John Levy, Ph.D.

P.O. Box 1012, Inverness, CA 94937

415 269-4096 http://johnlevyconsulting.com info@johnlevyconsulting.com

SUMMARY OF EXPERIENCE

Dr. Levy is an experienced technologist in computers, software and storage, with over forty years' experience; Ph.D. in Computer Science from Stanford.

Areas of expertise include:

Bus design – system bus - local area network (LAN) – I/O channel
Bus standards – USB – ATA – IDE – PATA – SATA– SCSI – SAS – 1394
Computer hardware – CPU – multiprocessor – input/output – I/O controller
Memory – memory controller – cache memory
Hard disk – RAID – storage network – SAN – NAS – distributed storage
Software – software development – firmware
Operating system – file system – file server – file access protocol

Inventor on seven patents and author of a book and several published technical papers. Engaged as an expert in over 60 cases including at least 5 involving IPRs; deposition and trial testimony; technical advisor to two Fed. District Court judges.

PROFESSIONAL EXPERIENCE

1999 to Present John Levy Consulting and 1982 to 1992 Management Consultant

Managing development of computers, software and storage devices. General business consulting for small firms, both for-profit and nonprofit. Expert witness in intellectual property and contract litigation.

1993 to 1998 Quantum Corporation

Director, Systems Engineering

Hired and managed an engineering organization of 27 people; Made Quantum a leader in hard disk interface technology - ATA/33, /66, SCSI-160M; Developed software/hardware tools for firmware & system validation; Led disk drive performance enhancements in caching, system performance modeling and simulation, Windows software drivers; Member of strategic planning team.

1979 to 1982 Apple Computer, Inc.

Engineering Supervisor

Hardware & firmware development of local area network on Lisa team; Design of hardware/firmware interpreter for Pascal p-machine processor.

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1977 to 1979 Tandem Computer, Inc.

Senior Engineer

Advanced development of next-generation multi-processor systems; Study of rollback-recovery in distributed databases.

1972 to 1977 Digital Equipment Corp.

Consulting Engineer

Design of computer processor hardware & operating system software; Design of Input/Output (I/O) subsystems, distributed systems, distributed storage systems; Design of buses for high-speed I/O channels and for minicomputer systems.

EDUCATION

Ph.D., Computer Science, Stanford University, 1973

M.S., Electrical Engineering, California Institute of Technology, 1966

B. Engineering Physics, Cornell University, 1965

LITIGATION RELATED EXPERIENCE – Please see separate summary

PUBLICATIONS

Get Out of the Way: How to Manage Development of Timely, Innovative and Relevant Products, Cupertino, CA: Happy About Publishing, May, 2010

If Extreme Programming is Good Management, What Were We Doing Before? *EDN Magazine*, November 13, 2003.

Twelve Things to Ask Your Software Development Team, ComputerWorld Online, September 22, 2003.

A File Structure for Non-Erasable Media, with Wayne Wang, Ninth IEEE Symposium on Mass Storage Systems, pp. 72-76, 1988. also published as "An Operating System-Independent WORM File System" in Software for Optical Storage, Meckler Corp., 1989, pp. 23-54

Small Image Retrieval System, with Wayne Wang, *Ricoh Technical Report No. 16*, pp. 93-95, 1987.

Buses, the Backbone of Computer Structures, chapter of *Computer Engineering* by Bell et al. (editors), Digital Press, 1978.

Computing with Multiple Microprocessors, Ph.D. Thesis, *Stanford Linear Accelerator Center Report No. 161*, 1973

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U.S. PATENTS

Patent Number	Year Issued	<u>Title</u>
4,245,303	1981	Memory for Data Processing System with Command and Data Buffering
4,229,791	1980	Distributed Arbitration Circuitry for Data Processing System
4,232,366	1980	Bus for a Data Processing System with Overlapped Sequences
4,045,781	1977	Memory Module with Selectable Byte Addressing for Digital Data Processing System
4,007,448	1977	Drive for Connection to Multiple Controllers in a Digital Data Secondary Storage Facility
3,999,163	1976	Secondary Storage Facility for Data Processing Systems
3,911,400	1975	Drive Condition Detecting Circuit for Secondary Storage Facilities in Data Processing Systems

PROFESSIONAL AFFILIATIONS & AWARDS

Association for Computing Machinery

Institute of Electrical and Electronics Engineers (IEEE):

Computer Society – *National Lecturer on bus design*

UNIVERSITY-LEVEL TEACHING

University of San Francisco, Fromm Institute for Lifelong Learning

2023	Computer Hardware
2018	A 60-year Perspective on Computers and the Web
2016, 2017	Artificial Intelligence
2013, 2014, 2015	various courses related to the Digital World
2012, 2010, 2008, 2006	The Digital Revolution in the Home
2011, 2009, 2007, 2005	Computers - the Inside Story

San Francisco State University

1980-81 Computer Input/Output Architecture