

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

HEWLETT-PACKARD COMPANY,
Petitioner

v.

YYZ, LLC,
Patent Owner

CBM No. Unassigned

**DECLARATION OF HANS-ARNO JACOBSEN, PH.D.
IN SUPPORT OF PETITION FOR
COVERED BUSINESS METHOD REVIEW**

U.S. PATENT NO. 7,062,749

I, Hans-Arno Jacobsen, do hereby declare that:

1. I have been retained by counsel for Petitioner to provide assistance regarding U.S. Patent No. 7,062,749 (the “749 patent”).

Professional Background

2. I have more than 20 years of experience in research, academia, and industry in the areas of middleware systems, event processing, service computing, enterprise data processing, distributed systems, and information systems.

3. I hold the title of Full Professor with tenure in the Department of Electrical & Computer Engineering and the Department of Computer Science (cross-appointed) at the University of Toronto, Canada. I held the Bell University Laboratories Chair in Software and lead the Middleware Systems Research Group. A copy of my curriculum vitae is attached as Appendix A to this declaration.

4. I received my Ph.D. degree from Humboldt University, Berlin in 1999 and my M.A.Sc. degree from the University of Karlsruhe (TH), Germany in 1994. Between 1992 and 1998 I engaged in pre-doctoral research activities working at various research laboratories world-wide, including the Laboratoire d'Informatique et d'Intelligence Artificielle (LIFIA) in Grenoble, France, the International Computer Science Institute (ICSI) in Berkeley, United States, and Lawrence Berkeley National Laboratory (LBNL) in Berkeley, United States. After completing my doctorate from 1998 to 1999, I engaged in post-doctoral research at Institut National de Recherche

en Informatique et en Automatique (French Institute for Research in Computer Science and Automation - INRIA) in Rocquencourt, France, before joining the University of Toronto in 2001.

5. My areas of research include the design and development of middleware systems, event processing, service computing, business process management, and applications in enterprise data processing, distributed systems, and information systems. My current research focuses on publish/subscribe, content-based routing, event processing, and aspect-orientation. My applied research focuses on information and communication technology for energy management and energy efficiency. I also explore the integration of modern hardware components, such as SSDs (Solid State Drives) and FPGAs (Field Programmable Gate Arrays), into middleware, event processing, and data management architectures.

6. I have served as program committee member of various international conferences, including the Institute of Electrical and Electronics Engineers (IEEE) International Conference on Distributed Computing Systems (ICDCS), International Conference on Data Engineering (ICDE), Association for Computing Machinery (ACM) Middleware Conference, ACM SIGMOD Conference (Special Interest Group on Management of Data), ACM Object-Oriented Programming, Systems, Languages & Applications Conferences (OOPSLA) and International Conference on Very Large Data Bases (VLDB). I was the Program Chair of the 5th ACM

International Middleware Conference and the General Chair of the Inaugural International Conference on Distributed Event-Based Systems (DEBS). I was among the initiators of the ACM International Conference on Distributed Event-Based Systems conference series. I have given numerous keynote addresses at major national and international conferences, such as the International Conference on Business Process Management, the ACM Middleware Conference, and the Chinese National Computer Congress.

7. I was awarded the Alexander von Humboldt-Professorship Award from the Humboldt Foundation to conduct research at the Technische Universität München.

8. I hold numerous patents and was involved in important industrial developments in the area of distributed systems, middleware systems, and business process management with partners like Bell Canada, Computer Associates, IBM, Yahoo! and Sun Microsystems.

Assignment & Materials Considered

9. Counsel for Petitioner requested that I provide analysis pertinent to the '749 patent.

10. For time spent in connection with this case, I am being compensated at my customary rate. My compensation is not dependent upon the outcome of this petition or any issues involved in or related to the '749 patent, and I have no other

financial stake in this matter.

11. The patent-related materials I considered include: the '749 patent (Exhibit 1001); the original prosecution history for the '749 patent (Exhibit 1002) and the reexamination file history for the '749 patent (Exhibit 1003).

12. The eSleuth prior art related materials I considered include: eSleuth 1.0 User's Guide ("User's Guide") (Exhibit 1011); eSleuth 1.0 Administrator's Guide ("Administrator's Guide") (Exhibit 1012); Release Notes eSleuth 1.0.0 Early Adoption Release ("Release Notes") (Exhibit 1013); a whitepaper entitled *eSleuth - eBusiness Transaction Analysis Software that Simplifies the Development of Reliable, High-Quality eBusiness Systems* ("First Whitepaper") (Exhibit 1006); and a whitepaper entitled *eBusiness Transaction Analysis Software that Improves Reliability, Performance, and Quality* ("Second Whitepaper") (Exhibit 1008),¹ (collectively, "eSleuth Materials"), along with the Cullens Declaration (Exhibit 1030).

13. The other prior art I considered include: MQSeries Primer, IBM MQSeries EAI Center, October 1999 ("MQSeries Primer") (Exhibit 1017); Using the IBM MQSeries Integrator Version 1.0, IBM International Technical Support

¹ An online version of the text of the Second Whitepaper is also at Exhibit 1009 at 6-12.

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