UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD
APPLE, INC., Petitioner
v.
REALTIME DATA LLC, Patent Owner
Case IPR2016-01738 Patent 8,880,862

EXPERT DECLARATION OF DR. GODMAR BACK IN SUPPORT OF PATENT OWNER'S MOTION TO AMEND



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I, Godmar Back, declare as follows:

I. INTRODUCTION

- 1. My name is Dr. Godmar Back. I have been retained by Realtime Data LLC to offer my opinions concerning certain proposed conditional amendments to the claims of U.S Patent No. 8,880,862 ("the '862 Patent").
- 2. Specifically, I have been asked to analyze arguments made by Apple, Inc. and its expert, Dr. Charles J. Neuhauser, in the petition for *inter partes* review ("IPR") proceeding of the '862 Patent, Case No. IPR2016-01738, as well as the material prior art references discussed in the prosecution of the '862 Patent, and the support and disclosures provided by the patent's original non-provisional application. I have also been asked to consider the prior art and arguments at issue in Case No. IPR2016-01365, in which Apple has challenged certain claims of U.S. Patent 7,181,608. I have additionally been asked to review the Motion to Amend submitted concurrently with this declaration, including the Claims Appendix therein, which sets forth the proposed substituted claims and the amendments to the original claims reflected therein.
- 3. In forming my opinions, I have reviewed the materials identified in the paragraph above, including the '862 Patent and its file history (Ex. 1002); application No. 09/776,267 ("the '267 application") (Ex. 2017), filed on Feb. 2, 2001, now Pat. No. 7,181,608, and its file history (Ex. 2023); Dr. Neuhauser's



declarations in this Proceeding and IPR2016-01365; Apple's Petition for *Inter Partes* Review; the references upon which Apple's Petition and Dr. Neuhauser rely; Realtime's Motion to Amend in this Proceeding; the Institution Decision; and materials referenced herein.

4. My opinions are based on my experience and knowledge of the relevant art, the documents identified above, as well as the documents discussed in this declaration.

A. Summary of Opinions

5. As explained in detail below, it is my opinion that the conditional substitute claims proposed in the Motion to Amend are supported by the original non-provisional application (Ex. 2017) and are patentable over the prior art at issue in this IPR Proceeding and the material art discussed during prosecution.

II. PROFESSIONAL BACKGROUND

6. I have been working in the field of computer science for over 25 years. My areas of expertise include computer systems, operating systems, and kernels. My experience includes, as a few examples, research, publications, lectures, and workshops in the field of computer systems, operating systems, and kernels. My Curriculum Vitae is attached hereto (Ex. 2009).



- 7. I obtained my undergraduate degree in Mathematics and Computer Science from Humboldt University of Berlin in 1992, and I studied Computer Science at the Technical University of Berlin from 1992-1994.
- 8. From September 1994 to May 1995, I was a Teaching Assistant in the Department of Computer Science at University of Utah, where I co-taught senior-level undergraduate courses and entry-level graduate courses in operating systems, networking, and compilers.
- 9. From June 1995 to November 2001, I was a Research Assistant in the Computer Systems Laboratory at University of Utah, where I conducted research on component-based operating systems (OSKit) and microkernel systems (Fluke). My research was published at the Second Symposium on Operating Systems Design and Implementation (OSDI) in 1996 and at the 16th ACM Symposium on Operating Systems Principles (SOSP) in 1997. Also during this time period, I conducted my dissertation research on runtime systems that support multiple applications. My research was published at the Seventh Workshop on Hot Topics in Operating Systems (HotOS) in 1999, at the Fourth Symposium on Operating Systems Design and Implementation (OSDI) in 2000, and at the USENIX 2000 Annual Technical Conference in 2000. I also received travel scholarship awards from Usenix, ACM, and the IEEE for various conferences such as these.



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