

# **EXHIBIT B**

2009

# Expert Report of Paul C. Pinto

*Oracle USA, Inc., et al. v. SAP AG, et al.*

Designated Highly Confidential

Pursuant to Protective Order

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In the 1990s, I was employed by Computer Task Group (a \$500M system integration firm). Throughout my 7-year tenure, I held multiple roles as a delivery agent, where I led a number of high-profile product development projects, provided guidance to troubled projects, and served as a Management Consultant focused on providing ERP package implementation and customization services.

**B. Publications**

I have no publications from the last ten years.

**C. Compensation**

My agreed-upon compensation in this litigation is \$381/hour. My compensation is in no way contingent on the results of my analysis.

**D. Prior Testimony**

I have provided expert witness services in one other matter, *Dibon Solutions Inc. v. Chugach Alaska Corporation* (Case No. 3 AN-08-10957 CI, Case Filing Date: October 3, 2008), where I performed an assessment of a failed software development effort and submitted an expert report. As part of my services, I conducted an analysis of multiple versions of delivered source code, as well as a comparison of two specific versions of source code to identify any copyright violations. As of the date of this report, the *Dibon v. CAC* case is still active, with trial scheduled for January, 2010. Given that this is an active case, under which I am currently governed by a confidentiality agreement, I am disallowed to provide details about my work product.

**E. Material considered**

A list of materials I have considered in preparing this report is attached as Appendix B.

**III. BACKGROUND**

My understanding of the scope of SAP TN's activities is based on the Complaint and my discussion with Kevin Mandia of Mandiant Consulting, who is also retained by Bingham McCutchen on behalf of Oracle in this litigation. I understand that SAP TN provided third party software support services for Oracle's JD Edwards, PeopleSoft, and Siebel applications. Further,

I understand that SAP TN maintained entire copies of Oracle's PeopleSoft, JD Edwards, and Siebel enterprise software applications, as well as fixes, patches, and updates to those enterprise software applications, on SAP TN's computer systems and that SAP TN used these sources in providing support services to its customers. I also understand that SAP TN used copies of Oracle's database software<sup>1</sup> in the provision of support services to its customers.

In light of SAP TN's use of the underlying JD Edwards, PeopleSoft and Siebel enterprise software applications (in addition to using the fixes, patches, and updates for these applications) in providing support for its customers, I have quantified what it would have cost Defendants to independently create the underlying applications - and not just particular fixes, patches, and updates - for the Oracle products identified herein.

The cost of development of the underlying body of applications including the time and technical and litigation risks associated with such development would, in my opinion, and based on my experience, significantly factor into a decision by a potential licensee whether to license a product from the original developer, as well as factoring into the reasonable amount to be paid for that license. In addition, while I do not quantify the cost of development of the database software involved in Defendants' allegedly illegal activities through this report, the cost of development of the database software would also factor into this analysis.

#### **A. General Approach**

In light of the above circumstances, I have focused my analysis on what it would have cost Defendants to independently develop the underlying software applications used in administration of maintenance services provided by SAP TN. I understand that Paul Meyer of Navigant Consulting, who is also retained by Bingham McCutchen on behalf of Oracle in this litigation, will be quantifying actual copyright damages based on the fair market value of Defendants' use. My analysis is related to this fair market value of use analysis because it

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<sup>1</sup> The term "database software" as used herein refers to any version and edition of Oracle's Relational Database Management System software.

demonstrates a portion of Defendants' avoided costs and avoided risks and avoided delays from infringing, rather than independently developing, the cited products.

Further, over my career as an outsourcing advisor and software company executive, I have been involved in hundreds of license negotiations, from the perspective of both the buyer and the seller of products. In negotiating the price of licenses, I would regularly consider the avoided costs, including saved time and avoided risks (such as avoided Research and Development ("R&D") missteps and avoided litigation from the IP owner) associated with licensing productized software, as opposed to independently developing software. Time and cost, are indeed, the most important considerations to potential licensees in my experience. My estimation of the cost of development is evidence of the investments avoided by not independently developing the products at issue in this litigation.

#### **B. Additional Value to Infringers**

Through my years of industry experience and active consulting work, I am very familiar with the challenges and efforts associated with the development of enterprise application software and the provision of support services for that software. By infringing Oracle's intellectual property rights rather than independently creating the products specified in the Complaint, Defendants would have avoided the costs associated with independent development.

Defendants also received a number of other benefits related to avoided cost, in the form of quicker time to market and avoided risks, including the avoidance of: the significant upfront monetary outlay necessary to create the intellectual property; the risk of taking wrong turns or making errors in the development process; the risk that the personnel necessary to complete the project were unavailable; and the risk that the creation of the product would take longer than anticipated and therefore the desired customer base would remain with the original support provider.

As discussed above in my summary of opinions, the ramp-up needed for a software development effort of this size would require access to, and the ongoing retention of, more than 2,828 well-trained personnel, for a period of no fewer than two years, to develop all of the cited

Siebel development costs would have ranged between \$198M and \$573M, depending on the selected staffing model.

## **VIII. RESULTS**

For the foregoing reasons, based on my experience as an I.T. professional specializing in commercialized product development and managed services, and after reviewing the materials in the case, examining the associated intellectual property, and conducting a methodical approach to estimating the associated development costs, my conclusions are as follows:

### **A. Summary of Analysis**

I am highly confident that the cost associated with performing full life-cycle product development for JD Edwards EnterpriseOne Version 8.12, as described in this report, and based on the Hybrid staffing scenario, will be in the area of \$320M, with a range between \$221M and \$749M depending largely on the labor source and associated costs.

I am highly confident that the cost associated with performing full life-cycle product development for PeopleSoft Version 8.X, as described in this report, and based on the Hybrid staffing scenario, will be in the area of \$707M, with a range between \$543M and \$1,573M depending largely on the labor source and associated costs.

I am highly confident that the cost associated with performing full life-cycle product development for JD Edwards World, as described in this report, and based on a similar Hybrid staffing scenario (the same used for JD Edwards EnterpriseOne), will be in the area of \$248M with a range between \$172M and \$581M depending largely on the labor source and associated costs.

I am highly confident that the cost associated with performing full life-cycle product development for Siebel, as described in this report, and based on a Hybrid staffing scenario (the same used for PeopleSoft), will be in the area of \$257M, with a range between \$198M and \$573M depending largely on the labor source and associated costs.

In total, I am highly confident that the cost associated with performing full life-cycle product development for all of the cited products, as described in this report, and based on a

Hybrid staffing scenario, will be in the area of \$1,532M, with a range between \$1,134M and \$3,477M depending largely on the labor source and associated costs.

Based on my complete analysis, it is estimated that 9,772,236 person-hours of productive effort would be required to perform full life-cycle application development for the cited software products (JD Edwards EnterpriseOne, JD Edwards World, PeopleSoft, and Siebel). Assuming there are 144 productive hours in a month, this translates into 67,863 person-months of effort. If the development effort were to be completed within a two-year time frame, the organization would require access to, and the ongoing retention of, more than 2,828 well-trained resources, throughout the 24-month duration of the project

#### **B. Valuation of Independent Development of Infringed Software**

Oracle's Complaint informs me that SAP TN also misused the Oracle database software by using it to support SAP TN customers. I did not qualify the costs of developing the Oracle database software because of time constraints. However, given the costs associated with the development of other software, and given Oracle's more than thirty-year history of development and innovation of database software,<sup>34</sup> I expect the costs Defendants avoided by not developing the Oracle database software themselves are significant. My estimate of Defendants' avoided R&D costs is thus conservative in that it does not include the database-related avoided costs.

### **IX. REFERENCE MATERIALS**

A list of material considered in generating this report is listed in Appendix B. All Tables are also produced in native form as ORCLX-PIN-000065. Other back-up material is produced as ORCLX-PIN-000063 through ORCLX-PIN-000085. A Glossary of Terms is provided in Appendix C.

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<sup>34</sup> For example, Oracle's history and development as a provider of database software is discussed in [Oracle Celebrates Thirty Years of Innovation](http://www.oracle.com/oramag/profit/07-may/p27anniv_timeline.pdf), Oracle Magazine, July/August 2007, available at [http://www.oracle.com/oramag/profit/07-may/p27anniv\\_timeline.pdf](http://www.oracle.com/oramag/profit/07-may/p27anniv_timeline.pdf). [ORCLX-PIN-000012]