UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

COMCAST CABLE COMMUNICATIONS, LLC, Petitioner,

v.

ROVI GUIDES, INC., Patent Owner.

Patent No. 7,200,855 Filing Date: May 24, 2001 Issue Date: April 3, 2007 Title: METHOD AND APPARATUS OF MULTIPLEXING A PLURALITY OF CHANNELS IN A MULTIMEDIA SYSTEM

Inter Partes Review No.: IPR2020-00787

DECLARATION OF CARRIE GARDNER, PH.D.

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	BACKGROUND AND QUALIFICATIONS	2
III.	PRELIMINARIES	3
IV.	OPINIONS REGARDING EXHIBIT 1006/1206: PCI LOCAL BUS SPECIFICATION, REVISION 2.2, PCI SPECIAL INTEREST GROUP DECEMBER 18, 1998 ("PCI")	
A.	Authentication	5
B.	Public Accessibility	11
C.	Conclusion	12
V.	OPINIONS REGARDING EXHIBITS 1016, 1116, 1216: EXCERPTS FROM THE BOOK MPEG-2 BY JOHN WATKINSON, PUBLISHED FOCAL PRESS, 1999.	
A.	Authentication	13
B.	Public Accessibility	15
C.	Conclusions	18
VI.	OPINIONS REGARDING EXHIBIT 1034, 1134, 1234: EXCERPTS FROM WIRELESS LANS: IMPLEMENTING INTEROPERABLE NETWORKS, JIM GEIER, MACMILLAN TECHNICAL PUBLISHING 1999	
A.	Authentication	18
B.	Public Accessibility	21
C.	Conclusions	24
VII.	OPINIONS REGARDING EXHIBITS 1046, 1107: EXCERPTS FROM FIREWIRE® SYSTEM ARCHITECTURE: IEEE 1394A, SECOND EDITION DON ANDERSON, ADDISON-WESLEY, 1999	
٨		
	Authentication Public Accessibility	
	-	
	Conclusions	29
VIII.	OPINIONS REGARDING EXHIBIT 1017, 1117, 1217: EXCERPTS FROM DIGITAL VIDEO: AN INTRODUCTION TO MPEG-2, B. HASKELL ET AL., CHAPMAN & HALL, 1997	29

A.	Authentication	29
B.	Public Accessibility	32
C.	Conclusions	35
IX.	OPINIONS REGARDING EXHIBIT 1026, 1126, 1226: EXCERPTS FROM TELECOMMUNICATIONS ENGINEER'S REFERENCE BOO FRAIDOON MAZDA, EDITOR, BUTTERWORTH-HEINEMANN LT 1993.	D,
A.	Authentication	35
B.	Public Accessibility	37
C.	Conclusions	40
X.	OPINIONS REGARDING EXHIBIT 1028, 1128, 1228: EXCERPTS FROM SWITCHED, FAST, AND GIGABIT ETHERNET, THIRD EDITION, ROBERT BREYER AND SEAN RILEY, MACMILLAN TECHNICAL PUBLISHING, 1999	. 40
A.	Authentication	40
B.	Public Accessibility	42
C.	Conclusions	45
XI.	OPINIONS REGARDING EXHIBIT 1030, 1130, 1230: EXCERPTS FROM NEWTON'S TELECOM DICTIONARY: THE OFFICIAL DICTIONARY OF TELECOMMUNICATIONS NETWORKING & TH INTERNET, SIXTEENTH EDITION, TELECOM BOOKS, 2000	
A.	Authentication	45
В.	Public Accessibility	48
	Conclusions	
XII.	OPINIONS REGARDING EXHIBIT 1033, 1133: EXCERPTS FROM INTERNETWORKING WITH TCP/IP VOL I: PRINCIPLES, PROTOCOLS, AND ARCHITECTURE, THIRD EDITION, PRENTICE HALL, INC., 1995	
A.	Authentication	49
B.	Public Accessibility	51
C.	Conclusions	54

XIII. OPINIONS REGARDING EXH	IBIT 1047, 1247: EXCERPTS FROM
THE BOOK: PCI SYSTEM ARC	CHITECTURE, FOURTH EDITION BY
TOM SHANLEY AND DON AN	NDERSON, PUBLISHED BY ADDISON-
WESLEY, 1999	
A. Authentication	
B. Public Accessibility	
C. Conclusions	
XIV. CONCLUSION	

1. I, Carrie Gardner, hereby declare under the pains and penalty of perjury:

I. INTRODUCTION

2. I have personal knowledge of the facts and opinions set forth in this declaration, I believe them to be true, and if called upon to do so, I would testify competently to them. I have been warned that willful false statements and the like are punishable by fine or imprisonment, or both.

3. I have extensive experience in the field of library and information science. I have taught library and information science courses for San Jose State University since 2002. I was an assistant professor at the Catholic University of America and for the Pennsylvania State System of Higher Education. I have been the principal consultant at Clairmaxine Consulting since 1991. I have delivered over 200 speeches, lectures, workshops and classes on aspects of information authenticity, information flow in our society, intellectual property, and confidentiality with regards to information access.

4. I have been retained by Banner Witcoff, Ltd., to authenticate and establish the dates of public accessibility of certain documents in an *inter partes* review proceedings for U.S. Patent No. 7,200,855. For this service, I am being paid my usual hourly fee of \$200/hour. My compensation in no way depends on the substance of my testimony or the outcome of this proceeding.

II. BACKGROUND AND QUALIFICATIONS

- 5. My educational history is as follows:
 - 2001: Doctor of Philosophy in Library Science, University of Pittsburgh. Dissertation: Conflict Resolution Behaviors among Stakeholders in Developing and Implementing Internet Use Policies in Pennsylvania Public High Schools;
 - 2014: Master of Education (Reading), Edinboro University of Pennsylvania;
 - 2004: Master of Education (Administration), Temple University;
 - 1993: Master of Library Science, University of Pittsburgh; and
 - 1990: Bachelor of Science, Education and Library Science, Millersville University of Pennsylvania. Magna Cum Laude.
- 6. My employment history is as follows:
 - Principal Consultant, Clairmaxine, 1991-Present;
 - Assistant Professor, Pennsylvania State System of Higher Education, 2007-2012;
 - Assistant Professor, School of Library and Information Science, Catholic University of America. 2003-2007;
 - Coordinator, Library Media Services, Milton Hershey School. 1999-2003;

- Library Media Specialist, Milton Hershey School. 1996-1999;
- Teaching Fellow, University of Pittsburgh. 1993-1995;
- Graduate Student Assistant, University of Pittsburgh. 1992-1993;
- Library Media Specialist, Palmyra School District. 1990-1992; and
- Student Retrospective Conversion Cataloger, Millersville University. 1987-1990.

7. In the course of my twenty-eight years of academic life, I have myself been an active researcher and librarian. I have collaborated with dozens of individual researchers and worked to provide information to over five thousand patrons. During the course of this work I have developed and maintained expert skills in information management and retrieval.

8. Attached hereto as Appendix A is my full resume.

III. PRELIMINARIES

9. *Scope of this declaration*. I am not a lawyer and I am not rendering an opinion on the legal question of whether any particular document is, or is not, a "printed publication" under the law.

10. I am, however, rendering my expert opinion on the authenticity of the documents referenced herein and on when and how each of these documents was disseminated or otherwise made available to the extent that persons interested and

ordinarily skilled in the subject matter or art, exercising reasonable diligence, could have located the documents.

11. I have been informed that for the '855 patent, a person having ordinary skill in the art is a hypothetical person that would have had, as of May 2001, a bachelor's degree in electrical engineering, computer engineering, computer science, or a similar discipline, and at least two years of experience with distributed computing systems such as multimedia systems, or would have had equivalent experience either in industry or research, such as designing, developing, evaluating, testing, or implementing the aforementioned technologies.

12. Such engineers and scientists frequently ask librarians, like myself, to assist them in locating information. Throughout the course of my career, I have assisted numerous engineers and scientists in locating technical papers, books, and Internet articles.

13. *Materials considered*. In forming the opinions expressed in this declaration, I have reviewed the documents and attachments referenced herein. These materials are records created in the ordinary course of business by businesses, publishers, libraries, indexing services, and others. From my years of experience, I am familiar with the process for creating many of these records, and I know these records are created by people with knowledge of the information in the record. Further, these records are created with the expectation that researchers and other

members of the public will use them. All materials cited in this declaration and its attachments are of a type that experts in my field would reasonably rely upon and refer to in forming their opinions.

IV. OPINIONS REGARDING Exhibit 1006/1206: PCI Local Bus Specification, Revision 2.2, PCI Special Interest Group, December 18, 1998 ("PCI")

A. Authentication

14. Exhibit 1006/1206 ("PCI") is a document titled: "PCI Local Bus Specification, Revision 2.2."

15. In order to authenticate Exhibit 1006/1206, I reviewed a Declaration from Doanh Vu (Exhibit 1007/1207) in which Mr. Vu explains that he obtained Exhibit 1006/1206 from the file history of U.S. Patent No. 6,218,864 (the "'864 patent", Exhibit 1011/1211) from the United States Patent and Trademark Office (USPTO). Appendix A of Mr. Vu's declaration includes a copy of the file history of the '864 patent, and Appendix B is a copy of Exhibit 1006/1206. Mr. Vu attests that Appendix B is a true and correct copy of the document he obtained from the patent office.

16. To begin, I went to https://www.google.com/ and using the google search engine, I searched "PCI Local Bus Specification Revision 2.2," which is the title on the cover page of the document.

17. The first result provided by my search at https://www.google.com/ list was: https://www.ics.uci.edu/~harris/ics216/pci/PCI_22.pdf. This website hosted by the University of California Irvine is a profile page of Ian G. Harris, who according to the website, is a professor of Computer Science. At this website I found a copy of the specification that exactly matches Exhibit 1006/1206, except that Exhibit 1006/1206 includes an additional stamp ("U.S. PTO") on the cover page. Finding identical copies of the same document from different sources that are unrelated, but that both involve the same field of study of a PHOSITA (an electrical engineering professor's website and a patent directed to an electrical circuit related to PCI) is an indication that Exhibit 1006/1206 has not been altered from its original form.

18. Both Exhibit 1006/1206 and the found copy at https://www.ics.uci.edu/~harris/ics216/pci/PCI 22.pdf state on page ii that the document was created by the PCI Special Interest Group. Page ii lists the website for the PCI Special Interest Group as: http://www.pcisig.com. I went to http://www.pcisig.com and read that PCISIG is the name of a group that creates specifications and standards for peripheral component interconnect (PCI) technology. At the website: https://pcisig.com/membership, I read that PCISIG started in 1992 as the Peripheral Component Interconnect Special Interest Group and has over 700 industry companies as members. A printout of this webpage is attached as Exhibit B. I clicked on the link labeled "Member Companies" and read that companies such as 3M, Amazon, and Microsoft are members. Their membership lends credibility to the validity and importance of the organization. I also read that Xilinx, Inc. is also a member, which is the Assignee identified on the cover page of the '864 patent.

19. At https://pcisig.com/, I used the search feature on the website to search "PCI Local Bus Specification Revision 2.2." The search returned this website: https://pcisig.com/pci-local-bus-specification-revision-23 which stated that the PCI Local Bus Specification Revision 2.2 was issued on December 18, 1998. A printout of this webpage is attached as Exhibit C. This is an exact match to the information contained on the cover page of Exhibit 1006/1206.

20. I also searched for "https://pcsig.com" on the website The Internet Archive (https://archive.org/about/). The Internet Archive, which is a 501(c)(3) non-profit, is a digital archive/library of Internet sites that starting in 1996 were 'scraped' from publicly accessible webpages. The Internet Archive created a service called the Wayback Machine that makes these archived web pages searchable. Searches on the Wayback Machine can be undertaken by URL. If an archive record for a URL is available, webpages for available dates will be shown. Through the Wayback Machine it is possible to view a specific webpage at a URL and see that page on that date as it then appeared. It is more or less a 'snapshot' of the website on that date.

21. My search for "https://pcsig.com" showed that the website had been archived 1,141 times between December 18, 1996, and April 10, 2020. I selected a capture to review dated February 09, 1999, which is attached as Exhibit D. On this page a selected a link "Specifications," which opened the webpage archived on March 02, 1999, which is attached as Exhibit E. The top of the pages of Exhibits D and E include the name of the organization and the address, "2575 NE Kathryn St #17 Hillsboro, OR 97124" and Fax number "503-693-8344," which are the same as that printed on page ii of Exhibit 1006/1206. Also, page 1 of Exhibit D states "PCI SIG Announces Release of PCI v2.2, PCI SIG announced today that v2.2 of the PCI Local Bus standard specification is now available." Exhibit E identifies costs of certain specifications "as of January 1999" and indicates that "PCI Local Bus Specification Rev. 2.2" is available for "\$25 plus shipping*." Exhibit E further indicates that the specifications are available by submitting a form by Fax to the number noted above. This information from Exhibits D and E provide additional corroboration that the Exhibit 1006/1206 is authentic.

22. I further secured a copy of the print book, PCI System Architecture, Fourth Edition by Don Anderson and Tom Shanley published by Addison-Wesley with a copyright of 1999 (Exhibit 1047/1247). Exhibit 1006/1206, the PCI Local Bus Specification, is the basis of the book by Anderson and Shanley, so information from Exhibit 1006/1206 is mentioned throughout the book. I found one example on

page 7 which states "[t]he latest version, 2.2 was completed on December 18, 1998

[which matches the date on the front cover of Exhibit 1006/1206] and became

available in February of 1999".

23. The Anderson and Shanley book (Exhibit 1047/1247) also states:

Obtaining PCI Bus Specification(s)

The PCI bus specification, version 1.0, was developed by Intel Corporation. The specification is now managed by a consortium of industry partners known as the PCI Special Interest Group (SIG). MindShare, Inc. is a member of the SIG. The specifications are commercially available for purchase from the SIG. The latest revision of the specification (as of this printing) is 2.2. For information regarding the specifications and/or SIG membership, contact:

PCI Special Interest Group 2575 N.E. Kathryn #17 Hillsboro, Oregon 97124 1-800-433-5177 (USA) 503-693-6232 (International) 503-693-8344 (Fax) pcisig@pcisig.com http://www.pcisig.com

Exhibit 1047/1247 at 13 (excerpt)

24. The mailing address, US phone and Fax numbers, and website where

the specification could be obtained as identified in the book, matches that identified

on the second page of Exhibit 1006/1206.

Contact the PCI Special Interest Group office to obtain the latest revision of the specification.

Questions regarding the PCI specification or membership in the PCI Special Interest Group may be forwarded to:

PCI Special Interest Group 2575 N.E. Kathryn #17 Hillsboro, Oregon 97124 Phone: 800-433-5177 (Inside the U.S.) 503-693-6360 (Outside the U.S.) Fax: 503-693-8344 e-mail pcisig@pcisig.com http://www.pcisig.com

Exhibit 1006/1206 at 2 (excerpt)

25. Exhibit 1006/1206 is in a condition that creates no suspicion about its authenticity. Specifically, Exhibit 1006/1206 is not missing any intermediate pages of text, the text on each page appears to flow seamlessly from one page to the next, and there are no visible alterations to the document. Exhibit 1006/1206 was found at multiple locations.

26. I conclude, based on:

- finding identical copies of Exhibit 1006/1206 from unrelated sources (the '864 patent and an electrical engineering professor's website), which both pertain to the subject matter of the reference and relevant background of a PHOSITA,
- finding references to Exhibit 1006/1206 (including its release date and other information that match the contents of the exhibit) on the current website of the publisher of the exhibit and in the Anderson and Shanley book (Exhibit 1047/1247), which is specifically about Exhibit 1006/1206, and
- finding references to Exhibit 1006/1206 in the archived webpages of the publisher that were captured near the date of publication, including references of the availability date and cost of Exhibit 1006/1206, and a matching address and Fax number that is included in Exhibit 1006/1206

that Exhibit 1006/1206 is an authentic copy of the PCI Local Bus Specification, Revision 2.2, released on December 18, 1998 and published by the PCI Special Interest Group.

B. Public Accessibility

27. In order to determine whether, and if so, Exhibit 1006/1206 was available to the public, I considered the same information I discussed above regarding the authenticity of the exhibit.

28. In particular, the exhibit itself includes a date of December 18, 1998, and the website of the publisher indicates the same date as the release date of the document.

29. Additionally, three separate references specifically identify and included details of Exhibit 1006/1206. The first is the '824 patent (Exhibit 1011/1211), which as discussed above includes a copy of Exhibit 1006/1206 that the applicant provided to the USPTO on August 10, 1999. The second is the Anderson and Shanley book (Exhibit 1047/1247), which itself was published in May 1999, and which provides a history of the specification indicating that it became available in February 1999. The third is the webpages of the publisher that were archived in February and March 1999 that announce the release and availability of the document.

30. Using San Jose State University library resources, I further conducted a full text search of articles published before May 24, 2001 for "PCI Local Bus Specification Revision 2.2." The search returned 112 articles. To confirm the search was accurate, I downloaded 12 of the articles and confirmed that the searched text was included in the article and that the article was published before May 24, 2001. A list of these 12 articles is attached as Exhibit F.

31. Based on the above corroborating information, I conclude that Exhibit 1006/1206 was publicly available to a person of ordinary skill in the art interested in obtaining the document as of February 1999 as indicated in Anderson and Shanley (Exhibit 1047/1247) and the archived webpage, which is a few months after its release date of December 18, 1998, and certainly no later than August 10, 1999, the date the '864 patent (Exhibit 1011/1211) was submitted to the patent office as an application.

C. Conclusion

32. Based on the totality of evidence presented here it is my opinion that Exhibit 1006/1206 is an authentic copy of the "PCI Local Bus Specification, Revision 2.2," released on December 18, 1998 and published by the PCI Special Interest Group, which was publicly available February 1999.

V. OPINIONS REGARDING Exhibits 1016, 1116, 1216: Excerpts from the book MPEG-2 by John Watkinson, published by Focal Press, 1999.

A. Authentication

33. Exhibits 1016, 1116, and 1216 (each including the same reference "Watkinson") contains excerpts from a monograph (book) titled "MPEG-2" by John Watkinson that was published by Focal Press in 1999. In order to authenticate Exhibit 1016/1116/1216, I secured a print copy of the book. The book was in a condition that left no doubt about its authenticity. The pages were securely within the cover and no pages were missing. After examining the condition of the book, I turned to the title page. I confirmed that Watkinson is titled "MPEG-2" by John Watkinson and published by Focal Press. On the verso of the title page, I found the phrase "Copyright John Watkinson 1999."

34. I also found the International Standard Book Number (ISBN) number of 0-24-0515102. ISBN identifiers are unique numeric identifiers that are placed in books in order to identify exact editions. If a new book is issued, it must include a different ISBN. This includes format as well as content changes. If content changes or if a different binding (*i.e.*, paperback) is created, a new ISBN must be secured. This system guarantees that different versions of a book have an ISBN that defines its relationship to all other editions of that title. In order to further authentic Watkinson, I went to https://catalog.loc.gov/ which is the online catalog of the Library of Congress. I searched the catalog using "0240515102" and retrieved a

record at this website: https://lccn.loc.gov/99203277 which contains the Library of Congress record for the book, which included identical identifying information as that indicated above. I found the Library of Congress Control Number (LCCN) of 99-203277. The Library of Congress provides a service where publishers send advanced copies of books to the Library of Congress staff. The staff assign a Library of Congress Control Number. The first part of the number is the year the book was received. The number after the dash is an accession number based on the number of books received that year. Exhibit 1016/1116/1216 was received by the Library of Congress in 1999 and it was the 203,277th book given an LCCN number during that year. I further went to the website https://www.worldcat.org/ which is the largest database of library holdings in the world. Librarians from around the world upload the holdings of their libraries to the database. I searched "0240515102" and retrieved this record: http://www.worldcat.org/oclc/41159672. I found entries for books that are identical to Exhibit 1016/1116/1216 and held by numerous libraries. Importantly, the books identified in the Worldcat database have the same ISBN number as Exhibit 1016/1116/1216, and every aspect described in Worldcat was an identical match to Exhibit 1016/1116/1216.

35. I further went to http://amazon.com and searched "0240515102" and retrieved this record: https://www.amazon.com/Mpeg-2-John-Watkinson/dp/ 0240515102/ref=sr_1_1?dchild=1&keywords=0240515102&qid=1586827118&sr

=8-1, which contains details identical to that indicated in Exhibit 1016/1116/1216, including an image of the front cover and an image of the copyright page. The Amazon webpage indicated that the book was available on April 14, 1999.

36. Based on the foregoing (*i.e.*, finding information about multiple copies of books identical to Watkinson available for sale and finding entries for multiple copies in different library collections), I conclude that Watkinson (Exhibit 1016/1116/1216) is authentic.

B. Public Accessibility

37. In order to determine whether, and if so when, Watkinson was available to the public, I first examined the book itself. Having established that Exhibit 1016/1116/1216 is authentic based on my finding multiple identical copies of it at likely websites, I examined Watkinson for information about availability. The verso of the title page is the most common location for information about copyright in books. The verso of the title page in Watkinson states that the book was copyrighted in 1999.

38. In order to further confirm the public accessibility of Exhibit 1016/1116/1216, I went to https://amazon.com. I searched "0240515102" and retrieved this website: https://www.amazon.com/Mpeg-2-John-Watkinson/dp/0240515102/

ref=sr_1_1?dchild=1&keywords=0240515102&qid=1586828212&sr=8-1 which lists the date the resource was available as April 14, 1999.

I further retrieved the record of the book from the Library of Congress 39. https://catalog.loc.gov/vwebv/staffView?searchId=22429&recPointer=0&rec at: Count=25&searchType=1&bibId=3106181. The LOC record includes a MARC (Machine-readable cataloging) record, which is an international standard set by the library community. Librarians around the world use the MARC standard to catalog books and other items found in libraries. Using this standard provides uniformity to library catalogs around the world. Each field in a MARC record begins with a number and contains multiple subfields. The MARC standard defines what information librarians put into each field. Use of the MARC record guarantees that librarians around the world catalog the same book in the same manner and that those records are compatible with the software that librarians purchase to create digital (online) catalogs of the resources in libraries. Use of MARC records also increases the accessibility of library collections for patrons.

40. Fields 245, 650, 955, and 991 of the MARC record for Watkinson are copied below.

245	10 a MPEG-2 / c John Watkinson.
650	_0 a Video compression
650	_0 a MPEG (Video coding standard)

955	a pb18 05-05-99 to cat.; jf00 05-07-99; jf03 to Subj. 05-17-99; jf08 05-
	17-99 to SL; jf25 05-20-99 to ddc
991	b c-GenColl h TK6680.5 i .W384 1999 t Copy 1 w BOOKS

41. The collections of the Library of Congress are searchable by keyword, subject matter, author, or title such that a person, with or without a research assistant, could find works in which they were interested. For example, a member of the public could have located Watkinson by searching author: John Watkinson; title: MPEG-2; and/or the subject field: "Video Compression" and "MPEG (Video coding standard)" in fields 245 and 650, respectively. Members of the public could read, study, and make notes about a selected work in the Reading Rooms. Further, members of the public were permitted to make photocopies of portions of the works while in the Reading Rooms. Accordingly, Watkinson was accessible to the general public and searchable by subject matter when it was available at the Library of Congress. The 991 record identifies the call number including the publication date of 1999, and the number of copies "Copy 1" available. The 955 record indicates the processing and cataloging of Watkinson in sequential steps separated by semicolons. Processing began on May 5, 1999, when the book was submitted for cataloging (CAT), and finished on May 20, 1999, when the book was submitted for Dewy Decimal Classification (DDC) number assignment. Watkinson would have

been accessible to the public on the shelf in the Library of Congress within a few days thereafter.

42. In view of the forgoing, it is my opinion that Exhibit 1016/1116/1216 was publicly available to persons interested and ordinarily skilled in the relevant subject matter or art, exercising reasonable diligence in May or June of 1999.

C. Conclusions

43. I conclude that Exhibit 1016/1116/1216 is authentic and was publicly available at no later than June 1999.

VI. OPINIONS REGARDING Exhibit 1034, 1134, 1234: Excerpts from Wireless LANs: Implementing Interoperable Networks, Jim Geier, Macmillan Technical Publishing, 1999

A. Authentication

44. Exhibits 1034, 1134, and 1234 (each including the same reference "Grier") contains excerpts from a monograph book titled "Wireless LANs: Implementing Interoperable Networks," First Edition authored by Jim Geier, copyright 1999 by the publisher Macmillan Technical Publishing. In order to authenticate Exhibit 1034/1134/1234, I secured a print copy of the book. The book was in a condition that left no doubt about its authenticity. The pages were securely within the cover and no pages were missing. After examining the condition of the book, I turned to the title page and the verso of the title page. I confirmed that this was the First Edition of the book titled "Wireless LANs: Implementing Interoperable

Networks" authored by Jim Geier that was copyrighted by Macmillan Technical Publishing in 1999. Also on the verso of the title page, I found the Library of Congress Control Number (LCCN) of 98-85489. The Library of Congress provides a service where publishers send advanced copies of books to the Library of Congress staff. The staff assign a Library of Congress Control Number. The first part of the number is the year the book was received. The number after the dash is an accession number based on the number of books received that year. Exhibit 1034/1134/1234 was received by the Library of Congress in 1998 and it was the 85,489th book given an LCCN number during that year.

45. When I examined Exhibit 1034/1134/1234, I found the International Standard Book Number (ISBN) number of 1-57870-081-7. ISBN identifiers are unique numeric identifiers that are placed in books in order to identify exact editions. If a new book is issued, it must include a different ISBN. This includes format as well as content changes. If content changes or if a different binding (*i.e.*, paperback) is created, a new ISBN must be secured. This system guarantees that different versions of a book have an ISBN that defines its relationship to all other editions of that title. In order to further authenticate Exhibit 1034/1134/1234, I went to the website https://www.worldcat.org/ which is the largest database of library holdings in the world. Librarians from around the world upload the holdings of their libraries to the database. I searched "wireless lans" and "jim geier" and retrieved this website:

https://www.worldcat.org/title/ wireless-lans-implementing-interoperablenetworks/oclc/992412806 which contains an entry that is an identical match to the information in Exhibit 1034/1134/1234. I found entries for books that are identical to Exhibit 1034/1134/1234 and held by numerous libraries. The entry describes a book by the exact same authors, published by the same publisher with the same number of pages. Most importantly, the books in the Worldcat database have the same ISBN number as Exhibit 1034/1134/1234. Every aspect of the book described at https://www.worldcat.org/title/wireless-lans-implementing-interoperablenetworks/ oclc/992412806 was an identical match to Exhibit 1034/1134/1234.

46. In order to further authenticate Exhibit 1034/1134/1234, I went to https://amazon.com. I searched "wireless lans jim geier" and retrieved an entry at: https://www.amazon.com/Wireless-Lans-Implementing-Interoperable-Networks/dp/ 1578700817/ref=sr_1_fkmr0_1?dchild=1&keywords=wireless+lans+jim+geier& qid=1586792624&sr=8-1-fkmr0 that contains information identical to Exhibit 1034/1134/1234. This entry also contains the date of January 15, 1999.

47. Exhibit 1034/1134/1234 is in a condition that creates no suspicion about its authenticity. Specifically, Exhibit 1034/1134/1234 is not missing any intermediate pages of the text, the text on each page appears to flow seamlessly from one page to the next, and there are no visible alterations to the exhibit.

48. Based on the foregoing (*i.e.*, finding multiple copies of Exhibit 1034/1134/1234 available for sale and finding entries for multiple copies in different library collections), I conclude that Exhibit 1034/1134/1234 is authentic.

B. Public Accessibility

In order to determine whether, and if so when, Exhibit 1034/1134/1234 49. was available to the public, I first examined the book itself. Having established that Exhibit 1034/1134/1234 is authentic based on my finding multiple identical copies of it at a likely website and in numerous libraries, I examined Exhibit 1034/1134/1234 for information about availability. The verso of the title page is the most common location for information about copyright in books. The verso of the title page in Exhibit 1034/1134/1234 states that the book was copyrighted in 1999 by Macmillan Technical Publishing. In order to confirm that Exhibit 1034/1134/1234 was available in 1999, I went to https://amazon.com. I searched "wireless lans jim geier" and retrieved an entry at: https://www.amazon.com/Wireless-Lans-Implementing-Interoperable-

Networks/dp/1578700817/ref=sr_1_fkmr0_1?dchild=1&keywords=wireless+lans+ jim+geier&qid=1586792624&sr=8-1-fkmr0 that contains information identical to Exhibit 1034/1134/1234. This entry also contains the date of January 15, 1999. It is standard practice for Amazon.com to include the date that edition was first

available from publishers. This is evidence that Exhibit 1034/1134/1234 was publicly available on January 15, 1999.

50. In order to further confirm the date Exhibit 1034/1134/1234 was publicly available, I considered the LCCN number 98-85489 on the verso of the title page of Exhibit 1034/1134/1234. Exhibit 1034/1134/1234 was received by the Library of Congress in 1998 and it was the 85,489th book given an LCCN number during that year. Based on this data, Exhibit 1034/1134/1234, was assigned an LCCN number in 1998 which is evidence that it was publicly available at least in 1999. I further retrieved the record of the book from the Library of Congress at: https://lccn.loc.gov/98085498. The LOC record includes a MARC record, which provides information about the processing of the book by the Library of Congress.

51. Fields 245, 650, 955, and 991 of the MARC record for Exhibit 1034/1134/1234 are copied below.

245	10 a Wireless LANs : b implementing interoperable networks / c Jim Geier.
650	a Local area networks (Computer networks)
650	a Wireless communication systems.
650	a Wireless LANs.
955	a pb11 02-18-99 to Cat.; jg00 02-22-99; jg05 03-17-99; jg07 03-18-99
955	a pn08/e-pcn 04-20-98; OCLC import, pb11 02-18-99

955	a ADDED COPIES: another copy to ASCD ps14 12-01-99
991	b c-GenColl h TK5105.7 i .G45 1999 t Copy 1 w BOOKS

The collections of the Library of Congress are searchable by keywords, 52. subject matter, author, or title such that a person, with or without a research assistant, could find works in which they were interested. For example, a member of the public could have located Geier by searching author: Jim Geier; title: Wireless Lan's Implanting Interoperable Networks; and/or the subject fields: "Local Area Networks (computer networks)" and "Wireless Communication systems" and/or "wireless lan's." Members of the public could read, study, and make notes about a selected work in the Reading Rooms. Further, members of the public were permitted to make photocopies of portions of the works while in the Reading Rooms. Accordingly, Geier was accessible to the general public when and searchable by subject matter when it was available at the Library of Congress. The 991 record identifies the call number including the publication date of 1999, and the number of copies "Copy 1" available. The 955 record indicates the processing and cataloging of Geier in sequential steps separated by semi-colons. Processing began on February 18, 1999, when the book was submitted for cataloging (CAT), and finished on March 18, 1999, when the book was finished being cataloged. Geier would have been accessible to the public on the shelf in the Library of Congress within a few days thereafter.

53. In view of the forgoing, it is my opinion that Exhibit 1034/1134/1234 was publicly available March 1999 to persons interested and ordinarily skilled in the relevant subject matter or art, exercising reasonable diligence.

C. Conclusions

54. I conclude that Exhibit 1034/1134/1234 is authentic and was publicly available no later than March 1999.

VII. OPINIONS REGARDING EXHIBITS 1046, 1107: Excerpts from FireWire® System Architecture: IEEE 1394a, Second Edition Don Anderson, Addison-Wesley, 1999.

A. Authentication

55. Exhibit 1046/1107 (each including the same reference "FireWire® System Architecture") contains excerpts from a monograph book titled "FireWire System Architecture: IEEE 1394a" authored by Don Anderson, copyright 1999 to Mindshare, Inc and published by the publisher Addison-Wesley. It is the second edition of the book. In order to authenticate Exhibit 1046/1107, I secured a print copy of the book. The book was in a condition that left no doubt about its authenticity. The pages were securely within the cover and no pages were missing. After examining the condition of the book, I turned to the title page. The title, author, and the publisher were listed on the title page. On the verso of the title page, I found the copyright date, 1999. On the verso of the title page, I also found the Library of

Congress Control Number (LCCN) of 98-43465. The Library of Congress provides a service where publishers send advanced copies of books to the Library of Congress staff. The staff assign a Library of Congress Control Number. The first part of the number is the year the book was received. The number after the dash is an accession number based on the number of books received that year. Exhibit 1046/1107 has an LCCN of 98-43465. Exhibit 1046/1107 was received by the Library of Congress in 1998 and it was the 43,465th book given an LCCN number during that year.

When I examined Exhibit 1046/1107, I found the International 56. Standard Book Number (ISBN) number of 0-201-48535-4. ISBN identifiers are unique numeric identifiers that are placed in books in order to identify exact editions. If a new book is issued, it must include a different ISBN. This includes format as well as content changes. If content changes or if a different binding (*i.e.*, paperback) is created, a new ISBN must be secured. This system guarantees that different versions of a book have an ISBN that defines its relationship to all other editions of that title. In order to further authenticate Exhibit 1046/1107, I went to the website https://www.worldcat.org/ which is the largest database of library holdings in the world. Librarians from around the world upload the holdings of their libraries to the Ι searched "0-201-48535-4" retrieved database. and this link http://www.worldcat.org/oclc/476494200 which is a record for a book identical to the book from which Exhibit 1046/1107 derives. The link provides data on copies

of the book in many libraries. The entry describes a book by the exact same author, published by the same publisher with the same number of pages. Most importantly, the books in the Worldcat database have the same ISBN number as Exhibit 1046/1107. Every aspect of the books described at http://www.worldcat.org/oclc/476494200 was an identical match to Exhibit 1046/1107.

57. In order to further authenticate Exhibit 1046/1107, I went to https://amazon.com. I searched "firewire system don Anderson." I retrieved an entry at: https://www.amazon.com/FireWire-System-Architecture-IEEE-1394A/dp/

0201485354/ref=sr_1_1?dchild=1&keywords=firewire+system+don+Anderson&q id=1586914258&sr=8-1 that contains information identical to Exhibit 1046/1107. The entry also contains the date of December 27, 1998.

58. Exhibit 1046/1107 is in a condition that creates no suspicion about its authenticity. Specifically, Exhibit 1046/1107 is not missing any intermediate pages of the text, the text on each page appears to flow seamlessly from one page to the next, and there are no visible alterations to the exhibit.

59. Based on the foregoing (*i.e.*, finding multiple copies of Exhibit 1046/1107 available for sale and finding entries for multiple copies in different library collections), I conclude that Exhibit 1046/1107 is authentic.

B. Public Accessibility

60. In order to determine whether, and if so when, FireWire® System Architecture (Ex. 1046/1107) was available to the public, I first examined the book itself. Having established that Exhibit 1046/1107 is authentic based on my finding multiple identical copies of it at a likely website and in numerous libraries, I examined Exhibit 1046/1107 for information about availability. The verso of the title page is the most common location for information about copyright in books. The verso of the title page in Exhibit 1046/1107 states that the book was copyrighted in 1999 by Mindshare, Inc. It also states that it is the second edition.

61. In order to further confirm the date Exhibit 1046/1107 was publicly available, I reviewed the verso of the title page and found that Exhibit 1046/1107 has a Library of Congress Control Number (LCCN) of 98-43465. The Library of Congress provides a service where publishers send advanced copies of books to the Library of Congress staff. The staff assign a Library of Congress Control Number. The first part of the number is the year the book was received. The number after the dash is an accession number based on the number of books received that year. Exhibit 1046/1107 was received by the Library of Congress in 1998 and it was the 43,465th book given an LCCN number during that year.

62. In order to further investigate the public availability of Exhibit 1046/1107, I went to the online library catalog of UCLA at:

https://catalog.library.ucla.edu/ vwebv/searchAdvanced. I searched the author field for "Don Anderson" and title field for "firewire." I retrieved the record at: https://catalog.library.ucla.edu/vwebv/ holdingsInfo?bibId=4132749.

63. Fields 245, 650, and 910 fields of the MARC record from UCLA for Anderson are copied below.

245	a FireWire system architecture: b IEEE 1394a / c MindShare, Inc.; Don
	Anderson.
650	a IEEE 1394 (Standard)
910	a 8 Jul 99 sms

64. The collections of the UCLA library are searchable by keywords, subject matter, author or title such that a person with or without a research assistant, could find works in which they were interested. For example, a member of the public could have located Exhibit 1046/1107 by searching author Don Anderson, title: "FireWire system architecture" and/or the subject field: "IEEE 1394 (Standard)." I viewed the MARC record at https://catalog.library.ucla.edu/vwebv/ holdingsInfo?bibId=4132749 and found that the 910 field contained the information: 8 Jul 99 sms. Using the "ask a librarian" chat feature on the webpage, I was given the email address for Miki Goral, a Reference librarian at UCLA. I emailed Miki Goral and received an email stating that the UCLA Cataloging Librarians use the

910 field of the MARC record to record the date an item is cataloged and the initials of the person who cataloged the book. The email from Mika Goral is attached as Exhibit G. The 910 MARC field states July 8, 1999 which is evidence that Exhibit 1046/1107 was cataloged by a UCLA librarian on July 8, 1999. Exhibit 1046/1107 would have been available to the public on the shelf in the UCLA library within a few days thereafter.

65. In view of the forgoing, it is my opinion that Exhibit 1046/1107 was publicly available in 1999 to persons interested and ordinarily skilled in the relevant subject matter or art, exercising reasonable diligence in July 1999.

C. Conclusions

66. I conclude that Exhibit 1046/1107 is authentic and was publicly available as of July 1999.

VIII. OPINIONS REGARDING Exhibit 1017, 1117, 1217: Excerpts from Digital Video: An Introduction to MPEG-2, B. Haskell et al., Chapman & Hall, 1997

A. Authentication

67. Exhibits 1017, 1117, and 1217 (each including the same reference "Haskell") contains excerpts from a monograph (book) titled "Digital Video: An Introduction to MPEG-2" by Barry G. Haskell, Atul Puri, and Arun Netravali published by Chapman & Hall in 1997. In order to authenticate Exhibit 1017/1117/1217, I secured a print copy of the book. The book was in a condition

that left no doubt about its authenticity. The pages were securely within the cover and no pages were missing. After examining the condition of the book, I turned to the title page. I confirmed that Exhibit 1017/1117/1217 is titled "Digital Video: An Introduction to MPEG-2" by Barry G. Haskell, Atul Puri, and Arun Netravali published by Chapman & Hall. On the verso of the title page, I found the phrase "Copyright 1997." I also found the International Standard Book Number (ISBN) number of 0-412-08411-2. ISBN identifiers are unique numeric identifiers that are placed in books in order to identify exact editions. If a new book is issued, it must include a different ISBN. This includes format as well as content changes. If content changes or if a different binding (*i.e.*, paperback) is created, a new ISBN must be secured. This system guarantees that different versions of a book have an ISBN that defines its relationship to all other editions of that title. On the verso of the title page, I also found the Library of Congress Control Number (LCCN) of 96-14018. The Library of Congress provides a service where publishers send advanced copies of books to the Library of Congress staff. The staff assign a Library of Congress Control Number. The first part of the number is the year the book was received. The number after the dash is an accession number based on the number of books received that year. Exhibit 1017/1117/1217 was received by the Library of Congress in 1996 and it was the 14,018th book given an LCCN number during that year. In order to further authenticate Exhibit 1017/1117/1217, I went to

https://catalog.loc.gov/ which is the online catalog of the Library of Congress. I searched the catalog using "0412084112 and was taken to this record: https://lccn.loc.gov/96014018 which contains information that matches exactly that of Exhibit 1017/1117/1217. This is further evidence of the authenticity of Exhibit 1017/1117/1217. In order to further authenticate Exhibit 1017/1117/1217, I went to http://amazon.com and searched "0412084112" and retrieved this record: https://www.amazon.com/Digital-Video-Multimedia-Standards/dp/0412084112/ ref=olp product details?ie=UTF8&me=&qid=1586821666&sr=8-1 which contains details identical to Exhibit 1017/1117/1217 and states that it was available on December 31, 1996. In order to further authenticate Exhibit 1017/1117/1217, I went to the website https://www.worldcat.org/ which is the largest database of library holdings in the world. Librarians from around the world upload the holdings of their libraries to the database. I searched "0412084112" and retrieved this record: http://www.worldcat.org/oclc/422857887 which contains information that is identical to Exhibit 1017/1117/1217. This is further evidence that Exhibit 1017/1117/1217 is authentic.

68. Based on the foregoing (*i.e.*, finding information about multiple copies of books identical to Exhibit 1017/1117/1217 available for sale and finding entries for multiple copies in different library collections), I conclude that Exhibit 1017/1117/1217 is authentic.

B. Public Accessibility

69. In order to determine whether, and if so when, Exhibit 1017/1117/1217 was available to the public, I first examined the book itself. Having established that Exhibit 1017/1117/1217 is authentic based on my finding multiple identical copies of it at likely websites, I examined Exhibit 1017/1117/1217 for information about availability. The verso of the title page is the most common location for information about copyright in books. The verso of the title page in Exhibit 1017/1117/1217 states that the book was copyrighted in 1997. On the verso of the title page, I also found the Library of Congress Control Number (LCCN) of 96-14018. Exhibit 1017/1117/1217 was received by the Library of Congress in 1996 and it was the 14,018th book given an LCCN number during that year.

70. In order to further investigate the public accessibility of Exhibit 1017/1117/1217, I went to https://amazon.com. I searched " digital video: an introduction to mpeg-2 haskell" and retrieved this website: https://www.amazon.com/Digital-Video-Introduction-Multimedia-

Standards/dp/0412084112/ref=sr_1_1?dchild=1&

keywords=digital+video%3A+an+introduction+to+mpeg-2+haskell&qid=

1586823776&sr=8-1 which lists the date the resource was available as December 31, 1996. This is further evidence that Exhibit 1017/1117/1217 was available in 1997.
71. I further retrieved the record of the book from the Library of Congress at: https://catalog.loc.gov/vwebv/search?searchCode=LCCN&searchArg=

96014018&searchType=1&permalink=y. The LOC record includes a MARC record, which provides information about the processing of the book by the Library of Congress.

72. Fields 245, 650, 955, and 991 fields of the MARC record for Haskell exhibit are copied below.

245	a Digital video : b an introduction to MPEG-2 / c Barry G. Haskell, Atul Puri, and Arun N. Netravali.
650	a Digital video.
650	a Video compression x Standards.
650	a Coding theory.
650	a MPEG (Video coding standard)
955	a pc14 to ja00 03-15-96; jf05 to subj. 03/18/96; jf08 03-19-96 to SL;jf12 03-19-96; CIP ver. yb08 02-07-97
991	b c-GenColl h TK6680.5 i .H37 1997 p 00050527529 t Copy 1 w BOOKS

73. The collections of the Library of Congress are searchable by keyword, subject matter, author, or title such that a person, with or without a research assistant, could find works in which they were interested. For example, a member of the public could have located Haskell by searching author: Barry G. Haskell, Atul Puri or Arun N. Netravali; title: Digital Video: An Introduction to MPEG-2 and/or the subject fields: "Video Compression," "video compression standards," "coding theory," "MPEG" and "MPEG video coding standard." Members of the public could read, study, and make notes about a selected work in the Reading Rooms. Further, members of the public were permitted to make photocopies of portions of the works while in the Reading Rooms. Accordingly, Haskell was accessible to the general public when and searchable by subject matter when it was available at the Library The 991 field record identifies the call number including the of Congress. publication date of 1997, and the number of copies "Copy 1" available. The 955 record indicates the processing and cataloging of Haskell in sequential steps separated by semi-colons. Processing began on March 15, 1996 when a prepublication copy of the book was submitted for cataloging and finished on March 19, 1996 when the book was submitted for Dewy Decimal Classification (DDC) number assignment. On February 7, 1997, a final copy of the book was submitted for final review of the CIP (cataloging in publication data) and the book would have been available to the public a few days later.

74. In view of the forgoing, it is my opinion that Exhibit 1017/1117/1217 was publicly available to persons interested and ordinarily skilled in the relevant subject matter or art, exercising reasonable diligence in February 1997.

C. Conclusions

75. I conclude that Exhibit 1017/1117/1217 is authentic and was publicly available no later than February 1997.

IX. OPINIONS REGARDING EXHIBIT 1026, 1126, 1226: Excerpts from Telecommunications Engineer's Reference Book, Fraidoon Mazda, Editor, Butterworth-Heinemann Ltd, 1993.

A. Authentication

76. Exhibits 1026, 1126, and 1226 (each including the same reference "Mazda") contains excerpts from a monograph (book) titled "Telecommunications Engineer's Reference Book" edited by Fraidoon Mazda, copyrighted in 1993 by Butterworth-Heinemann publishers. In order to authenticate Exhibit 1026/1126/1226, I secured a print copy of the book. The book was in a condition that left no doubt about its authenticity. The pages were securely within the cover and no pages were missing. After examining the condition of the book, I turned to the title page. I confirmed that Mazda is titled "Telecommunications Engineer's Reference Book" edited by Fraidoon Mazda, copyrighted in 1993 by Butterworth-Heinemann publishers. On the verso of the title page, I found the phrase "Copyright 1993." I also found the International Standard Book Number (ISBN) number of 0-7506-1037-9. ISBN identifiers are unique numeric identifiers that are placed in books in order to identify exact editions. If a new book is issued, it must include a different ISBN. This includes format as well as content changes. If content changes or if a different binding (*i.e.*, paperback) is created, a new ISBN must be secured. This system guarantees that different versions of a book have an ISBN that defines its relationship to all other editions of that title.

On the verso of the title page, I also found the Library of Congress 77. Control Number (LCCN) of 92-27846. The Library of Congress provides a service where publishers send advanced copies of books to the Library of Congress staff. The staff assign a Library of Congress Control Number. The first part of the number is the year the book was received. The number after the dash is an accession number based on the number of books received that year. Mazda was received by the Library of Congress in 1992 and it was the 27,846th book given an LCCN number during that year. In order to further authenticate Exhibit 1026/1126/1226, I went to https://catalog.loc.gov/ which is the online catalog of the Library of Congress. I catalog using "0750610379" and retrieved this record: searched the https://lccn.loc.gov/92027846 which contains information identical to the book that contains Exhibit 1026/1126/1226. This is further evidence of the authenticity of Exhibit 1026/1126/1226.

78. I also went to http://amazon.com and searched "telecommunications engineer's reference book mazda" and retrieved this record: https://www.amazon.com/Telecommunications-Engineers-Reference-Fraidoon-Mazda/dp/0750611626/ref=sr_1_7?dchild=1&keywords=telecommunications+eng

ineer%27s+reference+book&qid=1586814244&s=books&sr=1-7, which contains details identical to Exhibit 1026/1126/1226 and is further evidence of the authenticity of Exhibit 1026/1126/1226.

79. Exhibit 1026/1126/1226 is in a condition that creates no suspicion about its authenticity. Specifically, Exhibit 1026/1126/1226 is not missing any intermediate pages of the text, the text on each page appears to flow seamlessly from one page to the next, and there are no visible alterations to the exhibit.

80. Based on the foregoing (*i.e.*, finding information about multiple copies of books identical to Exhibit 1026/1126/1226 available for sale and finding entries for multiple copies in different library collections), I conclude that Exhibit 1026/1126/1226 is authentic.

B. Public Accessibility

81. In order to determine whether, and if so when, Exhibit 1026/1126/1226 was available to the public, I first examined the book itself. Having established that Exhibit 1026/1126/1226 is authentic based on my finding multiple identical copies of it at likely websites, I examined Exhibit 1026/1126/1226 for information about availability. The verso of the title page is the most common location for information about copyright in books. The verso of the title page in Exhibit 1026/1126/1226 states that the book was copyrighted in 1993 by the publisher Butterworth-Heinemann.

82. On the verso of the title page, I also found the Library of Congress Control Number (LCCN) of 92-27846. Based on the LCCN, Exhibit 1026/1126/1226 was received by the Library of Congress in 1992 and it was the 27,846th book given an LCCN number during that year.

In order to further investigate the public availability of Exhibit 83. 1026/1126/1226, I went to http://amazon.com and searched "telecommunications book mazda" retrieved engineer's reference and this record: https://www.amazon.com/Telecommunications-Engineers-Reference-Fraidoon-Mazda/dp/0750611626/ref=sr 1 7?dchild=1&keywords=telecommunications+eng ineer%27s+reference+book&qid=1586814244&s=books&sr=1-7, which described a book identical to Exhibit 1026/1126/1226 and contained the date: March 1993. It is standard practice for Amazon.com to include the date that edition was first available from publishers.

84. I further retrieved the record of the book from the Library of Congress at: https://catalog.loc.gov/vwebv/search?searchCode=LCCN&searchArg=92027846&se archType=1&permalink=y. The LOC record includes a MARC record, which provides information about the processing of the book by the Library of Congress.

85. Fields 245, 650, 955, and 991 fields of the MARC record for Mazda are copied below.

245	 a Telecommunications engineer's reference book / c edited by Fraidoon
	Mazda.
650	a Telecommunication.
955	a pc03 to ja00 07-27-92; jf06 07-27-92; jf08 07-28-92; jf12 07-28-92; aa07 07-28-92; CIP ver. pv08 07-13-93
	aa07 07-28-92; CIP ver. pv08 07-13-93
991	b c-GenColl h TK5101 i .M37 1993 t Copy 1 w BOOKS

The collections of the Library of Congress are searchable by subject 86. matter, keyword, author, or title such that a person, with or without a research assistant, could find works in which they were interested. For example, a member of the public could have located Mazda by searching author: Fraidoon Mazda; title: "Telecommunications Engineer's Reference Book"; and/or the subject field: "Telecommunication." Members of the public could read, study, and make notes about a selected work in the Reading Rooms. Further, members of the public were permitted to make photocopies of portions of the works while in the Reading Rooms. Accordingly, Mazda was accessible to the general public when and searchable by subject matter when it was available at the Library of Congress. The 991 record field identifies the call number including the publication date of 1993, and the number of copies "Copy 1" available. The 955 record indicates the processing and cataloging of Mazda in sequential steps separated by semi-colons. Processing began on July 27, 1992, when the book was submitted for pre-publication assignment of a Library of Congress Control Number assignment and pre-publication cataloging and

finished on July 13, 1993 when the book was submitted cataloging in publication (CIP) version review. Exhibit 1026/1126/1226 would have been accessible to the public on the shelf in the Library of Congress within days thereafter.

87. In view of the forgoing, it is my opinion that Exhibit 1026/1126/1226 was publicly available in July of 1993 to persons interested and ordinarily skilled in the relevant subject matter or art, exercising reasonable diligence.

C. Conclusions

88. I conclude that Exhibit 1026/1126/1226 is authentic and was publicly available no later than in March 1993.

X. OPINIONS REGARDING Exhibit 1028, 1128, 1228: Excerpts from Switched, Fast, and Gigabit Ethernet, Third Edition, Robert Breyer and Sean Riley, Macmillan Technical Publishing, 1999

A. Authentication

89. Exhibits 1028, 1128, and 1228 (each including the same reference "Breyer") contains excerpts from a monograph (book) titled "Switched, Fast, and Gigabit Ethernet," Third Edition authored by Robert Breyer and Sean Riley, copyright 1999 by the publisher Macmillan Technical Publishing. In order to authenticate Exhibit 1028/1128/1228, I secured a print copy of the book. The book was in a condition that left no doubt about its authenticity. The pages were securely within the cover and no pages were missing. After examining the condition of the book, I turned to the title page. I confirmed that Breyer was the third edition of the

book "Switched, Fast, and Gigabit Ethernet" by Robert Breyer and Sean Riley, and published by Macmillan Technical Publishing. On the verso of the title page, I found the phrase "Copyright 1999." I also found the International Standard Book Number (ISBN) number of 1-57870-073-6. ISBN identifiers are unique numeric identifiers that are placed in books in order to identify exact editions. If a new book is issued, it must include a different ISBN. This includes format as well as content changes. If content changes or if a different binding (i.e., paperback) is created, a new ISBN must be secured. This system guarantees that different versions of a book have an ISBN that defines its relationship to all other editions of that title. In order to further Exhibit authenticate 1028/1128/1228, I the website to went https://www.worldcat.org/ which is the largest database of library holdings in the world. Librarians from around the world upload the holdings of their libraries to the database. searched "1-57870-073-6" and retrieved this Ι website: http://www.worldcat.org/oclc/491404725. The information in this entry is an exact match to the information in Exhibit 1028/1128/1228 and that numerous libraries own this book. The entry describes a book by the exact same author, published by the same publisher with the same number of pages. Most importantly, the books in the Worldcat database have the same ISBN number as Exhibit 1028/1128/1228. Every aspect of the books described at http://www.worldcat.org/ oclc/491404725 was an identical match to Exhibit 1028/1128/1228. In order to further authenticate Exhibit 1028/1128/1228, I went to https://amazon.com. I searched "switched, fast, and gigabit ethernet robert breyer." I retrieved an entry at: https://www.amazon .com/Switched-Fast-Gigabit-Ethernet-3rd/dp/1578700736/ref=sr_1_1?dchild=1& keywords=switched%2C+fast%2C+and+gigabit+ethernet+robert+breyer&qid=158 6805359&sr=8-1 that contains information identical to Exhibit 1028/1128/1228.

90. Exhibit 1028/1128/1228 is in a condition that creates no suspicion about its authenticity. Specifically, Exhibit 1028/1128/1228 is not missing any intermediate pages of the text, the text on each page appears to flow seamlessly from one page to the next, and there are no visible alterations to the exhibit.

91. Based on the foregoing (*i.e.*, finding information about multiple copies of books identical to Exhibit 1028/1128/1228 available for sale and finding entries for multiple copies in different library collections), I conclude that Exhibit 1028/1128/1228 is authentic.

B. Public Accessibility

92. In order to determine whether, and if so when, Breyer was available to the public, I first examined the book itself. Having established that Exhibit 1028/1128/1228 is authentic based on my finding multiple identical copies of it at a likely website and in numerous libraries, I examined Exhibit 1028/1128/1228 for information about availability. The verso of the title page is the most common location for information about copyright in books. The verso of the title page in

Exhibit 1028/1128/1228 states that the book was copyrighted in 1999 by Macmillan Technical Publishing.

93. On the verso of the title page, I also found the Library of Congress Control Number (LCCN) of 98-85496. The Library of Congress provides a service where publishers send advanced copies of books to the Library of Congress staff. The staff assign a Library of Congress Control Number. Based on the LCCN, Exhibit 1028/1128/1228 was received by the Library of Congress in 1998 and it was the 85,496th book given an LCCN number during that year.

94. In order to further investigate the public accessibility of Exhibit 1028/1128/1228, I went to https://amazon.com. I searched "switched, fast, and gigabit ethernet Robert Breyer." The entry I retrieved at: https://www.amazon.com/Switched-Fast-Gigabit-Ethernet-

3rd/dp/1578700736/ref=sr_1_1?dchild=1&keywords=switched%

2C+fast%2C+and+gigabit+ethernet+by+robert+breyer&qid=1586806492&sr=8-1 is an exact match for the information in Exhibit 1028/1128/1228. It is standard practice for Amazon.com to include the date that edition was first available from publishers. This is evidence that Exhibit 1028/1128/1228 was publicly available on December 30, 1998.

95. I further retrieved the record of the book from the Library of Congress at: https://lccn.loc.gov/98085496. The LOC record includes a MARC record, which provides information about the processing of the book by the Library of Congress.

96. Fields 245, 650, 955, and 991 fields of the MARC record for Breyer are copied below.

245	a Switched, fast, and gigabit Ethernet / c Robert Breyer and Sean Riley.
650	Ethernet (Local area network system)
955	a pb05 to cat. 05-05-99; jf00 05-11-99; jf03 to Subj. 05-13-99; jf08 05-27- 99 to SL;jf12 05-28-99 to ddc
991	b c-GenColl h TK5105.8.E83 i B75 1999 t Copy 1 w BOOKS

97. The collections of the Library of Congress are searchable by keyword, subject matter, author, or title such that a person, with or without a research assistant, could find works in which they were interested. For example, a member of the public could have located Breyer by searching authors Robert Breyer and/or Sean Riley; title: Switched, Fast, and Gigabit Ethernet; and/or the subject field: "Ethernet (local area network system)"in fields 245 and 650, respectively. Members of the public could read, study, and make notes about a selected work in the Reading Rooms. Further, members of the public were permitted to make photocopies of portions of the works while in the Reading Rooms. Accordingly, Breyer was accessible to the general public and searchable by subject matter when it was available at the Library

of Congress. The 991 record identifies the call number including the publication date of 1999, and the number of copies "Copy 1" available. The 955 record indicates the processing and cataloging of Breyer in sequential steps separated by semi-colons. Processing began on May 5, 1999, when the book was submitted for cataloging (CAT), and finished on May 28, 1999, when the book was submitted for Dewy Decimal Classification (DDC) number assignment. Breyer would have been accessible to the public on the shelf in the Library of Congress within days thereafter.

98. In view of the forgoing, it is my opinion that Exhibit 1028/1128/1228 was publicly available at least as of June 1998 to persons interested and ordinarily skilled in the relevant subject matter or art, exercising reasonable diligence in 1998.

C. Conclusions

99. I conclude that Exhibit 1028/1128/1228 is authentic and was publicly available no later than in June 1998.

XI. OPINIONS REGARDING Exhibit 1030, 1130, 1230: Excerpts from Newton's Telecom Dictionary: The Official Dictionary of Telecommunications Networking & the Internet, Sixteenth Edition, Telecom Books, 2000.

A. Authentication

100. Exhibits 1030, 1130, and 1230 (each including the same reference "Newton's Telecom Dictionary") contains excerpts taken from a book titled "Newton's Telecom Dictionary: The Official Dictionary of Telecommunications

Networking & the Internet" by Harry Newton, Sixteenth Edition published in 2000 by Telecom Books. In order to authenticate Exhibit 1030/1130/1230, I secured a print copy of the book. The book was in a condition that left no doubt about its authenticity. The pages were securely within the cover and no pages were missing.

101. After examining the condition of the book, I turned to the title page and the verso of the title page. I confirmed that this was the Sixteenth Expanded and Updated Edition of the book titled "Newton's Telecom Dictionary: The Official Dictionary of Telecommunications Networking & the Internet" authored by Harry Newton that was copyrighted in 2000. I found the date, 2000, on the verso of the title page. When I examined Exhibit 1030/1130/1230, I found the International Standard Book Number (ISBN) number of 1-57820-053-9. ISBN identifiers are unique numeric identifiers that are placed in books in order to identify exact editions. If a new book is issued, it must include a different ISBN. This includes format as well as content changes. If content changes or if a different binding (*i.e.*, paperback) is created, a new ISBN must be secured. This system guarantees that different versions of a book have an ISBN that defines its relationship to all other editions of that title. In order to further authenticate Exhibit 1030/1130/1230, I went to the website https://www.worldcat.org/ which is the largest database of library holdings in the world. Librarians from around the world upload the holdings of their libraries to the database. I searched "newton's telecom dictionary harry newton" and retrieved this website: http://www.worldcat.org/oclc/1035887258 which contains an entry that is an identical match to the information in Exhibit 1030/1130/1230 and held by numerous libraries. The entry describes a book by the exact same author, published by the same publisher with the same number of pages. Most importantly, the books in the Worldcat database have the same ISBN number as Exhibit 1030/1130/1230. Every aspect of the books described at http://www.worldcat.org/oclc/1035887258 was an identical match to Exhibit 1030/1130/1230.

102. In order to further authenticate Exhibit 1030/1130/1230, I went to https://amazon.com. I searched "newton's telecom dictionary 16th" and retrieved an entry at: https://www.amazon.com/Dictionary-Official-Telecommunications-Networking-Internet/dp/B0039O1K6W/ref=sr_1_1?dchild=1&keywords=newton %27s+telecom+dictionary+16th+edition&qid=1586797870&sr=8-1 that contains information identical to Exhibit 1030/1130/1230.

103. Exhibit 1030/1130/1230 is in a condition that creates no suspicion about its authenticity. Specifically, Exhibit 1030/1130/1230 is not missing any intermediate pages of the text, the text on each page appears to flow seamlessly from one page to the next, and there are no visible alterations to the exhibit.

104. Based on the foregoing (*i.e.*, finding multiple copies of books that contain Exhibit 1030/1130/1230 available for sale and finding entries for multiple

copies in different library collections), I conclude that Exhibit 1030/1130/1230 is authentic.

B. Public Accessibility

105. In order to determine whether, and if so when, Newton's Telecom Dictionary was available to the public, I first examined the book itself. Having established that Exhibit 1030/1130/1230 is authentic based on my finding multiple identical copies of it at a likely website and in numerous libraries, I examined Exhibit 1030/1130/1230 for information about availability. The verso of the title page is the most common location for information about copyright in books. The verso of the title page in Exhibit 1030/1130/1230 states that the book was copyrighted in 2000 by Telecom Books. In order to further investigate the public accessibility of Exhibit 1030/1130/1230, I went to https://amazon.com. I searched "newton's telecom dictionary 16th" and retrieved an entry at: https://www.amazon.com/Dictionary-Official-Telecommunications-Networking-

Internet/dp/B0039O1K6W/ref=sr_1_1?dchild=1&keywords=newton

%27s+telecom+dictionary+16th+edition&qid=1586797870&sr=8-1 that contains information identical to Exhibit 1030/1130/1230. This entry also contains the date of January 1, 2000. It is standard practice for Amazon.com to include the date that edition was first available from publishers.

106. In view of the forgoing, it is my opinion that Exhibit 1030/1130/1230 was publicly available in January 2000 to persons interested and ordinarily skilled in the relevant subject matter or art, exercising reasonable diligence in January 2000.

C. Conclusions

107. I conclude that Exhibit 1030/1130/1230 is authentic and was publicly available no later than on January 1, 2000.

XII. OPINIONS REGARDING Exhibit 1033, 1133: Excerpts from Internetworking With TCP/IP Vol I: Principles, Protocols, and Architecture, Third Edition, Prentice-Hall, Inc., 1995

A. Authentication

108. Exhibits 1033 and 1133 (each including the same reference) contains excerpts from a monograph book titled "Internetworking with TCP/IP Volume 1 Principles, Protocols and Architecture," Third Edition authored by Douglas E. Comer, copyright 1995 by the publisher Prentice-Hall, Inc. In order to authenticate Exhibit 1033/1133, I secured a print copy of the book. The book was in a condition that left no doubt about its authenticity. The pages were securely within the cover and no pages were missing.

109. After examining the condition of the book, I turned to the title page and the verso of the title page. I confirmed that this was the Third Edition of the book titled "Internetworking with TCP/IP Volume 1 Principles, Protocols and Architecture" authored by Douglas E. Comer that was copyrighted by Prentice-Hall,

Inc. in 1995. The title, author, and the publisher were listed on the title page. I found the date, 1995, on the verso of the title page. On the verso of the title page, I also found the Library of Congress Control Number (LCCN) of 95-1830. Based on the LCCN, Exhibit 1033/1133 was received by the Library of Congress in 1995 and it was the 1,830th book given an LCCN number during that year.

110. When I examined Exhibit 1033/1133, I found the International Standard Book Number (ISBN) number of 0-13-216987-8. ISBN identifiers are unique numeric identifiers that are placed in books in order to identify exact editions. If a new book is issued, it must include a different ISBN. This includes format as well as content changes. If content changes or if a different binding (*i.e.*, paperback) is created, a new ISBN must be secured. This system guarantees that different versions of a book have an ISBN that defines its relationship to all other editions of that title. In order to further authenticate Exhibit 1033/1133, I went to the website https://www.worldcat.org/ which is the largest database of library holdings in the world. Librarians from around the world upload the holdings of their libraries to the database. I searched "internetworking with tcp/ip douglas comer" and retrieved this website: http://www.worldcat.org/oclc/174171598 which contains an entry that is an identical match to the information in Exhibit 1033/1133. I found entries for a book that is identical to Exhibit 1033/1133 and held by numerous libraries. The entry describes a book by the exact same author, published by the same publisher

with the same number of pages. Most importantly, the books in the Worldcat database have the same ISBN number as Exhibit 1033/1133. Every aspect of the books described at http://www.worldcat.org/oclc/174171598 was an identical match to Exhibit 1033/1133.

111. In also went to https://amazon.com and searched "wireless douglas e. comer" and retrieved an entry at: https://www.amazon.com/Internetworking-TCP-Principles-Architecture-1995-03-

24/dp/B01N1EZ43E/ref=sr_1_9?dchild=1&keywords=douglas+e.+comer&qid=15 86795655&sr=8-9 that contains information identical to Exhibit 1033/1133.

112. Exhibit 1033/1133 is in a condition that creates no suspicion about its authenticity. Specifically, Exhibit 1033/1133 is not missing any intermediate pages of the text, the text on each page appears to flow seamlessly from one page to the next, and there are no visible alterations to the exhibit.

113. Based on the foregoing (*i.e.*, finding multiple copies of Exhibit 1033/1133 available for sale and finding entries for multiple copies in different library collections), I conclude that Exhibit 1033/1133 is authentic.

B. Public Accessibility

114. In order to determine whether, and if so when, Exhibit 1033/1133 was available to the public, I first examined the book itself. Having established that Exhibit 1033/1133 is authentic based on my finding multiple identical copies of it at

a likely website and in numerous libraries, I examined Exhibit 1033/1133 for information about availability. The verso of the title page is the most common location for information about copyright in books. The verso of the title page in Exhibit 1033/1133 states that the book was copyrighted in 1995 by Prentice-Hall, Inc. It also states that it is the third edition available from publishers. In order to further confirm the date Exhibit 1033/1133 was publicly available, I reviewed the verso of the title page and found that Exhibit 1033/1133 has an LCCN of 95-1830. Based on the LCCN, Exhibit 1033/1133 was received by the Library of Congress in 1995 and it was the 1,830th book given an LCCN number during that year, which is an indication that it was publicly available in 1995.

115. I further retrieved the record of the book from the Library of Congress at: https://lccn.loc.gov/95001830. The LOC record includes a MARC record, which provides information about the processing of the book by the Library of Congress.

116. Fields 245, 650, 955, and 991 fields of the MARC record for Exhibit 1033/1133 are copied below.

245	a Internetworking with TCP/IP / c Douglas E. Comer.
650	a TCP/IP (Computer network protocol)
650	a Client/server computing.
650	a Internetworking (Telecommunication)

955	a pc01 to JA00 02-10-95; jg02; jg12 02-15-95; jg07 02-16-95; CIP ver. ym07 6-9-95
991	b c-GenColl h TK5105.585 i .C66 1995 p 00014016466 t Copy 1 v 1 w BOOKS

The collections of the Library of Congress are searchable by keyword, 117. subject matter, author, or title such that a person, with or without a research assistant, could find works in which they were interested. For example, a member of the public could have located Exhibit 1033/1133 by searching author: Douglas E. Comer; title: "Internetworking with TCP/IP"; and/or the subject field: "TCP/IP (Computer protocol)," "client/server computing," network and/or "Internetworking (Telecommunication)." Members of the public could read, study, and make notes about a selected work in the Reading Rooms. Further, members of the public were permitted to make photocopies of portions of the works while in the Reading Rooms. Accordingly, Comer was accessible to the general public when and searchable by subject matter when it was available at the Library of Congress. The 991 record identifies the call number including the publication date of 1995, and the number of copies "Copy 1" available. The 955 record indicates the processing and cataloging of Comer in sequential steps separated by semi-colons. Processing began on February 10, 1995 with a pre-publication copy, and finished on June 9, 1995, when the book was submitted for Cataloging in Publication (CIP) verification. Comer

would have been accessible to the public on the shelf in the Library of Congress within a few days thereafter.

118. In view of the forgoing, it is my opinion that Exhibit 1033/1133 was publicly available in June 1995 to persons interested and ordinarily skilled in the relevant subject matter or art, exercising reasonable diligence in 1995.

C. Conclusions

119. I conclude that Exhibit 1033/1133 is authentic and was publicly available no later than June 1995.

XIII. OPINIONS REGARDING EXHIBIT 1047, 1247: Excerpts from the book: PCI System Architecture, Fourth Edition by Tom Shanley and Don Anderson, published by Addison-Wesley, 1999.

A. Authentication

120. Exhibits 1047 and 1247 (both including the same reference "Shanley") contains excerpts from a monograph book titled "PCI System Architecture," fourth edition by Tom Shanley and Don Anderson that was published by Addison-Wesley in 1999. In order to authenticate Exhibit 1047/1247, I secured a print copy of the book. The book was in a condition that left no doubt about its authenticity. The pages were securely within the cover and no pages were missing.

121. After examining the condition of the book, I turned to the title page. I confirmed that Shanley is titled "PCI System Architecture" by Tom Shanley and Don Anderson, fourth edition published by Addison-Wesley. On the verso of the

title page, I found the phrase "Copyright ©1999 by MindShare, Inc." I also found the International Standard Book Number (ISBN) number of 0-201-30974-2. ISBN identifiers are unique numeric identifiers that are placed in books in order to identify exact editions. If a new book is issued, it must include a different ISBN. This includes format as well as content changes. If content changes or if a different binding (*i.e.*, paperback) is created, a new ISBN must be secured. This system guarantees that different versions of a book have an ISBN that defines its relationship to all other editions of that title. In order to further authenticate Exhibit 1047/1247, I went to https://catalog.loc.gov/ which is the online catalog of the Library of Congress. I searched the catalog using "0201309742" and retrieved a record at this website: https://lccn.loc.gov/99032447 that contains information identical to Exhibit 1047/1247. This is an indication that Exhibit 1047/1247 is authentic.

122. In order to further authenticate Exhibit 1047/1247, I went to http://amazon.com and searched "0201309742." I retrieved the following record: https://www.amazon.com/s?k=0201309742&ref=nb_sb_noss which contains details about a book identical to Exhibit 1047/1247 and states that it was available on June 20, 1999. This is a further indication that Exhibit 1047/1247 is authentic.

123. In order to further authenticate Exhibit 1047/1247, I went to the website https://www.worldcat.org/ which is the largest database of library holdings in the world. Librarians from around the world upload the holdings of their libraries to the

database. I searched "0201309742" and retrieved the following record: http://www.worldcat.org/oclc/614359831 which contains information that is identical to Exhibit 1047/1247 and available in multiple libraries. This is an additional indication that Exhibit 1047/1247 is authentic.

124. Based on the foregoing (*i.e.*, finding information about multiple copies of books identical to Exhibit 1047/1247 available for sale and finding entries for multiple copies in different library collections), I conclude that Exhibit 1047/1247 is authentic.

B. Public Accessibility

125. In order to determine whether, and if so when, Shanley was available to the public, I first examined the book itself. Having established that Exhibit 1047/1247 is authentic based on my finding multiple identical copies of it at websites that list holdings of books in libraries and books available for sale, I examined Exhibit 1047/1247 for information about availability. The verso of the title page is the most common location for information about copyright in books. The verso of the title page in Exhibit 1047/1247 states that the book was copyrighted in 1999. In order to further investigate the public accessibility of Exhibit 1047/1247, I went to https://catalog.loc.gov/, which is the online catalog of the Library of Congress. I searched the catalog using "0201309742" and retrieved a record at this website: https://lccn.loc.gov/99032447 that contains information identical to Exhibit

1047/1247. The record retrieved at: https://lccn.loc.gov/99032447 that is an identical match to Exhibit 1047/1247 contained the Library of Congress Control Number of 99-032447. Based on this data, Exhibit 1047/1247, was assigned an LCCN number in 1999 and was the 32,447th book assigned an LCCN during 1999. This is evidence that Exhibit 1047/1247 was publicly available in 1999.

126. I further retrieved the record of the book from the Library of Congress at: https://lccn.loc.gov/99032447. The LC record includes a MARC record, which provides information about the processing of the book by the Library of Congress.

127. Fields 245, 650, and 955 fields of the MARC record for Exhibit 1047/1247 are copied below.

245	 a PCI system architecture / c Mindshare, Inc. ; Don Anderson, Tom Shanley.
650	a Computer architecture.
650	a Microcomputers x Buses.
955	a pc17 to ja00 05-17-99;jf05 to subj. 05/17/99; jf11 to sl 05-18- 99;jf12 05-18-99 to ddc; bk rec'd, to CIP ver. pb05 10-05-99; CIP ver. jf03 01-13-00; jf12 to BCCD 02-04-00; copy 2 added jf16 to BCCD 03-26-01

128. The collections of the Library of Congress are searchable by keyword, subject matter, author, or title such that a person could find works in which they were interested. For example, a member of the public could have located Exhibit 1047/1247 by searching authors Tom Shanley and/or Don Anderson, title: "PCI System Architecture" and/or the subjects: "computer architecture" and "Microcomputers." Members of the public could read, study, and make notes about a selected work in the Reading Rooms. Further, members of the public were permitted to make photocopies of portions of the works while in the Library. Accordingly, Exhibit 1047/1247 was accessible to the general public and searchable by subject matter when it was available at the Library of Congress. The 955 record indicates the processing and cataloging of Exhibit 1047/1247 in sequential steps separated by semi-colons. Processing began on May 17, 1999, when the book was submitted for cataloging (CAT), and finished on February 4, 2000. A second copy of the book was processed March 26, 2001. Exhibit 1047/1247 would have been accessible to the public on the shelf in the Library of Congress within a few days thereafter.

129. In order to further determine whether, and if so when, Shanley was available to the public Exhibit 1047/1247, I went to http://amazon.com/ and searched "0201309742." I retrieved the following record: https://www.amazon.com/s?k=0201309742&ref=nb_sb_noss which contains details about a book identical to Exhibit 1047/1247 and states that it was available on June 20, 1999. This is further evidence that Exhibit 1047/1247 was publicly available on June 20, 1999.

130. In order to further investigate the public availability of Exhibit 1047/1247, I went to the website https://www.worldcat.org/ which is the largest database of library holdings in the world. Librarians from around the world upload the holdings of their libraries to the database. I searched "0201309742" and retrieved this http://www.worldcat.org/oclc/614359831 which contains information that is identical to Exhibit 1047/1247, is available in multiple libraries and states that Exhibit 1047/1247 was published in 1999. This is evidence that Exhibit 1047/1247 was published in 1999.

131. In view of the forgoing, it is my opinion that Exhibit 1047/1247 was publicly available to persons interested and ordinarily skilled in the relevant subject matter or art, exercising reasonable diligence in June 1999, and certainly no later than February 2000, based on the cataloging record at the Library of Congress.

C. Conclusions

132. I conclude that Exhibit 1047/1247 is authentic and was publicly available in no later than June1999.

XIV. CONCLUSION

133. I reserve the right to supplement my opinions in the future to respond to any arguments that Patent Owner or its expert(s) may raise and to consider new

information as it becomes available to me regarding any of the above identified references.

134. I declare under the pains and penalty of perjury that the foregoing is true and correct.

Executed this 21st day of April, 2020 in Bowie Maryland

adry

Carrie Gardner

Appendix A

Carrie Gardner Ph.D.

P.O. Box One Bowie Maryland 20719 *Cell:* 717-329-4159 carrie.gardner@gmail.com Education Doctor of Philosophy in Library Science University of Pittsburgh 2001 Dissertation: Conflict Resolution Behaviors among Stakeholders in Developing and Implementing Internet Use Policies in Pennsylvania Public High Schools. 2014 Master of Education, Reading Edinboro University of Pennsylvania Master of Education, Educational Administration 2004 Temple University *Master of Library Science* University of Pittsburgh 1993 Bachelor of Science, Education and Library Science Millersville University of Pennsylvania. Magna Cum Laude 1990 Teaching Certifications Pennsylvania *Instructional II Library Science *K-12 Principal Maryland *Library Science *Reading *Administration

Employment

Clairmaxine1991-PresentCEO and Principal Consultant of a consulting firm that specializes inlibrary science and education policies

Pennsylvania State System of Higher Education

Assistant Professor of Library Science at Kutztown University and Clarion University	2007-2012
Assistant Professor, School of Library and Information Science Catholic University of America, Washington, D.C.	2003-2007
Coordinator, Library Media Services Milton Hershey School, Hershey PA *Supervisor of 2 professionals, 3 para-professionals and approximately 40 hours of part-time employees	1999-2003
Library Media Specialist Milton Hershey School, Hershey PA	1996-1999
Teaching Fellow University of Pittsburgh, Pittsburgh PA	1993-1995
Graduate Student Assistant University of Pittsburgh, Pittsburgh PA	1992-1993
Library Media Specialist Palmyra School District, Palmyra, NJ	1990-1992
Student Retrospective Conversion Cataloger Millersville University	1987-1990

San Jose State University Online Teaching

100% Online Course Name: Intellectual Freedom Seminar Every Fall Semester 2002-2016, Summer Semesters 2006 and 2007

Mansfield University of Pennsylvania Online Teaching

100% Online Access and Legal Issues in the Information Age Summer 2001, Spring 2002, Summer 2002, Fall 2002, Summer 2003, Summer 2004, Fall 2004, Spring 2005

The University of Pittsburgh Teaching Experiences

Integrating the Internet into the K-12 Curriculum	Summer 2000
Integrating the Internet into the K-12 Curriculum	Summer 1998
Two course sections via Distance Education: Intellectual	
Freedom in the Electronic Age and Integrating the	
Internet in the K-12 Environment	Fall 1997
Integrating the Internet into the K-12 Curriculum	

Internet Issues: Developing Policies and Procedures	
Using the Internet: Getting Started	Summer 1997
Integrating the Internet into K-12 Curriculum	
Internet Issues: Developing Policies and Procedures	Summer 1996
Using the Internet: Getting Started	
Using the Internet: Beyond the Basics	
Integrating the Internet into the K-12 Curriculum	
Co-Instructor:	
Internet Issues: Developing Policies and Procedures	
How to Connect to the Internet	Summer 1995
Co-Instructor	
Using the Internet: Getting Started	
Using the Internet: Beyond the Basics	Summer 1994
Co-Instructor	
Using the Internet: Getting Started	
Using the Internet: Beyond the Basics	Summer 1993
Funded Projects	
Funded: \$400,000 IMLS Grant	2007
Publication Advisory Board	

Teacher Librarian

2003-2010

Publications

Book Chapters

Tales out of School: Developing Professional Dispositions. Gail Bush and Jamie Biles Jones, editor. Libraries Unlimited, 2009.

Ethics and Intellectual Freedom in Ethics in School Librarianship: A Reader. Carol Simpson, editor, Linworth Publishing, 2003.

Student Learning: Linking Research and Practice. with A. James Jones. In Learning and Libraries in an Information Age: Principals and Practice. Barbara K. Stripling, editor, Libraries Unlimited, 1999.

Thomas Jefferson and Intellectual Freedom. In Speaking Out! Voices in Celebration of Intellectual Freedom. Ann K. Symons and Sally G. Reed, editors, ALA Editions, 1999.

Can Intellectual Freedom Survive the Information Age? with Gordon M. Conable in Creating the Future: Essays on Librarianship in an Age of Great Change. Sally G. Reed,

editor. McFarland & Co. 1996.

Journal Articles

"What is the Library Bill of Rights and Why Should I Care?" Learning and Media, Fall 2001 vol. 29, number 4. p. 6.

"On the Firing Line." Learning and Media, Fall 2001 vol. 29, number 4, p. 7.

"To Government Regulations Be True." Educational Leadership, December 2001 vol. 59, number 4. p. 33.

"What is the Library Bill of Rights and Why Should I Care?" Learning and Media, Fall 2001 vol. 29. Issue 4, p. 6.

"On the Firing Line." Learning and Media, Fall 2001 vol. 29. Issue 4, p.7.

"Trainer's Forum: Surfing the Net with Kids." Families Helping Families, Summer 2000, vol. 19. Issue 3, p. 10-11.

"Conference Call: Children's Access: Protection or Preparation?." American Libraries, November 1999, p. 59.

"The Power of Information." Learning and Media, Summer 1999, p.4.

"The Importance of Libraries." Lebanon Daily News, January 15, 1999, Education Section p.1

"Out on a Limb." Learning and Media, Spring 1995, vol. 23, no. 2, p. 25.

"What Can the Intellectual Freedom Committee Do For You?" Learning and Media, Winter 1995, vol. 23, no. 1, p. 28.

"Twenty-third Annual International Association of School Librarianship Conference: Pittsburgh USA." IASL Newsletter, April 1994, vol. 23, no. 2, p.1.

<u>Margaret Tassia.</u> "Outstanding Contribution: Dr. Blanche Woolls." Learning and Media, Summer/Fall 1993, vol. 21, no. 3. p. 11-12.

<u>Maria Spiros Joseph and Cindy Backes.</u> "Of Note." Learning and Media, Fall 1992, vol. 20, no. 4, p. 8.

"*National Library Week in the Bag*!" *Learning and Media, Winter 1992, vol. 20, no. 1, p. 5.*

Column Editorships

School Library Media Quarterly Reviews and News Column Editor 1993-1996 Professional Update Column Editor 1994-1996 Technology Update Column Editor 1995-1996

Selected Presentations 2000-Present

Invited: October 26, 2018. Sticky Issues in Intellectual Freedom. York County Libraries In-service Day Keynote speaker. York PA.

Invited: Week of September 6, 2011. Online Discussion regarding Intellectual Freedom. Young Adult Library Services Division of the American Library Association.

Invited: August 18, 2011. An End to Copyright Confusion! Montgomery County Public Schools. Gaithersburg, Maryland.

Invited: July 7, 2011. Safe Schools in This Electronic Age. ULSTER BOCES. New Paltz, New York.

Invited: June 18, 2011. Who Needs Friends? Creating and Maintaining Friends Groups for your Public Library! Scranton, Pennsylvania.

Juried: February 14, 2011. AUP's: It's a Mad, Mad, Mad, Mad World! PETE & C Conference. Hershey Pennsylvania.

Invited: November 16, 2010. Intellectual Freedom and Young Adult Literature. Online Sessions via Wimba for Dr. Andrea Miller. Clarion University. Clarion, Pennsylvania.

Invited: November 18, 2010. Library Ethics 101. Eastern Shore Librarians. Denton, Maryland.

Invited: November 4, 2010. Intellectual Freedom and Privacy. Johnstown District Meeting. Johnstown, Pennsylvania.

Invited: October 21, 2010. Intellectual Freedom. University of Maryland Student Group Meeting. College Park, Maryland.

Invited: June 27, 2010. Self Censorship. (co-presenter). American Library Association, Washington D.C.

Invited: May 21, 2010 Sex, Lies and Facebook. Southwestern Association of Pennsylvania Librarians Association, Greensburg, Pennsylvania.

Invited: April 23, 2010 Everything You always wanted to know about Intellectual

Freedom. Southeastern Pennsylvania Library Association. Valley Forge, Pennsylvania

Invited: April 21, 2010 Privacy! Maryland Library Association Pre-conference. Ocean City, Maryland.

Invited: April 16, 2010 Dirty Little Secret:Self-Censorship in Libraries. Texas Library Association. San Antonio, Texas.

Juried: Nov. 7, 2009 Banned Books in 2009. American Association of School Librarians Conference. Charlotte, North Carolina.

Juried: Nov. 7, 2009 Rev up your AUP! American Association of School Librarians Conference. Charlotte, North Carolina.

Invited: Nov. 13, 2009 Loose Lips Violate State Law! Southwestern Pennsylvania Librarians Association. Greensburg, Pennsylvania.

Invited: May 15, 2009. Protecting Patron Privacy: It's the Law! Maryland Library Association. Ocean City, Maryland.

Invited: May 6, 2009. Cooperative Collection Development. Berks County Librarians. Reading, Pennsylvania.

Juried: May 1, 2009. Intellectual Freedom Basics. Pennsylvania School Librarians Association Annual Conference. State College, Pennsylvania.

Invited: April 2, 2009. Sex, Drugs and Rock and Roll: Intellectual Freedom in 2009. Bucks County Library Association, Levittown, Pennsylvania.

Juried: March 31, 2009. Improve Internet Access Through Your AUP. Internet@Schools East. Arlington, Virginia.

Invited: March 6, 2009. Copyright Basics for Educators. Kutztown School District, Kutztown, Pennsylvania.

Invited: November 4, 2008. Hot Topics for Librarians! Chester County Intermediate Unit In-Service program. With Eloise Long. Downington, Pennsylvania.

Invited: October 20, 2008. Harmful to Minors? The Rights of Youth to Access Library Materials. Maryland Library Association Workshop. Boonsboro, Maryland.

Invited: October 13, 2008. Copyright for Educators. In-service Presentation. Pennsylvania Intermediate Unit 8. Sommerset, Pennsylvania

Substitute for Judith Krug October 7, 2008. Intellectual Freedom and Libraries.

Arkansas Library Association, Bentonville, Arkansas

Juried: August 7, 2008. Acceptable Use Policy Language: Impact on Student Use of Information. International Association of School Librarians Annual Conference. Berkeley, California.

Juried: August 3, 2008. Acceptable Use Policies: Is Yours Ready for Web 2.0? International Association of School Librarians Annual Conference. Berkeley, California.

Invited: July 24, 2008. Intellectual Freedom and Privacy. Vermont Library Association Workshop, Burlington Vermont.

Invited: July 11, 2008. Updating Your Acceptable Use Policies. Intermediate Eight Summer Workshop. State College, Pennsylvania.

Invited: April 21, 2008. Legislating Away Intellectual Freedom. Oklahoma Library Association, Annual Conference. Tulsa, Oklahoma.

Invited: February 22, 2008. Intellectual Freedom. University of Washington Class Session. Via Skype.

Invited: February 8, 2008. Copyright for Educators. West Chester BOCES. In-service Program. Elmsford, New York.

Juried: January 9, 2008. What does civic librarianship have to do with today? ALISE Annual Conference. Philadelphia, Pennsylvania.

Invited: November 28, 2007. *Intellectual Freedom in 2007. Berks County School Librarians Fall Meeting. Topton, Pennsylvania.*

Invited: November 6, 2007. Intellectual Freedom for School Librarians. Chester County Common In-service. Malvern, Pennsylvania.

Invited: November 6, 2007. Patron Privacy in School Libraries. Chester County Inservice. Malvern, Pennsylvania.

Invited: October 29, 2007. Intellectual Freedom in America. Parkland Community Library, Allentown, Pennsylvania.

Juried: October 27, 2007. Sticky Issues: Labels on Resources. American Association of School Librarians National Conference. Reno, Nevada.

Juried: October 26, 2007. Is there a Book Challenge in your future? With Barbara Stripling and Helen Adams. American Association of School Librarians National
Conference. Reno, Nevada.

Invited: October 1, 2007. Harmful to Minors? The Rights of Youth Access to Library Materials.. Maryland Library Association, Odenton Maryland.

Invited: August 7, 2007. Intellectual Freedom for Librarians. District Meeting. Williamsport, Pennsylvania.

Invited: July 20, 2007. Safe Computing Town Hall Open House. U.S. Capital Building, Washington D.C.

Invited: June 25, 2007. A Sticky Issue: Is Labeling a Form of Censorship? ALA Annual Conference. Washington D.C.

Invited: June 21, 2007. Keynote Address. Intellectual Freedom. ALA Intellectual Freedom Round Table Preconference. Washington, D.C.

Invited: May 2, 2007. Can the KKK Meet in the Library? Maryland Library Association Annual Conference. Ocean City, Maryland

Invited: May 2, 2007. What is this Filth? Maryland Library Association Annual Conference. Ocean City, Maryland.

Invited: April 12, 2007 Intellectual Freedom 2007. District Workshop, Citizens Library. Washington, Pennsylvania.

Invited: March 6, 2007. Intellectual Freedom for Youth. Oklahoma Library Association Workshop. Oklahoma City, Oklahoma.

Invited: February 1, 2007. Copyright for Educators. Millersville University, Millersville, Pennsylvania.

Invited: November 8, 2006. Intellectual Freedom. State Library of Pennsylvania Workshop. Pittsburgh, Pennsylvania.

Invited: October 31, 2006. Intellectual Freedom. State Library of Pennsylvania Workshop. Harrisburg, Pennsylvania.

Juried: October 27, 2006. Intellectual Freedom Basics. Virginia Educational Media Association. Hampton Roads, Virginia.

Juried: October 27, 2006. Before the Censor Comes: Preparing Your Policies, Procedures, and Patience! Virginia Educational Media Association. Hampton Roads, Virginia. *Invited:* October 11, 2006. Copyright for Law Librarians. Law Librarians of D.C. Group. Washington, D.C.

Invited: August 24, 2006. The USA Patriot Act. Scranton Multi-District Workshop. East Pittston, Pennsylvania.

Invited: August 16, 2006. Keeping Resources in your Collection. Henrico County Public Schools Librarians Conference, Henrico County, Virginia.

Invited: August 16, 2006. Keynote Address: Intellectual Freedom in 2006. Henrico County Public Schools Librarians Conference, Henrico County, Virginia.

Invited: May 18, 2006. Everything you need to Know about Copyright! Ulster BOCES. New Paltz, New York.

Juried: April 29, 2006. Patron Privacy in School Libraries. Virginia Educational Media Association, Potomac Region 2006 Regional Conference. Loudoun County Virginia.

Juried: April 29, 2006. Copyright Basics. Virginia Educational Media Association, Potomac Region 2006 Regional Conference. Loudoun County Virginia.

Invited: March 17, 2006. Facilitated Meeting on the possible combination of a public high school library and public library. York, Pennsylvania.

Juried: January 17, 2006. Where all the Students are above average? Co presenter with Kathy Latrobe, June Lester and Sydney Pierce. Association of Library and Information Science Educators Annual Conference, San Antonio, Texas.

Invited Presentation: October 29, 2005. Selection/Reconsideration Policy Check-Up! New York Library Association. Buffalo, New York.

Invited: October 29, 2005. Exploring Aspects of Intellectual Freedom. New York Library Association Annual Conference. Buffalo New York.

Invited: July 12, 2005. Copyrights and Copywrongs. New York Library Association Workshop. Central New York.

Invited: September 27, 2005. WREC Radio Station.. Banned Book Week Interview. Station from Memphis Tennessee.

Juried: September 25, 2005. Communicating an Intellectual Freedom Message. Pennsylvania Librarians Association Annual Conference, Hershey, Pennsylvania. *Invited: September 21, 2005. Teaching for Understanding. Catholic University of America Library Employees Special Session. Washington, D.C.*

Invited: July 12, 2005. Copyright for Everyone. Regional Workshop. Middletown, New York.

Juried: April 30, 2005. Power up Privacy in Pennsylvania School Libraries. Pennsylvania School Librarians Association Annual Conference. Hershey, Pennsylvania.

Invited: March 22, 2005. Intellectual Freedom. Young Adult Resources Class at the University of Pittsburgh, School of Information Sciences. Pittsburgh, Pennsylvania.

Invited: October 25, 2004. Copyright for Educators and Librarians. SPIES Consortium Meeting. Gettysburg, Pennsylvania.

Invited: October 25, 2004. Intellectual Freedom Update. SPIES Consortium Meeting. Gettysburg, Pennsylvania.

Invited: October 21, 2004. An Intellectual Freedom Primer. New York Library Association Annual Conference. Rochester, New York.

Invited: October 20, 2004. Copyrights and Copywrongs: Copyright Basics for All Librarians. All Day pre-conference. New York Library Association Annual Conference. Rochester, New York.

Juried: October 14, 2004 Before the Censor Comes: Preparing Your Policies, Procedures and Patience. Maryland Educational Media Organization. Ellicott City, Maryland.

Juried: September 26, 2004. Intellectual Freedom Update 2004. Pennsylvania Library Association. Valley Forge, Pennsylvania.

Juried: September 26, 2004. Radio Frequency Identification (RFID) Tags and Libraries: Curse or Cure? . Pennsylvania Library Association. Valley Forge, Pennsylvania.

Invited: August 31, 2004. The Power of School Librarianship. Loudoun County Public Schools Staff Development Day. Leesburg, Virginia.

Invited: August 25, 2004. School Library Update. Moon Township School District Staff Development Day. Moon Township, Pennsylvania.

Invited: June 28, 2004. Youth Privacy Matters: Practical Approaches to Implementation. American Library Association Annual Conference. Orlando, Florida.

Juried: June 18, 2004. The Reading Role of the School Librarian. With Blanche Woolls, Ph.D. International Association of School Librarianship. Dublin, Ireland.

Juried: May 1, 2004. Intellectual Freedom Update. Pennsylvania School Librarians Association Annual Conference. Hershey, Pennsylvania.

Invited: March 28, 2004. Looking Forward. Alaska Library Association. Fairbanks, Alaska.

Invited: March 27, 2004. Privacy in Libraries: Policies, Practices and Pitfalls. Alaska Library Association. Fairbanks, Alaska.

Juried: February 2004. Student's Secrets, Your Data and the USA Patriot Act. Pennsylvania Educational Technology Expo and Conference. Hershey, Pennsylvania.

Invited: December 12, 2003. Copyright Compliance for Health Care Workers. The Nursing Teaching Staff Inservice Day at Reading Hospital. Reading, Pennsylvania.

Invited: December 1, 2003. The Censorship of the book: Invisible Man. Mike Romig Show on KDKA Radio. Pittsburgh, Pennsylvania.

Juried: October 24, 2003. Intellectual Freedom Matters. American Association of School Librarians. Kansas City, Missouri.

Juried: October 24, 2003. Patron Privacy Matters. American Association of School Librarians. Kansas City, Missouri.

Invited: October 16, 2003. USA Patriot Act Debate with TIME Magazine Person of the Year Coleen Rowley, FBI Agent. South Dakota Library Association. Sioux Falls, South Dakota.

Invited: January 20, 2002. School Librarians' Toolkit: How to Update your Library Program. Moon Area School District Librarians Meeting. Moon, Pennsylvania.

Invited: November 14[,] 2002. Plagarism and School Students Today. Lancaster-Lebanon Library Association. Lancaster, Pennsylvania.

Juried: November 13, 2002. The USA Patriot Act and it's impact on Libraries. Pennsylvania Library Association. Hershey, Pennsylvania.

Invited: November 11, 2002. The USA Patriot Act and it's impact on Libraries. Lower Merion Library System. Bryn Mawr, Pennsylvania.

Invited: October 23, 2002. The USA Patriot Act and it's impact on Libraries. Lower

Merion Library System, Norristown, Pennsylvania.

Invited: August 12, 2002. Staying Safe on the Internet: What do we teach the Students? Pennsylvania Middle School Association. Hershey, Pennsylvania.

Invited: May 21, 2002. An Intellectual Freedom Primer. Southern Nevada Librarians. Las Vegas, Nevada.

Invited: May 20, 2002. An Intellectual Freedom Primer. Northern Nevada Librarians. Reno, Nevada.

Invited: May 6, 2002. Children and Intellectual Freedom. Maine Library Association. Augusta, Maine.

Invited: May 2, 2002. Intellectual Freedom. Share Northwest School Librarians Group, Erie, Pennsylvania.

Juried: April 19, 2002. How Private is too Private? Computers, Freedom and Privacy National Conference. San Francisco, California.

Invited: March 14, 2002. CIPA, the USA PATRIOT Act and Other Irritants that Prevent You From Accessing Information. Clarion University. Clarion, Pennsylvania.

Invited: March 6, 2002. Intellectual Freedom and Christianity. Panel Discussion with Author Katherine Paterson. Messiah College, Grantham, Pennsylvania.

Juried: February 11, 2002. Right vs. Privilege: Student Internet Access. PETC Conference, Hershey, Pennsylvania.

Invited: January 3, 2002. Harry Potter: A Live Debate. Smart Talk Live, WITF Television. Harrisburg, Pennsylvania.

Invited: November 23, 2001. *Intellectual Freedom Basics*. *The Keystone State Reading Association Annual Conference. Hershey, Pennsylvania.*

Juried: November 16, 2001. Sex, Drugs, Rock and Roll and Filtering Software: Issues for School Library Media Centers. American Association of School Librarians National Conference. Indianapolis, Indiana.

Invited: November 5, 2001. Copyright in the Digital Age. Commonwealth Libraries Technology Conference. Grantville, Pennsylvania.

Invited: October 15, 2001. What is Intellectual Freedom? Marywood University Library School Class. Marywood University, Scranton Pennsylvania.

Invited: June 7, 2001. Filtering Software in School Libraries. Pennsylvania House Judicial Committee, Task Force on Internet Technology Law. Harrisburg, Pennsylvania.

Juried: April 28, 2001. Places I Never Meant to Be. Pennsylvania School Librarians Association. Hershey, Pennsylvania.

Invited: April 11, 2001. Privacy in the Digital Age. Indiana Federated Library Association. Indianapolis, Indiana.

Invited: April 11, 2001. To Filter or Not to Filter: A Live International Teleconference. Indiana Federated Library Association. Indianapolis, Indiana.

Invited: November 14, 2000. *Educational Technology 2000 and Beyond. Penn State Harrisburg Class Session, Hershey, Pennsylvania.*

Invited: October 18, 2000. All about Internet Filtering: A One-Day Pre-Conference. Iowa Library Association, Ames Iowa.

Invited: October 12, 2000. Children and the Internet: Safety First! Pennsylvania Foster Parents Association, Grantville, Pennsylvania.

Invited: September 14, 2000. Libraries and the Cyberage: Filtering, Censorship and the First Amendment. Winthrop University, Rock Hill, South Carolina.

Invited: July 21, 2000 The Role of a School Library. Commission on Online Child Protection, Congressional Internet Caucus Advisory Committee, Richmond Virginia.

Invited: July 17, 2000. The Role of a School Library. For the National Academies Project: Tools and Strategies for Protecting Kids from Pornography and Their Applicability to Other Inappropriate Internet Content. Washington, D.C.

Invited: May 12, 2000. Burning Books and Cyberspace: Intellectual Freedom for 2000 and Beyond. University of Pittsburgh at Greensburg Children's Literature Conference, Greensburg, Pennsylvania.

Juried: May 5, 2000. Kids Have Rights and Librarians Have Ulcers: Internet Use Polices for 2000 and Beyond. Pennsylvania School Librarians Association Annual Conference, Hershey, Pennsylvania.

Juried: May 4, 2000. The Thought Processes used to build a library for the Third Millennium. Pennsylvania School Librarians Association Annual Conference, Hershey, Pennsylvania. Juried: April 4, 2000. Here a Photocopy, There a Photocopy: Copyright Issues in the Digital Age. Pennsylvania Middle School Association State Conference, State College Pennsylvania.

Clarion University Service

• Chair, Fa	culty Search Committee	2010-Present
Co-Advis	sor, Lambda Sigma Student Group	2010-2011
• Advisor,	Lambda Sigma Student Group	
	sor, Student Pennsylvania Librarians. Assoc	2010-2011
• Member,	Faculty Senate Subcommittee on Student Ac	ctivities 2010-2011
	er, Webinar	September 28, 2010
•	, Curriculum Committee	2010-2011
• Member,	M. Coffta's evaluation committee	Fall 2010
• Chair, C.	Rudowsky's evaluation committee	Spring 2011
• Member,	C. Nawalsky's evaluation committee	Spring 2011
• Faculty Se	enate Subcommittee on Student Activities	2010-Present
Middle St	ates Taskforce #5: Faculty	2010-2011
• Member,	Department NCATE Committee	2010-2011
• Member, I	Department Scholarship Committee	2010-2011
• Member, I	L. McColl's evaluation Committee	Fall 2011
• Member, 1	M. Marsteller's evaluation Committee	Fall 2011
Kutztown Univ	e e e e e e e e e e e e e e e e e e e	2007-Present
	or, Alpha Beta Alpha Honor Fraternity	
	nt Workshop	October 10, 2007
	ture: Intellectual Freedom and Ethics	October 18, 2007
	ary Day Committee	2007-Present
,	nt Representative at Career Day	February 7, 2008
	: Summarizing Data Using Excel Histograms	February 26, 2008
	en House Academic Marketplace Days	2007-2008
	emic-University TV Show	March 4, 2008
	nline Course on Accommodating Students with I	6
	Response System Workshop	June 24, 2008
• <i>P.E.T Cor</i>	nmittee: Nancy Latanision	Fall 2008
• Departme	nt Representative to APSCUF	Fall 2007-Present
• Faculty Se	earch Committee	Fall 2008
• <i>P.E.T. Co</i>	mmittee	Spring 2009
0 Ni	ancy Latanision	

• Gail Člifford

 Joanne Beriswell Ph. D Andrea Harmer Ph. D Michelle Sims Ph. D P.E.T. Committee Andrea Harmer Ph.D. Michelle Sims Ph.D. R. Kiker 	Spring 2010
Gail CliffordNancy Latanision	
Catholic University of America Service	
Read Across America Coordinator	Spring 2004
 Coordinator, School Library Media Program 	2003-2007
 Failing Grades Committee 	2003-2007 2004-2005
	2003-2005
•	2003-2003
• Middle States Commission on Higher Education Periodic Review Report	2004-2005
	2004-2003 Summer 2004
School Library Media Program Website Revision	Summer 2004
• School of Library and Information Science Representation	
On the Council of Teacher Education	2003-2007
	cember 2005-March 2006
ALA Accreditation Team	2003-2007
Curriculum Committee	2003-2007
Rovelstad Scholarship Committee	2005-2007
Professional Associations	
American Library Association	1990-Present
President Ann K. Symons, Presidential Committee	1998-99
Co-Chair of the Presidents Education Strand	1998-99
Margaret Edwards Trust Pre-Conference Committee	1999
Election Task Force	200-2009
ALA Council	2008-2011
Special Committee on the Membership Meeting Quorun	n 2001
American Library Association Intellectual Freedom Committee	

Sub-committee on Privacy Chair	2008-2009
Member	1997-2001, 2004-2008, 2009-2011
Sub-committee on Access to Electronic Networks	1994-1996
Intern	1994-1997
Sub-committee on Privacy	1998-2011
ALA Student to Conference Assigned to ALA Inte	llectual Freedom

Committee

American Association of School Librarians	
Intellectual Freedom Committee	1993-96, 1998-2002
Legislation Committee	1994-1998
Chair, SIRS/AASL Intellectual Freedom Award Committee	1994
Intellectual Freedom Committee Chair	1999-2001
Treasurer	2003-2004
Vision Expansion Special Committee	2003-2004
ALA Planning and Budget Committee	2003-2004
Bylaws Committee	2008-2010
Nominating Committee	2010-2011
<u>American Library Association Intellectual Freedom Round Table</u>	
	nd 2011-2012
Publications Committee Chair and Newsletter Editor	1998-2000
Publications Committee Co-Chair	1996-1998
Nominations Committee	2004-2005
Liaison to the American Library Association	
Intellectual Freedom Committee	2003-2004
Nominating Committee Member	2005
Annual Conference Program Chair	2006-2009
Director	2008-2011
Association for Library Service to Children	
	-1998, 2007-2008
	1000,200, 2000
ALISE	
Member, Garfield Doctoral Dissertation Award Committee	2005
Young Adult Library Services Association (YALSA)	
Education Committee	1993-1998
YALSA Representative to the ALA Intellectual Freedom Commit	tee2011-2012
YALSA Representative to the Freedom to Read Foundation	2011-2012
YALSA Intellectual Freedom Co-Convener	2011-2012
International Association of School Librarianship	1992-2012
Newsletter Editor	1993-1994
Local Arrangements Committee	1994 and 2008
Treasurer Annual Conference	2008
Laternal Destine Association	2011 D
International Reading Association	2011-Present

Maryland Educational Media Organization

2003-2007

<u>Pennsylvania Citizens for Better Libraries</u> Board Member Annual Awards Luncheon Program Committee	2003-2014 2008			
Pennsylvania Library Association	2000-Present			
<u>Pennsylvania School Librarians Association</u>	1986-Present			
Poster Session: TV! Friend or Foe?	1990			
Chair, Intellectual Freedom Committee	1991-1992, 1994-2003			
Co-Chair, Intellectual Freedom Committee	1992-1994			
Moderator of two Intellectual Freedom Sessions	April 28 -29, 1994			
Moderator of Winnebago Users Group Session	April 25, 1996			
Moderator of three sessions	1997 Conference			
Organizer of a 15 hour for credit course on	1998 Conference			
Intellectual Freedom	1997-1998			
Web Page Development Team	1998-2001			
Board of Directors	1999 Conference			
Moderator of two sessions	1999 Conference			
Introduced Banquet Speaker Cynthia Voight,	1999 Banquet			
Moderator of a session	2000 Conference			
Moderator of a session	2004 Conference			
<u>University of Pittsburgh, School of Information Sciences</u> School Library Certification Program Advisory Group	2002-Present			
<u>Virginia Educational Media Association</u>	2003-2007			
Chair, Intellectual Freedom Committee	2005-2007			
Information Futures Institute	2004-2008			
<u>University of Pittsburgh School Library Program Advisory Group</u> 2004-Present				
<u>Freedom to Read Foundation</u>	1993-Present			
Conable Scholarship Committee	2008 - 2011			
Board of Trustees	2008-2010			

Activities

Spring 2008. Read Laura Bush Improving Literacy Through School Libraries Grants.

July 30, 2007. Consultant for Institute of International Education, 2007 Educators to Saudi Arabia Project. Washington D.C.

Spring 2006. *Consultant on School Library Formation at new K-12 Schools in the District of Columbia for the organization, Teaching for Change.*

March 9-10, 2006. IMLS Laura Bush 21st Century Librarian Program Grant Reviewer. Washington D.C.

2002-Present. University of Pittsburgh School Library Media Program Advisory Group

2004-2006. University of Pittsburgh Group to Advise on the ALA COA Program Presentation.

October 30, 2002. Library Services and Construction Act Grant Reviewer, State Library of Pennsylvania. Harrisburg, Pennsylvania.

September, 1997. Middle States Evaluation Team, Notre Dame High School, East Stroudsburg, Pennsylvania.

March 7-8 , 1997 Organizer of the Pennsylvanians for Intellectual Freedom Statewide Conference, Hershey Pennsylvania.

October 20-23, 1996 Middle States Evaluation Team. St. Timothy School, Stevenson, Maryland.

April 24, 1996. Testified before the Pennsylvania Senate Judiciary Committee regarding House Bill 881 at the request of the Motion Picture Association of America and the American Library Association.

May 1995, Library Services and Construction Act Grant Reviewer, State Library of Pennsylvania. Harrisburg, Pennsylvania.

1994 American Library Association. Author of skit performed during a program sponsored by the American Library Association Committee on Professional Ethics.

1994 American Library Association Annual Conference. Conference: Assistant to Judith Krug and the Office for Intellectual Freedom Staff. Miami, Florida.

1993 American Library Association Annual Conference. University of Pittsburgh/American Library Association Student Representative to Conference. New Orleans, Louisiana.

Selected Seminars

Quality Matters: Online Course Development and Delivery	2010
Milton Hershey School Adult Leadership Academy	2000
Dr. Stephen Covey, The Four Roles of a Leader	2000

Seven Habits of Highly Effective People	1998
Dale Carnegie	1998
Honor Fraternities Beta Phi Mu Phi Kappa Phi	1993-Present 1990-Present

Awards

Named one of the 103 Outstanding School Librarians in The Whole School Library				
Handbook by Blanche Woolls and David L. Loertscher	2005			
The ALA Intellectual Freedom Roll of Honor	1999			
The Pennsylvania School Librarians Association Student Award	1993			
Who's Who Among Students in American Universities and Colleges	1990			
The Arthur and Claribel Walker Gerhard Memorial Scholarship	1990			
The Alpha Beta Alpha Award	1990			
The Laura B. Doering Library Service Scholarship	1989			
The Beatrice U. Datesman Senior Award	1989			
The Class of 1927 Education Scholarship	1988			

Appendix B



- <u>Specifications</u>
 - <u>Review Zone</u>
 - Ordering Information
 - <u>FAQ</u>
- Events
 - <u>PCI-SIG Compliance Workshop #113</u>
 - PCI-SIG Developers Conference 2020
 - <u>Registration Details & Policies</u>
 - PCI-SIG Developers Conference Asia-Pacific Tour 2019
 - PCI-SIG Developers Conference Europe 2019
 - PCI-SIG Developers Conference Israel 2019
 - <u>Training Events Resources</u>
 - <u>Webinars</u>
 - Industry Events
 - Sponsorship Opportunities
- <u>Developers</u>
 - Compliance Program
 - Technical Support
 - Integrators List
 - Product Listing Request Form
- Membership
 - Become a Member
 - Board of Directors
 - Member Companies
 - Members Log In
 - Contact Us
 - Bylaws & Organizational Documents
- <u>Newsroom</u>
 - <u>Blog</u>
 - In the News
 - News Releases

Search form

Search	Search
Search	1

- LinkedIn
- <u>Twitter</u>
- <u>YouTube Channel</u>

- <u>Membership Home</u>
- Become a Member
- Bylaws & Organizational Documents
- Board of Directors
- Member Companies
- Members Log In
- <u>Contact Us</u>

Membership

Founded in 1992, Peripheral Component Interconnect Special Interest Group (PCI-SIG) is an association of 700+ industry companies committed to advancing its non-proprietary peripheral component interconnect (PCI) technology by:

- Defining PCI specifications to deliver required I/O functionality
- Adapting PCI technology to future applications
- Maintaining backward compatibility with previous specifications
- Supporting industry-wide product development by offering compliance and interoperability test support

The association offers single-tiered membership, available to any company interested in developing or working with the technology. These members collaborate in open committees to define, to test and to refine specifications.

PCI-SIG's methodical approach to specification development yields a reliable, scalable solution for high speed I/O in numerous market applications. In fact, the PCI I/O expansion bus is today's de facto interconnect between CPUs and peripherals—in computers to servers.

As demand for higher performing I/O grows, PCI-SIG's scope and ecosystem reach expands. Current

PCI Express[®] and other related technology roadmaps account for new form factors and lower power applications (e.g., handhelds, mobile, IoT/embedded). Innovation on these fronts will remain true to PCI-SIG's legacy of delivering solutions that are:

- Backward compatible
- Cost-efficient
- High performance
- Processor agnostic
- Scalable

Membership is open to everyone interested in developing or working with the Peripheral Component Interconnect (PCI) technology. Benefits include various services that help companies bring to market PCI-compliant devices, such as:

- Current PCI specification access
- Complimentary technical support
- Specification revision and addendum input
- Compliance Workshops invitations
- Voting rights

- Industry event inclusion (Developers Conferences, trade shows, etc.)
- Vendor ID assignments
- PCI-SIG PR and MarCom support

To learn more, review our organizational documents here.

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Appendix C



- <u>Specifications</u>
 - <u>Review Zone</u>
 - Ordering Information
 - <u>FAQ</u>
- Events
 - <u>PCI-SIG Compliance Workshop #113</u>
 - PCI-SIG Developers Conference 2020
 - <u>Registration Details & Policies</u>
 - <u>PCI-SIG Developers Conference Asia-Pacific Tour 2019</u>
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 - PCI-SIG Developers Conference Israel 2019
 - Training Events Resources
 - <u>Webinars</u>
 - Industry Events
 - Sponsorship Opportunities
- Developers
 - Compliance Program
 - Technical Support
 - Integrators List
 - Product Listing Request Form
- Membership
 - Become a Member
 - Board of Directors
 - <u>Member Companies</u>
 - <u>Members Log In</u>
 - Contact Us
 - Bylaws & Organizational Documents
- <u>Newsroom</u>
 - <u>Blog</u>
 - <u>In the News</u>
 - <u>News Releases</u>

Search form

Search	Search
Search	

- <u>LinkedIn</u>
- <u>Twitter</u>
- YouTube Channel

PCI Local Bus Specification Revision 2.3

This document contains the formal specifications of the protocol, electrical, and mechanical features of the PCI Local Bus Specification, Revision 2.3, as the production version effective March 29, 2002. The PCI Local Bus Specification, Revision 2.2, issued December 18, 1998, is superseded by this specification.

Date of Release Friday, March 29, 2002 Technology PCI Conventional Specification Revision 2.x Document Type Specification Member/Non-Member Document Member Specification Download Link https://members.pcisig.com/wg/PCI-SIG/document/download/8233

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Appendix D





PCI Special Interest Group 2575 NE Kathryn St #17 Hillsboro, OR 97124 FAX: 503-693-8344



JAVA Version Frames Version

PCI Overview | SIG Information | Specifications | Documents | FAQ/Answers Tech Support | News Room | Members Only!

🔊 What is PCI ?

Welcome to the world of <u>PCI</u>, the expansion standard for the '90s. The PCI Local Bus is a high-performance bus that provides a processor-independent data path between the CPU and high-speed peripherals. PCI is a robust interconnect mechanism designed specifically to accommodate multiple high performance peripherals for graphics, full motion video, SCSI, LAN, etc.

What is the PCI Special Interest Group ?

The PCI Special Interest Group (SIG) is an unincorporated <u>association of</u> <u>members</u> of the microcomputer industry set up for the purpose of monitoring and enhancing the development of the Peripheral Component Interconnect (PCI) architecture. The SIG is lead by a nine member <u>steering committee</u> and governed by SIG <u>bylaws</u>. Membership in the PCI SIG gives your company access to a variety of essential services. If you are not already a member, you can join the SIG today.

PCI SIG Announces Release of PCI v2.2 Specification

PCI SIG announced today that v2.2 of the PCI Local Bus standard specification is now available. PCI SIG is also releasing updates of its Power Management and PCI-to-PCI Bridge specifications and Mobile Design Guide. <u>Download the press release (MS Word)</u> <u>Download the press release (PDF)</u>

PCI Compliance Workshop #17

PCI Workshop #17 will be held in Milpitas, California on March 1 -3, 1999. The registration deadline for this event is February 19, 1999. <u>Download the invitation:(MS</u> <u>Word)</u> <u>Download the invitation: PDF</u>

📄 New PCI SIG Test Card

The SIG has an <u>updated version of it's test</u> <u>card</u> that provides new features targetted at helping PCI device builders build compliant hardware and software. Specifically, the new feature tests a device's compliance with the Maximum Completion Time requirement that is an approved Engineering Change Request



requirement.

New PCI Documents

PCI-X FAQ, a proposed extension to the PCI local bus specification, and Mini PCI FAQ, a proposed specification for integrated peripherals that targets small form factor products such as notebook PCs, docking stations and printers, are now available to download in the Members Only section.

尾 New Review Drafts

The review drafts of PCI Local Bus Specification Rev. 2.2, Mobile Design Guide Rev. 1.1, and Power Management Interface Specification Rev. 1.1 are now available to download in the Members Only section.

Rew Steering Committee members

Congratulations to Mylex and Gateway 2000, the newest members of the PCI Special Interest Group Steering Committee, and to the returning members: Adaptec, AMD, Compaq, IBM, Intel, Phoenix Technologies, and Texas Instruments.

PCI to PCI bridge card information

Intel Corporation offers evaluation boards for their extensive family of PCI-PCI Bridges. Intel bridges are Rev 2.1 compliant and meet power management/ACPI requirements. More information on the evaluation boards can be found on Intel's web site.

CompactPCI information



AGP Implementors Forum

The AGP Implementors Forum is a group of industry leaders in graphics hardware and OEM systems. PCI-SIG members should follow this link to learn more about this organization.

Small PCI Information

Come take a look at our Small PCI information: Backgrounder, FAQ, and industry comments!

PCI SIG Mail Reflector Archive

As of June 29th, we have archived approximately 1500 mail messages from the PCI SIG reflector. These messages date back to August, 1996, and are currently sorted by two indices: date and thread. Each index is presented in 100-message increments to make viewing easier for people with slow (dialup) access.

Forget Your Password ?

If you are a PCI SIG member, and do not know your password, you can use the online password form to request a password. We will respond as soon as possible.

For technical difficulties with the web page contact <u>webmaster@pcisig.com</u> For general questions about the PCI Special Interest Group contact <u>info@pcisig.com</u>

Last modified: Wed Jan 27 16:08:00 Pacific Standard Time 1999 webmaster@pcisig.com

Appendix E



PCI Specifications

The PCI SIG sells PCI specifications to cover some of its costs. No PCI specifications are available online. The quickest way to obtain PCI specs is to send a FAX to the PCI SIG office at **503-693-8344**.

Note: PCI SIG members receive a complimentary set of specifications upon joining the SIG. This page allows both members and non-members to order extra copies of the specifications.

For your convenience, we have created an online web page that you can print, complete, and FAX to the office. Use <u>this form</u> to speed your order processing with different <u>payment methods</u>.

Available Specifications

The latest revisions of all PCI specifications and their costs as of January, 1999 are:

PCI Local Bus Specification Rev. 2.2

\$25 plus shipping*

This document defines the PCI hardware environment including the protocol, electrical, mechanical and configuration specification for the PCI Local Bus components and expansion boards. PCI Spec. Rev. 2.2 supersedes Rev. 2.1 issued June 1, 1995. Seventeen ECRs were incorporated into the specification, including six mechanical ECRs, 3.3V aux, Message Signaled Interrupt, and Spread Spectrum Clock. All cache support was removed and the specification was edited for readability

PCI to PCI Bridge Architecture Specification Rev. 1.1

\$25 plus shipping*

http://www.pcisig.com/specs.html	Go	DEC	MAR	APR	bridg 😱 🕜	\bigotimes
must meet to be compliant to the PCI Local Bus Specification 73 captures transl PCI to PCI bridge features are also provided by		eco	02	tons an	d guidance	7
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specification was updated to include target initial latency requirements and edited for readability.

PCI BIOS Spec Rev 2.1

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This document describes the required System BIOS functions for accessing PCI configuration space. The specification describes everything necessary for a BIOS vendor to implement the PCI BIOS functions, and everything necessary for application/driver programmers to make the BIOS calls. The BIOS calls should be used in all operating environments where there are no operating system functions for accessing PCI configuration space. This specification applies only to Intel Architecture compatible PCs.

PCI Mobile Design Guide Rev. 1.1

\$25 plus shipping*

This document is an aid in designing a PCI-based mobile system or component which works within the context of industry standard power management architectures and which complies with the requirements of the PCI Specification. The goal of the PCI Mobile Design Guide is to enable "full capacity" PCI based systems from a maximum power conservation perspective. Rev. 1.1 supersedes Rev. 1.0 issued April 5, 1995. The specification was updated to include target initial latency requirements and edited for readability.

PCI Bus Power Management Interface Specification Revision 1.1

\$25 plus shipping*

This specification was developed to enhance the base PCI architecture to include standardized power management capabilities. It is architecturally aligned with the ACPI specification, and as such, enables PCI devices, both motherboard and add-in, to participate in platform-wide operating system-directed power management. Revision 1.1 supersedes Revision 1.0 issued June 30, 1997. The specification was updated to include the 3.3V aux ECR and edited for readability.

PCI Hot-Plug Spec 1.0

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The PCI Hot-Plug Specification defines the requirements for adapter cards, system platforms, and system software to enable the insertion and remove of PCI adapter cards without turning off the platform or rebooting the operating system. The spec is a supplement to the PCI Local Bus Specification, and is applicable to those cards, platforms, and operating systems that need higher availability.

Small PCI Spec 1.5aS

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content consists of: PCI Local Bus Specification Rev. 2.2, Mobile Design Guide Rev. 1.1, Power Management Interface Specification Rev. 1.1, PCI-to-PCI Bridge Architecture Specification Rev. 1.1, PCI Hot Plug Specification Rev. 1.0, Small PCI Specification Rev. 1.5a, and PCI BIOS Specification Rev. 2.1.

Special package prices:

PCI Specification CD and Hard Copy of PCI Local Bus Specification Rev. 2.2 ... \$50
Any 2 specs ... \$40 Any 5 specs ... \$70
Any 3 specs ... \$50 Any 6 specs ... \$80
Any 4 specs ... \$60 Visa or MasterCard accepted

*Please <u>contact the SIG</u> for current shipping guidelines

Available Books

PCI Hardware & Software Architecture and
Design
Edward Solari & George Willse
NEW 4TH EDITIONPCI REV. 2.2
INFORMATION

\$83.25 plus shipping*

This book covers both the hardware and software aspects of the PCI Local Bus. Free from the space limitations of a formal specification, the authors have gone beyond the PCI Local Bus Specification to describe conditions that you likely will meet in your day-to-day design and programming tasks. PCI Hardware and Software provides a complete PCI overview, including its relationship to the ISA bus and the Plug and Play architecture.

*Note: this book can be purchased for \$83.25 when purchasing at least one other PCI specification (above).

PCI Hot-Plug Application and Design	\$26.20 plus
Alan Goodrum	shipping*

This book explains not only the "what" of the new PCI Hot-Plug Specification, but the "why" behind the specification. It also goes beyond the high-level concepts of the spec to show



*Note: this book can be purchased for \$26.20 when purchasing at least one other PCI specification (above).

PCI System Architecture, 3rd Edition Mindshare ISBN# 0-201-40993-3

Note: this book is *not* available through the PCI SIG. Please check for it in a major bookstore near you.

Last modified: Sun Jan 31 21:47:42 Pacific Standard Time 1999

Appendix F

- Author: Anonymous
- Is Part Of: Electronic Engineering Times, May 14, 2001, Issue 1166, p.136
- Notes: The unit supports 400-Mbytes full-duplex communications per each of its two channels in all Fibre Channel topologies and complies with PCI local bus specification revision 2.2. In addition, the HBA complies with ANSI SCSI standards for Class 2 and 3 services, supports Fibre Channel protocol SCSI (FCPSCSI)...
- Language: English
- Identifier: ISSN: 01921541

Host bus adapter hits 2 Gbits/s.(Product Announcement)

- Subjects: Computer Peripherals Industry -- Product Introduction ; Buses (Computers) -- Product Development ; Motherboards -- Equipment And Supplies ; Computer Hardware -- Product Introduction ; Pci Buses ; Input Devices (Computers) ; Vme Microsystems International Corp.
- Is Part Of: Electronic Engineering Times, May 14, 2001, p.136
- Identifier: ISSN: 0192-1541

PCI cores drop into standard cell series

- Is Part Of: Electonics Times, Jan 24, 2000, p.52
- Language: English
- Identifier: ISSN: 01423118

PCI cores drop into standard cell series

- Subjects: Semiconductor Devices ; American Microsystems Inc.
- Is Part Of: Electronics Times (Online), Jan 24, 2000, p.52
- **Identifier: ISSN:** 0142-3118

AMI rolls out PCI cores, Galileo takes MoSys license

- Author: Santarini, Michael
- Is Part Of: Electronic Engineering Times, Jan 17, 2000, Issue 1096, p.46
- Language: English
- Identifier: ISSN: 01921541

AMI rolls out PCI cores, Galileo takes MoSys license.(CORE COMPETENCY -- DIRECTIONS IN DESIGN REUSE)(Company Business and Marketing)

- Author: Santarini, Michael
- **Subjects:** Software Industry -- Product Introduction ; Semiconductor Industry -- Product Introduction ; Cpus (Central processing units) -- Product Introduction ; Electrical Engineering Software ; American Microsystems Inc. ; Galileo Technology Inc.
- Is Part Of: Electronic Engineering Times, Jan 17, 2000, p.46
- Identifier: ISSN: 0192-1541

Exar Again Announces Industry First: Octal PCI Local Bus Serial Communications Device

- Is Part Of: PR Newswire, Mar 27, 2000, p.1
- Notes: FREMONT, Calif., March 27 /PRNewswire/ -- Continuing its series of industry firsts in serial communications, Exar Corp. (Nasdaq: EXAR) announced today the industry's first octal (eight-channel) PCI bus (PCI) serial communications device, also known as a Universal Asynchronous Receiver Transmitter (UART). Applications include a wide range of high-performance systems including network management, hubs and routers, remote access servers, factory automation and process control, point-of-sale, and multi-serial-port communications add-on cards. Current solutions accomplish in three devices what Exar now offers in one 144-pin TQFP package. Additional series members are scheduled for launch later this year. "The octal PCI UART is a true milestone for Exar," said Dr. Roubik Gregorian, senior vice president, general manager Exar Communications division, chief technology officer. "The rapid market adoption of the high-speed PCI bus-based systems sets a solid foundation for this new generation of Exar product solutions."
- Language: English

V3 Semiconductor Announces High Performance 64-bit, 66MHz PCI-to- PCI Bridge

- Author: Business & Technology Editors
- Is Part Of: Business Wire, Sep 27, 1999, p.1
- Notes: The V390PPB is a highly integrated, high performance peripheral device that performs PCI-to-PCI bridging functions. This Hot Swap Ready device expands the capability of the host PCI bridge by providing an extension to support additional PCI devices or slots on a system board. It simplifies the design...
- Language: English

RadiSys covers all bases

- Author: Grigonis, Richard
- Subjects: Network Hardware Industry -- Product Information ; Network Adapters -- Design And

Construction ; Signal Processing Equipment ; Lan Adapters ; Digital Signal Processors ; Signal Processing ; Radisys Corp.;

- Is Part Of: Computer Telephony, Apr 2001, Vol.9(4), p.96
- Notes: Two building-block examples: the complementary ARTIC 2107 SS7 adapter for the circuitswitched world and the SPIRIT-6022 DSP board for packetization and media applications. Both boards come in both PCI and CompactPCI form factors (the ARTIC 1107 is the cPCI version of the ARTIC 2107) and both boards can work together in the same system.
- Language: English
- Identifier: ISSN: 10721711

V3 Semiconductor Announces High Performance 64-bit, 66MHz PCI-to-PCI Bridge

• Is Part Of: Business Wire, Sept 27, 1999, p.1084

No let up in new product introductions

- Author: Rosen, Carol
- Is Part Of: ECN, Feb 2000, Vol.44(2), p.31
- Language: English
- Identifier: ISSN: 15233081

NEW PRODUCTS.(Product Announcement)

- Subjects: Network Hardware Industry -- Product Introduction ; Handheld Computers -- Product Introduction ; Semiconductor Industry -- Product Introduction ; Computer Hardware -- Product Introduction ; Handheld Data Devices ; Lan Adapters ; Network Switches ; Electronic Components ; Semiconductor Devices ; Keithley Instruments Inc. ; Lucent Technologies Inc. ; American Microwave Corp. ; Hypertronics Corp. ; Chomerics Inc.
- Is Part Of: Wireless Design & Development, Feb, 2000, Vol.8(2), p.6
- **Identifier: ISSN:** 1076-4240

Appendix G

From: <<u>AskALibrarian@oclc.org</u>> Date: Fri, Apr 17, 2020 at 8:33 PM Subject: Library Question - Answer [Question #15393977] To: <<u>carrie.gardner@gmail.com</u>>

##- Please reply above this line. Anything below this line will not be sent in your reply. We do not accept attachments via this reply method -##

Hello Carrie Gardner

Hi,

Your question was referred back to the UCLA Library. UCLA does have this book, <u>https://catalog.library.ucla.edu/vwebv/holdingsInfo?bibId=4132749</u>. You can look at the MARC record, but ours does not have a 900 field. The 910 field (910_ |a 8 Jul 99 sms) is the date cataloged and the initials of the cataloger.

Because of the COVID-19 shelter-in-place orders, we are all working remotely. So no one will answer if you call the number the first librarian gave you.

Let me know if you need more information and I can give you the name of

Miki Goral Reference Librarian, UCLA 310-825-5096 miki@library.ucla.edu

a cataloger.

Question History:

Patron: Qwidget: May I speak to a cataloger?

Patron: I am a faculty member at San Jose State University.

Librarian 1: Librarian 'Librarian Cal Poly SLO' has joined the session.

Patron: I would like to know what information librarians at UCLA put in the 910 field of a marc record.

Librarian 1: Hello, I'm actually a librarian from Cal Poly helping with these chats, so I have no

way to send you to a cataloger through chat but I can find you a telephone number!

Librarian 1: I will look for an email as well.

Patron: thank you. Does Cal poly have the book with the ISBN 0201485354

Librarian 1: Cal Poly does not, but would you like me to look for it at UCLA?

Patron: UCLA has it. I need find a marc record for the book that has a date in a 900 field and the data to know what information they put in the 900.

Librarian 1: Here is a phone number for the cataloging and metadata center at UCLA (310) 825-3834 and here is an e-mail: <u>mono-maint@library.ucla.edu</u>

Patron: Thank you.

Librarian 1: Here is a list of other contacts that may be helpful if those do not work: <u>https://www.library.ucla.edu/key-contacts-cat-met</u>

Librarian 1: You're welcome!

Librarian 1: Is there anything else I can help you with?

Librarian 1: Librarian ended chat session.

Librarian 2: Hi,

Your question was referred back to the UCLA Library. UCLA does have this book, <u>https://catalog.library.ucla.edu/vwebv/holdingsInfo?bibId=4132749</u> <u>https://catalog.library.ucla.edu/vwebv/holdingsInfo?bibId=4</u> <u>132749</u>. You can look at the MARC record, but ours does not have a 900 field. The 910 field (910_ |a 8 Jul 99 sms) is the date cataloged and the initials of the cataloger.

Because of the COVID-19 shelter-in-place orders, we are all working remotely. So no one will answer if you call the number the first librarian gave you.

Let me know if you need more information and I can give you the name of

Miki Goral Reference Librarian, UCLA 310-825-5096 miki@library.ucla.edu mailto:miki@library.ucla.edu

a cataloger.

--All my best, Carrie