence Information Request, BR00123-28 at 125; SAP Corporate Finance: Purchase Price Allocation as of January 19, 2005 induced by the Acquisition of TomorrowNow, Inc. dated April 4, 2005, SAP-OR00005574-589 at 589. SAP's purchase price allocation for intangible assets includes no value for software applications and software and support materials.

[407] Discussion with Paul Pinto (Sylvan VI, Inc.); November 16, 2009 Expert Report of Paul Pinto, pg. 6.

[408] Deposition of Nancy Lyskawa (Oracle Vice President of Support Marketing), dated May 6, 2009, pgs. 91-94 and 144-145; Oracle email from Tawanna Saunders to Nancy Lyskawa, Re: Customer FAQ v2, ORCL00302457-467 (Lyskawa Exhibit 428), at 463-466; 30(b)(6) Deposition of Richard Cummins (Oracle Senior Director of Support Renewals for North America), September 16, 2008, pgs. 179-180.

associated with their purchase of a company with potential intellectual property infringement exposure.

190. SAP documents in late 2004 acknowledge that market entry to service Oracle's customers can be difficult and expensive because of the need for access to PeopleSoft's systems to create and deliver software fixes, as well as the breadth of PeopleSoft and J.D. Edwards products that SAP sought to service.[409] The "buy or build" considerations pointed to 'buying' as the only solution that would allow SAP quick access to existing customers and capabilities in the desired time frame.[410]

191. That SAP would -- as a willing buyer -- pay the fair market value to Oracle of the IP it infringed is further bolstered by SAP's public statements on the importance of protecting intellectual property rights. For instance, in November 2005, SAP's former CTO and Executive Board Member, Shai Agassi, emphasized the importance of protecting IP. Mr. Agassi said, "I work for an IP company, and we believe in the importance of investors owning the IP they create. At SAP, we believe that without the ability to protect IP, most companies will no longer invest so much of their current revenues in future product innovation."[411] Werner Brandt, SAP CFO, was also the keynote speaker at a conference on the importance of intellectual property rights.[412]

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409 Email from Arlen Shenkman to James Mackey Re: Peoplesoft 1-2-3, SAP-OR00091723-728 (Shenkman Exhibit 210) at 726; Email from John Zepecki to Arlen Shenkman and other SAP personnel with attached document "Peoplesoft 1-2-3 01 05 05.doc", SAP-OR00004991-5007 (Shenkman Exhibit 225), at 994 and 999; Deposition of John Zepecki, dated September 9, 2008, pgs. 160-161.

410 Email from John Zepecki to James Mackey and other SAP personnel Re: TomorrowNow Meeting Summary, SAP-OR00004973-734 (Shenkman Exhibit 217), at 974; SAP internal email from Shai Agassi to James Mackey dated December 13, 2004, SAP-OR00004915 (Shenkman Exhibit 208), at 915.

411 Deposition of Shai Agassi (SAP Former CTO and Executive Board Member), dated January 5, 2009, pgs. 24-27.

412 Deposition of Werner Brandt (SAP CFO), November 12, 2008, pgs. 45-46.

192. In July 2007, when admitting that inappropriate downloading had occurred, Henning Kagermann, SAP Chief Executive Officer, acknowledged that intellectual property rights should be protected. Mr. Kagermann was quoted in a Reuters article as saying, "Even a single inappropriate download is unacceptable from my perspective."[413]

iv. Summary of Licensing History/Acquisitions and IP Policies

193. Consideration of the evidence set forth above, and heavily weighting Oracle's and SAP's policies regarding protecting intellectual property and their history of investing significant sums in acquiring new customers or deepening customer relationships through acquisitions, puts upward pressure on the amount of the license fee that would have been negotiated between Oracle and SAP for SAP's use of the PeopleSoft/J.D. Edwards copyrighted materials in suit.

c. Nature of the Commercial Relationship Between Oracle and SAP (*Georgia-Pacific* Factor 5)

194. This section addresses factors related to whether the parties to the hypothetical license are competitors, and what impact their role as competitors has on the license amount. (*See Georgia-Pacific* factors at **SCHEDULE 29)**

i. Impact on Oracle's Market Position

195. Oracle and SAP are direct competitors in software applications. SAP's market position and considerable resources pose a significant threat to Oracle's market share, and because of their then respective sizes, did even more so in January 2005 when the hypothetical negotiation would have

[413] Reuters Article: "Update 1 - SAP admits inappropriate downloads in Oracle case," July 3, 2007.

occurred.[414] According to Oracle's Co-President, Safra Catz, SAP is the most significant competitor in ERP software applications.[415]

196. Unauthorized access to, and use of, a company's intellectual property by a competitor significantly weakens the value of intangible assets, particularly when the competitor claims to offer the same product (in this case software support services) at significantly reduced prices.[416] By licensing its copyrighted property to a direct competitor such as SAP, Oracle would expect to experience lost software license revenue, reduced support revenue, reduced profit margins on retained customer accounts, reduced cross-selling and up-selling opportunities and lost strategic market positioning.

197. Historically, SAP was the leading seller of enterprise application software.[417] Prior to the January 2005 acquisition of PeopleSoft, Oracle was one-third the size of SAP based on enterprise application software revenues.[418] Oracle's acquisition of PeopleSoft significantly increased the level of competition between Oracle and SAP for enterprise application software.[419]

198. Oracle's financial benefits from its acquisition of PeopleSoft were impacted by TomorrowNow's actions, which cost Oracle lost customers, lost

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[414] *See* section III.D of this Report for a discussion of Oracle and SAP market share.

[415] Deposition of Safra Catz (Oracle Co-President), March 27, 2009, pgs. 19-20.

[416] Deposition of Safra Catz (Oracle Co-President), March 27, 2009, pg. 79; Deposition of Charles Phillips (Oracle Co-President), dated April 17, 2009, pgs. 17-18; Service Deliveries for PSFT Customers dated January 16, 2005, SAP-OR 00000927-938 (Shenkman Exhibit 234) at 928; Deposition of Shai Agassi (SAP Executive Board Member), January 5, 2009, pgs. 26-28.

[417] Market Analysis – Worldwide Enterprise Applications 2004-2008 Forecast and Analysis dated October 2004, ORCL00313337-384 at 349.

[418] Market Analysis – Worldwide Enterprise Applications 2004-2008 Forecast and Analysis dated October 2004, ORCL00313337-384 at 349.

[419] "Oracle Corporation: Estimation of the Fair Value of Certain Assets and Liabilities of PeopleSoft, Inc. as of December 28, 2004," dated June 23, 2005, ORCL00313160-253 at 171-173.

revenue, lost opportunities to sell more products to those customers, damaged customer relationships and reputational harm.[420]

ii. SAP Targeted Displacing Oracle

199. In July 2003, SAP's Executive Board Member and Co-CEO, Henning Kagermann, took the position in public that while the PeopleSoft acquisition would increase Oracle's market share in enterprise applications to be second in the market behind SAP, Oracle was not a competitor that could hurt SAP, with or without Oracle's acquisition of PeopleSoft.[421] Despite that public statement, at the end of 2004, when it became apparent that the Department of Justice would allow Oracle's acquisition of PeopleSoft, SAP, with full Executive Board approval, concentrated efforts to take away Oracle's maintenance revenue stream by offering PeopleSoft support services.[422]

200. Prior to 2005, SAP did not compete with Oracle for providing service of Oracle software applications.[423] The acquisition of TomorrowNow was intended to allow SAP to directly compete with Oracle for Oracle's core service business.[424] SAP intended to compete for and win customers from Oracle for service of Oracle's software applications.[425] At that time of the

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420 Oracle's November 2, 2009 Third Supplemental and Amended Initial Disclosures, Section III, Computation of Damages. *See also,* e.g., Deposition of Safra Catz (Oracle Co-President and Executive Board Member), March 27, 2009, pg. 79; Deposition of Larry Ellison (Oracle CEO and Executive Board Member), May 5, 2009, pgs. 10-12; Deposition of Charles Phillips (Oracle Co-President and Executive Board Member), April 17, 2009, pgs. 17-21. Deposition of Juergen Rottler (Oracle Executive Vice President, Customer Services), May 13, 2009, pgs. 50-54 and 67-68. Deposition of Judith Sim (Oracle Chief Marketing Officer), September 2, 2009, pgs. 232-233.

421 Who's Afraid of Oracle? Not SAP, July 17, 2003 (Kagermann Exhibit 410), pg. 1.

422 Oracle Annual Report for the fiscal year ending May 31, 2005, pg. 101; Email from Shai Agassi to James Mackey dated December 13, 2004, Re: TomorrowNow, SAP-OR00004915 (Shenkman Exhibit 208), at 915.

423 SAP Press Release dated January 19, 2005 (Hurst Exhibit 154), pg. 1.

424 Email sent from Chuck Mulloy to Gerhard Oswald and other SAP personnel with attached document "Safe Passage v6.ppt", SAP-OR00092046-070 (Shenkman Exhibit 236).

425 John Zepecki email and attached "Peoplesoft 1-2-3" SAP-OR00004991-5007 (Shenkman Exhibit 225) at 998.

hypothetical negotiation related to PeopleSoft and J.D. Edwards intellectual property, less than 1% of the software application licenses were serviced through third-parties and TomorrowNow was the largest domestic third party servicer of PeopleSoft applications.[426]

201. As discussed in section IV.B.3 above, SAP's strategic documents indicate its intent to disrupt Oracle's business and take market share away after the acquisition of PeopleSoft. For example, SAP's goals were to "maintain market share growth at the expense of Oracle" and to "interrupt Oracle's acquired maintenance income stream, making it difficult for them to invest in development of their Fusion platform."[427] SAP was looking to "'take on Oracle' in response to public provocation from Oracle,"[428] and to "Disrupt Oracle's planned maintenance income stream from PeopleSoft customers, making it more difficult for them to deliver their promises to the Street and the customer base."[429]

202. In a SAP Webex presentation held for account executives, Bob Geib, a TomorrowNow Senior Vice President, was invited to explain how to use TomorrowNow. Towards the end of the presentation, Mr. Geib directly addressed the amount of damage TomorrowNow had done to Oracle. He said, "We are here to help you, we are also here to make sure we put a world of hurt on Oracle. When I look at it for last year, I think that we were close to

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[426] SAP/TomorrowNow email chain, SAP-OR00091570-572 (Shenkman Exhibit 209) at 570.

[427] Email from Michael Wendell to Gregory McStravick Re: "CLEAR SAILING" SYLT 2005, SAP-OR00126416-417, SAP-OR00147894-919, SAP-OR00147924-934, SAP-OR00182303-306 (Kagermann Exhibit 413), at 928.

[428] Email from Michael Wendell to Gregory McStravick Re: "CLEAR SAILING" SYLT 2005, SAP-OR00126416-417, SAP-OR00147894-919, SAP-OR00147924-934, SAP-OR00182303-306 (Kagermann Exhibit 413), at 896.

[429] Email from Michael Wendell to Gregory McStravick Re: "CLEAR SAILING" SYLT 2005, SAP-OR00126416-417, SAP-OR00147894-919, SAP-OR00147924-934, SAP-OR00182303-306 (Kagermann Exhibit 413), at 900.

$100 million dollars of damage done, when it comes to our impact on Oracle's bottom line, taking money away from their development efforts, slowing Fusion down, and creating issues that they're protecting their maintenance rather than selling their software, and I think that's a great thing all around."[430]

203. SAP considered that while they might not convert every Oracle PeopleSoft customer to SAP, SAP's efforts could also "force Oracle to change its behavior or plans around pricing or positioning."[431] John Zepecki, SAP Vice President responsible for assimilation of acquired companies, indicated that, "Oracle's deal assumptions are challenged by this support model – losing support revenue stream forces actions or reactions and is a distraction."[432]

204. As discussed in section IV.B.2 of this Report, the timing and speed with which SAP could announce its TomorrowNow support offering was critical to SAP's competitive strategy against Oracle. I understand Oracle expert, Paul Pinto, has determined that without access to Oracle's software and support materials enabled by the copyright infringement, if it were possible to be completed in a 2 year period, it would have taken SAP 2,374 well-trained personnel to independently develop the PeopleSoft/J.D. Edwards copyrighted materials in suit.[433] Obtaining a license to Oracle's copyrighted materials would enable SAP to make a timely and strategic entry into this important market.

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430 Webex presentation – SAP hosted event, TN-OR00412503.

431 John Zepecki SAP internal email and attached "Peoplesoft 1-2-3," SAP-OR00004991-5007 (Shenkman Exhibit 225), at 998.

432 Email from John Zepecki to James Mackey and other SAP personnel Re: TomorrowNow Meeting Summary, SAP-OR00004973-734 (Shenkman Exhibit 217), at 973.

433 Discussion with Paul Pinto; November 16, 2009 Expert Report of Paul Pinto, pg. 42 and 44. 67,863 total person months effort, less 10,890 Siebel person months, divided by 24 months = 2,373.9.

iii. Oracle's Anticipated Changes to Its Business In Order to Compete With SAP and TomorrowNow

205. Oracle would expect direct and significant competition from SAP for support of PeopleSoft customers, including pricing pressure from SAP, and additional time and effort needed to quell the additional fear, uncertainty and doubt caused by SAP's support offering.

206. Post-acquisition events demonstrate those competitive pressures. Even before the timing of the hypothetical negotiation, TomorrowNow had been offering purportedly better service than Oracle for half the price, or less.[434] Post-acquisition, SAP's website promised that "SAP and TomorrowNow can cut your maintenance costs by as much as 50% through 2015."[435] Furthermore, in 2006, SAP ran a "Zero Dollar" marketing campaign where the customer could get its PeopleSoft, J.D. Edwards, and Siebel support at no cost while the customer migrated to SAP to "ensure we move these customer[s] off Oracle completely."[436]

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[434] For example, see Declaration of Bob Carlino, Corporate Purchasing, of Fairchild Semiconductor Corporation, October 8, 2009, pg. 2; Declaration of Steven Loyd, Former Director of Information Technology for Intraware, Inc., June 25, 2009, pg. 2; Declaration of Kathy Sauer, Systems Administrator of Cowlitz County, Washington, July 16, 2009, pg. 2; Declaration of Jeff Scheele for Harley-Davidson, Inc., September 28, 2009, pg. 2; Declaration of Ed Valle, of Everdream Corporation, November 17, 2009, p. 2; Declaration of John Goetz, Director of Information Technology of the Harris Products Group, November 16, 2009, p. 2. *See also* Deposition of Terry Hurst (SAP Director of Competitive Programs), April 30, 2008, pg. 163 and SAP Presentation: "FKOM '07 Las Vegas, Leveraging Safe Passage and TomorrowNow to Replace Oracle,"SAP-OR00019808-826 (Hurst Exhibit 168), at 816.

[435] Oracle USA Inc. et al v SAP AG et al, Fourth Amended Complaint In Case No. 07-CV-01658 dated August 18, 2009, pgs. 25-26.

[436] Oracle USA Inc. et al v SAP AG et al, Fourth Amended Complaint In Case No. 07-CV-01658 dated August 18, 2009, pgs. 12. The post-acquisition evidence, while relevant, is not necessary to determining value of use based on a hypothetical negotiation approach. I include it as an additional basis for my conclusions, and to reserve the position to reference it should Defendants claim my valuation is "excessive" [Judge Hamilton's November 2, 2009 Order: "Nevertheless, should Defendants take the position at trial that Oracle's damages are excessive, Oracle will be permitted to advise the jury that it is not seeking all the damages to which it is entitled, or that the court has precluded all the damages to which it believes it is entitled, or something similar."].

207. Prior to SAP's acquisition of TomorrowNow, Oracle did not have a policy to reduce support prices to compete with TomorrowNow, but occasional concessions were granted.[437] Juergen Rottler, Oracle Executive Vice President of Customer Services, testified that Oracle's pricing policies were impacted by competition with TomorrowNow, as Oracle made concessions on pricing for expanded or new licenses, and departed from PeopleSoft's support pricing practice of re-pricing contracts each year based on the then-current license price.[438]

208. As a result of SAP's TomorrowNow service offering, Oracle's customers had significant negotiating leverage and were positioned to be – and were -- more aggressive with Oracle.[439] Any license negotiated by these parties would recognize that SAP's continued ability to discount service could cause Oracle dramatic price competition for service business going forward. As a result, Oracle would have agreed to any license structure that did not contain a substantial license fee payment by SAP.

209. Competition between Oracle and SAP generally, and Oracle and TomorrowNow specifically, for PeopleSoft support revenues changed Oracle's business practices related to their Applications Unlimited, Lifetime Support, and support contract renewal "walk up" procedures.[440] Prior to the Oracle

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[437] Deposition of Richard Cummins (Oracle Senior Director, Support Renewals for North America), Vol. 1, September 16, 2008, pgs. 127-128; Deposition of Safra Catz (Oracle Co-President), March 27, 2009, pgs. 54-55; Deposition of Juergen Rottler (Oracle Executive Vice President, Customer Services), May 13, 2009, pgs. 47-49.

[438] Deposition of Juergen Rottler (Oracle Executive Vice President, Customer Services), May 13, 2009, pgs. 47-54. Deposition of Keith Block (Oracle Executive Vice President of Sales and Consulting in North America), September 17, 2009, pgs. 102-105.

[439] Deposition of Charles Phillips (Oracle Co-President), April 17, 2009, pg. 33; Deposition Juergen Rottler (SUP Customer Services), May 13, 2009, pgs. 49-53.

[440] Oracle's November 2, 2009 Third Supplemental and Amended Initial Disclosures, Section III, Computation of Damages. Per Magistrate Laporte's September 17, 2009 Order, I am not quantifying these impacts.

acquisition, PeopleSoft contracts had a support cap term in place that limited how much the charges could increase each year.[441] Robbin Henslee, Oracle Senior Director of Support Policies and Programs, testified that "[t]he practice under PeopleSoft is once that cap term had ended we would increase them either 10 or 15 percent… and renegotiate a new cap term with them."[442] Ms. Henslee further testified that "[w]ith TomorrowNow and in (sic) SAP, we actually stopped that practice under Oracle and just left their cap terms in place." Oracle made the decision to honor the previous caps even though they had contractually expired.[443] Additionally, because of TomorrowNow's influence, Oracle lowered the cap rates for some customers going forward and also on previous licenses.[444] This in turn lowered the amount that was available for Oracle to uplift the customers at renewal time.[445]

210. Oracle had announced it would support PeopleSoft products until 2013 at its January 18, 2005 press conference.[446] However, Oracle extended that support obligation for PeopleSoft and other products when it announced its Lifetime Support Policy in September 2005.[447] This policy provides "access to technical support experts and future upgrades to major releases for all product lines for the duration of the product license."[448] While Larry Ellison testified

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[441] Deposition of Robbin Henslee (Oracle Senior Director of Support Policies and Programs), July 15, 2009, pgs. 201-202.

[442] Deposition of Robbin Henslee (Oracle Senior Director of Support Policies and Programs), July 15, 2009, pg. 202.

[443] Deposition of Robbin Henslee (Oracle Senior Director of Support Policies and Programs), July 15, 2009, pg. 202.

[444] Deposition of Robbin Henslee (Oracle Senior Director of Support Policies and Programs), July 15, 2009, pg. 265.

[445] Deposition of Robbin Henslee (Oracle Senior Director of Support Policies and Programs), July 15, 2009, pg. 265.

[446] "Oracle CEO: Stop Worrying," dated January 18, 2005, TheStreet.com.

[447] Deposition of Robbin Henslee (Oracle Senior Director of Support Policies and Programs), July 15, 2009, pg. 262.

[448] "Oracle Protects Customer Investments and Creates Superior Ownership Experience with Lifetime Service Commitment," September 20, 2005 , Henslee Exhibit 522.

Oracle had "always planned to continue to support those products into the indefinite future,"[449] other witnesses attested that the creation of Lifetime Support caused Oracle to incur additional costs.[450]

211. Another program that several Oracle witnesses attest was expanded as a result of the competitive pressure of SAP and TomorrowNow's support offering was Oracle's Applications Unlimited program, announced in April 2006.[451] Applications Unlimited was a policy under which Oracle committed to releasing ongoing major new releases for every application product that had been previously acquired.[452] Under this program, Oracle committed to unlimited development of its current Oracle applications suite as well as its acquired PeopleSoft, JD Edwards and Siebel applications.[453] While Mr. Ellison testified that Oracle had "always planned to continue to support those products into the indefinite future,"[454] other witnesses have testified that the creation of the Applications Unlimited program caused Oracle to incur additional costs.[455]

212. While I do not quantify these specific post-acquisition impacts as part of Oracle's alternative lost profits measure of damages, they do validate my

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[449] Deposition of Larry Ellison (Oracle CEO), May 5, 2009, pgs. 66 – 68.

[450] Deposition of Robbin Henslee (Oracle Senior Director of Support Policies and Programs), July 15, 2009, pg. 263-265.; Deposition of Juergen Rottler (Oracle Executive Vice President, Customer Services), May 13, 2009, pgs. 71-74;

[451] "Oracle Applications Unlimited program releases pressure," April 27, 2006, Andersen Exhibit 483.

[452] Deposition of Juergen Rottler (Oracle Executive Vice President, Customer Services), May 13, 2009, pg. 95.

[453] "Oracle Applications Unlimited program releases pressure," April 27, 2006, Andersen Exhibit 483.

[454] Deposition of Larry Ellison (Oracle CEO), May 5, 2009, pgs. 66 – 68.

[455] Deposition of Robbin Henslee (Oracle Senior Director of Support Policies and Programs), July 15, 2009, pg. 263-264; Deposition of Juergen Rottler (Oracle Executive Vice President, Customer Services), May 13, 2009, pgs. 69-74; Deposition of Charles Rozwat (Executive Vice President, Product Development), October 12, 2009, pgs. 175-176 and 189-191; Oracle Presentation: "R&D Budget – FY 10, Chuck Rozwat, April 30, 2009," ORCL 00567139-249 (Rozwat Exhibit 724), at 146.

assumptions of the kinds of competitive and pricing pressures Oracle would expect to be facing as it considered the amount of the license fee it would accept from SAP for its use of the copyrighted materials in suit to compete against Oracle.

213. Oracle's anticipated additional costs to prevent losing customers once SAP had legal rights to use Oracle's intellectual property puts upward pressure on the license fee amounts.

iv. Summary of the Nature of the Competitive Relationship Between Oracle and SAP

214. Consideration of all of the evidence set forth in this section regarding the direct and significant level of competition between Oracle and SAP, SAP's desire to use the copyrighted materials at issue to disrupt Oracle's business and obtain a competitive advantage, and Oracle's expected additional cost and effort it would have to incur to prevent losing customers once SAP had legal rights to use Oracle's copyrighted materials in suit, puts upward pressure on the license fee amount.

d. Market and Financial Considerations Impacting the Respective Negotiating Positions of Oracle and SAP (*Georgia-Pacific* Factors 6, 8, 9, 10, 11, 12 and 13)

215. This section addresses relevant economic and other factors related to the profitability and commercial success of the products containing the copyrighted materials in suit, the extent of infringer's use of those materials, and the profit that is customary or appropriately credited to the intellectual property versus to other elements contributed by the infringer. (*See Georgia-Pacific* factors at **SCHEDULE 29)**

i. Profitability and Success of Services / Products Containing the Copyrighted Materials in Suit

216. Oracle products embodying the copyrighted materials are considered "best in breed" in the industry, and generate significant revenues and profit margins.[456] In 2004, PeopleSoft's total revenues were $2.7 billion.[457] Oracle paid a multiple of approximately 4 times revenues for PeopleSoft based on 2004 operating results.[458]

217. Oracle's gross profit margin on support and maintenance is approximately 90%.[459] This trend has gone up since fiscal period 2004.[460] Safra Catz, Oracle Co-President and Executive Board Member, testified that in years 2, 3, 4 and subsequent years of a customer's support contract, that incremental profit margin on that customer reaches close to 100%.[461] Oracle's gross margins on new license sales ranged between 43% and 51% over the period of 2004 to 2009.[462]

218. The copyrighted materials in suit provide for high support renewal rates, providing a significant annuity to Oracle with overall renewal rates at 90% and greater since the PeopleSoft acquisition.[463] If Oracle were to grant a license to SAP for the copyrights embodied in Oracle's software and support materials, Oracle would anticipate reductions in the renewal rate of PeopleSoft

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[456] PeopleSoft Investor Presentation, December 2004, ORCL00312888-935 at 895.

[457] **SCHEDULE 2.SU;** PeopleSoft, Inc. Form 10-Q for the Quarter Ending September 30, 2004, pg. 4; PeopleSoft Investor Presentation, December 2004, ORCL00312888-935 at 914.

[458] **SCHEDULE 2.SU**

[459] Deposition of Safra Catz (Oracle Co-President), March 27, 2009, pg. 56; **SCHEDULE 1.1**.

[460] Deposition of Safra Catz (Oracle Co-President), March 27, 2009, pgs. 57-58; **SCHEDULE 1.1.**

[461] Deposition of Safra Catz (Oracle Co-President), March 27, 2009, pgs. 183-184.

[462] **SCHEDULE 1.1.**

[463] Deposition of Safra Catz (Oracle Co-President), dated March 27, 2009, pgs. 95, 202-204. *See also*, **Schedule 34.2**.

or J.D. Edwards support contracts after TomorrowNow's entry into the market.[464] Oracle would also anticipate a significant drop in its overall maintenance revenues, as well as reduced license revenue, due to downward price pressure.

219. The significant sales and profits related to the products incorporating the copyright protected materials puts upward pressure on the licensed fee.

ii. Extent of SAP's Use of Copyrighted Materials in Suit

220. During its operation, through various methods, TomorrowNow obtained copies of virtually all Oracle's PeopleSoft/J.D. Edwards applications and related customer support materials. In his report, Oracle's expert, Kevin Mandia, identified TomorrowNow's specific improper access, downloading, copying, reproduction, distribution, creation of derivative copies, and/or further use related to copyright registered Oracle software. I defer to his report on the scope of those actions, but understand that TomorrowNow's actions were extensive and ongoing even after the lawsuit was filed.[465]

221. TomorrowNow (both independently and after being acquired by SAP in January 2005) has had the ability to access, copy, reproduce, distribute, create derivative copies, and/or further use the copyrighted materials in suit to solicit customers for their competitive offering of support services for PeopleSoft/J.D. Edwards software products throughout the period 2002 until October 2008. I understand TomorrowNow's entire business model was dependent on the

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[464] Discussion with Oracle senior executives: Larry Ellison, Safra Catz and Charles Phillips. Deposition of Juan Jones (Oracle Senior Vice President, Customer Services North America), dated April 24, 2009, pgs. 208-209.

[465] Discussion with Kevin Mandia (Mandiant); *See, e.g.,* February 12, 2010 Supplemental Expert Report of Kevin Mandia, pgs. 2 and 97.

illegal access, downloading, copying, reproduction, distribution, creation of derivative copies, and/or further use of the copyrighted materials in suit.[466]

222. SAP has acknowledged that it was successful with obtaining contracts to provide support services, at least for some period of time, to approximately 350 PeopleSoft/J.D. Edwards customers and generated significant revenues from offering these services (approximately $53 million from 2002 through 2008).[467] However, SAP acknowledges that the benefit of obtaining those support contracts went well beyond the actual support revenues. As discussed in section IV.B.3 of this Report, SAP acknowledges that access to new customers is a critical way to sell more software licenses and other products; TomorrowNow provided that entrée to SAP.[468] SAP's goal was to "convert the majority of the PeopleSoft and J.D. Edwards customer base to SAP and contain Oracle's potential growth in the next generation application market"[469] In his deposition, Oswald confirmed a statement made in a February 2007 presentation that said "TomorrowNow is a strategic investment and serves as a strategic weapon against Oracle" – i.e., it takes revenue away from Oracle, and creates a pipeline of future SAP revenue.[470]

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[466] Discussion with Kevin Mandia (Mandiant); February 12, 2010 Supplemental Expert Report of Kevin Mandia, pgs. 1, 3, 25 and 32.

[467] *See* **SCHEDULE 41.U**. $38.4 million (PeopleSoft customers) + $14.5 million (J.D. Edwards customers).

[468] *See, e.g.,* Email from John Zepecki to Arlen Shenkman and other SAP personnel with attached document "Peoplesoft 1-2-3 01 05 05.doc", SAP-OR00004991-5007 (Shenkman Exhibit 225) at 997.

[469] Email sent from Chuck Mulloy to Gerhard Oswald and other SAP personnel with attached document "Safe Passage v6.ppt", SAP-OR00092046- 070 (Shenkman Deposition Exhibit 236) at 050. In his deposition, Gerhard Oswald agreed that this was SAP's goal at the time, and testified that SAP's ultimate goal was to get TomorrowNow customers to be SAP customers [Deposition of Gerhard Oswald (SAP Executive Board Member), Vol. 1, December 10, 2008, pg. 89 and 93-94].

[470] Deposition of Gerhard Oswald (SAP Executive Board Member), Vol. 2, December 11, 2008, pg. 278-279; SAP Presentation: "Supervisory Board Meeting – TomorrowNow Status Update," SAP-OR00141570-581 (Kagermann Exhibit 436), at 571.

223. SAP planned to benefit from TomorrowNow's support customers by selling them SAP software that would replace PeopleSoft/J.D. Edwards software as well as cross-selling to those customers licenses to other SAP software.[471] SAP planned to provide support service of PeopleSoft/J.D. Edwards software until 2009, by which point customers would be switched over to SAP software.[472] As discussed in section IV.B.3 above, upgrading a customer to mySAP was ultimately SAP's end goal, and "the acquisition of TomorrowNow was meant to facilitate the movement of customers who so desired to move away from PeopleSoft – from PeopleSoft software in that particular case to SAP." [473]

224. SAP projected this business opportunity of obtaining maintenance, cross-sell revenue and up-sell revenue from PeopleSoft customers to be $897 million for just the period 2005 through 2007.[474] Within the first half of 2005, SAP reported €8.5 million in maintenance contract volume taken away from Oracle.[475] Thomas Ziemen, Vice President of Service Solutions Management at SAP, confirmed this assumed "business opportunity" of $897 Million in his deposition testimony.[476] Shai Agassi, SAP Former CTO and Executive Board

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[471] Email from Thomas Ziemen to Leo Apotheker Re: PeopleSoft Attack Program with attached document "PS_Attack_Program_12_2004_V6.ppt," SAP-OR00253278-301 (Ziemen Exhibit 447) at 283 and 288.

[472] Email from Thomas Ziemen to Leo Apotheker Re: PeopleSoft Attack Program with attached document "PS_Attack_Program_12_2004_V6.ppt," SAP-OR00253278-301 (Ziemen Exhibit 447) at 283.

[473] Email from John Zepecki to Arlen Shenkman and other SAP personnel with attached document "Peoplesoft 1-2-3 01 05 05.doc", SAP-OR00004991-5007 (Shenkman Exhibit 225) at 997; Deposition of Leo Apotheker (SAP Executive Board Member and Co-CEO), October 2, 2008, pg. 83.

[474] Email from Thomas Ziemen to Leo Apotheker Re: PeopleSoft Attack Program with attached document "PS_Attack_Program_12_2004_V6.ppt", SAP-OR00253278-301 (Ziemen Exhibit 447) at 288.

[475] Email from Ina Daniela Weber to Christian Walter Re: Safe Passage Updates with attached documents "Apollo Program Update_Leo.ppt" and "Safe_Passage_Update_Board_Meeting_Paris_Gerd.ppt", SAP-OR00139918-169 (Kagermann Exhibit 418) at 958.

[476] Deposition of Thomas Ziemen (SAP VP Service Solution Management), Vol. 1, September 30, 2008, pg. 77.

Member, testified that he believed that SAP could have done even better than what was projected, taking up to 60% of the PeopleSoft customer base from Oracle.[477] SAP's "PeopleSoft Attack Program" presentation highlights the situation of the Oracle/PeopleSoft merger stating that there were "lots of uncertainties in PeopleSofts installed base (12,750 in Total)."[478] It also proposes a service offering to PeopleSoft customers that switch to SAP, including maintenance for 17% and a planned migration path to SAP.[479]

225. An email from Andrew Nelson, Co-Founder of TomorrowNow, to the TomorrowNow executive team discusses the strategy for selling and marketing TomorrowNow standalone deal with full independence from SAP.[480] He states that this independent strategy allows TomorrowNow and SAP to "to build $10 of strategic future SAP license pipeline for every $1 of TomorrowNow standalone business we get through this independence. By winning these customers, TomorrowNow rips away Oracle's 'home-field advantage' jacking up the likelihood of SAP eventually replacing these Oracle-owned systems."[481] The email goes on to say $1 of TomorrowNow stand-alone revenue equals $18 of "originally expected Oracle revenue from their misguided acquisition."[482] In his deposition, Mr. Nelson explained the $1 to

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[477] Deposition of Shai Agassi (SAP Former CTO and Executive Board Member), January 5, 2009, pgs. 310-312.

[478] Email from Thomas Ziemen to Leo Apotheker Re: PeopleSoft Attack Program with attached document "PS_Attack_Program_12_2004_V6.ppt," SAP-OR00253278-301 (Ziemen Exhibit 447) at 281.

[479] Email from Thomas Ziemen to Leo Apotheker Re: PeopleSoft Attack Program with attached document "PS_Attack_Program_12_2004_V6.ppt," SAP-OR00253278-301 (Ziemen Exhibit 447) at 282.

[480] Email from Andrew Nelson to Lon Fiala, Bob Geib, Nigel Pullan and Leo Apotheker Re: TN Standalone deals to Safe Passage, TN-OR00609470-471, (Nelson Exhibit 1018) at 470.

[481] Email from Andrew Nelson to Lon Fiala, Bob Geib, Nigel Pullan and Leo Apotheker Re: TN Standalone deals to Safe Passage, TN-OR00609470-471, (Nelson Exhibit 1018) at 470.

[482] Email from Andrew Nelson to Lon Fiala, Bob Geib, Nigel Pullan and Leo Apotheker Re: TN Standalone deals to Safe Passage, TN-OR00609470-471, (Nelson Exhibit 1018) at 470.

$10, and $1 to $18 metrics: Because Oracle charges 20% of license fees as maintenance, and TomorrowNow charges half or 10% of license fees as maintenance. Therefore, every TomorrowNow dollar of maintenance corresponds to $10 in license, and when that customer has to replace that system, that represents a potential $10 in license fee for SAP.[483]

226. In an email between Lon Fiala and Andrew Nelson, Mr. Nelson states that every $1 of 2005 TomorrowNow business "typically represents" $2 of Oracle maintenance, a $20 in 10-year maintenance-based justification for the PSFT/JDE acquisition and a $10 increase to SAP's strategic license revenue pipeline.[484] In addition, for each new TomorrowNow customer, "Oracle loses an inside position on selling new products to customers, and faces downward price pressure."[485] The email goes on to say that "holding these results steady for a 10 year period" would cost Oracle up to $200 million in maintenance revenue.[486] In fact, in 2006, Mr. Nelson stated TomorrowNow would capture 15% of the PeopleSoft/ J.D. Edwards customer base and "this single component of TomorrowNow's business would take away approximately $1.1 billion from Oracle" while increasing "SAP strategic pipeline…by $1 billion." In 2006 and 2007, Mr. Nelson and SAP employees, including SAP's Global Communications Group, created a detailed financial projection to support the conclusion that TomorrowNow would take away $1.1 billion from Oracle. They provided the information to a writer with Investors.com, used it to brief

[483] Deposition of Andrew Nelson (Co-Founder of TomorrowNow), pgs. 168-170.

[484] Email from Lon Fiala to Andrew Nelson Re: Working Financial Impact Notes, TN-OR00591548 (Nelson Exhibit 1019).

[485] Email from Lon Fiala to Andrew Nelson Re: Working Financial Impact Notes, TN-OR00591548 (Nelson Exhibit 1019).

[486] Email from Lon Fiala to Andrew Nelson Re: Working Financial Impact Notes, TN-OR00591548 (Nelson Exhibit 1019).

a technology reporter with Citigroup, and tried to, and may have, provided the information to reporters at Reuters and the Wall Street Journal.[487]

227. SAP documents indicate that SAP license and other revenues from customers that also used TomorrowNow services exceeded [redacted] during the time TomorrowNow operated.[488]

iii. Profitability Credited to the Copyrighted Materials In Suit As Opposed to Elements Contributed by SAP/TomorrowNow

228. I understand that neither SAP nor TomorrowNow made significant improvements to the copyrighted materials, relying instead on Oracle's copyrighted materials to create derivative TomorrowNow-branded support materials."[489]

3. Hypothetical Negotiation Approach Summary (*Georgia-Pacific* Factor 15)

229. My conclusions and opinion as to the outcome of a hypothetical negotiation based on consideration of the financial, economic and other relevant factors discussed above is set forth in the following section.

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[487] Email from Lon Fiala to Andrew Nelson Re: Working Financial Impact Notes, TN-OR00591548 (Nelson Exhibit 1019). Email from Lon Fiala to Andrew Nelson Re: Revised PDF with attached document "Financial Impact on Maintenance Revenue over 10 years.pdf," TN-OR07165549-550. Email from Anke Mongannam (TomorrowNow Director of Marketing, Americas) to Michael Myers (SAP Analyst Relations Manager, Services, SAP Global Communications), TN-OR00141848; Email from Lon Fiala to Michael Prosceno (SAP Global Communications) Re: Impact on Vendor, TN-OR07160446. Email from Lon Fiala to J. Bonasia (Investors.com) with attached document "Financial Impact on Maintenance Revenue over 10 years.pdf," TN-OR07162308; Emails between Bob Geib (TomorrowNow Senior Vice President) and Daniel Jay (TomorrowNow Manager Services Marketing, Americas), TN-OR02774870-871; Email from Lon Fiala to Michael Prosceno (SAP Global Communications) Re: Impact on Vendor, TN-OR07160446; Email from Anka Mongannam (TomorrowNow Director of Marketing, Americas) to Mandy Wheller (Assistant to Andrew Nelson) with attached document "Brent_Thill_060504_VED_edits.doc," TN-OR07163894-899.

[488] *See* **SCHEDULE 42.SU**

[489] Oracle USA, Inc., et al v. SAP AG, et al, Fourth Amended Complaint in Case No. 07-CV-01658, August 18, 2009, pgs. 5-9.

230. Oracle would realize in the hypothetical negotiation that "but for" the license to SAP, it would be able to realize the full value of its investment in PeopleSoft, which Oracle's history has indicated would include returns beyond the entire acquisition price. Licensing SAP will severely impact the transition of the PeopleSoft customers to Oracle. The acquired cost per customer valuation metrics allow Oracle to apply fair market value data to its calculation of what it is really giving up with the license. These customer metrics are relevant to the license fees that would result in consideration of Georgia-Pacific factor 1: fees charged for the use of the intellectual property in suit.

D. Value of Use Under the Hypothetical Negotiation – Summary

231. The hypothetical negotiators would have considered the financial, economic and other valuation inputs that I have identified and analyzed, and then determined a reasonable royalty (i.e. license fee) by engaging in a "back and forth" negotiation.[490] Below, I summarize the hypothetical negotiation and refer to the various financial metrics in the market, income and cost approach section which would be relevant to determining the license fee in the hypothetical negotiation.

1. Summary of Factors Considered by Oracle and SAP

232. As discussed above, in determining the license fee that it would be willing to accept from SAP for SAP's use of the PeopleSoft/J.D. Edwards copyrighted materials in suit, Oracle would consider at least the following factors:

[490] I understand that the hypothetical negotiation would be conducted by a willing licensor (Oracle) and a willing licensee (SAP) acting in a rational manner in or around January, 2005.

- The broad scope of the license, which would enable SAP to compete against Oracle in providing support services to its PeopleSoft/J.D. Edwards customers, and provide SAP with enhanced ability to convert those customers to SAP applications;
- Expected lost support revenue to SAP on customers that would go to TomorrowNow for support services, as well as lost up-sell and cross-sell revenues from those customers;
- The anticipated permanent impact on Oracle due to the lost future license revenue and ongoing support renewals for customers that would switch to SAP applications;
- Immediately prior to the contemplated hypothetical negotiation, Oracle paid approximately $11.1 billion to acquire PeopleSoft, including rights to the PeopleSoft/J.D. Edwards customer support contracts and related relationships and associated goodwill;
- Oracle's investment of over $1 billion in further research and development for its PeopleSoft and J.D. Edwards products since the acquisition, which Oracle would reasonably understand that it would have to spend, and that SAP would avoid spending by virtue of the license;
- The nature of the relationship between Oracle and SAP, as direct competitors in the software applications business, particularly in light of Oracle's goals for the PeopleSoft acquisition to enhance its competitive position with SAP in the applications market;

- Anticipated changes to Oracle's business practices in order to compete with SAP to provide support services to Oracle customers; and,
- Anticipated negative impacts to the level of profitability and customer renewal rates of the Oracle support products that embody the copyrighted materials at issue, and the resulting impact on Oracle's ability to use that support revenue stream to fund ongoing research and development.

233. Similarly, in determining the amount of a license fee that SAP would be willing to pay to Oracle for its use of the PeopleSoft/J.D. Edwards copyrighted materials in suit, SAP would consider at least the following factors:

- The license would allow SAP to use its TomorrowNow service offering to drive the conversion of Oracle's applications customers to SAP's platform;
- SAP's willingness to pay significant amounts to acquire intellectual property and customer relationships, as evidenced in particular by its 2007 acquisition of Business Objects for $7.1 billion;
- SAP's knowledge that access to Oracle's copyrighted materials is necessary for the level of support that it sought to provide and advertised to Oracle's PeopleSoft/J.D. Edwards customers;
- TomorrowNow's entire business model relied upon its access and use of Oracle's PeopleSoft/J.D. Edwards copyrighted materials in suit;

- The nature of the competitive relationship between Oracle and SAP in the software applications business, and in particular the increased competitive threat that Oracle posed to SAP as a result of its acquisition of PeopleSoft;
- The significant development time, effort and risk that SAP would avoid by entering into the contemplated hypothetical license;
- The importance of timing and speed of SAP's offering of PeopleSoft/J.D. Edwards support services (to coincide with Oracle's acquisition of PeopleSoft and take advantage of customers' fear, uncertainty and doubt);
- The goals of SAP's Safe Passage program, of which the TomorrowNow service offering was an integral part, to convert the majority of the PeopleSoft/J.D. Edwards customer base to SAP; and,
- SAP's expected benefits from offering TomorrowNow support service, selling additional SAP products to those customers, and ultimately converting a portion of those customers to SAP.

234. In establishing their respective negotiating positions, Oracle and SAP would have considered the financial implications of entering into a license. Oracle would consider discounted cash flow scenarios with potential license and support losses between $2.0 billion and $3.8 billion (**SCHEDULES 11.SU-13.SU**); SAP would consider scenarios reflecting financial and economic benefits of between approximately $881 million to $2.7 billion (**SCHEDULES 15.SU-16**). These discounted cash flow scenarios are explained in the Market

Approach section related to SAPs "Value of Use", see Section VI.A.2 of this report. By granting SAP a license, Oracle and SAP would have also considered the financial metrics (multipliers) developed by TomorrowNow and SAP reflecting the impact on Oracle of SAP/TomorrowNow converting license and/or support revenue that would have otherwise been earned by Oracle. For example, one such TomorrowNow metric estimated the financial impact to Oracle at $20 support revenue lost for every $1 TomorrowNow gained. The parties would also consider the actual sales of TomorrowNow to PeopleSoft customers along with TomorrowNow's strategic planning and selling activities.

235. The parties would have considered the acquisition price paid by Oracle for PeopleSoft/J.D. Edwards and the components of the intangible assets. Significant value was embedded in the ongoing support revenue anticipated from the acquired PeopleSoft/J.D. Edwards customers. The copyrighted materials accessed by SAP are required resources to meet Oracle's/PeopleSoft related customer support contract commitments, or comparable materials must be independently developed. The valuation of the support revenue stream and customer relationships of $2.1 billion would be heavily considered. The parties would contemplate doubling the $2.1 billion value of support agreements and customer relationships[491] to $4.2 billion to reflect the goodwill premium paid overall by Oracle to acquire PeopleSoft. Oracle Senior Executives have indicated that the transaction goodwill premium reflects Oracle's ability to gain additional monetary value over time from acquired

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[491] *See* Market Approach in Section VI.1 of this report. The goodwill premium is actually 1.4 times the acquired tangible and intangible assets (tangible assets of $1.2 billion + intangible assets of $3.4 billion = $4.6 billion x 1.4 = $6.5 billion of goodwill).

customers through cross-sell and up-sell opportunities, as well as other financial benefits. Oracle would understand that, with the hypothetical license, there would be an immediate impact on its support revenue and customer goodwill.

236. Market value metrics and valuations would bring significant upward financial pressure to the negotiation, particularly as the hypothetical license coincides with Oracle's $11.1 billion acquisition of PeopleSoft.

2. Oracle Would Expect A Significant License Fee

237. Larry Ellison, Safra Catz and Charles Phillips informed me that Oracle would expect a significant license fee from SAP for the PeopleSoft/J.D. Edwards copyrighted materials in suit, and indicated the impact of licensing would be greater than $3 billion on Oracle. A further perspective on losing potentially 3,000 customers (whose support is enabled by the copyrighted materials) is illustrated by applying 30.2%[492] to the value of the total support contracts, customer relationships and goodwill of $8.85 billion to result in $2.67 billion of potential loss.[493] I understand that Larry Ellison, Safra Catz and Charles Phillips would be personally involved in these negotiations.

3. SAP Could Pay A Significant License Fee

238. Theoretically, as SAP was strategically interested in expanding its customer support footprint and disrupting the transition of PeopleSoft customers to Oracle, SAP could have attempted to acquire PeopleSoft customer relationships and support revenue through a third party acquisition. In January 2005, in an arms-length transaction, Oracle paid approximately $1

[492] 3,000 customers / 9,920 customers = 30.2%.

[493] Discussion with Oracle Senior Executives: Larry Ellison, Safra Catz and Charles Phillips.

million per PeopleSoft customer.[494] PeopleSoft's customers have contracts for support services which were enabled by the PeopleSoft intellectual property, including the copyrighted materials in suit. SAP Senior Management would be aware of the value that Oracle paid, and that SAP would have had to pay, in a third party transaction to acquire similar customers, whose support services use the copyrighted materials.

239. SAP would be willing to pay a $2 billion license fee to compete head to head with Oracle for the acquired PeopleSoft support customers and to execute on its strategy to cross-sell and up-sell to PeopleSoft customers.

240. In 2004, SAP Group generated revenues of $4.1 billion[495] and had liquid assets of nearly $4.4 billion,[496] including cash and cash equivalents of $2.1 billion.[497] In 2005, SAP Group generated revenues of $4.7 billion[498] and had liquid assets of $3.8 billion,[499] including cash and cash equivalents of $2.4 billion.[500]

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[494] The PeopleSoft cost per acquired customer of $1.0 million has a nature and components relevant to an established license fee under *Georgia-Pacific* factor 1, where consideration and analysis involves royalties paid for the subject intellectual property.

[495] SAP Annual Report for fiscal year ended December 31, 2005, pg. 151. €3.3 in year 2004, currency converted using exchange rate of $1.2490 to €1, per the SAP Annual Report 2005, p.98.

[496] SAP Annual Report for fiscal year ended December 31, 2005, pg. 152. €3.2 in year 2004, currency converted using exchange rate of $1.3621 to €1, per the SAP Annual Report 2005, p.98.

[497] SAP Annual Report for fiscal year ended December 31, 2005, pg. 152. €1.5 in year 2004, currency converted using exchange rate of $1.3621 to €1, per the SAP Annual Report 2005, p.98.

[498] SAP Annual Report for fiscal year ended December 31, 2005, pg. 151. €3.8 in year 2005, currency converted using exchange rate of $1.2360 to €1, per the SAP Annual Report 2005, p.98.

[499] SAP Annual Report for fiscal year ended December 31, 2005, pg. 152. €3.2 in year 2005, currency converted using exchange rate of $1.1797 to €1, per the SAP Annual Report 2005, p.98.

[500] SAP Annual Report for fiscal year ended December 31, 2005, pg. 152. €2.1 in year 2005, currency converted using exchange rate of $1.1797 to €1, per the SAP Annual Report 2005, p.98.

E. Opinion: Value of Use of PeopleSoft/J.D. Edwards Copyrighted Materials Based on Hypothetical Negotiation Approach to Establish Intellectual Property Value – Oracle and SAP Would Have Agreed Upon a License Fee of No Less Than $2 Billion

241. Based on my analysis of the fifteen *Georgia-Pacific* factors and relevant economic, financial and valuation issues and considerations, in January 2005, it is my opinion that the parties would have agreed to a license fee of no less than $2 billion. [501]

[501] Oracle and SAP may have entered into a hypothetical license, depending on the level of payment [Deposition of Safra Catz, (Oracle Co-President and Executive Board Member), dated March 27, 2009, pgs. 20-25; Deposition of Charles Phillips (Oracle Co-President and Executive Board Member), dated April 17, 2009, pgs. 118-120].

B. Defendants' Use Of Oracle's Database Software

1. Defendants' Downloads and Use of Oracle Database

244. John Baugh, TomorrowNow's PeopleSoft Environments Manager, testified at his deposition that TomorrowNow had a version of Oracle database software on a Solaris 7 server obtained sometime prior to July 2003, that TomorrowNow downloaded multiple versions of Oracle database from the Oracle.com website starting on or around March 2004 and continuing over time, and that TomorrowNow downloaded bug patches or fixes for Oracle database from Oracle's metalink.com website.[514] I understand that Defendants have admitted in court filings and through deposition testimony that TomorrowNow downloaded and installed certain versions of Oracle database on TomorrowNow servers, then copied, accessed and otherwise used versions of Oracle's database software to provide TomorrowNow maintenance services to PeopleSoft and Siebel customers through the wind-down of TomorrowNow's business in October 2008.[515]

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[514] Deposition of John Baugh (TomorrowNow PeopleSoft Environments Manager), December 3, 2009, pgs. 164-169, 209; TomorrowNow July 24, 2003 email from Andrew Nelson to John Baugh Re: Sql to Oracle Migration Complete, indicating that as of July 2003, TomorrowNow was using an "automated process to build Oracle/Unix test environments" based on Oracle database environment HR751ORA [TN-OR03756893-894 (Baugh Exhibit 1837)]; TomorrowNow July 27, 2004 email from John Baugh to George Lester Re: FW: Environment Build List, with attachment TN-OR00465698-700 (Baugh Exhibit 1839); Deposition of George Lester (Enterprise Technology Support Manager) April 23, 2009, pgs. 19-20, (indicating that the database software for Oracle was "in place" when he arrived in 2004); TomorrowNow January 15, 2007 email from John Baugh to Greg Nelson Re: Data Center Requirements, TN-OR00475532-535 (Baugh Exhibit 1845) indicating "We are running Oracle 8i and 9i on both the tn-dell2650-01 and psdev01 servers. We also have a requirement for Oracle 10g which will be installed within the next couple of weeks"; Deposition of William Thomas (TomorrowNow Global IT Director), December 4, 2009, pgs. 7-9; Discussion with Kevin Mandia; February 12, 2010 Supplemental Expert Report of Kevin Mandia, pgs 75-77. Defendants' First Amended Response To Plaintiffs' Fourth Set of Requests for Admission to Defendants TomorrowNow, Inc., SAP AG, and SAP America, Inc., December 4, 2009, pg. 23 (admitting that SAP TN accessed Metalink for the purpose of obtaining support for one or more of SAP TN's installed instances of Oracle Database products).

[515] Defendants' First Amended Response to Plaintiffs' Fourth Set of Requests For Admissions to Defendants TomorrowNow, Inc., SAP AG, And SAP America, Inc., December 4, 2009, pgs. 5-7; Defendant TomorrowNow, Inc.'s Seventh Amended and Supplemental Response to Plaintiff Oracle USA Inc.'s First Set of Interrogatories (Set One), December 4, 2009, pg. 16; Deposition of William Thomas (TomorrowNow Global IT Director), December 4, 2009 pgs.

245. I understand that beginning in or around July 2003, TomorrowNow built Oracle database environments that may have been used in its retrofit support model and that around 2005 TomorrowNow began to build local environments based on Oracle database in its critical support model.[516] Defendants have identified 128 customer-specific or general local environments accessing Oracle database software on TomorrowNow's internal systems that were created to emulate TomorrowNow's PeopleSoft customer's Oracle platform, and two customer-specific local environments accessing Oracle database software on TomorrowNow's internal systems that were created to emulate TomorrowNow's Siebel customer's Oracle platform. The creation of customer-specific environments was TomorrowNow's preferred method for its development team to generate updates and fixes for customers in its critical support model.[517]

6-7, 21-22; Deposition of John Baugh (TomorrowNow PeopleSoft Environments Manager), December 3, 2009, pgs. 189-190. Defendants have indicated that TomorrowNow is not currently aware of any version or release of Oracle database related components maintained on TomorrowNow's network for any J.D. Edwards' applications, and therefore Defendants believe that no Oracle database components maintained on TomorrowNow's network were to provide maintenance services to J.D. Edwards customers. *See* Defendants Response and Objections to Plaintiff's Fifth Set of Interrogatories to Defendant TomorrowNow, Inc., and Fourth Set of Interrogatories to Defendants SAP AG and SAP America, Inc., November 11, 2009, pg. 19; Deposition of William Thomas (TomorrowNow Global IT Director), December 4, 2009, pg. 7. Defendants have also alleged in court filings and in deposition testimony that TomorrowNow did not provide Oracle database applications to customers and did not provide maintenance services on Oracle database to TomorrowNow customers as part of its services. Defendant TomorrowNow Inc.'s Eighth Amended And Supplemental Response to Plaintiff Oracle Corporation's First Set of Interrogatories (Set One), December 4, 2009, pg. 17; Deposition of William Thomas (TomorrowNow Global IT Director), December 4, 2009, pg. 7.

[516] TomorrowNow July 24, 2003 email from Andrew Nelson to John Baugh Re: Sql to Oracle Migration Complete, indicating that as of July 2003, TomorrowNow was using an "automated process to build Oracle/Unix test environments" based on Oracle database environment HR751ORA [TN-OR03756893-894 (Baugh Exhibit 1837)]; Deposition of John Baugh, December 3, 2009, pg. 209; Discussions with Kevin Mandia; Supplemental Expert Report of Kevin Mandia, February 12, 2010, pgs. 20-32. Deposition of John Baugh, February 6, 2008, pgs. 131-140 (referring to "retrofit" as "extended support" and "critical support" as "direct") and Baugh Exhibit 31 "PeopleSoft Demo Environments".

[517] **Schedule 44.1.SU;** *See* TN-OR06515456 (Excel Spreadsheet identifying 128 PeopleSoft application environments running on Oracle database software at SAP TN); *see also* Defendant TomorrowNow, Inc.'s Third Amended and Supplemental Response to Plaintiff Oracle USA, Inc.'s Second Set of Interrogatories, December 4, 2009 , pg. 7

2. Defendants' Discussions Regarding Licensing Oracle Database

246. I understand that Defendants claim that their downloads and use of Oracle's database software were pursuant to TomorrowNow accepting and entering into a Development License with Oracle.[518]

247. Despite Defendants' current claim that their use of Oracle's database was pursuant to a Development License, contemporaneous SAP and TomorrowNow emails indicate that Defendants understood that they did not have, and needed, licenses in order for TomorrowNow to be able to access, copy and/or use Oracle's copyrighted database software and related materials to provide TomorrowNow maintenance services to customers. Defendants admitted: "TomorrowNow directed some inquiries to SAP employees regarding the manner, method, and means for purchasing a license for at least

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("TomorrowNow further responds that an Excel workbook that has been produced at TN-OR06515456 that contains the most detailed information TomorrowNow has been able to gather regarding the PeopleSoft environment components that might have existed on TomorrowNow's network."); Deposition of John Baugh (TomorrowNow PeopleSoft Environments Manager), December 3, 2009, pgs. 187-190; Defendants' Responses And Objections To Plaintiffs' Fifth Set of Interrogatories to Defendant TomorrowNow, Inc., and Fourth Set of Interrogatories To Defendants SAP AG and SAP America, Inc., November 11, 2009, pg. 19 identifying 2 Siebel local customer environments accessing Oracle database; Deposition of William Thomas (TomorrowNow Global IT Director), December 4, 2009, pgs. 71-72; Deposition of Shelley Nelson (TomorrowNow Vice President of Global Support Services), September 3, 2009, pg. 627-628, 633; TomorrowNow December 13, 2006 email from John Baugh to Nigel Pullen Re: Fw: Oracle DB Upgrades, TN-OR00475285-287 (Baugh Exhibit 1843) (indicating that in December 2006 TomorrowNow had 103 instances of Oracle database with 13 on Microsoft Windows and 90 on Unix AIX). Oracle's Expert, Kevin Mandia, has identified 109 installations of Oracle database software. February 12, 2010 Supplemental Expert Report of Kevin Mandia, p. 77.

[518] Deposition of William Thomas (TomorrowNow Global IT Director), December 4, 2009, pgs. 9-10, 19-20, 41; Deposition of John Baugh (TomorrowNow PeopleSoft Environments Manager), December 3, 2009, pg. 211-212. I also understand that Defendants have admitted in court filings that <u>customers</u> did not provide to TomorrowNow, either directly or through customer passwords, any Oracle database related components and/or applications including any updates or patches for those applications. Defendant TomorrowNow, Inc.'s Eighth Amended and Supplemental Response to Plaintiff Oracle Corporation's First Set of Interrogatories (Set One) December 4, 2009, pg. 42. Defendants' First Amended Response to Plaintiffs' Fourth Set of Requests For Admission To Defendants TomorrowNow, In., SAP AG, and SAP America, Inc. December 4, 2009, pgs. 204-205.

one Oracle database product."[519] The following emails and deposition testimony address TomorrowNow's requests and SAP's response.[520]

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[519] Defendants' First Amended Response to Plaintiffs' Fourth Set of Requests for Admission To Defendants TomorrowNow, Inc., SAP AG, and SAP America, Inc. No. 12, December 4, 2009, pg. 10. Deposition of Shelley Nelson (TomorrowNow Vice President of Global Support Services), September 3, 2009, pg. 628. Shelley Nelson testified that "And at that point in time, we were trying to get pricing on how many additional DBMS licenses we might – might need to buy in order to install on these different machines."

[520] **Schedule 46.SU.**

[520A] TN-OR00466716 (Lester Exhibit 1215). Also, on May 11, 2005, George Lester emailed Greg Nelson a copy of the Oracle Development License Agreement then in effect, TN-OR01019051-52 (G. Nelson Exhibit 1829);

[520B] SAP-OR00844406-407. (Schraeder Exhibit 1791);

[520C] TN-OR00469398 (Baugh Exhibit 1842);

[520D] SAP-OR00846609-610, October 21, 2005 (Schraeder Exhibit 1792); Deposition of Georg Schraeder (SAP Global Licensing), November 30, 2009, pgs. 122-123;

[520E] SAP-OR00846150, October 28, 2005 (Schraeder Exhibit 1793); Deposition of Georg Schraeder (SAP Global Licensing), November 30, 2009, pgs. 130-132 (Mr. Schraeder testified that the two October 2005 requests from TomorrowNow were not duplicative, but separate requests. He also admitted in testimony that he did not respond to Greg Nelson and does not recall responding to Mr. Maples to inform them that SAP would not provide an Oracle database license to TomorrowNow under the Reseller Agreement.);

[520F] SAP-OR00844606-607 (Schraeder Exhibit 1794);

[520G] TN-OR01226163, (G. Nelson Exhibit 1835), showing an IT ticket with entries updating the status of TomorrowNow requests to purchase Oracle Database licenses between December 2005 and June 2006. The June 5, 2006 entry puts the request on hold pending determination by SAP legal if the license purchase is necessary;

[520H] SAP-OR00847764-767 (Scholten Exhibit 1786);

[520I] TN-OR01040829-834, at 829 (Nelson Exhibit 1832);

[520J] TN-OR01029489-493, at 490-491 (A. Nelson Exhibit 1242) and TN-OR01029494-496, at 494 (G. Nelson Exhibit 1833);

[520K] TN-OR01029489-493, at 489-490 (A. Nelson Exhibit 1242), Deposition of Gregory Nelson (TomorrowNow VP Global Service Automation & IT), December 3, 2009, pgs. 265-266.

[520L] TN-OR01226238 (Lester Exhibit 1216);

[520M] TN-OR01049359-361 (G. Nelson Exhibit 1836);

[520N] TN-OR00475532-535, at 532-533 (Baugh Exhibit 1845) and Deposition of John Baugh (TomorrowNow PeopleSoft Environments Manager), December 3, 2009, pgs. 236-238.

[520O] Deposition of John Baugh, December 3, 2009, pgs. 201-204.

[520P] In response to TomorrowNow's request to create a hosted remote environment, Parkview, received a $65,000 database software license quote from Oracle for a license to set up a new environment at the customer site for a 4 CPU Standard Edition license. TomorrowNow email chain, January 11, 2008, TN-OR06428233-235, (Baugh Exhibit 1849).

a) January 25, 2005: Email from John Baugh (TomorrowNow) to Greg Nelson (TomorrowNow) and George Lester (TomorrowNow): "Oracle allows downloading and use of their database software 'free' for development environments. However, now that we are under the SAP umbrella, we may need to look at purchasing Oracle licenses…The Oracle rdbms is fairly expensive, but it may be more cost effective in the long run to make sure we have all our bases covered."[520A]

b) March 31, 2005: Greg Nelson (TomorrowNow) provided John Schaefer (SAP) with "details for the projected IT expenditures" for TomorrowNow including two cost items for Oracle "Developer License Equivalent" to be incorporated into TomorrowNow's two year budget/plan. [520B]

c) October 11, 2005: Internal TomorrowNow email from John Baugh to Victor Delgado and George Lester indicating, "We should license Oracle Database Standard Edition." [520C]

d) October 14, 2005: George Lester (TomorrowNow) sent an email to Douglas Owens (SAP), Wolfgang Hellmann (SAP) and Paul Bigos (SAP Americas Global Purchasing Organization) requesting an Oracle database license for a 4 CPU machine with Windows and a separate 4 CPU machine for AIX. Mr. Lester indicated that TomorrowNow needed to purchase Oracle database licenses for environments where TomorrowNow developed its customers' deliverables.

October 21, 2005: Wolfgang Hellmann (SAP) replied to everyone on the email including a courtesy copy to Georg Schraeder (SAP) directing Mr. Lester to contact Mr. Schraeder. Mr. Lester emailed Mr. Schraeder October 21, 2005 with the same email that was sent on October 14, 2005.

Mr. Schraeder testified at deposition that he never responded to this email.[520D]

e) October 20, 2005: Email from Greg Nelson (TomorrowNow) to Paul Bigos (SAP Americas GPO) requesting a 1CPU edition Oracle database license to be used for one customer-specific local environment.

   October 28, 2005: Mr. Bigos forwards Mr. Nelson's email to John Maple (SAP Germany GPO) and Georg Schraeder (SAP) and Mr. Maple asks Mr. Schraeder to advise how to "process this Oracle request."[520E]

f) October 28, 2005: Email from Jennifer Mrak (SAP IT Purchasing Buyer) to Greg Nelson (TomorrowNow) and courtesy copy to Paul Bigos (SAP) containing a quote from a software vendor, Insight, for an Oracle Database Standard Edition license for $10,815 with $2,379 annual maintenance. Ms. Mrak also informs Mr. Nelson that she is checking with SAP IT to see if SAP has an internal license for the software.[520F]

g) December 19, 2005: TomorrowNow email indicating an IT Service Ticket titled "Need to purchase Oracle license for both PSDEVO1 And TN-DELL2650-01," for two TomorrowNow servers that had installed versions of Oracle database running.[520G]

h) January 2006 and March 2006: January 25, 2006 email from Alex La Mar (TomorrowNow) to Georg Schraeder (SAP), and a follow up email on March 14, 2006, reiterating the need for two 4-CPU machine Oracle database licenses "for environments where we develop our customer's deliverables" and asking if SAP has an enterprise license agreement for TomorrowNow's use of Oracle database.[520H]

i) March 20, 2006: Greg Nelson (TomorrowNow) email to Paul Bigos (SAP) asking for assistance in obtaining an Oracle database license and explaining that the "ORACLE license is urgently needed to support our PeopleSoft customers." [520I]

j) March 30, 2006: Email from George Lester (TomorrowNow) to Paul Bigos (SAP) indicating that, "Following a license review conducted last year, we determined the need to procure Oracle Standard Edition licenses for development. We have been pursuing channels to obtain these licenses through SAP since October of 2005….please consider this an unfulfilled urgent purchasing request. This is a critical need to support our customers running PeopleSoft on Oracle, which is about 40% of our customer base." Also on March 30, 2006: Email from Paul Bigos (SAP) transmitting a March 27, 2006 price quote from a software reseller (SHI) to George Lester (TomorrowNow) and Greg Nelson (TomorrowNow) for an Oracle Database Standard Edition license for 8 processors of $11,414 per processor or $91,312 over all. Product maintenance is quoted at $2,310 per processor in Year 1, or $18,480 overall. The annual maintenance cost goes up to $22,440 for 8 processors in year 2. [520J]

k) March 31, 2006: Email from Paul Bigos (SAP) to George Lester (TomorrowNow) and Greg Nelson (TomorrowNow) directing them how to begin the SAP purchase process with the SHI price quote for Oracle database license, which also requires "CIC and Mark White's approval" before purchasing. Greg Nelson (TomorrowNow) testified at deposition that he does not recall Mark White ever giving approval for the purchase.[520K]

l) June 6, 2006: Email from John Baugh (TomorrowNow) to George Lester (TomorrowNow) asking if there has been "[a]ny word on the Oracle license," as "Oracle has now cut off access to Metalink for accounts with no active CSI (Customer Support Identifier)….It is difficult to troubleshoot the Oracle error messages…without access to Metalink." [520L]

m) September 14, 2006: Numerous emails between TomorrowNow and SAP regarding obtaining various software licenses including Oracle database.[520M]

n) January 12, 2007: Email from John Baugh (TomorrowNow) to Gerald Newsom (Summit Technology Inc) identifying that TomorrowNow is "running Oracle 8i and 9i on both the tn-dell2650-01 and psdev01 servers." And that "Oracle 10g…will be installed within the next couple of weeks." John Baugh (TomorrowNow) also indicates in the email, "We do not have Oracle licensed." [520N]

o) After the lawsuit was filed in March 2007: John Baugh (TomorrowNow) testified that he discussed TomorrowNow needing to purchase an Oracle database license at a meeting with Mark White, Shelley Nelson and Kathy Williams. [520O]

p) January 11, 2008: Mark White (Senior Vice President and Chief Financial Officer of SAP North America and Executive Chairman of TomorrowNow) approved TomorrowNow reimbursing a customer, Parkview, for an Oracle database license. TomorrowNow had requested that the customer set up a remote hosted environment in order to continue support with TomorrowNow. The client indicated that setting up such an environment would require the client to purchase an Oracle database license for the new installation, and got a bid from Oracle for a standard license. [520P]

248. SAP has admitted in court filings and in deposition testimony that even though it "never separately purchased a license to any Oracle database product that was solely for the purpose of TomorrowNow using that license to provide support services to TomorrowNow's Customers," SAP understood, at the time of its acquisition of TomorrowNow, that based on the applications TomorrowNow was providing service for, database software was required.[521] SAP further admitted that: it did not provide TomorrowNow with an Oracle database license through SAP's role as an Oracle database reseller; SAP could only license application-specific full use licenses for Oracle database; and SAP decided that it would not consider use of the Oracle database reseller agreement to obtain a license for TomorrowNow because of SAP AG's Boards' "Rules of Engagement," which indicated that the business of SAP and TomorrowNow be kept separate.[522]

C. Scope of Use

249. I understand that the license between Oracle and Defendants for Oracle's copyrighted database software materials would be subject to restrictions such as:

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[521] Defendants' First Amended Response to Plaintiffs' Fourth Set of Requests for Admission To Defendants TomorrowNow, Inc., SAP AG, and SAP America, Inc. No. 13, December 4, 2009, pg. 11. Deposition of Georg Schraeder (SAP Global Licensing), November 30, 2009, pg. 85.

[522] Defendants' First Amended Response to Plaintiffs' Fourth Set of Requests for Admission to Defendants TomorrowNow, Inc., SAP AG, and SAP America, Inc. No. 14, December 4, 2009, pg. 11. Deposition of Georg Schraeder (SAP Global Licensing), November 30, 2009, pgs. 24-26, 31-33, 118. SAP also admitted that it did not respond to TomorrowNow's requests for a license under SAP's database reseller agreement with Oracle. *See* Deposition of Georg Schraeder (SAP Global Licensing), November 30, 2009, pgs. 122-123, 130, 146. Deposition of William Thomas (TomorrowNow Global IT Director), December 4, 2009, pg. 40.

- SAP and TomorrowNow would not be permitted to advertise or promote TomorrowNow or SAP as a licensed service provider or partner with Oracle for providing service for Oracle software products.
- SAP could not use Oracle's copyrighted information in any manner not expressly permitted under the license.
- TomorrowNow or SAP would not receive any rights to Oracle copyrights, trademarks, patents or know-how related to the infringed database materials.
- TomorrowNow or SAP would not receive any rights to access the source code of the database software, nor rights to create any derivative fixes/patches/updates that make any direct change to any database software code.
- TomorrowNow or SAP would not receive any right to copy, reproduce, download, create derivative works from, or do anything else to directly maintain a customer's Oracle database software, or do anything that would substitute in any way for Oracle's database customer maintenance offering.
- Basically, TomorrowNow would have a license to the Oracle database software that would only allow it to meet the needs of the PeopleSoft and Siebel application customers that it was servicing, and who are subject to other Oracle intellectual property claims as addressed in the report.

D. Methodology

250. Although, as addressed above, I understand it is Oracle's position that no license it issues would permit a licensee to use Oracle's database software in the manner in which TomorrowNow used the software, for purposes of determining Oracle's damages as SAP's value of use, I have adopted certain aspects of Oracle's existing database licensing structure as benchmarks to determine the license fees that SAP should have paid Oracle for the contemplated license to Oracle's copyrighted database software materials. Richard Allison (Oracle Senior Vice President of Global Practices and Risk Management) has provided input into the calculation of the database license fee. The fact that Oracle would be licensing its database software to its biggest enterprise applications rival to enable it to compete with Oracle for Oracle application support revenue, would influence Oracle's license pricing and would justify Oracle offering SAP no discount off list price.[523] The billions of dollars Oracle had spent on research and development of its proprietary database software products also would be considered by Oracle, and would indicate that it would charge SAP a premium for the license.[524]

251. For TomorrowNow's PeopleSoft and Siebel application support customers that ran their applications on Oracle databases, and who TomorrowNow supported using copies of Oracle database software residing on TomorrowNow servers, I understand Defendants would be required to obtain sufficient licenses to Oracle's database software, and also maintain on-going sufficient support agreements from Oracle to allow access to necessary

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[523] Discussion with Richard Allison.

[524] Discussion with Richard Allison; *See* **SCHEDULE 9.**

upgrades, patches, fixes and other software services.[525] In the following section, in order to quantify Oracle's damages based on Defendants' "value of use," I analyze the fair market value of Oracle's copyrighted database software materials as measured by the metrics and prices in place for Oracle database licenses over the relevant time period beginning with SAP's January 2005 acquisition of TomorrowNow, despite TomorrowNow's use of Oracle database prior to the acquisition. I have begun damages in January 2005 for Oracle database use in conjunction with PeopleSoft applications and September 2006 for Oracle database use in conjunction with Siebel applications.

252. SAP is Oracle's most significant competitor in enterprise applications and, under the contemplated database license, would be using Oracle's database software to compete for Oracle's application support business at critical junctures in the two companies' histories (at the time of Oracle's acquisition of PeopleSoft and Siebel, and at the time of SAP's acquisition of TomorrowNow and launch of support service for Oracle applications, as is described elsewhere in my report). However, the effects of Defendants' actions on Oracle's PeopleSoft, J.D. Edwards, and Siebel customer bases have already been taken into account in my quantification of the value of use of licenses for those applications. Thus, I have limited SAP's value of use of the copyrighted database materials in suit to the measure of the lost license fees that SAP would have had to pay Oracle had it purchased a license (similar to a separate OLSA) for each relevant customer for which TomorrowNow provided application maintenance services using an Oracle database. For

[525] Discussion with Richard Allison.

purposes of determining SAP's value of use of the copyrighted database materials in suit, I have applied Oracle's pricing for its standard OLSA licensing terms assuming a particular configuration of TomorrowNow hardware. I have not included any fees for options or upgrades that may have been needed by TomorrowNow for each customer in order to emulate its customers' environments. These additional fees could be considerable. For example, some options have additional license fees of 25% - 50% of the enterprise edition license fees. I understand that for an Oracle Standard (Full-Use) license, Oracle would price the database license using its Enterprise Edition, utilizing the count of processors (or cores on each processor, for multi-core processors) on the servers with Oracle database installed or running.[526] In pricing this license, I have considered the following specifications:

- Oracle's list price per processor for the basic Enterprise Edition license and support was consistent between 2004 and 2008 at $40,000/processor for the license and $8,800/processor per year for support.[527] Therefore, I have used $40,000 per customer per processor as the one-time perpetual license fee and $8,800 per processor per customer as the support fee per year.

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[526] Discussion with Richard Allison. Oracle Software Investment Guide, TN-OR 01765697-752, at 709 and 714. For purposes of this analysis, a "processor" refers to either the CPU itself for single-core chips or each core, for multi-core processors.

[527] Oracle December 2004 E-Business Global Price List, ORCL00704411-433, at 412; Oracle September 2006 E-Business Global Price List, ORCL00704381-410, at 382; US$ Pricing Oracle Database filename: ePL071708 JDE Localisable Price lists.xls, ORCL00213686. Oracle's price lists also show options including Enterprise Edition Options such as Real Application Clusters, Partitioning and OLAP. Enterprise Edition Options are priced in addition to the license fees and the listed options range from an additional $10,000 to $20,000 per processor per option. *See* Oracle December 2004 E-Business Global Price List, ORCL00704411-433, at 412.

- TomorrowNow installed and ran Oracle database software on numerous servers that had 2 to 4 processors which were single to quad-core, or effectively 2 to 16 processors per server when considering Oracle's pricing practices, which considers each core for a multi-core processor.[528] The server with the majority of TomorrowNow local environments running on Oracle database was purchased in January 2005 and was a 4 processor Unix server with dual-cores, or effectively 8 processors, based upon which Oracle would price a license for 6 processors (Oracle applies a .75 processor factor to Unix processors, so 8 * .75 = 6 processors priced in the license).[529]
- Per discussion with Richard Allison, I understand that Oracle would have priced the license based on the largest server configuration. Therefore, I have assumed that Oracle would

[528] Defendant TomorrowNow, Inc.'s Eighth Amended And Supplemental Response to Plaintiff Oracle Corporation's First Set of Interrogatories (Set One), December 4, 2009, Interrogatory No. 11 pgs. 42-55. (Identifying TomorrowNow servers with Oracle database-related files). Defendant's First Supplemental Responses And Objections To Plaintiffs' Fifth Set of Interrogatories To Defendant TomorrowNow, inc. and Fourth Set of Interrogatories to Defendants SAP AG and SAP America, Inc., December 4, 2009, pgs. 7-32. (Identifying TomorrowNow servers with Oracle database-related files and confirming that customer local environments accessed Oracle database files). Email from Joshua Fuchs (Jones Day) to Nitin Jindal (Bingham McCutchen), February 19, 2010 identifying the number of processors, number of cores and the date of purchase for each server identified in interrogatories as having an Oracle database installation. *See also*, October 28, 2005 email from George Lester to Jennifer Mrak (SAP), TN-OR01020812-818 at 812 (G. Nelson Exhibit 1831), indicating that, "I have been trying to procure a license for Oracle Standard Edition on two of our internal servers, which each have 4 CPU's."; Email from Alex La Mar (TomorrowNow) to Greg Nelson (TomorrowNow) on March 20, 2006, TN-OR01040829-34 at 829 (G. Nelson Exhibit 1832), indicating "we need to obtain Oracle Standard Edition for a 4 CPU machine running AIX and a 4 CPU machine running Windows."

[529]Email from Joshua Fuchs (Jones Day) to Nitin Jindal (Bingham McCutchen, February 19, 2010 identifying the number of processors, number of cores and the date of purchase for each server identified in interrogatories as having an Oracle database installation. TomorrowNow PeopleSoft Growth Projections, TN-OR02171843-848, at 844, identifying Quad Processor Unix Database Server as the location for the majority of PeopleSoft environments running on Oracle Database software); Discussion with Richard Allison; Oracle Software Investment Guide, TN-OR 01765697-752, at 709 and 714 (identifying the Unix processor factor as .75).

require SAP to purchase no less than a license that covered each customer accessing Oracle database priced at 6 processers per license. A 6 processor Enterprise Edition Oracle database license would be priced at 6 processors times the license fee of $40,000 per customer, or $240,000 per customer, and an annual support fee of $8,800 times 6 processors, or $52,800 per year per customer.[530]

E. Opinion: Value of Use of Oracle's Copyrighted Property – Oracle Database Copyright Infringement

253. Using the above-described parameters related to Oracle's database license and support fees, TomorrowNow's processor configurations and TomorrowNow's database use, I have formed opinions and computed the following amounts for license fees and support fees, which indicate measurement of SAP's value of use of Oracle's copyrighted database materials.

254. One component of SAP's value of use of Oracle's copyrighted database materials is related to certain local environments residing on TomorrowNow's servers. According to Defendants' records, and counting only one environment per customer, at least 71 local environments were running Oracle database software on TomorrowNow's systems (both customer-specific and non-customer specific).[531] The table below reflects a measure of SAP's value of

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[530] Oracle Software Investment Guide, TN-OR 01765697-752, at 713-714. I am not aware of any technological reason related to Oracle's database or applications to explain why TomorrowNow built environments on servers with different processor configurations.

[531] **Schedule 44.1.SU**; *See* TN-OR06515456; Defendant's First Supplemental Responses And Objections To Plaintiffs' Fifth Set of Interrogatories To Defendant TomorrowNow, inc. and Fourth Set of Interrogatories to Defendants SAP AG and SAP America, Inc., December 4, 2009, pg. 18. ("TomorrowNow has also produced a spreadsheet which

use of Oracle's database software requiring TomorrowNow to license Oracle database use for 71 separate customers. My analysis assumes that licenses should have been purchased at the later date of when the customer started application service with TomorrowNow, when TomorrowNow built the customer a local environment, or January 1, 2005. I have calculated support fees from the date of license purchase until the customer left TomorrowNow. For instances when the local environment build date was not provided by Defendants and the customer started with TomorrowNow prior to January 2005, I have started the license in January 2005, when SAP acquired TomorrowNow. I have deducted 5% of revenues to reflect additional costs, if any, that Oracle would have incurred to provide this license.[532] Richard Allison represented that this license would have little, if any, impact on Oracle's costs. For example, no sales representatives would receive a commission on this type of licensing, similar to the commission treatment at

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identifies environment components located on TomorrowNow's network, including identifying if a customer's local environment components were using Oracle database related components for their respective TomorrowNow PeopleSoft customers."); Defendants Response and Objections to Plaintiff's Fifth Set of Interrogatories to Defendant TomorrowNow, Inc., and Fourth Set of Interrogatories to Defendants SAP AG and SAP America, Inc., November 11, 2009, pgs. 16-19; TN-OR00418511-45 at 519 (TomorrowNow document indicating it had 77 customers with Oracle database in 2007). For purposes of this analysis, I have only calculated license and support fees for each customer once, even if the customer had multiple local environments based on Oracle database. I have also only calculated license and support fees for two generic environments, despite the fact that there were numerous generic local environments based on Oracle database.

[532] **Schedule 37.2.SU.**

[532A] FY06 North America Compensation Terms and Conditions, June 1, 2005, ORCLX-NAV-000079; FY07 North America Compensation Terms and Conditions, June 1, 2006, ORCLX-NAV-000080; FY08 North America Compensation Terms and Conditions, June 1, 2007, ORCLX-NAV-000081; FY09 North America Compensation Terms and Conditions, June 1, 2008, ORCLX-NAV-000082. Diane Hamilton, Oracle's Director of Global Incentive Compensation, indicated that only a limited group of executives have revenue-based thresholds for compensation and that $50 million in additional revenues is unlikely to cause any variation in those executives' compensation given that the revenue base is large relative to the additional revenues due to this license (base is $1.3 billion to $2.7 billion) and that the incremental commission rates are less than one-half of one percent (less than 0.05%). Discussion with Diane Hamilton.

Oracle pursuant to the Oracle/SAP Reseller Agreement.[523A] Using an income approach to establish a fair market value of this component of SAP's value of use, I have determined that this component of SAP's value of use is approximately $23.6 million for the 71 customer environments.

Table 9: SAP's Value of Use Related to Use of Oracle's Database Copyrighted Materials Measured as License Fees and Related Support for 71 Customers[533]	
	SAP Value of Use
License and Support Revenue	$24,795,524
Margin	95%
Total	$23,555,748

255. Another component of SAP's value of use of Oracle's copyrighted database materials is related to a limited analysis conducted on a portion of TomorrowNow's support delivery practices. I understand that TomorrowNow developed support materials for PeopleSoft and Siebel customers more generally than just on each customer's local environment, and specifically, there are instances where a local customer environment was used to support a different customer.[534] For example, I understand that fixes for certain customers were developed or tested on another customer's local

[533] **Schedule 44.SU, 44.1.SU.**

[534] *See* e.g., TomorrowNow's Third Amended and Supplemental Responses to Plaintiff Oracle USA, Inc.'s Second Set of Interrogatories, December 4, 2009, p. 10. ("TomorrowNow is aware of certain instances where an environment maintained on behalf of one customer may have been used to create or test updates and/or fixes for other customers."); February 12, 2010 Supplemental Expert Report of Kevin Mandia, pgs 78.

environment or a generic development/test environment on TomorrowNow's servers. From data extracted from TomorrowNow's databases related to HRMS fixes analyzed by Oracle's technical expert, Kevin Mandia, as well as based on Defendants' responses to interrogatories, I have identified at least 43 additional PeopleSoft customers that received fixes that were developed and/or tested on an Oracle database instance associated with another customer's local environment on TomorrowNow's servers.[535] My process and ability to identify customers was based on a very limited analysis provided by Mr. Mandia for a subset of customers receiving HRMS-related fixes. For each customer, I only sought to identify one fix that the customer received that was developed and/or tested on an Oracle database instance, and I excluded instances where there were 2 or more databases accessed, including an Oracle database, but there was a 50% chance that the customer received a fix accessing the non-Oracle database. I understand that Defendants would need a license and support contract for each of the customers that received fixes developed or tested on another customer's Oracle-database related local environment (at least 43). Thus, the components of this analysis are the limited identification of 43 customers together with the 71 local customer environments described above. Using the above-described parameters related to license and support fees for an enterprise edition Oracle database license, I have measured the fees associated with allowing for 114 TomorrowNow customers' use of Oracle database and deducting 5% of revenues to reflect additional costs, if any, that Oracle would have incurred to provide this license.

[535] **Schedule 47.SU.** February 12, 2010 Supplemental Expert Report of Kevin Mandia, pgs 78-80; Discussions with Kevin Mandia; TomorrowNow's Third Amended and Supplemental Responses to Plaintiff Oracle USA, Inc.'s Second Set of Interrogatories, December 4, 2009, pgs. 10 - 147. **Schedule 45.SU.**

256. The table below reflects a measure of SAP's value of use of Oracle's database software assuming TomorrowNow is licensed for 114 customers purchased at the later of the date when the customer started application service with TomorrowNow, or the date the local environment that was used to support the customer was built, or January 1, 2005. I have computed support fees from the date of license purchase until the date the customer departed TomorrowNow. For instances when the local environment build date is not provided and the customer started with TomorrowNow prior to January 2005, I have started the license in January 2005, when SAP acquired TomorrowNow. Using an income approach to establish a fair market value of SAP's value of use, I have determined SAP's value of use to be approximately $38.1 million for 114 customers.

Table 10: SAP's Value of Use Related to Use of Oracle's Database Copyrighted Materials Measured as License Fees and Related Support for 114 Customers[536]	
	SAP's Value of Use
License and Support Revenues	$40,155,394
Margin	95%
Total	$38,147,624

[536] **Schedule 44.SU, 44.1.SU, 44.2.SU.**

257. According to records produced by the Defendants, in addition to the customers with local environments, and the customers for which it was determined that the customer received a fix from another customer's local environment, TomorrowNow appears to have had at least 58 additional PeopleSoft HRMS customers that may have benefited from fixes developed or tested on Oracle database environments. Due to TomorrowNow's business practices of cross-use of environments, including those running on top of Oracle database software for the development and testing of fixes that were delivered across the PeopleSoft HRMS customer base, I further understand through discussion with Oracle's expert, Kevin Mandia, that over the course of TomorrowNow's operational lifetime, it is more likely than not that every PeopleSoft HRMS customer received support delivered, at least in part, through TomorrowNow's use of the Oracle database software. As a result, I have offered a further opinion based on a measurement where TomorrowNow's use required a license covering 172 customers, comprised of 71 local environments based on Oracle database, 43 customers where another customer's local environment based on Oracle database was used to provide fixes, and 58 additional customers that received support for HRMS applications. Using an income approach to establish a fair market value of SAP's value of use, I have determined SAP's value of use to be approximately $55.6 million for 172 customers.

Table 10A: SAP's Value of Use Related to Use of Oracle's Database Copyrighted Materials Measured as License Fees and Related Support for 172 Customers[537]	
	SAP's Value of Use
License and Support Revenues	58,551,681
Margin	95%
Total	$55,624,097

In my opinion, Tables 9, 10 and 10A summarize my determination of SAP's value of use of Oracle's database copyright materials of $55.6 million based on the components described in this section.

[537] **Schedule 44.SU, 44.1.SU, 44.2.SU, 44.3.SU.** For purposes of this analysis, only customers with local environments accessing Oracle database, customers identified in the limited analysis of customers using other customer's local environments and only the remaining TomorrowNow PeopleSoft HRMS customers are summed, despite information regarding cross-use among PeopleSoft Financial customers, in order to align our analysis with Oracle's technical expert, Kevin Mandia. This analysis also may not capture the full measure of cross-use of environments based on Oracle's database that were used. For example, in the retrofit model the environments did not follow the later TomorrowNow convention of identifying the use of Oracle database by naming the environment to end in "O" and therefore, it was not possible to identify all of the retrofit environments based on Oracle database which may have been used. Deposition of John Baugh, February 6, 2008, pgs. 134, 138-139.

1. Market Approach

265. In analyzing the fair market value of the Siebel copyrighted materials in suit using the market approach, I have considered the same types of evidence addressed in the market approach for the PeopleSoft/J.D. Edwards copyrighted materials in suit in Section VI.A.1 above. Specifically, I have considered the acquisitions addressed above between Oracle and PeopleSoft, PeopleSoft and J.D. Edwards, and SAP and Business Objects, which involve intellectual property relevant to understanding the value of the Siebel copyrighted materials in suit. Additionally, there is an arm's length transaction for the subject intellectual property within a year of the valuation date. Data related to Oracle's acquisition of Siebel provides relevant, comparable metrics of the fair market value for the copyrighted materials in suit. The following section sets forth my analysis of the market approach based on Oracle's acquisition of Siebel as well as considering the other acquisitions mentioned above.

a. Oracle's Acquisition of Siebel

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[551] *Intellectual Property, Valuation, Exploitation, and Infringing Damages*, by Gordon V. Smith and Russell L. Parr., 2005 Edition, p. 148-154.

266. Again, theoretically, in lieu of illegally accessing the copyrighted materials in suit, SAP could have entered into a fair market value transaction and acquired a portion of the Siebel customer base and the associated revenue stream. The amount Oracle paid to acquire Siebel reflects an arm's length transaction to acquire the same intellectual property, customer relationships and future revenues and profits that SAP sought to obtain. As part of Oracle's acquisition of Siebel in January 2006, Oracle acquired Siebel intellectual property, including the Siebel copyrighted materials in suit, which relate to Siebel's Customer Management Relationship ("CRM") software applications and then existing software and support materials.[552] In addition, Oracle obtained access to 4,000 Siebel customers who were, at the time of acquisition, under support contracts with Siebel. For the year-ended December 31, 2005, Siebel reported total revenue of $1.4 billion.[553] On January 31, 2006, Oracle acquired the entire Siebel company for $6.1 billion.[554] Therefore, Oracle's purchase price represented an approximate 4.3 price-to-revenue multiple.

267. As discussed in section III.C. above, Oracle Senior Executives believed the Siebel acquisition would provide Oracle new or deepened access to Siebel's customer base, a competitive benefit from Siebel's leading market position, and valuable software technology, including its "best in breed" CRM software. Oracle's $6.1 billion acquisition price equates to an investment of

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552 Oracle Corporation Form 10-K for the fiscal year ended May 31, 2006, pgs. 75-77; "Oracle Corporation: Estimation of the Fair Value of Certain Assets and Liabilities of Siebel Systems, Inc. as of January 31, 2006," dated July 20, 2006, ORCL00312747 – 819 at 756.

553 News Release: Siebel Systems Confirms Financial Results for the Quarter Ended December 31, 2005, dated January 25, 2006, pgs. 2, 4; Email from Christian Klein to Thomas Ziemen and Bernd Welz (Vice President System Service Solution Management), dated October 25, 2005 with attached Business Case files, SAP-OR00250204-225, (Hurst Exhibit 1601), at 223.

554 Oracle Corporation Form 10-K for the fiscal year ended May 31, 2006, pgs. 75-77.

approximately $1.53 million on average per Siebel customer for the 4,000 Siebel customers.[555] Oracle Senior Executives have indicated that they would value a license to SAP for the Siebel copyrighted materials in suit based on the ratio of Siebel customers that they believed might leave for TomorrowNow, applied against the total $6.1 million acquisition price.[556] Using this methodology, if up to 10% of Siebel's customers would be expected to depart Oracle, the fair market value of SAP's value of use of Oracle's Siebel copyrighted materials in suit would be approximately $600 million.

268. Oracle retained Duff & Phelps, LLC ("Duff & Phelps") to value certain assets and liabilities acquired from Siebel Systems, Inc., and allocate the $6.1 billion acquisition price.[557] Duff & Phelps determined that Siebel's intangible assets were worth approximately $1.6 billion, including patents/core technology, software support agreements and related customer relationships and trademarks.[558] Including acquired goodwill, valued at $2.5 billion, the total fair market value of Siebel intangible assets was $4.1 billion.[559] Table 11 summarizes the intangible asset valuation for Oracle's acquisition of Siebel as reported in Oracle's financial statements.

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[555] SAP believed Siebel had 4,000 customers [Business Case: TomorrowNow – Siebel, TN-OR00995250-259, (Zieman Exhibit 472)], at 254; Email from Christian Klein to Thomas Ziemen and Bernd Welz (Vice President System Service Solution Management), dated October 25, 2005 with attached Business Case files, SAP-OR00250204-225, (Hurst Exhibit 1601), at 223.

[556] Discussion with Larry Ellison, Safra Catz and Charles Phillips. Deposition of Larry Ellison (Oracle CEO), May 5, 2009, pgs. 77-84.

[557] "Oracle Corporation: Estimation of the Fair Value of Certain Assets and Liabilities of Siebel Systems, Inc. as of January 31, 2006," dated July 20, 2006, ORCL00312747 – 819 at 748, 783, 812.

[558] "Oracle Corporation: Estimation of the Fair Value of Certain Assets and Liabilities of Siebel Systems, Inc. as of January 31, 2006," dated July 20, 2006, ORCL00312747 – 819 at 782.

[559] Oracle Corporation Form 10-K for the fiscal year ended May 31, 2006, pg. 76.

Table 11: Intangible Asset Valuation[560] Oracle's Acquisition Price of Siebel ($ In Millions)		
Goodwill	$	2,514
Developed Technology		418
Patents/Core Technology		199
Software Support Agreements and Customer Relationships		808
Customer Relationships		108
Trademarks		31
Total	$	4,078

269. Duff & Phelps' valuation of Siebel's intangible assets provides a contemporaneously prepared indication of the fair market value of the Siebel copyrighted materials in suit. While Duff & Phelps did not specifically value solely the Siebel copyrighted materials in suit, relevant portions of the Duff & Phelps intangible asset valuation include the value of using those copyrighted materials to provide service and enhance customer relationships. Duff & Phelps' valuations of the following intangible assets include value attributable to the Siebel copyrighted materials in suit: software support agreements and related customer relationships, the cost to replace customer relationships, and

[560] Amounts in Table 11 reflect Oracle's financial statement disclosures regarding the accounting for the acquisition. Oracle Form 10-K for the fiscal year ended May 31, 2006, pgs. 75-77; "Oracle Corporation: Estimation of the Fair Market Value of Certain Assets and Liabilities of Siebel Systems, Inc. as of January 31, 2006," dated July 20, 2006, ORCL00312747 – 819 at 782. *See* **SCHEDULE 4.** Duff & Phelps' valuation of Siebel's intangible assets totaled to $1.628 billion. Oracle's financial statement disclosures recorded In-Process Technology valued at $64 million as "In-process research and development" in the financial statement disclosures and was not included in the total identified intangible assets valuation. This adjustment reduces the intangible asset valuation to $1.6 billion ($1,628 – $64 = $1,564).

the goodwill premium resulting from the transaction.[561] Without the Siebel copyrighted materials in suit, TomorrowNow would not have been able to represent to Oracle's newly-acquired Siebel customers that it could meet the support service contract requirements and offer comparable service to Oracle at half the price, nor be able to make such an offering in the short time frame after Oracle's acquisition of Siebel.[562]

270. Duff & Phelps valued Siebel software support agreements and related customer relationships at $808 million based on a discounted cash flow approach, considering projections of future support revenues and costs related to the use of the copyrighted materials in suit to provide support for the 4,000 Siebel customers through 2016.[563] Duff & Phelps' valuation deducts all costs of offering support services and operating expenses.[564] While this valuation includes Oracle's rights to these annual support agreements in addition to the Siebel copyrighted materials in suit, SAP's access and use of Oracle's copyrighted materials in suit would allow SAP to potentially supplant Oracle as the support provider and receive the benefit of the agreements that Oracle believed it was acquiring in the transaction. Because the terms of the contemplated hypothetical license presume that SAP would only be using the

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[561] Duff & Phelps' valuation of Existing and In-Process Technology and Patents/Core Technology is not relevant to the determination of the fair market value of the copyrighted materials in suit in this matter because it measures the capability of the technology to generate new license revenues for that technology. In these circumstances, SAP would not be selling licenses for the copyrighted software applications, this measure of value is unrelated to the alleged improper actions of SAP and TomorrowNow. For purposes of this valuation, I have excluded any value associated with those alleged actions.

[562] Discussions with Kevin Mandia; February 12, 2010 Supplemental Expert Report of Kevin Mandia, pgs. 1-3; Discussions with Paul Pinto; November 16, 2009 Expert Report of Paul C. Pinto, pgs. 2, 42-43.

[563] "Oracle Corporation: Estimation of the Fair Value of Certain Assets and Liabilities of Siebel Systems, Inc. as of January 31, 2006," dated July 20, 2006, ORCL00312747 – 819 at 770-772; 798.

[564] "Oracle Corporation: Estimation of the Fair Value of Certain Assets and Liabilities of Siebel Systems, Inc. as of January 31, 2006," dated July 20, 2006, ORCL00312747 – 819 at 798.

Siebel copyrighted materials in suit until October 2008, and only a portion of Siebel's customers would be impacted, a downward adjustment to the $808 million intangible asset value would be warranted.

271. Duff & Phelps separately valued the cost to replace the approximate 1,800 new customer relationships Oracle obtained from the Siebel acquisition.[565] Duff & Phelps valued those relationships at approximately $108 million.[566] This valuation assumes that Oracle avoided the cost of a 6 month sales cycle in order to place a customer in a Siebel license contract with residual ongoing support contract revenues. Although SAP's use of the copyrighted materials still required it to approach and attempt to establish customer support relationships (e.g., they would not be handed a software support contract without some sales efforts), SAP avoided the time and effort required to get the customer to license Siebel software. Instead, SAP was able to spend a much shorter amount of time to convince the customer to switch support providers. In addition, there is little overlap between SAP and Siebel customers. Only 300 customers are estimated by SAP to overlap. Therefore, SAP would be gaining access to twice the number of new customers (3,700 customers) than the number of new customers to Oracle (1,800 customers) that were used to determine the $108 million customer relationship value. As a result, a large portion of the $108 million value of the Siebel customer relationships would be relevant to the value of the copyrighted materials in suit.

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[565] Since 55% percent of Siebel customers overlapped with Oracle customers, 45% represent new customer relationships (4,000 x 45% = 1,800); "Oracle Corporation: Estimation of the Fair Value of Certain Assets and Liabilities of Siebel Systems, Inc. as of January 31, 2006," dated July 20, 2006, ORCL00312747 – 819 at 772-773.

[566] "Oracle Corporation: Estimation of the Fair Value of Certain Assets and Liabilities of Siebel Systems, Inc. as of January 31, 2006," dated July 20, 2006, ORCL00312747 – 819 at 800.

272. The $2.5 billion attributed to Siebel goodwill includes value relevant to the Siebel copyrighted materials in suit, including support revenues from customers that purchased Siebel products after Oracle's acquisition date, as well as revenues from purchases of other Oracle software by Siebel customers.[567] Some of the benefit to SAP of supplanting Oracle in providing support for Siebel customers is included in the $2.5 billion of goodwill.

273. SAP's "value of use" would include a portion of the total $3.4 billion of relevant intangible assets. The $3.4 billion is the sum of the fair market value of all Siebel maintenance agreements and related customer relationships at the time of acquisition ($808 million), the avoided cost of developing certain new customer relationships ($108 million) and all of Oracle's recorded goodwill from the acquisition ($2.5 billion). Since access to the copyrighted materials are important to generating revenues and enhancing customer relationships, a portion of the $3.4 billion would be relevant to the fair market value of the copyrighted property in suit.

b. Summary: Fair Market Value Using The Market Approach

274. SAP was projecting obtaining 200 Siebel support customers, or approximately 5%, of Siebel's 4,000 customers.[568] After considering the transactions described above, and providing particular focus on the Siebel acquisition, in my opinion, the market approach indicates a fair market value of SAP's use of Oracle's Siebel copyrighted materials in suit of no less than

[567] Oracle Corporation Form 10-K for the fiscal year ended May 31, 2006, pg. 93.

[568] "Apollo Competitive Program Office Program Playbook," SAP-OR00790353-387 (Hurst Exhibit 1597), at 355; Email from Christian Klein to Thomas Ziemen and Bernd Welz (Vice President System Service Solution Management), dated October 25, 2005 with attached Business Case files, SAP-OR00250204-225, (Hurst Exhibit 1601), at 223 and 225.

$170 million, computed as 5% of the $3.4 billion in intangible asset value related to support revenues, customer relationships and goodwill.[569] Additionally, using the $1.525 million average cost per customer resulting from the Siebel acquisition described above, extended to the 200 potentially lost customers, indicates a value of $305 million.

2. Income Approach

275. In determining SAP's "value of use" of the Siebel copyrighted material in suit, I have employed the income approach by determining the incremental net cash flows Oracle would expect to lose to SAP as a result of licensing the copyrighted materials. I have also considered analyses performed contemporaneously by SAP or TomorrowNow indicating the revenues they expected to receive and/or the amount of Oracle's business they expected to displace.

a. Income Approach Applied To Oracle's Expected Losses

276. Duff & Phelps' overall valuation of Oracle's Siebel acquisition was measured as the discounted cash flow from revenues and profits from sales of Siebel software licenses to existing Siebel customers (up-sell), sales of licenses to new Siebel customers after the acquisition, and revenue from new and existing support contracts. In modeling the value of the customers Oracle would expect to lose if it licensed the Siebel copyrighted materials in suit to SAP, I have used various assumptions from the Duff & Phelps' valuation, including the size of the Siebel customer base acquired, expected annual attrition rates, average annual maintenance fees, cost information, and discount rates. I have also considered the terminal value of Oracle losing a

[569] $3.4 billion intangible asset value times 5% (200/4,000 customers = 5%). $3.4 *5% = $170 million.

Siebel customer as a result of licensing the Siebel copyrighted materials in suit to SAP.

277. I understand that Siebel had more source code protections than Oracle or PeopleSoft applications, such that a defect in the product that involves a fix to the code could only be fixed in the code by a Siebel engineer, or Siebel development, given that they had the only complete access to the source code.[570] As a result, Oracle would have considered these technical limitations on the scope of third party support offerings when determining the fair market value.

278. I have calculated the fair market value of the Siebel copyrighted material in suit under the assumption that Oracle would lose 200 Siebel support customers as a result of licensing the copyrighted materials in suit to SAP. My analysis indicates a fair market value of $231.9 million.[571] I varied the assumptions of a discounted cash flow model to reflect varied expectations of the revenue and profits that Oracle would lose assuming 200 of its Siebel support customers switch to SAP and TomorrowNow between September 2006 and October 2008, with terminal loss of up-sell and cross-sell license and related support revenue through December 31, 2015. Customer loss estimates are based on SAP's projections for TomorrowNow support wins for Siebel support services and Siebel customer license migration goals to SAP.[572] Based on estimates of Oracle's incremental costs, including cost of goods and sales

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[570] Deposition of Edward Abbo (Oracle Senior Vice President, Applications), June 29, 2009, pgs. 146-147 and 179-180.

[571] *See* **SCHEDULE 14.U.**

[572] "Apollo Competitive Program Office Program Playbook," SAP-OR00790353-387 (Hurst Exhibit 1597), at 354-355; Email from Christian Klein to Thomas Ziemen and Bernd Welz (Vice President System Service Solution Management), dated October 25, 2005 with attached Business Case files, SAP-OR00250204-225, (Hurst Exhibit 1601), at 223 and 225.

expenses, I have deducted 15% for cost of support revenues, 20% for cost of incremental license sales to existing customers, and 50% for cost of new license revenues.[573] I have determined a terminal value representing lost support customers to SAP after October 2008, lost incremental license revenue and associated support.

b. Income Approach Applied To SAP's Expected Gains

279. SAP estimated the benefit that would be realized from access and use of the Siebel copyrighted materials in suit. In October 2005, Siebel-related projections by SAP indicated that they believed they would achieve limited success in converting Siebel support customers. SAP believed that approximately 300 of the 4,000 total Siebel customers also had SAP software.[574] While SAP's focus was to convert all of these 300 customers, the TomorrowNow Business Case for 2006 projects only 40, 100 and 200 customers of TomorrowNow for Siebel support between 2006 and 2008.[575] Analyzing the expected TomorrowNow support revenues, SAP up-sell and cross-sell revenue, and determining the terminal value of the ongoing support revenue from customers converted to SAP results in a fair market value of the Siebel

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[573] **SCHEDULES 14.1.U, 14.2.U**. Oracle Corporation Estimation of Fair Value of Certain Assets and Liabilities of Siebel Systems, Inc., as of January 31, 2006, ORCL00312747-819 at 799 and 813; Oracle Form 10-K data for 2004-2008 shows a gross margin on "New Software Licenses" ranging from 43% to 51% (*See* **SCHEDULE 1.1**).

[574] "The opportunity is to move the 300+ SAP customers that SAP and Siebel have in common and migrate them to mySAP CRM" The launch date for the Siebel Safe Passage Program is October 17, 2005. Program Objectives – "Convert 5 joint SAP/Siebel customers by the end of Q2 and 20 by the end of Q4."Siebel Safe Passage Program Playbook, SAP-OR00790353-387 at 354-355, (Hurst Exhibit 1597).

[575] Business Case: TomorrowNow 2006 "Biz Planning – TNow Offering for Siebel" shows Customer (Calculated) forecast: 40 in 2006, 100 in 2007, and 200 in 2008. SAP-OR00250204-225 at 225, (Hurst Exhibit 1601); Siebel Safe Passage Program Playbook, SAP-OR00790353-387 at 354 (Hurst Exhibit 1597).

copyrighted materials in suit of $97 million after deducting 30% of revenues for incremental costs and discounting to September 2006 at 14%.[576]

280. A second scenario assumes the same base calculations outlined above, but computes a $1,000,000 residual value assuming that 200 Siebel customers are lost to SAP, and results in a fair market value of the copyrighted materials in suit of $246.7 million.[577]

281. Lastly, a third calculation is based on SAP's projection that in 2007 TomorrowNow earns $14.38 million of Siebel service revenue. It is unclear whether the $14.38 million assumes TomorrowNow's 50% discount of Oracle's license price (or support priced at 10% of license revenues) or if the revenue projection assumes a 17% fee on license revenues. Therefore, I have performed the below described calculation under two versions, one assuming $14.38 million for TomorrowNow Siebel support revenues in 2007, and the other version assuming half of $14.38 million, or $7.19 million for TomorrowNow Siebel support revenues for 2007. Applying Andrew Nelson's ratio of $1 of TomorrowNow revenue is equal to $18 of Oracle lost revenue (as addressed in section VI.C. above), the $7.19 million or $14.38 million of TomorrowNow revenues is equivalent to $129 million to $259 million. Adjusting for 15% incremental cost (based on Oracle's financial data regarding costs and margins), results in a fair market value of the Siebel copyrighted materials in suit of $110 million to $220 million.[578]

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[576] *See* **Schedule 17.SU.**

[577] *See* **Schedule 18.SU.**

[578] **Schedule 22.U.** Various documents indicate that an ongoing customer relationship has a present value of one million dollars or greater. **Schedule 23.SU;** TN-OR00608667-691, at 676; SAP-OR000565364-431; ORCL00087645-661; 1/11/05 Bernstein Research Call.

3. Cost Approach

282. In this circumstance, I have considered Oracle's cost to acquire subject intellectual property, as well as Oracle's investment in research and development of the intellectual property since the acquisition. In addition, I have considered an estimate of the costs SAP would have incurred to attempt to independently recreate the Siebel copyrighted materials in suit. As addressed above, the cost approach has limitations, and may understate the fair market value by not reflecting the full potential future benefits of the resulting intellectual property. However, it may serve to assess the reasonableness of the valuations derived from the other approaches.

283. As discussed above, Oracle acquired Siebel for $6.1 billion in 2006.[579] Since 2006, Oracle has continued to incur development expenses related to Siebel products, including development efforts primarily related to support of existing products, and development efforts primarily related to new product development.

284. For the period March 2006 through August 2008 (2.5 years), Oracle personnel prepared reports identifying direct research and development expenses by product line, with allocations of associated overhead. These reports provide development expenses for Siebel products. Over this period, Oracle spent $260 million on Siebel product applications development.[580] On average, Oracle spent approximately $104 million per year developing Siebel Software and Support Materials.[581]

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[579] Oracle Corporation Form 10-K for the fiscal year ended May 31, 2006, pgs. 75-77.

[580] *See* **SCHEDULE 10.**

[581] $260 million / 2.5 years = $104 million per year.

285. Although Oracle's financial systems historically have not tracked research and development employee time by task, Oracle employees have analyzed the percentage of resources Oracle devotes to maintenance-related, as opposed to new product-related, research and development.[582] I understand that based on these analyses, Oracle has estimated that 60-65% of its research and development expense for its applications products related to support-related development efforts.[583] Therefore, for the period of January 2006 through September 2008, support-related research and development expense for Siebel products was approximately $156 million to $169 million.[584] However, given that TomorrowNow copied Oracle's Siebel support materials, as well as underlying applications, such apportioning of research and development expense between new product and support-related efforts is unnecessary.

286. For the nine months ending September 30, 2005, Siebel recorded product development expense of $211.9 million.[585]

287. Assuming that SAP's improper actions allowed SAP to avoid development expenses from at least September 2006 through October 2008 (2.17 years), Oracle's development history would indicate a fair market value of no less than $225.7 million. This calculation excludes the costs to develop the software and support materials as they existed prior to September 2006.

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582 Discussion with Houman Behazadi (Oracle Director of Business Planning and Operations).

583 *See, e.g.*, Oracle Presentation: "Applications Strategy – November 2007,"ORCL00560527-566, at 533. Fusion research and development expenses are excluded from this analysis [Discussion with Houman Behazadi (Oracle Director of Business Planning and Operations)].

584 $260 million * 60% = $156 million; $260 million * 65% = $169 million.

585 Siebel Systems, Inc. Form 10-Q for the quarterly period ended September 30, 2005, p. 2.

288. Oracle's expert, Paul Pinto, estimated the costs that Defendants would have incurred to independently develop certain of the Siebel copyrighted materials in suit. I understand that one of Mr. Pinto's conclusions addresses avoided development costs of $198 million to $573 million. I understand that if completed in a 1 to 2 year period, this effort would take approximately 450 to 900 well trained resources.[586]

C. Summary: Value of Use for Siebel Copyrighted Materials Based on Market, Income and Cost Approaches

289. In my opinion, Table 12 summarizes my opinions related to the fair market value of the Siebel copyrighted materials in suit based on the market, income and cost approaches:

Table 12. Copyrighted Software And Support Materials Siebel Fair Market Values With Projections Up To 200 Oracle Lost Customers ($ In Millions)		
Market Approach		
Based on Siebel Acquisition		$170 - $305
Income Approach		
Oracle Potential Losses		$ 231.9
SAP Potential Gains		$97 - $247
SAP Projected Impact On Oracle Profits		$110 - $220
Cost Approach		
Avoided Development Cost (Mr. Pinto)		$198 - $573
Fair Market Value	No less than	**$100**

[586] 2.17 years * $104 million = $225.7 million. November 16, 2009 Expert Report of Paul C. Pinto, pgs. 42-43. 10.890 person months ÷ 24 = 454 people; 10,890 person months ÷ 12 = 908.

D. Siebel Copyright Infringement – Determination Of SAP's Value Of Use Based On: Hypothetical Negotiation Approach to Establishing Intellectual Property Value

1. Methodology

290. As addressed above, analysis of financial, economic, and other relevant factors as set forth in the *Georgia-Pacific* case is an appropriate structure for determining the fair market value of the intellectual property in suit. The following paragraphs address the fifteen *Georgia-Pacific* factors, and summarize facts and issues relevant to determining SAP's value of use for Oracle's copyrighted property related to Siebel software. A hypothetical negotiation framework assists in determining the fair market value that SAP would be reasonably willing to pay to Oracle, and the amount that Oracle would be reasonably willing to accept from SAP, for use of Oracle's Siebel copyrighted materials in suit, and provides another measure of SAP's "Value of Use" damages.

291. Consistent with, and for the same reasons described above as it relates to the hypothetical negotiation for PeopleSoft/J.D. Edwards copyrighted materials in suit, I assume the hypothetical negotiation for the Siebel copyrighted materials in suit would take place between Oracle and SAP.[587] The negotiation would occur on or about September 2006,[588] with both parties knowledgeable of key relevant facts, such as the duration of the license, the scope of what can be copied and any use restrictions, the expectations the parties have for themselves at the commencement of the license (including

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[587] I understand that the hypothetical negotiation would be conducted by a willing licensor (Oracle) and a willing licensee (SAP) acting in a rational manner in or around September 2006.

[588] As explained in sections IV.C and V. of this Report, above, the date of the hypothetical negotiation between Oracle and SAP would be on or around September 2006, the date of SAP's alleged first infringement (by virtue of TomorrowNow selling a support contract for Siebel support).

monetary and non-monetary benefits), and the likely cost and time delays SAP avoids by licensing. I understand that the copyrighted property that is the subject of this matter is fundamental to providing the support of Siebel's software applications in the manner that TomorrowNow did. Without the copyrighted property, SAP and TomorrowNow would not have a support service offering comparable to Oracle's/Siebel's service offering.[589] This negotiation will determine the fair market value that SAP would pay Oracle to use Oracle's Siebel software applications and support materials.

292. I have considered the opinions and relevant information of Oracle Senior Executives as to the amount of a license fee Oracle would be willing to accept from SAP for a license to the Siebel copyrighted materials in suit.[590]

2. Siebel Copyright Infringement: Hypothetical Negotiation Factor Analysis

293. For purposes of my analysis, I have grouped the relevant financial, economic and other factors into the following categories: (A) the nature, scope and duration of the hypothetical license;[591] (B) the past licensing practices of the parties for similar intellectual property, or lack thereof;[592] (C) the nature of

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[589] Discussions with Kevin Mandia; February 12, 2010 Supplemental Expert Report of Kevin Mandia, pgs. 1-3. As described in section IV.C of this Report, TomorrowNow and SAP acknowledged that access to Oracle's intellectual property was critical to providing Siebel support at the level of service and cost offered by TomorrowNow.

[590] I understand, as a matter of law, that this is appropriate. *See Polar Bear Prods., Inc. v. Timex Corp.* 384F.3d 700 (9th Cir. 2004). I understand that some of the relevant factors that would be considered by Oracle Executives are stated in the declarations of Larry Ellison and Safra Catz in support of Oracle's Opposition to Defendants' Motion for Partial Summary Judgment [Declaration of Larry Ellison in Support of Oracle's Opposition to Defendants' Motion for Partial Summary Judgment Regarding Plaintiffs' Hypothetical License Damages Claim, September 22, 2009; Declaration of Safra Catz in Support of Oracle's Opposition to Defendants' Motion for Partial Summary Judgment Regarding Plaintiffs' Hypothetical License Damages Claim, September 22, 2009].

[591] The consideration and analysis of this factor is consistent with *Georgia-Pacific* factors 3 and 7.

[592] The consideration and analysis of this factor is consistent with *Georgia-Pacific* factors 1, 2 and 4.

the commercial relationship of the parties;[593] and (D) market and financial considerations that would impact the parties' respective negotiating positions.[594] I have already discussed much of the documentation and other evidence in this matter related to those factors, as it was also relevant to the determination of the fair market value of the copyrighted materials at issue upon considering the Market, Income or Cost valuation approaches as described above.

a. Nature, Scope and Duration of the Hypothetical License (*Georgia-Pacific* Factors 3-7)

294. This section addresses *Georgia-Pacific* factors 3 and 7 which generally concern the nature, scope and duration of the hypothetical license. (*See Georgia-Pacific* factors at **SCHEDULE 29)**

295. The license agreement between SAP and Oracle for the Siebel copyrighted property would be a non-exclusive, non-transferable, license allowing SAP to reproduce, distribute and create derivate works in all geographies where and when SAP actually used the Siebel copyrighted materials in suit. The license would be non-exclusive as Oracle would continue to provide software and software support for its own customers using those materials. For example, at an Oracle Application user Group conference in April 2006, Charles Phillips (Oracle Co-CEO) promised that Oracle will maintain, enhance and support the Siebel applications, among others, indefinitely.[595] Oracle continued to support Siebel products throughout the

[593] The consideration and analysis of this factor is consistent with *Georgia-Pacific* factor 5.

[594] The consideration and analysis of this factor is consistent with *Georgia-Pacific* factors 6 and 8 through 13.

[595] InformationWeek, July 3, 2006, "Oracle Says Application Integration Efforts Are On Track," pg. 2.

term of the Siebel hypothetical license at issue. The license would include grant terms that would reflect SAP's alleged infringing behavior.

296. SAP's permitted use and limitations of use for the Siebel copyrighted materials in suit under the hypothetical license are set forth in section VIII.A. In general, the scope of the license allows SAP to reproduce, distribute, and retain backup copies in certain circumstances for the Siebel copyrighted materials in suit.

297. The limited duration and the limited nature of copyright protected acts put downward pressure on the license fee.

298. While the hypothetical license would end in October 2008, coinciding with the TomorrowNow dissolution,[596] Oracle would consider the long term financial implications of providing the above described license to the copyrighted materials to a larger direct competitor. While the duration of the license is relatively short, which generally puts some downward pressure on a license fee, key circumstances in this situation should be considered.

299. First, SAP wanted access to the Siebel copyrighted materials in suit as quickly as possible to be able to take advantage of any fear, uncertainty and doubt of Oracle's Siebel customers related to the acquisition.

300. Second, Oracle would consider the financial impact of licensing to a competitor that has abundant resources to directly compete with Oracle in providing a level of Siebel service for which there was no other competitor offering the same level of service.

[596] SAP Annual Report for fiscal year ending December 31, 2008, pg. 173.

301. Third, SAP's own documents, as well as deposition testimony of SAP Senior Executives and Board Members, acknowledge that SAP's intention was not simply to receive revenue from the provision of TomorrowNow support services, but it was rather to use its TomorrowNow offering to drive the conversion of Oracle's Siebel customers to SAP. In other words, SAP's objective was (and likewise Oracle's expectation would be) that some portion of TomorrowNow's customers obtained through October 2008 would switch to the SAP software platform, causing Oracle to lose license and support revenue into the future.[597] These factors significantly outweigh the relatively short duration of the license and result in upward pressure on the amount of the license fee.

302. Fourth, both Oracle and SAP understood how Oracle's acquisition changed the enterprise applications market shares and dynamic, and SAP's strategic focus about impeding Oracle's momentum.

303. These factors significantly outweigh the relatively short duration of the license and put upward pressure on the amount of the license fee.

b. Past Licensing Practices of the Parties for Similar Intellectual Property, or Lack Thereof (*Georgia-Pacific* Factors 1, 2 and 4)

304. This section addresses *Georgia-Pacific* factors 1, 2 and 4 which generally concern the licensing history of the parties and Oracle's licensing policies. (*See Georgia-Pacific* factors at **Schedule 29)**

i. Oracle Licensing History

305. As addressed at length in Section VI.C.2.b above, there are no relevant Oracle or SAP licenses in or out that establish a license fee for similar property.

[597] "Apollo Competitive Program Office Program Playbook" SAP-OR00790353-387 (Hurst Exhibit 1597), at 354.

306. While Oracle has not licensed the Siebel copyrighted materials in suit to third parties in comparable or instructive situations, Oracle did acquire the copyrighted materials in an arm's length transaction. The value to Oracle of the copyrighted materials and the use of those materials to provide service to its customers is evident in the amounts that it paid to acquire and develop that intellectual property.[598] As discussed above in the market approach, Oracle invested significant capital, over $6.1 billion, to acquire Siebel, including the Siebel copyrighted materials in suit. Oracle valued the intangible assets at approximately $3.4 billion, including the value of goodwill, technology, maintenance contracts and customer relationships (see section III.C. of this Report).

307. Additionally, as addressed above in the cost approach, since its acquisition of Siebel, Oracle has continued to invest in its intellectual property, spending $260 million from March 2006 through August 2008, in additional research and development to provide applications development, updates, patches, fixes and other support materials.

ii. Oracle Licensing Policies/Protection of Copyrighted Materials In Suit

308. As explained in section VI.C above, Oracle and the predecessor company at issue (Siebel) did not, and does not, license the copyrighted materials in suit to third parties; it licenses them only to its customers for their own use.[599] Customers purchase licenses that grant them limited rights to use specific

[598] Oracle's acquisition cost per Siebel customer of $1.5 million provides a fair market value license fee metric for the copyrighted materials, as those copyrighted materials enable and protect customer support revenues. The acquisition metric resulted from an arm's-length negotiation.

[599] *See*, e.g., License Agreement between Siebel Systems and Genting Information Knowledge Enterprise, TN-OR03568025-035 (Allison Exhibit 839) at 025.

software programs created or owned by Oracle (or its predecessor, Siebel), while Oracle (itself or as successor to Siebel) retains all intellectual property rights in these works.[600] The above-referenced Oracle license agreements with customers typically contain terms designed to preserve the intellectual property of the licensing company.[601] In addition, Oracle's license customers purchase software support services that include the right to obtain product updates such as software upgrades, bug fixes and patches. The terms of Oracle's agreements with its customers generally prohibit access to, or use of, software that is not expressly licensed to, and paid for, by the customer.[602] Customers are also generally prohibited from distributing, disclosing, using, marketing, renting, leasing or transferring licensed software to third parties. Oracle customers may engage third parties to help them install or maintain Oracle software, but only subject to the terms of the license agreement between the customer and Oracle, which often have explicit restrictions on how and where third party service can be performed and access and use rights.[603]

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[600] *See*, e.g., License Agreement between Siebel Systems and Genting Information Knowledge Enterprise, TN-OR03568025-035 (Allison Exhibit 839) at 025; Siebel End User License and Services Agreement, ORCL00522252-253 at 252.

[601] *See*, e.g., License Agreement between Siebel Systems and Genting Information Knowledge Enterprise, TN-OR03568025-035 (Allison Exhibit 839) at 026; Siebel End User License and Services Agreement, ORCL00522252-253 at 252.

[602] *See*, e.g., License Agreement between Siebel Systems and Genting Information Knowledge Enterprise, TN-OR03568025-035 (Allison Exhibit 839) at 025 and 031.

[603] 30(b)(6) Deposition of Richard Allison (Oracle Senior Vice President of Global Practices and Risk Management), November 12, 2009, pgs. 64-66, 72-74, 86-87, 90-92, 94-95, 120-121, 144-145; Software License and Services Agreement between Ace Parking and PeopleSoft, ORCL00017200-206, 211, 214-215 at 201 (Allison Exhibit 810); Software License and Services Agreement between ABF Grain and PeopleSoft UK Limited, ORCL00086191-197, at 195 (Allison Exhibit 811); Amendment Three to Software License and Services Agreement between AON Corporation and Oracle Corporation, ORCL00610080, (Allison Exhibit 818)

iii. SAP Licensing History/Acquisitions/IP Policies

309. As addressed in section VI.C above, SAP does not have any relevant licensing history, nor is its Oracle database reseller license with Oracle applicable here. However, SAP's willingness to pay significant sums to acquire customers and intellectual property, such as the $7.1 billion paid for Business Objects and amounts paid for other acquisitions, are instructive to the hypothetical licenses.[604] These transactions indicate that SAP will commit significant capital resources to expand its software portfolio when strategically warranted.

310. At the time of its decision in 2006 to offer Siebel support services through TomorrowNow, SAP had substantial financial resources at its disposal, €2.4 billion in cash on hand and €3.5 billion in working capital.[605]

311. As the information in section VI.C indicates, SAP had a policy to protect its intellectual property and acknowledged that inappropriate downloads are unacceptable.

iv. Summary of Licensing History/Acquisitions and IP Policies

312. Oracle's significant investment in the copyrighted materials in suit, their unwillingness to license the copyrighted materials to third-party service providers in order to protect their revenue streams for reinvestment in innovation, and both parties' acknowledgement of the importance of protecting intellectual property, all put upward pressure on the amount of a

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[604] SAP to Acquire Business Objects in Friendly Takeover; Combined Companies to Accelerate Leadership for Business User Applications press release dated October 7, 2007, pgs. 1-2. €4.8 billion in year 2007, currency converted using exchange rate of $1.4721 to €1, per the SAP Annual Report for the fiscal year ended 2008, pg. 145. See **SCHEDULE 6**.

[605] SAP Annual Report for the fiscal year ended December 31, 2006, pg. 129. Working Capital is the difference between current assets and current liabilities.

license fee that would have been negotiated for the Siebel copyrighted materials in suit.

c. Nature of the Commercial Relationship Between Oracle and SAP (*Georgia-Pacific* Factor 5)

313. This section addresses factors related to whether the parties to the hypothetical license are competitors. (*See Georgia-Pacific* factors at **Schedule 29)**

i. Impact on Oracle's Market Position

314. Oracle and SAP are direct competitors in software applications. SAP's market position and considerable resources pose a significant threat to Oracle's market share. According to Oracle's Co-President, Safra Catz, SAP is the second most significant competitor in CRM software applications behind Salesforce.com.[606] Unauthorized access to, and use of, a company's intellectual property by a competitor significantly weakens the fair market value of intangible assets, particularly when the competitor claims to offer the same product, in this case software support services, at significantly reduced prices.[607] By licensing its copyrighted property to a direct competitor such as SAP, Oracle would expect to experience lost software license revenue, reduced software support revenue, reduced profit margins on retained customer accounts, reduced cross-selling and up-selling opportunities, and lost strategic market positioning.

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[606] Deposition of Safra Catz (Oracle Co-President), March 27, 2009, pgs. 19-20.

[607] Deposition of Safra Catz (Oracle Co-President), March 27, 2009, pg. 79; Deposition of Charles Phillips (Oracle Co-President), April 17, 2009, pgs. 17-18; Service Deliveries for PSFT Customers dated January 16, 2005, SAP-OR00000927-938 (Shenkman Exhibit 234) at 928; Deposition of Shai Agassi, January 5, 2009, pgs. 26-28.

315. As discussed above, historically, SAP was the leading seller of enterprise application software.[608] Prior to the January 2005 acquisition of PeopleSoft, Oracle was one-third the size of SAP based on enterprise application software revenues.[609] Oracle's acquisition of PeopleSoft significantly increased the level of competition between Oracle and SAP for enterprise application software.[610]

316. As set forth in more detail in Section III.D. above, Oracle's January 2006 acquisition of Siebel made it an even more formidable competitor to SAP and caused SAP to re-think its situation in the CRM market.[611] Oracle's acquisition of Siebel made Oracle the "best-in-class" in CRM solutions over SAP's CRM solution.[612] SAP acknowledged that SAP's "competitive edge [was] diminished by 40% post SEBL acquisition."[613]

ii. SAP Targeted Displacing Oracle with Siebel Customers

317. The extension of TomorrowNow's service offerings to include Siebel software was intended to allow SAP to directly compete with Oracle for Oracle's Siebel support business, and compete for and win CRM applications customers from Oracle.[614]

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[608] Market Analysis – Worldwide Enterprise Applications 2004-2008 Forecast and Analysis dated October 2004, ORCL00313337-384 at 349.

[609] Market Analysis – Worldwide Enterprise Applications 2004-2008 Forecast and Analysis dated October 2004, ORCL00313337-384 at 349.

[610] "Oracle Corporation: Estimation of the Fair Value of Certain Assets and Liabilities of PeopleSoft, Inc. as of December 28, 2004," dated June 23, 2005, ORCL00313160-253 at 171-173.

[611] Deposition of Henning Kagermann (SAP Executive Board Member and Co-CEO), September 25, 2008, pgs. 214 and 393.

[612] "Oracle Corporation: Estimation of the Fair Market Value of Certain Assets and Liabilities of Siebel Systems, Inc. as of January 31, 2006" dated July 20, 2006, ORCL00312747-819 at 755-756.

[613] SAP CRM Review II Presentation dated October 24, 2005, SAP-OR00164521-58 (Kagermann Exhibit 439), at 527.

[614] Siebel Safe Passage Program Playbook, SAP-OR00790353-387 at 354, (Hurst Exhibit 1597).

318. As in the case of PeopleSoft/J.D. Edwards, SAP promoted its TomorrowNow Siebel support offering at 50% of Oracle's pricing.[615] Furthermore, in 2006, SAP ran a "Zero Dollar" marketing campaign where the customer could get its PeopleSoft, J.D. Edwards and Siebel support at no cost while the customer migrated to SAP to "ensure we move these customer[s] off Oracle completely."[616]

iii. Oracle's Anticipated Changes to Its Business In Order to Compete With SAP and TomorrowNow

319. As explained above, Oracle did not have a policy to reduce support prices to compete with TomorrowNow, but occasional concessions were granted.[617] Juergen Rottler, Oracle Executive Vice President of Customer Services, testified that Oracle's pricing policies were impacted by competition with TomorrowNow.[618]

320. As a result of SAP's TomorrowNow service offering, Oracle's customers had significant negotiating leverage and were positioned to be – and were – more aggressive with Oracle.[619] Any license negotiated by these parties would recognize that SAP's continued ability to discount service could cause Oracle continued price competition for support business going forward. As a result of this and the other factors described herein, Oracle would not have agreed to

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[615] Deposition of Thomas Hurst, September 10, 2009, pg. 564.

[616] Oracle USA Inc. et al v SAP AG et al, Fourth Amended Complaint In Case No. 07-01658 dated August 18, 2009, pg. 12.

[617] Deposition of Richard Cummins (Oracle Senior Director, Support Renewals for North America), Vol. 1, September 16, 2008, pgs. 127-128; Deposition of Safra Catz (Oracle Co-President), March 27, 2009, pgs. 54-55; Deposition of Juergen Rottler (Oracle Executive Vice President, Customer Services), May 13, 2009, pgs. 46-49.

[618] Deposition of Juergen Rottler (Oracle Executive Vice President, Customer Services), May 13, 2009, pgs. 46-49.

[619] Deposition of Charles Phillips (Oracle Co-President), dated April 17, 2009, pg. 33. Deposition Juergen Rottler (Oracle Executive Vice President, Customer Services), May 13, 2009, pgs. 49-53.

any license structure that did not require a substantial license fee to be paid by SAP.

321. The direct and significant level of competition between Oracle and SAP, as well as the lack of other servicers that could match the level of service offered by Oracle, puts upward pressure on the license fee amount.

322. The acknowledgement by SAP's management that Oracle's acquisition of Siebel was a significant threat to SAP's market position for CRM applications puts additional upward pressure on the hypothetical negotiation for the Siebel copyrighted materials in suit.

iv. Summary of the Nature of the Competitive Relationship Between Oracle and SAP

323. Consideration of all of the evidence set forth in this section regarding the direct and significant level of competition between Oracle and SAP, SAP's desire to use the Siebel copyrighted materials in suit to disrupt Oracle's business and obtain a competitive advantage, and Oracle's expected additional cost and effort it would have to incur to prevent losing customers once SAP had legal rights to use Oracle's copyrighted materials in suit, puts upward pressure on the amount of the license fee.

d. Market and Financial Considerations Impacting the Respective negotiating Positions of Oracle and SAP (*Georgia-Pacific* Factors 6, 8, 9, 10, 11, 12 and 13)

324. This section addresses relevant economic and other factors related to the profitability and commercial success of the products containing the Siebel copyrighted materials in suit, the extent of infringer's use and the profit that is customary or appropriately credited to the intellectual property as opposed to

other elements contributed by the infringer. (*See Georgia-Pacific* factors at **Schedule 29)**

i. Profitability and Success of Services / Products Containing the Copyrighted Materials in Suit

325. Oracle products embodying the Siebel copyrighted materials in suit are considered "best in breed" in the industry, and generate significant revenues and profit margins.[620] In 2005, Siebel's annual license, support and other revenues were $1.4 billion.[621] Oracle paid a multiple of approximately 4 times revenue based on Siebel's 2005 operating results.[622]

326. Oracle's gross profit margin on support and maintenance is approximately 90%.[623] This trend has gone up since fiscal period 2004.[624] Safra Catz, Oracle Co-President and Executive Board Member, testified that in years two, three, four and subsequent years of a customer's support contract, that incremental profit margin on that customer reaches close to 100%.[625] Oracle's gross margins on new license sales ranged between 43% to 51% over the period of 2004 to 2009.[626]

327. The copyright materials in suit provide for high support renewal rates, providing a significant annuity to Oracle with overall renewal rates at 90% and greater since the Siebel acquisition.[627] If Oracle were to grant a license to

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[620] PeopleSoft Investor Presentation, December 2004, p. 7.

[621] **SCHEDULE 2.SU**

[622] **SCHEDULE 2.SU**

[623] Deposition of Safra Catz (Oracle Co-President), March 27, 2009, pg. 56; **SCHEDULE 1.1**.

[624] Deposition of Safra Catz (Oracle Co-President), March 27, 2009, pgs. 57-58; **SCHEDULE 1.1.**

[625] Deposition of Safra Catz (Oracle Co-President), March 27, 2009, pgs. 183-184.

[626] **SCHEDULE 1.1.**

[627] Deposition of Safra Catz (Oracle Co-President), March 27, 2009, pgs. 95, 203-204; *See also*, **Schedule 34.2**.

SAP for the copyrights embodied in Oracle's Siebel software and support materials, Oracle would anticipate reductions in the renewal rate of Siebel support contracts after TomorrowNow's entry into the market.[628] Oracle would also anticipate a significant drop in its overall maintenance revenues, as well as reduced license revenue, due to downward price pressure.

328. The significant sales and profits related to the products incorporating the Siebel copyrighted materials in suit puts upward pressure on the amount of the license fee.

ii. Extent of SAP's Use of Siebel Copyrighted Materials in Suit

329. During its operation, TomorrowNow illegally obtained through downloads, copying or receiving disks from customers, Siebel application Software and Support Materials, as well as copies of Oracle Database software. I understand that Oracle's expert, Kevin Mandia, has investigated Defendant's specific improper downloading and copying activity. I defer to his report on the scope of those actions, but understand that TomorrowNow's actions were extensive and ongoing even after the lawsuit was filed.[629]

330. If SAP were to receive a license for Oracle's Siebel copyrighted materials in suit, they would have enhanced access to Oracle's entire Siebel customer base over 90% of which SAP had no prior relationship with. SAP estimated that only 300 of the 4,000 companies with Siebel products were also SAP

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628 Discussion with Oracle senior executives: Larry Ellison, Safra Catz and Charles Phillips. Deposition of Juan Jones (Oracle Senior Vice President, Customer Services North America), dated April 24, 2009, pgs. 208-209.

629 Discussion with Kevin Mandia (Mandiant); February 12, 2010 Supplemental Expert Report of Kevin Mandia, pgs. 2 and 97 (activity continued after the lawsuit was filed), and pgs. 36-37, 40, 73-75 and Appendix F.4 (scope of SAP TN's activity).

customers.[630] SAP acknowledges that access to new customers is a critical way to sell more software licenses and other products.[631]

331. The *Siebel Safe Passage Program Playbook*, dated October 2005 states, "The opportunity is to move the 300+ SAP customers SAP and Siebel have in common and migrate them to mySAP CRM"[632] Additionally an SAP Presentation titled *Business Case: TomorrowNow – 2006*, dated October 2005, states "The Siebel customer base consists of **4,000 customers**, (including large number of joint SAP/Siebel customers) and presents a huge market opportunity."[633] In his deposition, SAP Executive Board member Gerhard Oswald confirmed that the opportunity was part of the basis for SAP's decision to have TomorrowNow service Oracle-owned Siebel applications.[634]

332. I understand that due to the manner in which Siebel provides software to its customers, (e.g., without the source code), TomorrowNow's capability to service Siebel customers is limited by lack of access to the source code. Siebel's policy to not provide source code to customers when it provides applications makes it difficult for a third party servicer to provide comparable let alone superior support service to Oracle's.[635]

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[630] Siebel Safe Passage Program Playbook, SAP-OR00790353-387 at 354, (Hurst Exhibit 1597); SAP email from Christian Klein to Thomas Ziemen Re: TNow Budget 2006 with attached documents "Business_Case_TNow_Vers4.ppt: Business-Case-Migration2006Vers 1.ppt" and "3yp template.xls," SAP-OR 00250204-225 (Hurst Exhibit 1601), at 223.

[631] Business Case: TomorrowNow – Siebel, TN-OR00995250-259 (Zieman Exhibit 472), at 254.

[632] Siebel Safe Passage Program Playbook, SAP-OR00790353-387 at 354, (Hurst Exhibit 1597); Deposition of Terry Hurst (SAP Director of Competitor Programs), September 10, 2009, pg. 517 (indicating that the document was created in approximately October 2005).

[633] SAP email from Christian Klein to Thomas Ziemen Re: TNow Budget 2006 with attached documents "Business_Case_TNow_Vers4.ppt: Business-Case-Migration2006Vers 1.ppt" and "3yp template.xls," SAP-OR 00250204-225 (Hurst Exhibit 1601), at 223.

[634] Deposition of Gerhard Oswald (SAP Executive Board Member), Vol. 2, December 11, 2008, pgs. 288-289.

[635] Deposition of Edward Abbo (Oracle Senior Vice President, Applications), June 29, 2009, pgs. 145-147 and 156-157.

333. SAP planned to sell its Siebel software support customers additional SAP software.[636] Mr. Oswald, also confirms that a reason for offering Siebel service was that TomorrowNow's software support offering can be used as an enabler for future SAP license revenue.[637]

334. The annuity resulting from obtaining Siebel support revenue streams, the long-term retention value of the Siebel acquired customers, and the benefits of up-sell and cross-sell opportunities over time, all put upward pressure on the amount of the license fee.

335. I understand that documents indicate, and Kevin Mandia has confirmed, that TomorrowNow's Siebel business model was reliant on access, copying and further use of Oracle's Siebel-related copyrighted materials in suit.

336. TomorrowNow activities impacted the fair market value of the acquisition of Siebel in the same way as PeopleSoft. Oracle Senior Executives have testified that it is difficult to measure how many customers were actually impacted.[638]

337. Oracle's acquisition price for Siebel was $6.1 billion.[639] Of that, $1.6 billion was related to intangible assets that included Siebel software support agreements and related relationships and developed technology, and another $2.5 billion was allocated goodwill.[640] If Oracle provided SAP a license to use Siebel copyrighted materials in suit and put Oracle's Siebel support customer

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[636] Business Case: TomorrowNow – Siebel, TN-OR00995250-259 (Zieman Exhibit 472), at 254.

[637] Deposition of Gerhard Oswald (SAP Executive Board Member), Vol. 2, December 11, 2008, pgs. 288-90.

[638] Deposition of Safra Catz (Oracle Co-President), March 27, 2009, pgs. 14-16.

[639] Oracle Annual Report for the fiscal year ended May 31, 2006, pg. 75.

[640] Oracle Annual Report for the fiscal year ended May 31, 2006, pgs. 75-77.

base 'at-risk', the fair market value of the intangible assets would be less than what Oracle paid for in the acquisition.

iii. Profitability Credited to the Copyrighted Materials in Suit As Opposed to Elements Contributed by SAP/TomorrowNow

338. I understand that neither SAP nor TomorrowNow made significant improvements to the copyrighted materials in suit related to Siebel, relying instead on Oracle's copyrighted software and support materials.[641]

3. Hypothetical Negotiation Approach for Siebel Copyrighted Materials – Summary (*Georgia-Pacific* Factor 15)

339. My conclusions and opinion as to the outcome of a hypothetical negotiation between Oracle – as a willing seller – and SAP – as a willing buyer – is based on consideration of the financial, economic and other relevant factors discussed above and summarized in the following section.

340. Oracle would realize in the hypothetical negotiation that "but for" the license to SAP, it would be able to realize the full value of its investment in which Oracle's history has indicated would include returns beyond the entire acquisition price. Licensing SAP will severely impact the transition of Siebel customers to Oracle. The acquired cost per customer valuation metrics allow Oracle to apply fair market value data to its determination of what it is really giving up with the licensing of SAP.[642]

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[641] Oracle USA, Inc., et al v. SAP AG, et al, Fourth Amended Complaint in Case No. 07-CV-01658 dated August 18, 2009, pgs. 5-9. Discussions with Kevin Mandia (Mandiant); February 12, 2010 Supplemental Expert Report of Kevin Mandia, pgs. 1-3.

[642] These customer metrics are relevant to the license fees that would result in consideration of "*Georgia-Pacific* factor 1: fees charged for the use of the intellectual property in suit."

E. Value of Use Under the Hypothetical Negotiation – Summary

341. I believe that the hypothetical negotiators would have considered the financial, economic and other inputs that I have identified and analyzed, and then determined the paid-up license fee by engaging in a "back and forth" negotiation.[643] Below, I summarize the hypothetical negotiation and refer to the various financial metrics in the market, income and cost approach section which would be relevant to the hypothetical negotiation for a license to Siebel copyrighted materials in suit.

1. Summary of Factors Considered by Oracle and SAP

342. As discussed above, in determining the license fee that it would be willing to accept from SAP for SAP's use of the Siebel copyrighted materials in suit, Oracle would consider at least the following factors:

- The broad scope of the license, which would enable SAP to compete against Oracle in providing support services to its Siebel customers, and provide SAP with enhanced ability to convert those customers to SAP applications;
- Technological limitations on TomorrowNow's ability to fix source code-level product errors due to Siebel's historic policy to not distribute uncompiled source code outside of Oracle;
- Expected lost support revenue to SAP on customers that would go to TomorrowNow for Siebel support services, as well as lost up-sell and cross-sell revenues from those customers;

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[643] I understand that the hypothetical negotiation would be conducted by a willing licensor (Oracle) and a willing licensee (SAP) acting in a rational manner in and around September 2006.

- Assuming there had already been a PeopleSoft/J.D. Edwards license in January 2005, Oracle would consider in September 2006 TomorrowNow's history of success at winning Oracle support customers in the period since SAP acquired TomorrowNow and SAP's success in leveraging TomorrowNow to win SAP applications customers, as well as the impact to date on support renewals, discounts and other impacts;
- The anticipated permanent impact on Oracle due to the lost future license revenue and ongoing support renewals for customers that would switch from Siebel applications to SAP applications;
- 10 months prior to the contemplated hypothetical negotiation, Oracle paid approximately $6.1 billion to acquire Siebel, including rights to the Siebel customer support contracts, related relationships and goodwill;
- Oracle's investment of over $250 million in further research and development for its Siebel products since the acquisition as well as Oracle's understanding that about 60% of their research and development investment goes to software and support materials and that by licensing, SAP avoids these costs;
- The nature of the relationship between Oracle and SAP, as direct competitors in the software applications business, particularly in light of Oracle's ability with the Siebel

acquisition to capture significantly more CRM market share than SAP;

- The Siebel acquisition had given Oracle acknowledged traction and market share against SAP which it would not want to endanger without significant upside;
- Anticipated changes to Oracle's business practices in order to compete with SAP to provide support services to Oracle customers; and,
- Anticipated negative impacts to the level of profitability and customer renewal rates of the Oracle support products that embody the copyrighted materials at issue, and the resulting impact on Oracle's ability to use that support revenue stream to fund ongoing research and development.

343. Similarly, in determining the amount of a license fee that SAP would be willing to pay to Oracle for its use of the Siebel copyrighted materials in suit, SAP would consider at least the following factors:

- The license would allow SAP to use its TomorrowNow service offering to drive the conversion of Oracle's Siebel applications customers to SAP's platform;
- Technological limitations on TomorrowNow's ability to fix source code-level product errors due to policy to not distribute uncompiled source code outside of Oracle;
- SAP's willingness to pay significant amounts to acquire intellectual property and customer relationships, as evidenced in particular by its 2007 acquisition of Business Objects for $7.1 billion;

- SAP's knowledge that access to Oracle's copyrighted materials is necessary for the level of support that it solicited and sought to provide to Oracle's Siebel customers to gain their loyalty and future business;
- SAP's knowledge and understanding related to the research and development time and effort necessary to develop software and support materials, and its understanding that licensing will avoid delay, costs and likelihood of unsuccessful development;
- TomorrowNow's business model relied upon its access and use of Oracle's copyrighted materials in suit in order to provide service to customers at the level TomorrowNow promoted;
- The nature of the competitive relationship between Oracle and SAP in the software applications business, and in particular, the increased competitive threat that Oracle posed to SAP as a result of its acquisition of Siebel;
- The importance of timing and speed of SAP's offering of Siebel support services (while less important than in the PeopleSoft acquisition, SAP still sought to take advantage of customer uncertainty with the Siebel acquisition);
- The goals of SAP's Safe Passage program, of which the TomorrowNow service offering was an integral part to convert the 300+ Siebel customers to SAP; and,
- SAP expected benefits from offering TomorrowNow support service, selling additional SAP products to those customers,

and ultimately converting a portion of those customers to SAP.

344. In establishing their respective negotiating positions, Oracle and SAP would have considered the financial implications of entering into a license. Oracle would consider discounted cash flow scenarios with potential losses of up to $231.9 million; SAP would consider scenarios reflecting benefits between $97 million and $247 million (*See* Table 12). Oracle and SAP would have also considered the financial metrics (multipliers) developed by TomorrowNow and SAP reflecting the impact on Oracle of SAP/TomorrowNow converting license and/or maintenance revenue that would have been earned by Oracle. For example, one such TomorrowNow metric estimated the financial impact to Oracle at $18 - $20 lost for every $1 TomorrowNow gained.[644] As addressed in the income approach, at $7 million or $14 million in annual support revenues, there is a $110 million to $220 million impact on Oracle's revenues, assuming 10 years of support is lost to Oracle. (*See* **Schedule 22.U**) The parties would also consider the actual sales of TomorrowNow to Siebel customers along with TomorrowNow's strategic planning and selling activities.

345. The parties would have also considered the acquisition price paid by Oracle for Siebel and the intangible asset valuations. Significant value was assigned to the ongoing maintenance revenue anticipated from the acquired Siebel customers in addition to goodwill. The copyrighted materials accessed

[644] April 25, 2006 email from Andrew Nelson to Lon Fiala, which indicates $1 of TomorrowNow revenue is equivalent to $20 of Oracle support revenues taken from a "10-year maintenance based justification for the PeopleSoft/JDE takeover" [TN-OR00591548 (Nelson Exhibit 1019)]. A March 26, 2006 email from Andrew Nelson to Lon Fiala, et al, (with cc to Leo Apotheker) indicates that "$1 of TN Stand-alone revenue this year represents $18 of originally expected Oracle revenue" [TN-OR00609470-71 (Nelson Exhibit 1018)]. Mr. Apotheker did not disagree or contradict Mr. Nelson's analysis [Deposition of Andrew Nelson (Co-Founder of TomorrowNow), February 26, 2009, pgs. 163-166].

by SAP are required resources to meet Oracle/Siebel-related customer support contract commitments, or comparable materials must be independently developed. The valuation of this revenue stream and customer relationships of $808 million would be considered. The parties would contemplate increasing the $808 million value of support agreements and customer relationships by a factor to reflect the related goodwill premium paid overall by Oracle to acquire Siebel. SAP targeted 200 customers of Siebel's, or 5% of the acquired Siebel support customers. $170 million represents 5% of Siebel intangible assets of $3.4 billion. Oracle Senior Executives have indicated that the transaction goodwill premium reflects Oracle's ability to gain additional monetary value over time from acquired customers through cross-sell and up-sell opportunities, as well as other financial benefits.

2. Oracle Would Expect A Significant License Fee

346. In licensing its largest direct competitor to access just acquired Siebel customer accounts with their intended goal to "take Oracle out of incumbent vendor position," it is my opinion that Oracle Senior Executives would expect a royalty in the form of a license fee. An amount consistent with Oracle's expectations of the amount of lost customers due to licensing would be considered, along with the potential permanent impact that granting such a license would have on Oracle's future support business revenues and future product sales.[645] I understand that Larry Ellison and Safra Catz would be involved in these negotiations.[646]

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[645] SAP WebEx Presentation "AE Hot Topics Briefing: Using TomorrowNow to help you replace Oracle," dated March 1, 2007, pg. 2, TN-OR00412503 (native file); Discussion with Oracle senior executives: Larry Ellison, Safra Catz and Charles Phillips.

[646] Declaration of Safra Catz in Support of Plaintiff's Opposition to Defendants' Motion For Partial Summary Judgment Regarding Plaintiffs' Hypothetical License Damages Claim, September 22, 2009, p. 1.

3. SAP Could Pay A Significant License Fee

347. Theoretically, as SAP was strategically interested in expanding its customer support footprint, SAP could have attempted to acquire Siebel customer relationships and support revenue through a third party acquisition. In September 2006, in an arms-length transaction, Oracle paid approximately $1.5 million per Siebel customer.[647] Siebel customers had contracts for support services which were enabled by Siebel's intellectual property, including the copyrighted materials in suit. SAP Senior Management would be aware of the value that Oracle paid, and that SAP would have had to pay, in a third party transaction to acquire similar customers whose support services use the copyrighted materials.

348. SAP would be willing to pay a $100 million license fee to compete head to head with Oracle for the acquired Siebel support customers, and to execute on its strategy to cross-sell and up-sell to its customers. The value of the copyrighted materials accessed by SAP related to Siebel is much lower on a comparative basis than the value of copyrighted materials related to PeopleSoft, for a variety of reasons, including:

- the SAP/Siebel downloading activities were later in time;
- the Siebel software had additional protections on source code;
- SAP's access to PeopleSoft copyrighted materials was strategically timed to coincide with Oracle's acquisition of PeopleSoft to disrupt Oracle assimilation of the PeopleSoft

[647] The Siebel cost per acquired customer of $1.5 million has a nature and basis relevant to an established license fee under *Georgia-Pacific* factor 1, where consideration and analysis involves royalties paid for the subject intellectual property.

customers (the SAP/Siebel downloading activities did not coincide directly with Oracle's purchase of Siebel);

- SAP's anticipated conversion of Siebel customers was much less aggressive than its estimated conversion of it PeopleSoft customers, resulting in lower risk of customer losses to Oracle; and
- The period during which SAP provided support for Siebel customers was shorter than the PeopleSoft customer support period.[648]

349. In 2004, SAP Group generated revenues of $4.1 billion[649] and had liquid assets of nearly $4.4 billion,[650] including cash and cash equivalents of $2.1 billion.[651] In 2005, SAP Group generated revenues of $4.7 billion[652] and had liquid assets of $3.8 billion,[653] including cash and cash equivalents of $2.4 billion.[654]

[648] Based on the documents produced by SAP, SAPs anticipated conversion of Siebel customers to support contracts and cross-sell/up-sell contracts was much lower than such estimates in documents produced related to PeopleSoft.

[649] SAP Annual Report for fiscal year ended December 31, 2005, pg. 151. €3.3 in year 2004, currency converted using exchange rate of $1.2490 to €1, per the SAP Annual Report 2005, p.98.

[650] SAP Annual Report for fiscal year ended December 31, 2005, pg. 152. €3.2 in year 2004, currency converted using exchange rate of $1.3621 to €1, per the SAP Annual Report 2005, p.98.

[651] SAP Annual Report for fiscal year ended December 31, 2005, pg. 152. €1.5 in year 2004, currency converted using exchange rate of $1.3621 to €1, per the SAP Annual Report 2005, p.98.

[652] SAP Annual Report for fiscal year ended December 31, 2005, pg. 151. €3.8 in year 2005, currency converted using exchange rate of $1.2360 to €1, per the SAP Annual Report 2005, p.98.

[653] SAP Annual Report for fiscal year ended December 31, 2005, pg. 152. €3.2 in year 2005, currency converted using exchange rate of $1.1797 to €1, per the SAP Annual Report 2005, p.98.

[654] SAP Annual Report for fiscal year ended December 31, 2005, pg. 152. €2.1 in year 2005, currency converted using exchange rate of $1.1797 to €1, per the SAP Annual Report 2005, p.98.

F. Opinion: Value of Use for Siebel Copyrighted Materials Based on Hypothetical Negotiation Approach to Establish Intellectual Property Value – Oracle and SAP Would Have Agreed Upon a License Fee of No Less Than $ 100 million

350. Based on my analysis of the fifteen *Georgia-Pacific* factors and relevant economic, financial and valuation issues and considerations, in September 2006, in my opinion the parties, as willing participants in a hypothetical negotiation for the above described license, would have agreed on a license fee of no less than $100 million.

C. Defendants' Unjust Enrichment – Revenue from Sales of Other SAP Products and Services

439. As explained in section IV.B.3 above, TomorrowNow was an integral part of SAP's Safe Passage program, the goal of which was to capture Oracle's PeopleSoft and J.D. Edwards customers and convert them to SAP applications.[812] The third step and ultimate goal of SAP's "PeopleSoft 1-2-3" plan was to convert PeopleSoft customers to SAP applications.[813] An SAP

[813] SAP email from John Zepecki to Arlen Shenkman and other SAP personnel, dated January 5, 2005, with attached document "Peoplesoft 1-2-3 01 05 05.doc," SAP-OR00004991-5007 (Shenkman Exhibit 225), at 997 and 003.

document states, "Freezing a PeopleSoft customer 'forever' is not an end goal for SAP. SAP ultimately wants to sell more software and upgrade a customer to mySAP."[814] SAP's goal was to convert 50% of Oracle's PeopleSoft and J.D. Edwards customers to SAP.[815] SAP's primary goal of extending TomorrowNow support services to Oracle's Siebel product line was to get those Siebel customers to switch to SAP's CRM software.[816] In an effort to achieve these goals, SAP offered TomorrowNow service as a loss leader in order to gain more Safe Passage program customers.[817]

440. SAP's TomorrowNow support offering served as an enabler for SAP to win more customers from Oracle. SAP did not have a comparable offering (to provide support service to Oracle's customer base) either before it acquired or after it shutdown TomorrowNow's operations.[818] Through its operation of TomorrowNow's alleged business model, Defendants have benefited financially from the sales of other SAP products and services to certain of the Relevant TomorrowNow Customers.

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[814] SAP email from John Zepecki to Arlen Shenkman and other SAP personnel, dated January 5, 2005, with attached document "Peoplesoft 1-2-3 01 05 05.doc," SAP-OR00004991-5007 (Shenkman Exhibit 225), at 997.

[815] "Safe Passage: Winning Customers and Markets From Oracle-PeopleSoft-J.D. Edwards," SAP-OR00299495-518 (Oswald Exhibit 595), at 500; Deposition of Shai Agassi (Former SAP CTO and Executive Board Member), January 5, 2009, pgs. 315-318.

[816] Deposition of Terry Hurst (SAP Director of Competitive Programs), September 10, 2009, pgs. 503-504.

[817] Email from Thomas Zieman to Gerhard Oswald, dated July 31, 2006, Re: Q1 Oracle Disruption Plan, SAP-OR00156241-242 (Ziemen Exhibit 454). See also, Deposition of Paul Cooley (Waste Management Director of Information Technologies), November 24, 2009, pgs. 34-39, who testified that the total cost of ownership was a deciding factor in Waste Management's decision to switch to TomorrowNow/SAP.

[818] Deposition of Keith Block (Oracle Executive Vice President of Sales and Consulting in North America), September 17, 2009, pgs. 238-240.

1. SAP Positions and Claims Regarding Safe Passage Success and Revenues

441. In December 2004, Thomas Ziemen sent an email to several SAP Executive Board members attaching a presentation containing slides about a "PeopleSoft Attack Program." The slides indicate that the SAP Business Opportunity included revenues from "maintenance" of PeopleSoft products, "upswitch" of replacing PeopleSoft products with SAP products and "cross-sell" of selling customers other SAP products.[819] Reports on TomorrowNow's financial results indicated that support revenue won by TomorrowNow was not the full extent of value for SAP. For example, a June 20, 2006 SAP presentation titled "*CEO Council – Post Merger Integration (PMI)*" includes a slide titled "Financial Scorecard – TomorrowNow (Stand Alone)," which indicates that "When conducting a financial review for TomorrowNow the following two aspects have to be considered: 1) TomorrowNow on a Stand-Alone basis, as well as 2) Safe Passage implications."[820] That same June 20, 2006 presentation contains a slide titled "TomorrowNow – Creation of Safe Passage," which reports:

- "Safe passage pipeline (752 opportunities) and Revenues justify the cost of the [TomorrowNow] acquisition and additional operating expenses;"

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[819] Email and from Thomas Ziemen to Leo Apotheker and others dated December 23, 2004, Re: PeopleSoft Attack Program with (Ziemen Ex. 447) PS_Attack_Prog attachment, SAP-OR00253278-301, at 288-290; Deposition of Thomas Ziemen (SAP Vice President, Service Solution Management), September 30, 2008, pgs. 72-76. "Upswitch" relates to the conversion of a PeopleSoft or J.D. Edwards customer to SAP applications, while "cross-sell" relates to the sale of other software components that are integrated in the SAP NetWeaver environment [Deposition of Thomas Ziemen, September 30, 2008, pgs. 72-74].

[820] CEO Council Post Merger Integration (PMI) dated June 20, 2006, SAP-OR00097329-364 (Oswald Exhibit 606), at 344.

- "In 2005, TNow was directly involved in 14 Safe Passage deals with net software value of approximately € 30M;" and,
- "Successful Deal strategically & financially (indirectly) . . . Global Benefits: In 2005, 35 Americas Customers and 33 EMEA Customers."[821]

442. A January 11, 2007 "*Safe Passage Update*" presentation made at a Global Leadership Meeting in Lake Tahoe defines a Safe Passage customer as "A current Oracle, PeopleSoft, JD Edwards, Retek, or Siebel customer that chooses to either replace their existing implementation in favor of SAP or defer migration to Oracle Fusion by purchasing a maintenance contract from TomorrowNow."[822] That same January 11, 2007 presentation reports:

- 26 joint TomorrowNow/Safe Passage customers,[823]
- "30% of TomorrowNow customers think TomorrowNow is a first step on the road to SAP,"[824]
- "Safe Passage pipeline (403 opportunities currently in process); TomorrowNow pipeline (816 open opportunities), and revenues justify the cost of the [TomorrowNow] acquisition and additional operating expenses";[825] and,

[821] CEO Council Post Merger Integration (PMI) dated June 20, 2006, SAP-OR00097329-364 (Oswald Exhibit 606), at 344.

[822] TomorrowNow Global Leadership Meeting January 11, 2007, SAP-OR00007470-498 (Kagermann Exhibit 417), at 487.

[823] TomorrowNow Global Leadership Meeting January 11, 2007, SAP-OR00007470-498 (Kagermann Exhibit 417) at 488.

[824] TomorrowNow Global Leadership Meeting January 11, 2007, SAP-OR00007470-498 (Kagermann Exhibit 417), at 491.

[825] TomorrowNow Global Leadership Meeting January 11, 2007, SAP-OR00007470-498 (Kagermann Exhibit 417), at 497.

- Predicted Break-even for TomorrowNow in 2008 "after completion of globalization and business scoping in 2007."[826]

443. SAP regularly reported on the success of the Safe Passage program, of which TomorrowNow was an integral part.

Table 17: SAP Safe Passage Program Results				
	2005[827]	2006[828]	As of Sept 2007[829]	Total (Jan 2005 – Sept 2007)
Annual Safe Passage License Revenue (in Euros)	€170.0M	€206.8M	€119.0M	€495.8M
Annual Safe Passage License Revenue (in US Dollars)[830]	$211.7M	$259.8M	$160.0M	$631.5M
Signed Safe Passage Deals	140	193	99	432

[826] TomorrowNow Global Leadership Meeting January 11, 2007, SAP-OR00007470-498 (Kagermann Exhibit 417), at 497.

[827] TomorrowNow Global Leadership Meeting January 11, 2007, SAP-OR00007470-498 (Kagermann Exhibit 417), at 493.

[828] Service Initiatives Reporting Update October 2007 dated October 17, 2007, SAP-OR00565364-431 (Bamberger Exhibit 792), at 422.

[829] Service Initiatives Reporting Update October 2007 dated October 17, 2007, SAP-OR00565364-431 (Bamberger Exhibit 792), at 422. This is the latest report that I have seen in the record of Safe Passage results.

[830] Converted to U.S. Dollars using the average Euro to USD exchange rate for the respective years from oanda.com. Average exchange rates were 1.24539 for 2005, 1.25622 for 2006, and 1.34454 for January through September 2007.

2. Opinion: SAP Revenue Received from Relevant TomorrowNow Customers

444. SAP has identified a subset of its "Safe Passage" customers, comprised of 86 of the Relevant TomorrowNow Customers ("List of 86"), that purchased TomorrowNow support services and SAP products or services simultaneously, or that were existing TomorrowNow customers at the time that they purchased new SAP software or service.[831] SAP products and services sold to these customers include both the sale of SAP software to replace the customers' PeopleSoft, J.D. Edwards or Siebel applications, as well as sales of other non-replacement SAP products and services.

445. I have reviewed and analyzed the customer-specific revenue data produced by SAP for the List of 86 Customers, which includes revenue from sales of licenses, support, training and other services for the period of 2002 to 2008.[832] From 2005 (when SAP acquired TomorrowNow) through 2008, SAP received [redacted] in revenue from sales of SAP software licenses, support, training and other services to the List of 86 customers, [redacted] of which was received after the customer started receiving support services from

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[831] See, for example, Deposition of Paul Cooley (Waste Management Director of Information Technologies), November 24, 2009, pgs. 34-39, who testified that the total cost of ownership was a deciding factor in Waste Management's decision to switch to TomorrowNow/SAP.

I understand that Defendants' list of relevant SAP customers has changed over time. I have based my calculations on the latest version provided to me, which I understand was served by Defendants on July 15, 2009 (a list of 83 customers), and supplemented on October 17, 2009 to add 3 additional customers. *See* SAP file: List of 83.xls; Email from Jason McDonell (Jones Day) to Geoff Howard, et al. (Bingham McCutchen) Re: Customer list adds, dated October 17, 2009; Letter from Jason McDonell (Jones Day) to Geoff Howard (Bingham McCutchen) Re: List of 86, dated November 3, 2009. On November 3, 2009, Defendants identified seven more Relevant TN Customers that purchased SAP applications, though they have not produced relevant customer-level SAP revenue information [*See* November 10, 2009 Joint Discovery Statement , pgs. 19-20]. I understand Oracle has asked for this information and it was not forthcoming. I reserve the right to revise this section of the report and schedules accordingly if additional information becomes available.

[832] SAP-OR00603615 (SAP Customer Report.xls); SAP-OR00789887 (SAP Customer Report July 2009 Update.xls); SAP-OR00841587 (SAP Customer Report Updated 10-30-09.xls).

TomorrowNow.[833] Of that [redacted] in revenue, [redacted] was from sales of new or additional licenses to SAP products.[834] It is my opinion, a portion of these revenues have been earned, and or enhanced, by the Defendants' alleged conduct.

[833] **SCHEDULE 42.SU**.