

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC
Petitioner

v.

UNILOC 2017 LLC
Patent Owner

Patent No. 7,012,960

DECLARATION OF DR. INGRID HSIEH-YEE

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I, Ingrid Hsieh-Yee, Ph.D., do hereby declare as follows:

I. INTRODUCTION

1. I have been retained by Google, LLC (“Google”) as independent expert consultant in this *Inter Partes* Review (“IPR”) proceeding before the United States Patent and Trademark Office (“PTO”) regarding U.S. Patent No. 7,012,960 (“the ’960 patent”).

2. I am being compensated for my work in this matter at my accustomed hourly rate. I am also being reimbursed for reasonable and customary expenses associated with my work and testimony in this investigation. My compensation is not contingent on the results of my study, the substance of my opinions, or the outcome of this matter.

II. MATERIALS CONSIDERED

3. In the preparation of this declaration, I have reviewed the exhibits referenced below, each of these is a type of material that experts in my field would reasonably rely upon when forming their opinions:

- (1) Keesman, G., Hellinghuizen, R., Hoeksema, F., & Heideman, G., (“Keesman”), “Transcoding of MPEG bitstreams,” *Signal Processing: Image Communication*, vol. 8, no. 6 (September 1996), pp. 481-500, obtained from the British Library, **Ex. 1005**;
- (2) Bibliographic record for *Signal Processing: Image Communication*, whose vol. 8, no. 6 contains Keesman, available at the online catalog of the British Library at <http://explore.bl.uk/BLVU1:LSCOP-ALL:BLL01009876007>, accessed and obtained on December 12, 2019, **Appendix 1005-A**;
- (3) MARC record for *Signal Processing: Image Communication*, whose vol. 8, no. 6 contains Keesman, available at the online catalog of the British Library at <http://explore.bl.uk/BLVU1:LSCOP-ALL:BLL01009876007> (select MARC display to view the MARC record), accessed and obtained on December 12, 2019, **Appendix 1005-B**;

- (4) Public Availability Date Letter on Keesman, obtained from the British Library, **Appendix 1005-C**;
- (5) Early citations of Keesman, **Appendix 1005-D**;
- (6) Neri, A., Russo, G., & Talone, P., (“Neri”), “Inter-block filtering and downsampling in DCT domain,” *Signal Processing: Image Communication*, vol. 6, no. 4 (August 1994), pp. 303-317, obtained from the British Library, **Exhibit 1006**;
- (7) Bibliographic record for *Signal Processing: Image Communication*, whose vol. 6, no. 4 contains Neri, available at the online catalog of the British Library at <http://explore.bl.uk/BLVU1:LSCOP-ALL:BLL01009876007>, accessed and obtained on December 12, 2019, **Appendix 1006-A**;
- (8) MARC record for *Signal Processing: Image Communication*, whose vol. 6, no. 4 contains Neri, available at the online catalog of the British Library at <http://explore.bl.uk/BLVU1:LSCOP-ALL:BLL01009876007> (select MARC display to view the MARC record), accessed and obtained on December 12, 2019, **Appendix 1006-B**;

- (9) Public Availability Date Letter on Neri, obtained from the British Library, **Appendix 1006-C**;
- (10) Early citations of Neri, **Appendix 1006-D**;
- (11) Mitchell, J. L., Pennebaker, W. B., Fogg, C. E., & LeGall, D. J., ("Mitchell"), MPEG VIDEO: COMPRESSION STANDARD, Chapman & Hall, 1996, obtained from the Library of Congress, **Ex. 1018**;
- (12) Bibliographic record for MPEG VIDEO: COMPRESSION STANDARD ("Mitchell"), available at the online catalog of the Library of Congress at <https://lccn.loc.gov/96031124>, accessed and obtained on August 28, 2019, **Appendix 1018-A**;
- (13) MARC record for MPEG VIDEO: COMPRESSION STANDARD ("Mitchell"), available at the online catalog of the Library of Congress at <https://catalog.loc.gov/vwebv/staffView?searchId=19882&recPointer=0&recCount=25&searchType=2&bibId=1635594>, accessed and obtained on August 28, 2019, **Appendix 1018-B**; and
- (14) Early citations of Mitchell, **Appendix 1018-C**.

4. In forming the opinions expressed within this declaration, I have

considered:

- (1) The documents listed above;
- (2) The reference materials cited herein; and
- (3) My own academic background and professional experiences, as described below.

III. BACKGROUND AND QUALIFICATIONS

5. My complete qualifications and professional experience are described in my academic curriculum vitae, a copy of which is provided as **Appendix A**. The following is a brief summary of my relevant qualifications and professional experience.

6. I am currently a Professor in the Department of Library and Information Science at the Catholic University of America. I have experience working in an academic library, a medical library, and a legislative library and have been a professor for more than 25 years. I hold a Ph.D. in Library and Information Studies from the University of Wisconsin-Madison and a Masters in Library and Information Studies from the University of Wisconsin-Madison.

7. I am an expert on library cataloging and classification and have published two books on this subject, *Organizing Audiovisual and Electronic Resources for Access: A Cataloging Guide* (2000, 2006). I teach a variety of courses, including Cataloging and Classification, Advanced Cataloging and Classification, Organization of Internet Resources, Organization of Information, Digital Content Creation and Management, Internet Searches and Web Design, Information Literacy Instruction, Advanced Information Retrieval and Analysis Strategies, and The Information Professions in Society. My research interests cover cataloging and

classification, information organization, metadata, information retrieval, information architecture, digital collections, scholarly communication, user interaction with information systems, and others.

8. I am fully familiar with a library cataloging encoding standard known as the “Machine-Readable Cataloging” standard, also known as “MARC,” which became the national standard for sharing bibliographic data in the United States by 1971 and the international standard by 1973. MARC is the primary communications protocol for the transfer and storage of bibliographic metadata in libraries. Experts in my field would reasonably rely upon MARC records when forming their opinions.

9. A MARC record is composed of several fields, each of which contains specific data about the work. Each field is identified by a standardized, unique, three-digit code corresponding to the type of data that follows. **Appendix B** is a true and correct copy of Parts 7 to 10 of “Understanding MARC Bibliographic: Machine-Readable Cataloging” (<http://www.loc.gov/marc/umb/>) from the Library of Congress that explains commonly used MARC fields. For example, the personal author of the work is recorded in Field 100, the title is recorded in Field 245, publisher information is recorded in Field 260, the physical volume and characteristics of a publication are recorded in Field 300, and topical subjects are recorded in the 650 fields.

10. The Online Computer Library Center (OCLC) is the largest bibliographic network of the world, with more than 453 million records and thousands of libraries from more than 100 countries. According to the “Third Article, Amended Articles of Incorporation of OCLC Online Computer Library Center, Inc.,” OCLC was created “to establish, maintain and operate a computerized library network and to promote the evolution of library use, of libraries themselves, and of librarianship, and to provide processes and products for the benefit of library users and libraries, including such objectives as increasing availability of library resources to individual library patrons and reducing the rate of rise of library per-unit costs, all for the fundamental public purpose of furthering ease of access to and use of the ever-expanding body of worldwide scientific, literary and educational knowledge and information.”¹ (**Appendix C**).

11. OCLC members can contribute original cataloging records in MARC to the system or derive cataloging records from existing records, an activity referred to as “copy cataloging.” When an OCLC participating institution acquires a work, it can create an original MARC record for the work in OCLC’s Connexion system (a

¹ The Third Article, Amended Articles of Incorporation of OCLC Online Computer Library Center, Inc. was last revised on November 30, 2016 and is available at <https://www.oclc.org/content/dam/oclc/membership/articles-of-incorporation.pdf>

system for catalogers to create and share MARC records), and the system will automatically generate a code for the date of record creation in the yymmdd format, and the creating library's OCLC symbol is recorded in subfield "a" of the 040 field. Once the MARC record is in Connexion, it becomes available to other OCLC members for adoption to their local online catalogs (*i.e.*, copy cataloging).

12. After a MARC record is created in Connexion, it also becomes searchable and viewable on WorldCat, which is a web portal to more than 10,000 libraries worldwide. The record in WorldCat, however, is not presented in MARC fields. Instead, the data elements are labeled to help users interpret the record.

13. WorldCat (<http://www.worldcat.org>) is "the world's largest network of library content and services" and its features are summarized in "What is WorldCat" (<http://www.worldcat.org/whatis/default.jsp>). Through WorldCat, users can search for information in their local libraries and libraries around the world. WorldCat allows users to search for books, CDs, videos, and many new types of digital content, such as audiobooks, in many languages. Users can also retrieve research materials and article citations with links to their full text. After an item is retrieved, WorldCat helps users identify a library nearby that holds the item or all the libraries that hold the item. WorldCat is an efficient way to explore the content held by more than 10,000 libraries around the world.

14. Libraries create MARC records for works they acquire, including books, serials, motion pictures, and publications in other formats. The MARC records are searchable in library online catalogs and enable users to discover and access library collections. The cataloging of serials and the serial check-in process are discussed here to show how libraries usually provide access to newly received serial issues. According to the glossary of the *RDA: Resource Description and Access* cataloging standard, a serial is “a mode of issuance of a manifestation issued in successive parts, usually bearing numbering, that has no predetermined conclusion. A serial includes a periodical, monographic series, newspaper, etc.” Because the publisher of a serial makes new issues of the serial available successively, a customary cataloging practice is to create one bibliographic record for the entire serial, and the MARC serial record typically provides information on the beginning date and frequency of the serial, not the dates of individual issues. In other words, libraries typically do not create MARC records for individual issues of a serial. Instead, they rely on a serial check-in system to keep track of the receipt of new issues. A common check-in practice is to date stamp a new issue when it arrives. This practice has become automated since the late 1990s, and libraries now vary in how they share the receipt date of a new serial issue with the public. Some libraries use a date stamp, some affix a label to indicate the receipt date, some pencil in the receipt date, and some do not provide the information to the public.

15. The serial check-in process usually takes less than an hour, and one of the steps involves placing a date stamp on the new issue to document the date the issue is checked in. After that, the holdings information of the serial is updated in the library's catalog so that users know which issues are available for request or access. After serial check-in is completed, the new issue is placed on the shelf with the previous issues of the serial. Libraries with a public periodical room typically place new issues in the periodical room for easy user access. Because information presented in serials often reflects latest discovery, a general practice of libraries is to make new issues of serials available for user access soon after they are checked in, often on the date when serial check-in is completed, and usually no more than a week after serial check-in.

16. I am personally familiar with many online catalogs, databases, and search engines. In preparing for this declaration I used authoritative information systems, including WorldCat (<https://www.worldcat.org>), the online catalog of the British Library (http://explore.bl.uk/primo_library/libweb/action/search.do), and Google Scholar (<https://scholar.google.com>) to search for records. These records are identified and discussed in this declaration. Experts in the field would reasonably rely on the data described herein to form their opinions.

IV. EXHIBIT 1005 (KEESMAN)

17. Exhibit 1005 is a true and correct copy of “Transcoding of MPEG bitstreams” by Keesman et al., in *Signal Processing: Image Communication*, vol. 8, no. 6 (September 1996), pp. 481-500, which I obtained from the British Library, with the assistance of Wisconsin TechSearch (WTS), a document delivery service based at the University of Wisconsin-Madison. When I began preparing this declaration I searched “Transcoding of MPEG bitstreams” in WorldCat (<https://www.worldcat.org>) for records, and the search results informed me that the British Library held the journal that published Keesman. After that, I searched the online catalog of the British Library (http://explore.bl.uk/primo_library/libweb/action/search.do) by “Transcoding of MPEG bitstreams” for records, and the search results led me to the journal record that confirmed the British Library held the journal containing Keesman. I then asked WTS to obtain a scanned copy of Keesman and the front matter of the journal issue containing Keesman from the British Library for me. I received the scanned pages from the British Library on December 17, 2019. The pages include the cover page, copyright page, table of contents of the vol. 8, no. 6 (September 1996) issue of *Signal Processing: Image Communication*, and the Keesman article.

18. Page 1 of Exhibit 1005 is the cover of the “Volume 8, No. 6, September 1996” issue of *Signal Processing Image Communication Theory, Techniques &*

Applications. It shows the ISSN (International Standard Serial Number) of this journal is “0923-5965” and this issue (signified by “8(6)” in the top-right corner under the ISSN number, where “8” is for Volume 8 and “(6)” indicates No. 6) contains pages “475-568 (1996).” The cover shows the table of contents of this issue, including “Transcoding of MPEG bitstreams” by Keesman et al. that begins on page 481 and ends on page 500. The cover also indicates that the journal is “A publication of the European Association for Signal Processing (EURASIP)” published by Elsevier. The cover shows a label of “(P) RU 45 – E(16)” that has the appearance of a shelfmark. Page 2 of **Exhibit 1005** is the copyright page that shows *Signal Processing: Image Communication* is “published in one volume (six issues) a year” (under the “Membership and Subscription Information” heading near the middle-right of Page 2) and the vol. 8, no. 6 (September 1996) issue has a copyright date of “1996” with “Elsevier Science B.V.”, the journal publisher, as the copyright holder. Page 3 is the table of contents page of vol. 8, no. 6 (September 1996) of *Signal Processing: Image Communication* that presents the same content information as the cover and a date stamp of “The British Library ... 22 AUG 1996.”

19. Page 4 of **Exhibit 1005** is the first page of Keesman that shows the title, authors, abstract and keywords of this article, and indicates the article was “received 25 May 1995.” The bottom of this page shows the article has a “1996” copyright date with “Elsevier Science B.V.” as the copyright holder. The Keesman article is

20 pages long, containing 23 figures and 12 references.

A. British Library Records

20. **Appendix 1005-A** is a true and correct copy of the bibliographic record for *Signal Processing: Image Communication* whose vol. 8, no. 6 (September 1996) issue contains Keesman. I retrieved the record from the online catalog of the British Library by searching for the title of Keesman's article, and the record includes a link to the journal *Signal Processing: Image Communication*. I personally identified, located, and obtained this bibliographic record, which experts in my field would reasonably rely upon when forming their opinion.

21. **Appendix 1005-A** shows that "Signal processing. Image communication" is the title of this journal, "Image communication" is a variant title by which users can find this journal, and "European Association for Signal Processing" is the contributor. The record also shows that Elsevier of Amsterdam has been the publisher since 1989. The Shelfmark(s) field indicates the British Library owns two copies of this journal, one in "Document Supply" with a shelfmark of "8275.985600" and the other in the "Science, Technology & Business" Division with a shelfmark of "(P) RU 45 -E(16)." The "(P) RU 45 -E(16)" shelfmark matches the shelfmark on Page 1 of **Exhibit 1005** (the cover of the vol. 8, no. 6 (September 1996) issue containing Keesman).

22. **Appendix 1005-B** is a true and correct copy of the MARC record for *Signal processing: Image communication* whose vol. 8, no. 6 (September 1996) issue contains Keesman. The bibliographic record that I retrieved for this journal (**Appendix 1005-A**) has a link for “MARC display,” which brings up the MARC record. This is the type of records experts in my field would reasonably rely upon when forming their opinion.

23. The first six digits of Field 008 in the MARC record (**Appendix 1005-B**) show that the serial record was created on “891003” (*i.e.*, October 3, 1989). The code of “c19899999” following the record creation date in Field 008 means the journal is a continuing resource that began publication in 1989 and is an ongoing publication. Field 040 shows “Uk” is the original creator of this serial record. According to the MARC Codes for Organizations in the UK and Its Dependencies (<http://www.bl.uk/bibliographic/pdfs/marc-codes-directory.pdf>), “UK” is the code for the British Library.

24. Field 245 of the MARC record (**Appendix 1005-B**) shows the title of this publication is “Signal processing. Image communication.” Field 246 shows “Image communication” is a variant title for this journal. Field 260 shows Elsevier of Amsterdam has been the publisher since 1989. Field 022 shows the journal’s ISSN is “0923-5965.” Field 362 shows the journal began published with “Vol. 1, no. 1

(June 1989).” A Field 500 note indicates the journal is “a publication of the European Association for Signal Processing” and Field 710 presents this organization as an additional access point so that users can find this journal by the name of this organization. Field 776 shows the journal is also available online, and “1879-2677” is the ISSN of the online version of this journal. The title, ISSN (print version), publisher, shelfmark of “(P) RU 45 – E(16)” and contributing organization match the information presented on the cover (page 1) of **Exhibit 1005**.

25. Subject matters of this journal are represented by a Dewey Decimal Classification number in Field 082 as “621.388,” which is the class number for the “Television” class; by a British Library – Science reference information service subject classification (blsrissc) number in Field 084 as “RU 45”; and by a Library of Congress subject heading in Field 650 as “Image processing |v Periodicals,” (“|v” is a form subdivision that indicates the format of the publication).

26. This MARC record (**Appendix 1005-B**) makes *Signal Processing: Image Communication*, whose vol. 8, no. 6 contains Keesman, searchable in the online catalog of the British Library. As a result, users interested in the topics covered by this title are able to search for and retrieve this journal title by the Dewey classification number and Library of Congress subject term. Users can also search for this publication by its title, variant title and the contributing organization,

European Association for Signal Processing.

B. British Library Date Stamps

27. As I noted above, the cover of **Exhibit 1005** has a shelfmark of “(P) RU 45 – E(16)” and the table of contents page (Page 3 of **Exhibit 1005**) bears a date stamp of “The British Library ... 22 August 1996.” The stamp has the appearance and distinctive characteristics of a typical check-in date stamp utilized by libraries to indicate the date a particular publication was received by the library. As I noted above, it is ordinary and regular practice for a library to maintain intake records, including date stamping serial issues during the check-in process, updating the holdings record and making a newly received serial issue available to the public in the library shortly after the library receives and date stamps the issue, usually within a week after serial check in. In this case, it is my understanding that the British Library date stamped vol. 8, no. 6 of *Signal Processing: Image Communication* on August 22, 1996, and shortly thereafter, would have made the issue accessible for the public as early as on August 22, 1996, and no later than August 29, 1996.

C. Public Availability Date Letter Issued by the British Library

28. **Appendix 1005-C** is a true and accurate copy of a Public Availability Date (PAD) letter about Keesman that I received from the British Library on December 17, 2019. This is the type of record experts in my field would reasonably rely upon when forming their opinions. **Appendix 1005-C** includes a letter stating

that, regarding “Transcoding of MPEG bitstreams” by Keesman et al., the British Library has two copies but only one of the copies “is available for inspection.” The letter further states that “we can only give you the date of the one copy that is currently available. We can confirm that the British Library Public Availability Date (PAD) for one of the two copies held is the **21st of August 1996**. This particular copy of the item would have been available for public use from that date onwards.”

29. The PAD letter includes “a scan of the cover page and table of contents page with date stamp” of vol. 8, no. 6 (September 1996) of *Signal Processing: Image Communication*. The cover of this issue (page 3 of **Appendix 1005-C**) shows a label of “21-AUG-1996 BLDSC Boston SPA” (*i.e.*, August 21, 1996 at the British Library Document Supply Center of the Boston Spa Branch) that includes the title of the journal, the numbering of this particular issue, and a barcode followed by “8275.985600,” which is the shelfmark of the copy held by the Document Supply Center. The cover also shows the table of contents of vol. 8, no. 6, including “Transcoding of MPEG bitstreams” by Keesman et al. that begins on page 481 and ends on page 500. The cover also shows a label of “LOAN BAN expires 19 FEB 1997” that is placed above the publisher’s name. Based on my knowledge and understanding of library cataloging and processing practice, I understand this stamp to be a temporary access control practice to ensure that this title was not circulated outside of the British Library for a limited period of time so that users could access

it at the Library. This type of short-term access control practice is used by libraries to manage access to heavily used materials. In this case, the time between the receipt date (August 21, 1996) and the ban expiration date (February 19, 1997) would have ensured that, for nearly six months, users would have access to this title at least in the British Library.

30. I have closely examined and compared **Exhibit 1005**, which I obtained from the British Library with the assistance of WTS, and the cover and copyright page included in the Public Availability Date letter of the British Library (**Appendix 1005-C**), and found them to have the same cover page and copyright page. The shelfmark labels on these two copies inform me that **Exhibit 1005** comes from the copy held at the Science, Technology & Business Division of the British Library, while **Appendix 1005-C** comes from the copy held by the Document Supply Center of the British Library. One difference is **Exhibit 1005** has a date stamp of “22-AUG-1996” while **Appendix 1005-C** has a date stamp of “21-AUG-1996.” The shelfmark details match the information documented by the bibliographic and MARC records I discussed above (with reference to **Appendices 1005-A** and **1005-B**) of *Signal Processing: Image Communication* at the British Library and confirm that the British Library has two copies of this journal. The two receipt dates of these copies indicate that these copies of the issue of *Signal Processing: Image Communication* that contains Keesman were received by the British Library in August 1996.

D. Actual usage of Keesman

31. Actual usage of a publication is reflected by the papers that make reference to it. My research on Google Scholar has found 337 citations of Keesman, including 25 citations published between 1997 and 1998, with the earliest citation published in February 1997. **Appendix 1005-D** presents these citations to Keesman to demonstrate early usage, further supporting my opinion that vol. 8, no. 6 (September 1996) of *Signal Processing: Image Communication* (including Keesman contained therein) was publicly accessible in August 1996.

E. Summary of Findings Regarding Keesman

32. In view of the British Library records, British Library date stamps, MARC record, PAD letter, and the citation history of Keesman, it is my opinion that:

- (a) Two copies of “Transcoding of MPEG bitstreams,” by Keesman et al. (**Exhibit 1005**) were received by the British Library on August 21 and August 22, 1996, as reflected by the date stamps on these copies that indicate the dates when the British Library received copies of vol. 8, no. 6 of the physical journal containing Keesman.
- (b) MARC Record: This record shows that the record for this journal was first created on October 3, 1989, as a continuing resource, making it searchable in the online catalog of the British Library. As a result, users interested in the topics covered by this title are able to search for and

retrieve this journal title by the Dewey classification number and Library of Congress subject term. Users can also search for this publication by its title, variant title and the contributing organization, European Association for Signal Processing.

- (c) PAD Letter: The PAD Letter from the British Library, and my knowledge and experience with the cataloging and processing practices of libraries inform my opinion that *Signal Processing: Image Communication*, which contains Keesman, was date stamped by the British Library on August 21, 1996 (the Document Supply Center copy) and August 22, 1996 (the Science, Technology & Business Division copy). The physical copies would have been available soon after serial check-in was completed. As the PAD Letter indicates, the copy held by the Document Supply Center would have been available for public access from “the 21st of August 1996.”
- (d) Citation history: Keesman has been cited at least 337 times, including 25 citations published between 1997 and 1998, demonstrating the early usage of this article.
- (e) Taken together, these records and data inform my opinion that the journal that contains Keesman is held by the British Library, and is

searchable in the online catalog of WorldCat; and that copies of vol. 8, no. 6 that contains Keesman were received and checked in at the British Library on August 21 and August 22, 1996, and became available to the public at the British Library as early as August 21, 1996, and no later than a week after receipt.

V. EXHIBIT 1006 (NERI)

33. Exhibit 1006 is a true and correct copy of “Inter-block filtering and downsampling in DCT domain” by Neri et al., in *Signal Processing: Image Communication*, vol. 6, no. 4 (August 1994), pp. 303-317, which I obtained from the British Library, with the assistance of WTS, a document delivery service based at the University of Wisconsin-Madison. When I began preparing this declaration I searched “Inter-block filtering and downsampling in DCT domain” in WorldCat (<https://www.worldcat.org>) for records, and the search results informed me that the British Library held the journal that published Neri. After that, I searched the online catalog of the British Library (http://explore.bl.uk/primo_library/libweb/action/search.do?vid=BLVU1) by “Inter-block filtering and downsampling in DCT domain” for records, and the search results led me to the journal record that confirmed the British Library held the journal containing Neri. I then asked WTS to obtain a scanned copy of Neri and the front matter of the journal issue containing Neri from the British Library for me. I received the scanned pages from the British Library on December 17, 2019. The pages include the cover page, copyright page, table of contents of the vol. 6, no. 4 (August 1994) issue of *Signal Processing: Image Communication*, and the Neri article.

34. Page 1 of **Exhibit 1006** is the cover of the “Volume 6, No. 4, August 1994” issue of *Signal Processing Image Communication Theory, Techniques &*

Applications. It shows the ISSN (International Standard Serial Number) of this journal is “0923-5965” and this issue (signified by “6(4)” in the top-right corner under the ISSN number, where “6” is for Volume 6 and “(4)” indicates No. 4) contains pages “281-378 (1994).” The cover shows the table of contents of this issue, including “Inter-block filtering and downsampling in DCT domain” by Neri et al., that begins on page 303. The cover also indicates that the journal is “a publication of the European Association for Signal Processing (EURASIP).” The cover shows a label of “2-SEP-1994 BLDSC Boston Spa” (*i.e.*, September 2, 1994, British Library Document Supply Center of the Boston Spa Branch) that includes the journal title, the numbering of this issue, and a barcode followed by “8275.985600” that has the appearance of a shelfmark. Page 2 of **Exhibit 1006** is the copyright page that shows *Signal Processing: Image Communication* is “published in one volume (six issues) a year” (under the “Membership and Subscription Information” heading near the middle-right of Page 2) and the vol. 6, no. 4 (August 1994) issue has a copyright date of “1994” with “Elsevier Science B.V.”, the journal publisher, as the copyright holder. Page 3 is the table of contents page of vol. 6, no. 4 (August 1994) of *Signal Processing: Image Communication* that presents the same content information as the cover.

35. Page 4 of **Exhibit 1006** is the first page of Neri that shows the title, authors, abstract and keywords of this article, and indicates the article was “received

16 December 1992.” The bottom of this page shows the article has a “1994” copyright date with “Elsevier Science B.V.” as the copyright holder. The Neri article is 15 pages long, containing 16 figures (Figure 16 includes six images) and 13 references.

A. British Library Records

36. Appendix 1006-A is a true and correct copy of the bibliographic record for *Signal Processing: Image Communication* whose vol. 6, no. 4 (August 1994) issue contains Neri. I retrieved the record from the online catalog of the British Library by searching for the title of Neri's article, and the record includes a link to the journal *Signal Processing: Image Communication*. I personally identified, located, and obtained this bibliographic record, which experts in my field would reasonably rely upon when forming their opinion.

37. Appendix 1006-A shows that “Signal processing. Image communication” is the title of this journal, “Image communication” is a variant title by which users can find this journal, and “European Association for Signal Processing” is the contributor. The record also shows that Elsevier of Amsterdam has been the publisher since 1989. The Shelfmark(s) field indicates the British Library owns two copies of this journal, one in “Document Supply” with a shelfmark of “8275.985600” and the other in the “Science, Technology & Business” Division with a shelfmark of “(P) RU 45 -E(16).” The “8275.985600” shelfmark matches the

shelfmark on Page 1 of **Exhibit 1006** (the cover of the vol. 6, no. 4 (August 1994) issue containing Neri).

38. Appendix 1006-B is a true and correct copy of the MARC record for *Signal processing: Image communication* whose vol. 6, no. 4 (August 1994) issue contains Neri. The bibliographic record that I retrieved for this journal (**Appendix 1006-A**) has a link for “MARC display,” which brings up the MARC record. This is the type of records experts in my field would reasonably rely upon when forming their opinion.

39. The first six digits of Field 008 in the MARC record (**Appendix 1006-B**) show that the serial record was created on “891003” (*i.e.*, October 3, 1989). The code of “c19899999” following the record creation date in Field 008 means the journal is a continuing resource that began publication in 1989 and is an ongoing publication. Field 040 shows “Uk” is the original creator of this book record. According to the MARC Codes for Organizations in the UK and Its Dependencies (<http://www.bl.uk/bibliographic/pdfs/marc-codes-directory.pdf>), “UK” is the code for the British Library.

40. Field 245 of the MARC record (**Appendix 1006-B**) shows the title of this publication is “Signal processing. Image communication.” Field 246 shows a “Image communication” as the variant title for discovering this journal. Field 260

shows Elsevier of Amsterdam has been the publisher since 1989. Field 022 shows the journal's ISSN is "0923-5965." Field 362 shows the journal began published with "Vol. 1, no. 1 (June 1989)." A Field 500 note indicates the journal is "a publication of the European Association for Signal Processing" and Field 710 presents this organization as an additional access point so that users can find this journal by the name of this organization. Field 776 shows the journal is also available online, and "1879-2677" is the ISSN of the online version of this journal. The title, ISSN (print version), publisher, contributing organization and the shelfmark of "8275.985600" match the information presented on the cover (page 2) of **Exhibit 1006**.

41. Subject matters of this journal are represented by a Dewey Decimal Classification number in Field 082 as "621.388," which is the class number for the "Television" class; by a British Library – Science reference information service subject classification (blsrisc) number in Field 084 as "RU 45"; and by a Library of Congress subject heading in Field 650 as "Image processing \$v Periodicals," ("v" is a form subdivision that indicates the format in which the publication is presented in).

42. This MARC record (**Appendix 1006-B**) makes *Signal Processing: Image Communication*, whose vol. 6, no. 4 contains Neri, searchable in the online

catalog of the British Library. As a result, users interested in the topics covered by this title are able to search for and retrieve this journal title by the Dewey classification number and Library of Congress subject term. Users can also search for this publication by its title, variant title, and the contributing organization, European Association for Signal Processing.

B. British Library Date Stamps

43. As I noted above, the cover of **Exhibit 1006** has a label of “2-SEP-1994 BLDSC Boston Spa.” The stamp has the appearance and distinctive characteristics of a typical check-in date stamp utilized by libraries to indicate the date a particular publication was received by the library. As I noted above, it is ordinary and regular practice for a library to maintain intake records, including date stamping serial issues during the check-in process, updating the holdings record and making a newly received serial issue available to the public in the library shortly after the library receives and date stamps the issue, usually within a week after serial check in. In this case, it is my understanding that the British Library date stamped vol. 6, no. 4 of *Signal Processing: Image Communication* on September 2, 1994, and would have made the issue accessible for the public as early as on September 2, 1994, and no later than September 9, 1994.

C. Public Availability Date Letter Issued by the British Library

44. **Appendix 1006-C** is a true and accurate copy of a public availability

date letter about Neri that I received from the British Library on December 17, 2019. This is the type of record experts in my field would reasonably rely upon when forming their opinions. **Appendix 1006-C** includes a letter stating that, regarding “Inter-block filtering and downsampling in DCT domain” by Neri A et al., the British Library can confirm that “the British Library Public Availability Date (PAD) for this item is the **2nd of September 1994**. The item would have been available for public use from that date onwards.”

45. The PAD letter includes “a scan of the cover page and table of contents page with date stamp” of vol. 6, no. 4 (August 1994) of *Signal Processing: Image Communication*. The letter further indicates that “we can only provide the date that the British Library made this item available for public use; for the actual date of publication, please contact the publisher.” The cover of this issue, included as page 3 of **Appendix 1006-C**, shows a label of “2-SEP-1994 BLDSC Boston SPA” (*i.e.*, September 2, 1994, the British Library Document Supply Center of the Boston Spa Branch) that includes the title of the journal, the numbering of this particular issue, and a barcode followed by “8275.985600,” which is the shelfmark of this journal, according to the library records (**Appendices 1006-A and 1006-B**). The cover also shows the table of contents of vol. 6, no. 4, including “Inter-block filtering and downsampling in DCT domain” by Neri et al. that begins on page 303. The cover of the issue at page 3 of **Appendix 1006-C** matches the cover of the issue at page 1 of

Exhibit 1006.

D. Actual usage of Neri

46. Actual usage of a publication is reflected by the papers that make reference to it. My research on Google Scholar has found 26 citations of Neri, including seven citations published between 1995 and 1999, with the earliest citation published in May 1995. **Appendix 1006-D** presents these citations to Neri to demonstrate early usage, further supporting my opinion that vol. 6, no. 4 (August 1994) of *Signal Processing: Image Communication* (including Neri contained therein) was publicly accessible in 1994.

E. Summary of Findings Regarding Neri

47. In view of the British Library records, British Library date stamps, MARC record, PAD letter, and the citation history of Neri, it is my opinion that:

- (a) **Exhibit 1006**, “Inter-block filtering and downsampling in DCT domain” by Neri et al. was received by the British Library on at least September 2, 1994, as reflected by the British Library’s date stamp of September 2, 1994, that indicates when the library received the issue of the physical journal containing Neri.
- (b) MARC Record: This record shows that the record for this journal was first created on October 3, 1989, as a continuing resource, making it searchable in the online catalog of the British Library. As a result, users

interested in the topics covered by this title are able to search for and retrieve this journal title by the Dewey classification number and Library of Congress subject term. Users can also search for this publication by its title, variant title and the contributing organization, European Association for Signal Processing.

- (c) PAD Letter: The PAD Letter from the British Library, and my knowledge and experience with the cataloging and processing practices of libraries inform my opinion that *Signal Processing: Image Communication*, which contains Neri, was date stamped by the British Library on September 2, 1994. The physical copies would have been available soon after serial check-in was completed. As the PAD letter indicates (**Appendix 1006-C**), the copy held by the Document Supply Center would have been available for public access from “the 2nd of September 1994” onwards.
- (d) Citation history: Neri has been cited at least 26 times, including seven citations published between 1995 and 1999, with the earliest citation published in May 1995, demonstrating early usage of this article.
- (e) Taken together, these records and data inform my opinion that the journal that contains Neri is held by the British Library, and is

searchable in the online catalog of the WorldCat; and that vol. 6, no. 4, that contains Neri was received and checked in at the British Library on September 2, 1994, and became available to the public at the British Library no later than September 9, 1994, a week after receipt.

VI. EXHIBIT 1018 (MITCHELL)

48. Ex. 1018 is a true and correct copy of portions of MPEG VIDEO COMPRESSION STANDARD (1996) by Mitchell *et al.* (“Mitchell”), published by Chapman & Hall, obtained from the Library of Congress on Sept. 2, 2019. In connection to Mitchell, I searched for records for this book by its title in WorldCat (<https://www.worldcat.org>) and the search results showed that the Library of Congress was one of the holding libraries. I searched the online catalog of the Library of Congress to verify the holdings, and the search results confirmed the Library of Congress held this book. The “Item Availability” area of the library records indicates the Library of Congress has one copy of MPEG VIDEO: COMPRESSION STANDARD (“Mitchell”), the book’s call number is “TK6680.5 .M69 1996” and users can request this copy at the “Jefferson or Adams Building Reading Rooms.” Based on my information and belief, as I further discuss below, **Ex. 1018** is the Mitchell book borrowed from the Library of Congress and scanned for the purposes of this declaration.

49. The cover of **Ex. 1018** (page 1) shows “MPEG Video Compression Standard” as the title, “Joan L. Mitchell, William B. Pennebaker, Chad E. Fogg, and Didier J. LeGall” as the authors, and “Digital Multimedia Standards Series” as the series that includes this title. The cover also shows a label for the call number, “TK 6680.5 .M69 1996.” Page 2 of **Ex. 1018** is the back cover of this book and it shows

Chapman & Hall of New York as the publisher and “0-412-08771-5” as the ISBN (International Standard Book Number) assigned to this book. Page 5 of **Ex. 1018** is the title page that shows the same title, author and series information as the cover and also indicates “Chapman & Hall” of New York as the publisher. Page 6 of **Ex. 1018** is the copyright page that shows a “1996” copyright date and “Chapman & Hall” as the copyright holder. The lower part of this page shows a block of “Library of Congress Cataloging-in-Publication Data” that includes “96-31124” as the Library of Congress control number and includes a note that indicates “British Library Cataloging in Publication Data” is also available. In addition, the copyright page shows a stamp of “LIBRARY OF CONGRESS MAR 17. 1997 CIP” and a hand-written call number of “TK6680.5 .M69 1996.” Page 8 of **Ex. 1018** is the “Series Preface” that indicates MPEG VIDEO: COMPRESSION STANDARD “initiates a new digital multimedia standards series” and “already in production for this series are books titled *Digital Video: Introduction to MPEG-2* and *Data Compression in Systems*.” The table of contents shows the book has 18 chapters and an appendix and the last numbered page is page 470.

A. Library of Congress – Bibliographic and MARC Records

50. **Appendix 1018-A** is a true and correct copy of the bibliographic record for Mitchell. I retrieved this record from the Library of Congress online catalog (<https://catlog.loc.gov>) after searching for the book by its title, “MPEG video:

compression standard.” I personally identified and located this record, which experts in my field would reasonably rely upon when forming their opinions.

51. Appendix 1018-B is a true and correct copy of the MARC record for Mitchell. I retrieved this record from the Library of Congress online catalog (<https://catlog.loc.gov>) after searching for the book by its title, “MPEG video: compression standard.” I personally identified and located this record, which experts in my field would reasonably rely upon when forming their opinions.

52. The main title field of the bibliographic record (**Appendix 1018-A**) and Field 245 of the MARC record (**Appendix 1018-B**) identify the book title as “MPEG video: compression standard” and “Joan L. Mitchell ... [et al.]” as the authors. The published/created field of the bibliographic record and Field 260 of the MARC record show that Chapman & Hall of New York published this book with a 1996 copyright date. The LCCN field of the bibliographic record and Field 010 of the MARC record show that “96031124” is the Library of Congress control number assigned to this book. The ISBN field of the bibliographic record and Field 020 of the MARC record show that “0412087715” is the ISBN assigned to this book. The title, author information, ISBN, publisher, and copyright date information match the information presented in **Ex. 1018**. Field 300 of the MARC record shows the last numbered page is page 470, which matches the last numbered page of **Ex. 1018**.

Field 440 records the name of the series, which enables users to find this book by the series title.

53. The first six digits of Field 008 of the MARC record (**Appendix 1018-B**) show that the record was first created on “960621” (*i.e.*, June 21, 1996) and Field 955, a field for recording local cataloging dates, shows that the original MARC record was verified on “05-02-97” (*i.e.*, May 2, 1997). Field 040 subfield “a” shows that “DLC” created the original MARC record. According to the Directory of OCLC Members (<https://www.oclc.org/en/contacts/libraries.html>), “DLC” is the OCLC library symbol for the Library of Congress. These data inform my opinion that the MARC record (**Appendix 1018-B**) was first created on June 21, 1996 as a Cataloging-in-Publication (CIP) record, and the CIP record was verified on May 2, 1997 after the published book was received by the CIP program of the Library of Congress.

54. The CIP Program at the Library of Congress is responsible for cataloging books in advance of publication to alert the library community to forthcoming publications and to facilitate acquisition. The initial CIP record is created based on information submitted by the publisher. When the CIP record is ready, it is sent to the publisher for inclusion in the publication. The “Library of Congress Cataloging-in-Publication Data” on the copyright page of **Ex. 1018**

reflects this practice. The Library of Congress distributes CIP records in MARC format to large libraries, bibliographic services, and book vendors around the world. After the book is published, the publisher is obligated to send a copy to the CIP Program, and CIP catalogers use the newly received publication to verify and update data in the original CIP record.

55. Field 050 of the MARC record (**Appendix 1018-B**) shows Mitchell has been assigned a Library of Congress Classification (LCC) number, “TK6680.5,” which is the class number for “general works” in the “digital video” class. Field 082 shows the Dewey Decimal Classification (DDC) Number assigned to this publication is “621.388,” which is the class number for “television” including interactive television such as video-on-demand. The subjects of this publication are also represented in Fields 650 by five Library of Congress subject headings: “Digital video,” “Video compression |x Standards” (|x indicates a topical subdivision of the main heading), “Sound |x Recording and reproducing |x Digital techniques |x Standards,” “Coding theory,” and “MPEG (Video coding standard).” The first author, Joan L. Mitchell is recorded in field 700 as an access point, meaning users can find this book by the first author’s name. This MARC record (**Appendix 1018-B**) makes Mitchell (**Ex. 1018**) searchable in the Library of Congress online catalog. As a result, users interested in the subjects of this book would be able to search for and retrieve this book by the subject terms in the 650 fields and by the subject areas

represented by the LCC number and the DDC number. Users would also be able to find this book by its title, first author, series, and ISBN.

56. Based on the information above, it is my opinion that Mitchell (**Ex. 1018**) is a book that has been made available by the Library of Congress, meaning that anyone who was interested in the topics covered by the book would be able to search for and access Mitchell.

B. Library of Congress – Date Stamp

57. The copyright page of Mitchell in **Ex. 1018** bears a stamp of “LIBRARY OF CONGRESS MAR 17. 1997 CIP” that indicates the date when the Library of Congress received the physical volume of Mitchell. The stamp has the appearance and distinctive characteristics of a typical check-in date stamp utilized by libraries to indicate the date a particular publication was received by the library. The date stamp and the cataloging dates in Field 955 of the MARC record (**Appendix 1018-B**) inform my opinion that the MARC record was created by the Library of Congress on “960621” (*i.e.*, June 21, 1996) based on the information provided by the publisher, and this MARC record was verified on “05-02-97” (*i.e.*, May 2, 1997) after the CIP Program received the physical copy of this book and used it to verify details of the original MARC record. In most academic libraries a newly cataloged book would become available for the public soon after the cataloging record is completed, usually within a week. Considering the volume of

materials for processing at the Library of Congress, my conservative estimate is that Mitchell would have become available for public access by August 2, 1997, three months after the CIP record was verified.

58. Based on the date stamp placed on the copyright page in Mitchell (**Ex. 1018**), which has a date stamp of March 17, 1997, the bibliographic record (**Appendix 1018-A**), the MARC record (**Appendix 1018-B**), and my understanding of the ordinary and customary cataloging and processing practices of libraries, it is my opinion that Mitchell (**Ex. 1018**) was cataloged by the Library of Congress CIP Program in June 1996, then the CIP record was sent to the publisher for inclusion in the published work. The block of CIP data on the copyright page of **Ex. 1018** reflects this practice. The CIP record became searchable in the online catalog of the Library of Congress. After CIP catalogers received the published work on March 17, 1997, they used it to verify the CIP record on May 2, 1997. The physical copy would then become accessible to the public at the Library of Congress by August 2, 1997, at the latest.

C. Actual Usage

59. Actual usage of a publication is reflected by the papers that make reference to it. My research on the ACM Digital Library has identified 102 citations of Mitchell. **Appendix 1018-C** presents six citations of Mitchell, showing that the earliest citation was published in November 1997, and further supporting my opinion

that Mitchell would have been accessible to the public in 1997.

D. Summary of Findings Regarding Mitchell

60. In view of the Library of Congress date stamp, bibliographic record, MARC record, and the citation history of Mitchell, it is my opinion that:

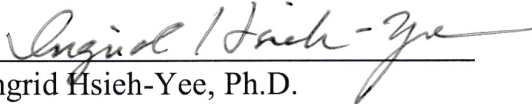
- (a) **Exhibit 1018:** MPEG VIDEO COMPRESSION STANDARD (1996) by Mitchell et al. was received by the Library of Congress on at least March 17, 1997; because of the Library of Congress's date stamp of March 17, 1997 that indicates when the library received the physical book.
- (b) **MARC Record:** This record shows that the record was first created on June 21, 1996 as a Cataloging-in-Publication (CIP) record, making it searchable at this time, and the CIP record was verified on May 2, 1997 after the published book was received by the CIP program of the Library of Congress, and interested users would have been able to search for and retrieve the book at the Library of Congress at least by August 2, 1997.
- (c) **Citation history:** Mitchell has been cited at least 102 times, and the first citing paper published in November 1997 demonstrates the early usage of this book.

- (d) Taken together, these records and data inform my opinion that Mitchell became searchable in the online catalog of the Library of Congress as early as June 21, 1996 when the CIP record was created, the published book was received by the Library of Congress in March 1997, and the physical volume of Mitchell became available to the public at the Library of Congress no later than August 2, 1997.

VII. CONCLUSION

61. I hereby declare that all statements made herein on my own knowledge are true and that all statements made on information and belief are believed to be true, and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

Dated: March 24, 2020

By: 
Ingrid Hsieh-Yee, Ph.D.

Appendix A

Ingrid Hsieh-Yee

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Education

Ph.D. Library and Information Studies, University of Wisconsin-Madison
Minors: Sociology and Psychology

M.A. Library and Information Studies, University of Wisconsin-Madison.

M.A. Comparative Literature, University of Wisconsin-Madison.

B.A. Foreign Languages and Literature, National Taiwan University.

Work Experience

Professor, School/Dept. of Library and Information Science, Catholic University of America,
2004- (Assistant Professor, 1990-1996; Associate Professor, 1997-2004)

Co-Chair, Dept. of Library and Information Science, Catholic University of America, June 2015-
August 2016.

Acting Dean, School of Library and Information Science, Catholic University of America,
January 2010-June 2012.

Cataloger, Dept. of Legislative Reference Library, Annapolis, Maryland, 1989-1990.

Lecturer, School of Library and Information Studies, University of Wisconsin-Madison, 1988.

Teaching Assistant, School of Library and Information Studies, University of Wisconsin-
Madison, 1986-1988.

Cataloger, Health Sciences Library, University of Wisconsin-Madison, 1984-1986.

Areas of Teaching and Research Interests

Information Organization and Access; Metadata; Cataloging & Classification; Information
Architecture; Information Retrieval; Digital Collections; Scholarly Communication; Information

Behavior; Health Informatics; Human Computer Interaction; Usability Studies

Grants & Honors

Cultural Heritage Information Management Project. IMLS grant. Amount: \$498,741. Period: Aug. 2012 to July 2015. Co-PI with Dr. Youngok Choi.

D.C. Health Information Technology (HIT4): Building Capacity & Providing Access in Our Nation's Capital. Dept. of Labor H2B Training Grant. Grant amount: \$4,175,500. Grant period: Nov. 2011 to Dec. 2015. Partner with the Metropolitan School of Professional Studies of the Catholic University of America, Children's National Medical Center, D.C. Department of Employment Services, Holy Cross Hospital, Howard University, Center for Urban Progress, Providence Hospital, and Sibley Memorial Hospital.

Capital Health Careers Project. Department of Labor Healthcare Sector and Other High Growth and Emerging Industries Grant. Grant amount: \$4,953,999. Grant period: March 2010 – February 2013. Awarded to a group of healthcare organizations and educational institutions in Washington, D.C. Providence Health Foundation of Providence Hospital (Lead institution). Part of the grant supported the development of a Master's degree program in Information Technology with a concentration in Health Information Technology offered by the School of Library and Information Science.

The Washington D.C. School Librarians Project. IMLS grant. Grant amount: \$412,660. Grant period: Aug. 2007 – June 2011. The School partnered with the District of Columbia Public Schools (DCPS) and the District of Columbia Library Association to educate and mentor school media specialists for the DCPS system. PI, Jan. 2010 to June 2011.

SIG Member of the Year, American Society for Information Science and Technology (2009).

Most Outstanding Paper of *OCLC Systems & Services* (2001).

ALISE Research Grant (2001).

Most Outstanding Paper of *OCLC Systems & Services* (2000).

Research Grant from ERIC (1999-2000).

Best Research Paper Award; Association for Library and Information Science Education (1998).

Research Grants, Catholic University of America. 1991, 1992, 1993, 1996, 1998, 1999, 2004, 2005, 2006, 2007, 2013-14.

Cooperative Faculty Research Grant, Consortium of Universities in the Washington Metropolitan Area (1993-1994).

Cooperative Research Grant, Council on Library Resources (1993-1994).

Journal of the American Society for Information Science Best Paper Award (1993).

ASIS/ISI Information Science Doctoral Dissertation Scholarship (1989).

HEA Title IIB Fellowship (Dept. of Education) (1989)

Chinese-American Librarians Association Scholarship (1987).

Beta Phi Mu (1985).

Vilas Fellowship, University of Wisconsin-Madison. 1984

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Choi, Y., and Hsieh-Yee, I. (2010). Finding Images in an OPAC: Analysis of User Queries, Subject Headings, and Description Notes. *Canadian Journal of Information and Library Science*, 34(3): 271 – 295.

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- NISO A Framework of Guidance for Building Good Digital Collections*. 2nd ed. Bethesda, MD: National Information Standards Organization, 2004. Framework Advisory Group: Grace Agnew, Liz Bishoff, Priscilla Caplan (Chair), Rebecca Gunther and Ingrid Hsieh-Yee.
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- Yee, P. L., Hsieh-Yee, I., Pierce, G.R., Grome, R., and Schantz, L. (2004). Self-Evaluative Intrusive Thoughts Impede Successful Searching on the Internet. *Computers in Human Behavior*, 20(1): 85-101.
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- Hsieh-Yee, I. (1995). Ten entries in James S. C. Hu (Ed.), *Encyclopedia of Library & Information Science*, 913, 1028-29, 1036, 1037, 1145-46, 1514, 1575, 1763-64, 2216-27, 2378-79. Taipei, Taiwan: Sino-American Publishing. (Topics include "Advanced Technology/Libraries," "Information Ethics," "Instruction on Cataloging and Classification," "Instruction on Reference Services.")
- Hsieh-Yee, I. (1993). Effects of Search Experience and Subject Knowledge on Online Search Behavior: Measuring the Search Tactics of Novice and Experienced Searchers. *Journal of the American Society for Information Science*, 44: 161-174. (Received the 1993 Best JASIS Paper Award.)

Presentations

- Hsieh-Yee, I. and Fragan-Fly, J. (May 2018) Trends, Design & Strategies for Digital Scholarship Services. Presented at the 2018 Maryland/Delaware Library Association Conference, Cambridge, MD.
- Hsieh-Yee, I. (February, 2018) Research Data Management: What It Takes to Succeed. Presented at the 10th Bridging the Spectrum Symposium, Washington, D.C.
- Hsieh-Yee, I. (February, 2017) *Research Data Management: New Competencies and Opportunities for Information Professionals*. Presented at the 9th Bridging the Spectrum Symposium, Washington, D.C.
- Hsieh-Yee, I. and Lawton, P. (February, 2017) *Enhancing Catholic Portal Searches with User Terms and LCSH*. Presented at the 9th Bridging the Spectrum Symposium, Washington, D.C.
- Hsieh-Yee, I. (2016, October) *Visualizing Data for Information*. Presented at the 2016 Virginia Library Association Conference, Hot Springs, VA.
- Hsieh-Yee, I. (2016, August) *Religious Materials Toolbox for Archivists: Solutions to Problems Facing the Profession*. Presented at Archives * Records 2016, Atlanta, GA.
- Hsieh-Yee, I. and Lawton, P. (2016, March) *Enhancing Retrieval of Catholic Materials with LCSH Knowledge Structure*. Presented at the 2016 Catholic Library Association Conference, San Diego, CA.

- Fagan-Fry, J. and Hsieh-Yee, I. (2016, February) *Approaches to Digital Scholarship at Top Universities around the World: Scholarly Publishing in the Digital Age*. Presented at the 8th Bridging the Spectrum Symposium, Washington, D.C.
- Hsieh-Yee and Fagan-Fry, J. (2016, January) *Innovative Services for Digital Scholarship at Top 100 Research Libraries of the World*. Poster presented at the 2016 Annual Conference of the Association for Library and Information Science Education, Boston, Mass.
- Hsieh-Yee, I. and Lawton, P. (2015, June). *Crowdsourcing terms for CRRA portal themes*. Poster presented at the third CRRA symposium and annual meeting, Bringing the created toward the Creator: Liturgical art and design since Vatican II. Catholic Theological Union, Chicago, Illinois.
- Hsieh-Yee, I. and Lawton, P. (2015, February). *Crowdsourcing terms for thematic exploration in the Catholic Portal*. Poster presented at the 7th Annual Bridging the Spectrum Symposium, Washington, D.C.
- Hsieh-Yee, I., James, R., and Fagan-Fry, J. (2015, February). *Support for digital scholarship at top university libraries of the world*. Poster presented at the 7th Annual Bridging the Spectrum Symposium, Washington, D.C.
- Hsieh-Yee, I., Zhang, S., Lin, K., and Cherry, S. (2015, February). *Thus said the end users: Summon experience and support for research workflows*. Poster presented at the 7th Annual Bridging the Spectrum Symposium, Washington, D.C.
- Yontz, E., Hsieh-Yee, I., & Houston, S. (2015, February). *Healthy Heroes Summer Reading Club: Developing healthy youth at public libraries*. 11th Annual Jean Mills Health Symposium, Greenville, North Carolina.
- Yontz, E., Hsieh-Yee, I., and Houston, S. (2015, January). *Healthy youth and libraries: A pilot study*. Association for Library & Information Science Education (ALISE) Annual Conference, Chicago, Illinois.
- Hsieh-Yee, I. (2014, May). *Linking CRRA resources to portal themes via authority files*. Presented at the Catholic Research Resources Alliance 2014 Membership Meeting, Marquette, WI.
- Hsieh-Yee, I. (2014, April). *Enhancing subject access to CRRA resources*. Presented at the 2014 Catholic Library Association Conference, Pittsburgh, PA.
- Hsieh-Yee, I. (2014, January). *Health Information Technology Program: Educational entrepreneurship in action*. Presented at the 2014 annual Conference of the Association for Library and Information Science Education, Philadelphia, PA

- Hsieh-Yee, I., Zhang, S., Lin, K., and Cherry, S. (2014, January). *Discovering information through Summon: An analysis of user search strategies and search success*. Paper presented at the 6th Bridging the Spectrum Symposium, Washington, D.C.
- Hsieh-Yee, I. (2012, December). *National Digital Stewardship Alliance and SLIS at CUA: An Educational Partnership*. Paper presented at Best Practices Exchange: Acquiring, Preserving, and Providing Access to Government Information in the Digital Era, Annapolis, MD
- Choi, Y. and Hsieh-Yee, I. (2010, January). *Finding Images in an OPAC: Analysis of User Queries, Subject Headings, and Description Notes*. Paper presented at 2nd Annual Bridging the Spectrum Symposium, Catholic University of America, Washington, D.C.
- Hsieh-Yee, I. and Coogan, J. (2010, January). *Google Scholar vs. Academic Search Premier: What Libraries and Searchers Need to Know*. Paper presented at 2nd Annual Bridging the Spectrum Symposium, Catholic University of America, Washington, D.C.
- Hsieh-Yee, I. (2009, November). *Information Science Education: An LIS School's Perspective*. Paper presented at Annual Meeting of the American Society for Information Science and Technology, Vancouver, British Columbia, Canada.
- Hsieh-Yee, I., Menard, E., Ya-Ning Chen, A., Shu-Jiun Chen, S., Kalfatovic, M. R., Wisser, K. M. (2009, November). *Information Organization in Libraries, Archives and Museums: Converging Practices and Collaboration Opportunities*. Presented at Annual Meeting of the American Society for Information Science and Technology, Vancouver, British Columbia, Canada. (Organizer and moderator of this panel.)
- Hsieh-Yee, I. and Coogan, J. (2009, July). *Catching up to Google Scholar: The Retrieval Power of Academic Search Premier and Google Scholar*. Poster presented at American Library Association Conference, Chicago, Illinois.
- Hsieh-Yee, I., with the CUA Scholarly Communications Project Team. (2009, January). *Digital Scholarship@CUA: Developing an Institutional Repository for CUA*. Poster presented at 1st Annual Bridging the Spectrum Symposium, Catholic University of America, Washington, D.C.
- Wise, M., Cylke, K., and Hsieh-Yee, I. (2009, January). *Digital Talking Books: Meeting the Needs of the Blind and the Handicapped*. Paper presented at the Bridging the Spectrum Symposium, Catholic University of America, Washington, D.C.
- Hsieh-Yee, I. (2009, January). *User Expectations of MERIC*. Presented at the Information Organization Competencies for the 21st Century Discussion Session of the 2009 Conference of the Association for Library and Information Science Education, Denver, Colorado.

- Choi, Y., and Hsieh-Yee, I. (2008, November). *Subject Access for Images in an OPAC*. Annual Meeting of the American Society for Information Science and Technology, Columbus, Ohio. (Also co-organized a panel on Retrieving and Using Visual Resources: Challenges and Opportunities for Research and Education.)
- Hsieh-Yee, I. (2008, June). *Educating Cataloging Professionals in a Changing Information Environment*. National Taiwan University, Taipei, Taiwan.
- Vellucci, S. L., Moen, W.E., Hsieh-Yee, I., Marson, B., and Wisser, K. (2008, January) *Building a Metadata Education and Research Community through MERIC (Metadata Education and Research Information Commons): Demo and Stakeholder Input*. A panel presented at the 2008 Conference of the Association for Library and Information Science Education, Philadelphia, Pennsylvania.
- Hsieh-Yee, I., Choi, Y. and Kules, B. (2007, October). *Searching for Books and Images in OPAC: Effects of LCSH, TOC and Subject Domains*. A poster presented at the American Society for Information Science and Technology Annual Meeting, Milwaukee, Wisconsin.
- Hsieh-Yee, I. and Coogan, J. (2007, August) *Google Scholar vs. Academic Search Premier: A Comparative Analysis*. Presented to the Faculty and Staff of the University of the District of Columbia.
- Hsieh-Yee, I. and Coogan, J. (2007, June). *Google Scholar vs. Academic Search Premier: A Comparative Analysis*. Presented to the Washington Research Library Consortium Community, Catholic University of America, Washington, D.C.
- Hsieh-Yee, I., Choi, Y., and Kules, B.. (2007, June). *What Users Need for Subject Access: Table of Contents or Subject Headings?* A poster presented at the 2007 American Library Association Annual Conference, Washington, D.C., June 2007.
- Choi, Y., Hsieh-Yee, I., and Kules, B. (2007, June). *Retrieval Effectiveness of TOC and LCSH*. A paper presented at the Joint Conference on Digital Libraries 2007, Vancouver, Canada.
- Vellucci, S. L., Hsieh-Yee, I., and Moen, W.E. (2007, May). *If We Build It, Will They Come? Building a Community of Practice for Metadata Stakeholders*. A poster presented at the Rutgers University Research Day, Bridgeton, New Jersey.
- Hsieh-Yee, I. (2007, May). *Federated Searching: User Experience & Perceptions*. International Conference on Information Organization & Retrieval, National Taiwan University, Taipei, Taiwan.
- Hsieh-Yee, I. (2007, May). *Search Performance of Google Scholar and Academic Search Premier*. International Conference on Information Organization & Retrieval, National Taiwan University, Taipei, Taiwan.

- Hsieh-Yee, I. (2007, May) *MERIC: Building a Digital Commons for Metadata Education & Research*. International Conference on Information Organization & Retrieval, National Taiwan University, Taipei, Taiwan.
- Hsieh-Yee, I., and Coogan, J. (2007, March/April). *A Comparative Analysis of Google Scholar and Academic Search Premier*. Poster presented at the Association of College & Research Libraries 13th National Conference, Baltimore, Maryland.
- Vellucci, S. L. and Hsieh-Yee, I. (2007, March/April) *They Didn't Teach Me That in Library School! Building a Digital Teaching Commons to Enhance Metadata Teaching, Learning and Research*. On-site presentation and Webcast by Elluminate. A contributed paper presented at the Association of College & Research Libraries 13th National Conference, Baltimore, Maryland. The acceptance rate for contributed paper was 20%. This paper was one of 10 conference papers chosen for live webcast during the conference.
- Moen, W., Hsieh-Yee, I. and Vellucci, S.L. (2007, January) *A DSpace Foundation for a Teaching & Research Commons: The Metadata Education and Research Information Commons*. A poster session presented at the Open Repositories Conference 2007, San Antonio, Texas.
- Tang, R., Hsieh-Yee, I., and Zhang, S. (2006, November) *User Perception of MetaLib Combined Search*. Paper presented at the Annual Meeting of the American Society for Information Science and Technology, Austin, Texas, Nov. 2006.
- Hsieh-Yee, I. (2006, November). *Federated Searching: User Perceptions, System Design, and Library Instructions*. Paper presented at the Annual Meeting of the American Society for Information Science and Technology, Austin, Texas. (Panel organizer, moderator, presenter).
- Hsieh-Yee, I. (2006, November). *Building a Digital Teaching Commons to Enhance Teaching and Learning: The MERIC Experience and Challenges*. Paper presented at the Annual Meeting of the American Society for Information Science and Technology, Austin, Texas. (Panel organizer, moderator, presenter)
- Hsieh-Yee, I. (2006, September). *Search Performance of Google Scholar and Academic Search Premier*. Paper presented at the ERIC Publishers Meeting, Washington, D.C.
- Hsieh-Yee, I., Zhang, S., and Rong Tang, R. (2006, June). *User Perceptions of a Federated Search System*. Poster presented at Joint Conference on Digital Libraries, Chapel Hill, North Carolina.
- Hsieh-Yee, I. and Zhang, S. (2006, June). *Preparing Users for Federated Search: Implications of a MetaLib User Perceptions Study*. Paper presented at the 2006 Ex Libris User Groups of North America Conference, Knoxville, Tennessee.

- Hsieh-Yee, I. (2006, January). *MERIC Organizations and Navigation*. Paper presented at the 2006 ALISE Annual Conference, San Antonio, Texas.
- Hsieh-Yee, I. (2006, January). *Metadata and Cataloging Education: Recommended Competencies*. Paper presented at the 2006 ALISE Annual Conference, San Antonio, Texas.
- Hsieh-Yee, I. (2005, November). *Digital Library Evaluation: Progress & Next Steps*. Presentation at the Annual Meeting of the American Society for Information Science & Technology, Charlotte, North Carolina.
- Hsieh-Yee, I. (2005, August). *Providing Access to Digital Content: Issues for DL Managers*. Presentation at MDK12 Digital Library Steering Committee Meeting, Columbia, Maryland.
- Hsieh-Yee, I. (2005, April). *Enhancing Teaching and Learning: The Role of School Library Media Specialists*. Presentation at Meeting of the Baltimore County Public School System School Media Specialists, Baltimore, Maryland.
- Hsieh-Yee, I. (2005, January). *Subject Access and Users: Insights & Inspirations from Marcia J. Bates*. Paper presented at the Historical Perspectives SIG, 2005 Conference of the Association for Library and Information Science Education, Boston, Massachusetts.
- Hsieh-Yee, I. (2005, January). *Electronic Resource Management: Practice, Employer Expectations, & CE Interests*. Paper presented at Technical Services Education SIG, 2005 Conference of the Association for Library and Information Science Education, Boston, Massachusetts.
- Hsieh-Yee, I. (2004, October). *Library Professionals for the Digital Age: Competencies & Preparation*. Paper presented at Bibliographic Access Management Team meeting, Library of Congress, Washington, D.C.
- Hsieh-Yee, I. (2004, January). *Cataloging and metadata expertise for the digital era*. Presented at Preparing 21st Century Cataloging and Metadata Professionals: A Workshop for Educators and Trainers, San Diego and sponsored by ALCTS, ALISE, LC, and OCLC.
- Hsieh-Yee, I. (2004, January). *Educating catalogers for the digital era*. Paper presented at the Technical Services SIG, 2004 Conference of the Association for Library and Information Science Education, San Diego.
- Hsieh-Yee, I. (2003, July). *Cataloging Education for the 21st Century*. A presentation at the Library of Congress, Washington, D.C.
- Hsieh-Yee, I. (2002, January) *Metadata Education and Research Priorities: A Delphi Study of*

- Metadata Experts*. Presentation at the 2002 Conference of the Association for Library and Information Science Education, New Orleans.
- Hsieh-Yee, I. (2001, November). *A Delphi Study of Metadata: Preliminary Findings*. Poster session at the 2001 Annual Meeting of the American Society for Information Science & Technology, Washington, D.C.
- Hsieh-Yee, I. (2001, June). *Resources on Asian American Children: Analysis of Retrieval by Search Engines and WorldCat*. Presentation at the National Conference on Asian Pacific American Librarians, San Francisco.
- Hsieh-Yee, I. (2001, January). *Delphi Study on Metadata: Project Design*. Presentation at Research Awards Session, Association for Library & Information Science Education, Washington, D.C.
- Hsieh-Yee, I. (2000, May). *Web Search Behavior Research: Progress and Implications*. Presentation at the Symposium on Evaluating Library and Information Science Research, University of Wisconsin-Madison, Madison, Wisconsin.
- Hsieh-Yee, I. (2000, March). *ERIC User Services: Evaluation in a Decentralized Environment*. Presentation at the National ERIC Joint Directors/Technical Meeting, Arlington, Virginia.
- Hsieh-Yee, I. (2000, January). *Enhancing Learning with Web Technology*. Presentation at Faculty Conversations, Catholic University of America, Washington, D.C.
- Hsieh-Yee, I. (2000, January). *From Surrogates to Objects: CUA's Approaches to Organizing Electronic Resources*. Paper presentation at the Annual Conference of the Association for Library and Information Science Education, San Antonio, Texas.
- Yee, P., and Hsieh-Yee, I. (1997, November). *Individual Differences in Search Behavior on the WWW*. A poster session presented at the 38th Annual Meeting of the Psychonomic Society, Philadelphia, Pennsylvania.
- Hsieh-Yee, I. (1997, April). *Research + Marketing + Preparation = Job!* Presented at the "Workshop on Resume and Interview Techniques," Special Libraries Association, Student Chapter, Catholic University of America, Washington, D.C.
- Hsieh-Yee, I. (1997, February). *Creating CyberCatalogers: Education and Training*. Presentation at ALA's Midwinter Meeting, Washington, D.C.
- Hsieh-Yee, I. (1997, February). *Search Tactics of Web Users in Searching for Texts, Graphics, Known Items and Subjects: A Search Simulation Study*. Presented at the Conference of the Association for Library and Information Science Education, Washington, D.C.

Hsieh-Yee, Ingrid. "Beginning Your Special Library/Information Center Career." Presented at SLA's "Career Day," Jan. 11, 1997, Catholic University of America.

Hsieh-Yee, I. (1996, September). *The Roles of Library and Information Scientists in Managing Electronic Information*. Presentation at Hamilton College, Clinton, New York.

Hsieh-Yee, I. (1996, May). *The Future of Cataloging as a Profession*. Presented at "The Cataloging Forum, Library of Congress, Washington, D.C.

Hsieh-Yee, I. (1994, October). *The Impact of the Internet on OPACs*. Presented at the Third Workshop on User Interfaces for OPACs, Library of Congress, Washington, D.C.

Reports

Hsieh-Yee, I., with Knowledge Management Competencies and Performance Action Group of the Federal Knowledge Management Initiative. "From Knowledge Management Competencies to Improved Organizational Performance." April 9, 2009.

Hsieh-Yee, I., with Knowledge Practices Action Group of the Federal Knowledge Management Initiative. "KM Practice in Government Agencies: Findings and Recommendations." April 9, 2009.

Hsieh-Yee, I. "Delphi Study on Metadata." 2001. Three quarterly reports submitted to the Association for Library and Information Science Education.

Hsieh-Yee, I. "College Students' Information Channels: Patterns of Use and Possible Factors in Channel Selection." 1995. Submitted to the Catholic University of America.

Hsieh-Yee, I. "The Information-Seeking Patterns of Scholars and Their Use of an Online Information System." 1994. Submitted to the Council on Library Resources.

Book Reviews

Review of *The Measurement and Evaluation of Library Services*, by Sharon L. Baker and F. Wilfrid Lancaster. *Information Processing and Management* 30 (1994): 450-52.

Review of *Subject Access to Films and Videos*, by Sheila S. Intner and William E. Studwell; and *Cataloging Unpublished Nonprint Materials*, by Verna Urbanski with Bao Chu Chang and Bernard L. Karon. *Information Processing and Management* 30 (1994): 449-50.

Review of *Automated Information Retrieval in Libraries: A Management Handbook*, by Vicki Anders. *Journal of Library and Information Science* 19 (1993): 98-100.

Review of *Full Text Databases*, by Carol Tenopir and Jung Soon Ro. *Information Processing and Management* 28 (1992): 667-68.

Review of *Descriptive Cataloging for the AACR2R And USMARC: A How-to-Do It Workbook*, by Larry Millsap and Terry Ellen Ferl. *Information Processing and Management* 28 (1992): 809-11.

Review of *MARC Manual: Understanding and Using MARC Records*, by Deborah J. Byrne. *Information Processing and Management* 28 (1992): 537-38.

Service

Professional Associations and Societies

- Library of Congress. RDA Training Program for the Profession. Co-authored with Tim Carlton. 2013-2014.
- 2014 Digital Preservation Outreach & Education Survey. Contributed to the design of the survey, 2014.
- National Digital Stewardship Alliance. Outreach Committee. 2011-2014.
- National Digital Stewardship Residency Program. Advisory Group, 2012-2013.
- FEDLINK Health Information Technology Advisory Council, 2011-2015.
- 2012 Joint Conference on Digital Libraries. Program Planning Committee, Pre-Conference Proposals Review Committee, 2012
- Catholic Research Resources Alliance. Five-Year Strategic Plan Task Force, 2011-2012
- Institute of Museum and Library Services. Grant reviewer. 2004, 2005, 2010.

- Association for Library and Information Science Education.
 - * ALISE Bodan Wynar Research Paper Award Committee, 2015, 2016, 2017
 - * ALISE Eugene Garfield Dissertation Award Competition, Jury, 2013, 2014
 - * ALISE Research Grant Competition Committee. Chair, 2012
 - * Pratt-Severn Faculty Innovation Award. Chair, 2009, 2010
 - * ALISE Doctoral Poster Jury, 2012
 - * “Information Organization Competencies for the 21st Century” Discussion session leader. 2009 Conference of the Association for Library and Information Science Education.
 - * Assisted Technical Services SIG Convener in organizing a program, ““Building a Metadata Education and Research Community through MERIC (Metadata Education and Research Information Commons): Demo and Stakeholder Input” for the 2008 ALISE conference.
 - * Association for Library Collections and Technical Services/Association for Library and Information Science Education (ALCTS/ALISE) Metadata Education and Research Information Center (MERIC) Advisory Board, Co-Chair (with Sherry Vellucci), 2005-2007. Chair, 2008-2009 (leading the effort to build MERIC, a repository and collaborative space for metadata educators, practitioners, and researchers)

- * Technical Services SIG, Convener, 2004-2005. Organized a program on “Electronic Resources Management: Current Practices, Employer Expectations, and Teaching Strategies” for the 2005 conference in Boston, Massachusetts.
- * Technical Services SIG, Convener, 2003-2004. Organized a program on “Organizing Information with Metadata: Desired Competencies and Teaching Innovations” for the 2004 conference.
- * Technical Services SIG, Convener, 1999-2000. Organized a program on "Teaching the Organization of Electronic Resources" for the 2000 conference.
- * Curriculum SIG, Co-convener (with Sibyl Moses), 1996-97. Organized a program on “Government Information Policy” for the 1997 conference.
- American Society for Information Science & Technology.
 - * Reviewer, Conference program panel submissions and poster submissions, 2005, 2006, 2007, 2009, 2011, 2012, 2013, 2014, 2015, 2016, 2017
 - * Nomination Committee, 2009-2011
 - * Information Science Education Special Interest Group. American Society for Information Science and Technology. Chair-Elect, 2007-2008. Chair 2008-2009.
 - * Committee on Information Science Education. 1999-2006.
 - * Committee on Information Science Education. Organizing Committee for an orientation program for students at ASIS annual meetings, 1999-2001
 - * Committee on Information Science Education. Sub-committee on Student Welfare (focusing on issues related to master's education), 1998-2001
 - * SIG ED. Organizing Committee for the "Seminar on Research and Career Development" for junior researchers. 1995-96 (chair), 1997-2001
 - * ISI Doctoral Dissertation Proposal Scholarship Jury, 1997; 2001, 2002
 - * Pratt-Severn Best Student Research Paper Award Jury. Chair. 1997
 - * 1998 Midyear Meeting (referee of contributed papers), 1997
 - * Organizer and moderator of the ASIS Doctoral Forum and the Doctoral Research Seminar 1994-1995
 - * SIG Human Computer Interaction. Chair-Elect, Chair, 1993-1995
 - * Doctoral Forum Award Jury, 1995
 - * Best Student Paper Award Jury, 1995
- American Library Association.
 - * Committee on Accreditation, External Review Panelist, 2009- (site visiting team 2013-2014; site visiting team 2016-2017)
 - * Association for Library Collections and Technical Services Task Force on Competencies and Education for a Career in Cataloging, member, 2008-2009
 - * Facilitator for “What They Don't Teach in Library School: Competencies, Education and Employer Expectations for a Career in Cataloging,” an Association for Library Collections and Technical Services Preconference, June 22, 2007 in Washington, D.C. Also a local liaison for bringing this program to the Catholic University of America.
 - * Facilitator for a discussion on "Effect of Electronic Resources on Technical Services" at ALA's Midwinter Meeting held in Feb. 1997 in Washington, D.C.

- * International Relations Committee, Subcommittee Task Force for IFLA and China, 1994-1997
- Virginia Association of School Librarians. Scholarships and Awards Committee. 2010-2012
- Federal Knowledge Management Initiative, Knowledge Management Practices Action Group. Member. 2009 (leading the effort to build a knowledge management repository)
- Federal Knowledge Management Initiative, Knowledge Management Competencies & Learning Action Group. Member. 2009 (developing an action plan for helping government knowledge workers and government agencies to develop knowledge management competencies)
- National Center for Education Statistics. Technical Review Panel. 2008.
- External evaluator for a case of promotion to full professorship. University of Tennessee. 2008.
- National Information Standards Organization (NISO). Advisory Board, Revision of “IMLS Framework of Guidance for Building Good Digital Collections,” 2004, 2007.
- Library of Congress, Bibliographic Control of Web Resources: A Library of Congress Action Plan. Principal Investigator of Action Item 5.1, focusing on cataloging and metadata education for students and new librarians, 2002-2003. (worked with the Association for Library Collections and Technical Services, Education Task Force)
- Chinese American Librarians Association
 - * Chinese American Librarians Association Outstanding Library Leadership Award in Memory of Dr. Margaret Chang Fung, Award Committee, 2016-2017
 - * Achievement Award Jury, 2000-2001
 - * CALA Goal 2000 Task Force, 1997
 - * Scholarship Committee, 1995, 1996-1997 (chair)
 - * Board of Directors, 1994-1997
 - * Publication Committee, 1993-1995
 - * International Relations Committee, 1993-1996
- SailorSM Assessment Advisory Group (An impact study of Sailor, Maryland's Public Information Network), 1995
- Editorial boards
 - Journal of Library and Information Science. Editorial Board, 2012-
 - Chinese American Librarians Association, *Occasional Papers Series*. Editorial Board, 2009-2016.
 - Library Quarterly*. Editorial Board, 2003-2008
 - Bulletin of the Medical Library Association*, 1994-97
 - Newsletter editor for the Chinese American Librarians Association, 1989-92
- Referee for the following journals
 - Information Processing and Management*

Journal of Digital Information
Journal of Education for Library and Information Science
Journal of Information Science
Journal of Library & Information Science
Journal of Library Metadata
Journal of the American Society for Information Science & Technology
Library and Information Science Research
Library Quarterly

- Expert reviewer, “Digital Library” course, Evaluation module, University of North Carolina, Chapel Hill, 2007-2008.
- Expert reviewer, “Information Organization” course, University of Michigan, Ann Arbor. 2007.

Catholic University of America

- School of Arts & Sciences, Academic Senate representative, 2017-2020
- School of Arts & Sciences, Committee on Appointments and Promotions, 2015-2019
- School of Arts & Sciences, Academic Council, 2015-2016.
- School of Arts & Sciences, Ordinary Professor Group, 2013-
- Doctoral Dissertation Defense Committee, Chair, Dept. of Psychology, 2016, 2017, 2018
- Doctoral Dissertation Defense Committee, Chair, Dept. of Education, 2014, 2015, 2017
- President’s Administrative Council, 2010-2012
- Deans’ Council, 2010-2012
- Academic Leadership Group, 2010-2012
- Academic Senate, 2003-2012
- Academic Senate, Committee on Committees and Rules, 2009-2012
- Academic Senate, Committee on Appointments and Promotions, 2005-2008
- Graduate Board, 2010-2012
- CUA Scholarly Communication Project Team, Member (2007), Chair, 2008-2009
- Academic Senate Library Committee, Interim Chair (2007), Member, 2008-2012
- Doctoral Dissertation Defense Committee, Chair, School of Nursing, 2006, 2008
- Dean Search Committee, 1992-1994, 1998-1999, 2002-2003, 2006-2007
- Fulbright Review Panel, 2006
- Academic Senate Committee on Computing, 1995-2003
- CUA Service Learning Advisory Board, 2001-2002
- CUA Faculty Conversations on Enhancing Teaching and Learning through Technology, Planning Group, 1999-2001
- CUA Initiative on Technology and Teaching, 1998-2001

Dept. of Library and Information Science

- Symposium and Colloquium Committee, fall 2016-May 2018, Chair, May 2018-

- Admissions Committee, 2007-2009, Chair 2010-2012, Member 2013-2015, Member 2018-
- Accreditation presentation, Chair, June 2015-August 2016
- Interim Co-Chair, June 2015-August 2016.
- Appointments and Promotions Committee, 1991-
- Blended/OWL Learning Committee, spring 2016-2018
- Scholarship and Awards Committee, fall 2016-
- Technology Committee, fall 2016-2017
- Comprehensive examination editor, 2016-2017, reader (every year since 1990)
- LIS Advisory Board, 2015-2016 (chair); fall 2016- May 2018 (member)
- Committee on Planning and Assessment, 2015-2016 (chair)
- Senior Faculty Committee, 2014-2016.
- Accreditation Steering Committee, 2014-2016 (Chair, 2015-2016)
- Accreditation Students Standard Committee, co-chair, 2014-2016
- Accreditation Mission, Goals, and Objectives Standard Committee, co-chair, 2014-2016
- Accreditation Curriculum Standard, member 2014-2-16
- Accreditation Administration and Finance Standard, member 2014-2016
- Cultural Heritage Information Management Project (IMLS-funded), Co-PI, 2012-2015
- Cultural Heritage Information Management Forum (scheduled for June 2015), Co-Organizer, 2013-2015
- Health Information Technology Interim Review Committee, 2015 (chair)
- Health Sciences Librarianship Advisory Group, 2015- (chair)
- Comprehensive examination editors, 2013-2014, 2016-2017
- National Digital Stewardship Alliance liaison, 2011-2014
- Advisory Board, Chair 2010-2012
- Academic Honesty Committee, Chair, 2008-2012
- Blended Learning Committee, 2010-2012
- Colloquium Committee, 2010-2012
- Comprehensive Examination Administration, 2010-2012
- Cultural Heritage Information Management Advisory Committee, 2010-2012 (chair), 2013-
- Curriculum Committee, 1991-2003, 2007-2009, Chair 2010-2012, member 2013-
- Curriculum Subcommittee on Comprehensive Examination, Chair 2009-2012
- Health Information Technology Advisory Board, Chair 2010-2012. Member 2013-
- Health Sciences Advisory Committee, 2009, Chair 2010-2012. Member 2013-
- HIT Expert Forum, Chair 2012. Member 2013-
- Health Information Technology Student Group Advisor, 2011-2012
- State Council for Higher Education of Virginia, SLIS Representative, 2010-2012
- Symposium Planning Committee, 2010-2012
- Website Management Team, Chair, 2010-2012
- Urban School Librarianship Project (IMLS-Funded), PI, 2007-2011 (chair, 2010-11)
- Failing Grades Committee, 1995-1997 (chair), 2000-2001 (chair), 2004-2005 (chair), 2007 (chair)-2011

- Faculty Search Committee, 1994-1998, 2002-2004, 2006 (chair), Fall 2007-2009, Chair fall 2009-2012
- Recruitment Committee, Chair 2010-2012
- Strategic Planning Committee, Chair 2010-2012
- Technology Committee, 2010-2012
- Accreditation Advisory Committee, 2007-2009
- Accreditation Coordinating Committee, 2007-2009
- Accreditation Steering Committee, 2007-2009
- SLIS Advisory Group, 2007-2009
- Accreditation Curriculum Standard Committee, Co-chair, 2007-2009
- Accreditation Faculty Standard Committee, Co-chair, 2007-2009
- LSC 551 Information Organization Review Team, Co-chair, 2008-2009, 2015-2016.
- Curriculum Subcommittee on Portfolios, 2009
- LSC 555 Information Systems in Libraries and Information Centers Review Team, contributor, 2008-2009
- Redesign of LSC 730 Use and Users of Libraries and Information. 2009-
- Development of a metadata institute that was taught as LSC 715 Organization of Internet Resources in 2008. The institute is being revised and will be offered in 2010 under a new course title.
- Development of lesson plans, assignments, and evaluation rubrics for LSC 606, Cataloging and Classification, for the School's NCATE accreditation. 2008
- Howard and Mathilde Rovelstad Scholarship Committee, Chair, 2004-2007
- Assistant Dean Search Committee, Chair, Fall 2007
- Liaison to the Association for Library Collections and Technical Services to bring its preconference program, Cataloging Education and Employer Expectations, to CUA during the 2007 American Library Association Annual Meeting in Washington, D.C.
- Organizer of the colloquium presentation and reception for Tamar Sadeh of Ex Libris on PRIMO June 2007
- Practicum review and design (work with potential supervisors, such as the American Indian Museum internship description revision) 2006-
- Comprehensive examinations (edits, proctoring, and grading), 1990-
- SLIS Web site redesign: Comments and suggestions. Fall 2007
- Conducted surveys of current students and alumni in preparation for the 2005 re-accreditation, 2004-2005
- Student advisement, 1990-
- Technology Committee, 1992-1999 (chair, 1996-1998), 2002-2003 (member)
- Colloquia Committee 1997-1999, 2002-2003.
- Advisor of the CUA Student Chapter of the American Society for Information Science and Technology, 2002-2003
- Visiting Professor Search Committee, 1999, 2000, 2001
- Leader, Participation in the CORC experiment, 1999-2000
- Advisor of the Special Libraries Association Student Chapter, 1993-1999; the group was recognized for outstanding leadership by SLA in 1999.

- COA planning Committee, Task Force on Electronic Presentation of SLIS Reports (team leader) 1997-1998
- COA Planning Committee, Subcommittee on Technology 1996-1998
- NLM practicum coordinator, 1997-1998
- Computer Literacy Workshops: Assisted with the development and evaluation of the workshops, 1996-1998
- Leader, Participation in the InterCat project, 1995-1997

Appendix B

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MARC 21 Reference Materials

[Part VII: A Summary of Commonly Used MARC 21 Fields](#)

[Part VIII: A List of Other Fields Often Seen in MARC Records](#)

[Part IX: The Leader](#)

[Part X: Field 008 for Books](#)

Part VII:

A Summary of Commonly Used MARC 21 Fields

This is a summary of the MARC 21 tags used most frequently by libraries in entering their own bibliographic records. For full listings of all MARC 21 tags, indicators, and subfield codes, see *MARC 21 Format for Bibliographic Data*.

In the explanations on these pages:

Tags -- The tags (3-digit numbers) are followed by the names of the fields they represent. In this summary, and in the *MARC 21 Format for Bibliographic Data*, if a tag can appear more than once in one bibliographic record, it is labeled repeatable (R). If it can only be used once, it is labeled non-repeatable (NR). For example, a catalog record can have several subjects, so the tags for subject added entries (6XX) are labeled repeatable (R).

Indicators -- The use of indicators is explained in fields where they are used. Indicators are one-digit numbers. Beginning with the 010 field, in every field -- following the tag -- are two character positions, one for Indicator 1 and one for Indicator 2. The indicators are not actually defined in all fields, however. And it is possible that a 2nd indicator will be used, while the 1st indicator remains undefined (or vice versa). When an indicator is undefined, the character position will be represented by the character # (for blank space).

Subfield codes -- All the data in each field (beginning with the 010 field) is divided into subfields, each of which is preceded by a delimiter-subfield code combination. The most common subfield codes used with each tag are shown. Each subfield code is preceded by the character \$, signifying a delimiter. The name of the subfield follows the code.

In general, every field **MUST** have a subfield 'a' (**\$a**). One exception that is often seen is in Field 020 (ISBN), when the ISBN information (subfield **\$a**) is unavailable but the price (subfield **\$c**) is known. Some subfields are repeatable. In this summary, repeatability is noted for only the more common repeatable subfields.

Examples: Examples follow the explanation for each field. For clarity, one space has

been placed between the tag and the first indicator, one space has been placed between the second indicator and the first delimiter-subfield code, and one space has been inserted between the delimiter-subfield code and the subfield data.

010 Library of Congress Control Number -- (LCCN)

(NR, or Not Repeatable)

Indicators undefined.

Subfield used most often:

\$a -- Library of Congress control number

Example: 010 ## \$a ###86000988#

020 International Standard Book Number -- (ISBN)

(R, or Repeatable)

Indicators undefined.

Subfields used most often:

\$a -- International Standard Book Number

\$c -- Terms of availability (often a price)

\$z -- Cancelled/invalid ISBN (R)

Example: 020 ## \$a 0877547637

040 Cataloging source -- (NR)

Indicators undefined.

Subfields used most often:

\$a -- Original cataloging agency

\$c -- Transcribing agency

\$d -- Modifying agency (R)

Example: 040 ## \$a DLC
 \$c DLC
 \$d gwhs

100 Main entry -- Personal name -- (primary author)

(NR; there can be only one main entry)

Indicator 1: Note/title added entry controller

- 1 -- Note, title added entry
- 3 -- No note, title added entry

Indicator 2: Type of title

- # -- No information provided
- 0 -- Portion of title
- 1 -- Parallel title
- 4 -- Cover title
- 8 -- Spine title

Subfield used most often:

- \$a** -- Title proper

Example: 246 3# \$a Four corners power review

250 Edition statement (NR)

Indicators undefined.

Subfield used most often:

- \$a** -- Edition statement

Example: 250 ## \$a 6th ed.

260 Publication, distribution, etc. (Imprint) (R)

Indicator 1: Sequence of publishing statements

- # -- No information provided

Indicator 2: Undefined

Subfields used most often:

- \$a** -- Place of publication, distribution, etc. (R)
- \$b** -- Name of publisher, distributor, etc. (R)
- \$c** -- Date of publication, distribution, etc. (R)

Example: 260 ## \$a New York :
 \$b Chelsea House,
 \$c 1986.

300 Physical description (R)

Indicators undefined.

Subfields used most often:

\$a -- Extent (number of pages) (R)

\$b -- Other physical details (usually illustration information)

\$c -- Dimensions (cm.) (R)

\$e -- Accompanying material (for example, "teacher's guide" or "manual")

Example: 300 ## \$a 139 p. :
 \$b ill. ;
 \$c 24 cm.

440 Series statement / Added entry--Title

This field was made obsolete in 2008 to simplify the series statement. See 490 and 830.

490 Series statement (No added entry is traced from field) (R)

Indicator 1: Specifies whether series is traced (whether an 8XX tag is also present)

0 -- Series not traced

1 -- Series traced (8XX is in record)

Indicator 2 undefined.

Subfield used most often:

\$a -- Series statement (R)

\$v -- Volume number (R)

Example: 490 1# \$a Colonial American craftsmen

500 General note (R)

Indicators undefined.

Subfield used most often:

\$a -- General note (Used when no specialized note field has been defined for the information. Examples: Notes regarding the index; the source of the title; variations in title; descriptions of the nature, form, or scope of the item.)

Example: 500 ## \$a Includes index.

504 Bibliography, etc. note (R)

Indicators undefined.

Subfield used most often:

\$a -- Bibliography, etc. note

Example: 504 ## \$a Includes bibliographical references.

505 Formatted contents note (R)

Indicator 1: Type of contents note

0 -- Complete contents

1 -- Incomplete contents (used with multivolume set when some volumes are not yet published)

2 -- Partial contents

Indicator 2: Level of content designation

-- Basic

Subfield used most often:

\$a -- Formatted contents note

Example: 505 0# \$a Pride and prejudice -- Emma -- Northanger Abbey.

520 Summary, etc. note (R)

Indicator 1: Display constant controller

-- Summary

1 -- Review

2 -- Scope and content

3 -- Abstract

Indicator 2 undefined

Subfields used most often

\$a -- Summary, abstract, or annotation

\$b -- Expansion of summary note

Example: 520 ## \$a This basic guide to parliamentary procedure tells how to conduct and participate in a meeting properly.

Note regarding Sears subject headings: The MARC 21 format does not provide an assigned indicator for Sears subject headings. Therefore, an indicator of 7 is used, and the MARC defined code "sears" is placed in subfield \$2.)

Subfields used most often:

- \$a -- Topical term
- \$v -- Form subdivision (R)
- \$x -- General subdivision (R)
- \$y -- Chronological subdivision (R)
- \$z -- Geographic subdivision (R)
- \$2 -- Source of heading or term used with 2nd indicator of 7)

<p><i>Example:</i> 650 #0 \$a Theater \$z United States \$v Biography \$v Dictionaries.</p>

Notice that subfields \$v, \$x, and \$z in the 650 field are repeatable. Subfields \$v, \$x, \$y, and \$z do not have to be in alphabetical order. They will be in the order prescribed by the instructions given by the subject heading system.

651 Subject added entry -- Geographic name (R)

Indicator 1: undefined.

Indicator 2: Subject heading system/thesaurus.

See indicator 2 under 600

Subfields used most often:

- \$a -- Geographic name
- \$v -- Form subdivision (R)
- \$x -- General subdivision (R)
- \$y -- Chronological subdivision (R)
- \$z -- Geographic subdivision (R)
- \$2 -- Source of heading or term (used with 2nd indicator of 7)

<p><i>Example:</i> 651 #0 \$a United States \$x History \$v Chronology.</p>
--

Notice that subfields \$v, \$x, and \$z in the 651 field are repeatable. Subfields \$v, \$x, \$y, and \$z do not have to be in alphabetical order. They will be in the order prescribed by the instructions given by the subject heading system.

700 Added entry -- Personal name (R)

Indicator 1: Type of personal name entry element

- 0 -- Forename
- 1 -- Surname (this is the most common form)
- 3 -- Family name

Indicator 2: Type of added entry

- # -- No information provided (most common; co-authors, editors, etc.)
- 2 -- Analytical entry (The values for Indicator 2 changed in 1994 with Format Integration, and older records may display additional values. An analytical entry involves an author/title of an item contained in a work.)

Subfields used most often:

- \$a** -- Personal name
- \$b** -- Numeration
- \$c** -- Titles and other words associated with a name (R)
- \$q** -- Fuller form of name
- \$d** -- Dates associated with a name (generally, year of birth)
- \$e** -- Relator term (such as ill.) (R)
- \$4** -- Relator code (R)

Example: 700 1# \$a Baldridge, Letitia.

710 Added entry -- Corporate name (R)

Indicator 1: Type of corporate name entry element

- 0 -- Inverted name (not used with AACR2)
- 1 -- Jurisdiction name
- 2 -- Name in direct order

Indicator 2: Type of added entry.

- See Indicator 2 under 700
- # -- No information provided
- 2 -- Analytical entry

Subfields used most often:

- \$a** -- Corporate name or jurisdiction name as entry element
- \$b** -- Subordinate unit (R)

Example: 710 2# \$a Sunburst Communications (Firm)

740 Added entry -- Uncontrolled related/analytical title (R)

Indicator 1: Nonfiling characters

\$v -- Volume number

Example: 830 #0 \$a Railroads of America (Macmillan)

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Part VIII:

A List of Other Fields Often Seen in MARC Records

001	Control number
003	Control number identifier
005	Date and time of latest transaction
006	Fixed-length data elements -- additional material characteristics
007	Physical description fixed field
008	Fixed length data elements (See Part X)
022	International Standard Serial Number (ISSN)
037	Source of acquisition
041	Language code
043	Geographic area code
050	Library of Congress call number
060	National Library of Medicine call number
082	Dewey Decimal classification number (the one recommended by the Library of Congress; locally-assigned call numbers may appear elsewhere)
110	Main entry -- Corporate name (less frequent under AACR2 rules)
256	Computer file characteristics
263	Projected publication date (indicates a CIP -- Cataloging in Publication -- record)
306	Playing time
508	Creation/production credits note
510	Citation/references note (review sources)
511	Participant or performer note
521	Target audience note (first indicator: 0 = reading grade level, 1 = interest age level, 2 = interest grade level, 3 = special audience characteristics, 4 = motivation interest level)
530	Additional physical form available note
538	System details note
586	Awards note
656	Index term -- Occupation
730	Added entry -- Uniform title
852	Location

- 856 Electronic location and access
 9XX Reserved for local use. (They are used by vendors, systems, or individual libraries to exchange additional data)

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Part IX:

The Leader

There are 24 positions in the Leader, numbered from 00 to 23. For fuller explanation, see the *MARC 21 Format for Bibliographic Data*.

- 00-04 Record length (calculated by the computer for each record)
 05 Record status
 a = increase in encoding level
 c = corrected or revised
 d = deleted
 n = new
 p = increase in encoding from prepublication (previous CIP)
 06 Type of record
 a = language material
 c = printed music
 d = manuscript music
 e = cartographic material
 f = manuscript cartographic material
 g = projected medium
 i = nonmusical sound recording
 j = musical sound recording
 k = 2-dimensional nonprojectable graphic
 m = computer file
 o = kit
 p = mixed materials
 r = 3-dimensional artifact or naturally occurring object
 t = manuscript language material
 07 Bibliographic level
 a = monographic component part
 b = serial component part
 c = collection
 d = subunit
 i = integrating resource
 m = monograph/item
 s = serial
 08 Type of control
 # = no specified type
 a = archival

- 09 **Character coding scheme**
= MARC-8
a = UCS/Unicode
- 10 **Indicator count** (always "2")
- 11 **Subfield code count** (always "2")
- 12-16 **Base address of data** (calculated by the computer for each record)
- 17 **Encoding level**
= full level
1 = full level, material not examined
2 = less-than-full level, material not examined
3 = abbreviated level
4 = core level
5 = partial (preliminary) level
7 = minimal level
8 = prepublication level (CIP)
u = unknown
z = not applicable
- 18 **Descriptive cataloging form**
= non-ISBD
a = AACR2
i = ISBD
u = unknown
- 19 **Multipart resource record level**
= Not specified or not applicable
a = Set
b = Part with independent title
c = Part with dependent title
- 20 **Length of the length-of-field portion** (always "4")
- 21 **Length of the starting-character-position portion** (always "5")
- 22 **Length of the implementation-defined portion** (always "0")
- 23 **Undefined** (always "0")

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Part X:

Field 008 for Books

Field 008 is used for Fixed Length Data Elements ("Fixed Field Codes"). There are 40 character positions in field 008, numbered from 00-39. Undefined positions must contain either a blank (#) or a fill character (|). Positions 00-17 and 35-39 are defined the same way for all media.

The information shown here for positions 18-34 applies only to books. For explanation of all the positions below and for positions 18-34 for other media, see the *MARC 21 Format*

for Bibliographic Data.

Note that field 008 has no indicators or subfield codes.

- 00-05 Date entered on file (YYMMDD),
where Y=year, M=month, and D=day
- 06 Type of date/publication status:
 b = no dates given; B.C. date involved
 e = detailed date
 s = single known date/probable date
 m = multiple dates
 r = reprint/reissue date (Date 1) and original date (Date 2)
 n = dates unknown
 q = questionable date
 t = publication date and copyright date
 | = no attempt to code
- 07-10 Date 1/beginning date of publication
- 11-14 Date 2/ending date of publication

Date fields contain the year(s) of publication. The type of date(s) in these elements are specified in fixed field element 06: Type of date/publication status. (For further details, see the field 008 description in the *MARC 21 Format for Bibliographic Data*.)

- 15-17 Place of publication, production, or execution
 For example:
 pk# = Pakistan
 cau = California (US)

(For a full list of codes used in these positions, see the [MARC Code List for Countries](#).)

- 18-21 Illustrations (up to 4 codes):
 # = no illustrations
 a = illustrations
 b = maps
 c = portraits
 d = charts
 e = plans
 f = plates
 g = music
 h = facsimiles
 i = coats of arms
 j = genealogical tables
 k = forms
 l = samples
 m = phonodisc, phonowire, etc.
 o = photographs
 p = illuminations
 | = no attempt to code

- 22 **Target audience:**
 # = unknown or not specified
 a = preschool
 b = primary
 c = pre-adolescent
 d = adolescent
 e = adult
 f = specialized
 g = general
 j = juvenile
 | = no attempt to code
- 23 **Form of item:**
 # = none of the following
 a = microfilm
 b = microfiche
 c = microopaque
 d = large print
 f = braille
 r = regular print reproduction
 s = electronic
 | = no attempt to code
- 24-27 **Nature of contents (up to 4):**
 # = no specified nature of contents
 a = abstracts/summaries
 b = bibliographies (is one or contains one)
 c = catalogs
 d = dictionaries
 e = encyclopedias
 f = handbooks
 g = legal articles
 i = indexes
 j = patent document
 k = discographies
 l = legislation
 m = theses
 n = surveys of literature
 o = reviews
 p = programmed texts
 q = filmographies
 r = directories
 s = statistics
 t = technical reports
 u = standards/specifications
 v = legal cases and notes
 w = law reports and digests
 z = treaties
 | = no attempt to code

- 28 **Government publication:**
 # = not a government publication
 i = international intergovernmental
 f = federal/national
 a = autonomous or semi-autonomous component
 s = state, provincial, territorial, dependent, etc.
 m = multistate
 c = multilocal
 l = local
 z = other type of government publication
 o = government publication -- level undetermined
 u = unknown if item is government publication
 | = no attempt to code
- 29 **Conference publication:**
 0 = not a conference publication
 1 = conference publication
 | = no attempt to code
- 30 **Festschrift:**
 0 = not a festschrift
 1 = festschrift
 | = no attempt to code
- 31 **Index:**
 0 = no index
 1 = index present
 | = no attempt to code
- 32 **Undefined (since 1990)** (Earlier records may contain the values 0 or 1)
 # = Undefined
 | = no attempt to code
- 33 **Literary form:**
 0 = not fiction (not further specified)
 1 = fiction (not further specified)
 c = comic strips
 d = dramas
 e = essays
 f = novels
 h = humor, satires, etc.
 i = letters
 j = short stories
 m = mixed forms
 p = poetry
 s = speeches
 u = unknown
 | = no attempt to code
- 34 **Biography:**
 # = no biographical material
 a = autobiography
 b = individual biography

- c = collective biography
- d = contains biographical information
- | = no attempt to code

35-37 Language:

A three-letter code. For example: eng fre ger spa rus ita

(For a full list of codes used in these positions, see the [MARC Code List for Languages](#).)

38 Modified record:

- # = not modified
- x = missing characters (because of characters unavailable in MARC character set)
- s = shortened
- d = "dashed-on" information omitted
- r = completely romanized/printed cards in script
- o = completely romanized/printed cards romanized
- | = no attempt to code

39 Cataloging source:

- # = national bibliographic agency
- c = cooperative cataloging program
- d = other sources
- u = unknown
- | = no attempt to code

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Library of Congress

[Library of Congress Help Desk \(10/27/2009 \)](#)

Appendix C

AMENDED ARTICLES OF INCORPORATION

OF

OCLC Online Computer Library Center, Inc.

- FIRST The name of the corporation shall be OCLC Online Computer Library Center, Inc. (the "Corporation").
- SECOND The place in this State where the principal office of the Corporation is to be located is in the City of Dublin, Franklin County, Ohio.
- THIRD The purpose or purposes for which the Corporation is formed are to establish, maintain, and operate a computerized library network and to promote the evolution of library use, of libraries themselves, and of librarianship, and to provide processes and products for the benefit of library users and libraries, including such objectives as increasing availability of library resources to individual library patrons and reducing the rate of rise of library per-unit costs, all for the fundamental public purpose of furthering ease of access to and use of the ever-expanding body of worldwide scientific, literary, and educational knowledge and information.
- FOURTH The affairs of the Corporation shall be managed by the Board of Trustees. The qualifications of the Trustees, together with their terms of office, manner of election, removal, change of number, filling of vacancies and of newly-created trusteeships, powers, duties and liabilities, shall, except as otherwise provided in these Articles, or by the laws of the State of Ohio, be as prescribed by the Code of Regulations.
- FIFTH There shall be two classes of members of the Corporation and they shall be OCLC Members, and Trustee Members. The voting powers of each class of members shall be only as defined in the Code of Regulations or as stated in these Articles.
- SIXTH There shall be a Global Council composed of Member Delegates as prescribed in the Code of Regulations.
- SEVENTH These Articles may be amended at any business meeting of the Trustee Members called for that purpose provided that notice of the proposed amendment(s) has been sent to the Trustee Members at least ten (10) days prior to said meeting. A two-thirds (2/3) vote of all of the authorized Trustee Members of the Corporation is required for approval.
- EIGHTH The duration of the Corporation shall be perpetual.
- NINTH No part of the earnings, dues, or receipts of the Corporation shall inure to the benefit of or be distributed to its members, trustees, officers, or other private persons, except only that the Corporation shall be authorized and empowered to pay reasonable compensation for services rendered and expenses incurred and to make payments or distributions in furtherance of the purposes set forth in Article Third hereof. No substantial part of the activities of the Corporation shall be the carrying on of propaganda, or otherwise attempting to influence Amended Articles of Incorporation

legislation, and the Corporation shall not participate in, or intervene in (including the publishing or distribution of statements) any political campaign on behalf of, or in opposition to, any candidate for public office. Notwithstanding any other provision of these Articles, the Corporation shall not carry on any other activities not permitted to be carried on (a) by a corporation exempt from Federal income tax under Section 501(c)(3) of the Internal Revenue Code of 1986, as amended (or the corresponding provision of any future United States internal revenue law) (the "Code") or (b) by a corporation, contributions to which are deductible under Section 170(c)(2) of the Code.

TENTH Upon the dissolution of the Corporation, the Board of Trustees shall, after paying or making provision for the payment of all of the liabilities of the Corporation, dispose of all of the assets of the Corporation exclusively for the purposes of the Corporation in such manner, or to such organization or organizations as are described in Section 170(c)(1) or (2) of the Code, as the Board of Trustees shall determine. Any of such assets not so disposed of shall be disposed of by the Court of Common Pleas of the county in which the principal office of the Corporation is then located, exclusively for such purposes or to such organization or organizations, as said Court shall determine, which are organized and operated exclusively for such purposes.

ELEVENTH These Articles supersede all prior Articles or Amended Articles.

Appendix 1005-A



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Signal processing. Image communication.

Amsterdam : Elsevier, 1989-

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Key Title: Signal processing. Image communication**Subjects:** [Image processing -- Periodicals](#);
[Dewey: 621.388](#)**Rights:** Terms governing use: Current copyright fee: GBP32.84**Publication Details:** Amsterdam : Elsevier, 1989-**Language:** English**Description:** Vol. 1, no. 1 (June 1989)-**Identifier:** ISSN 0923-5965; System number: 009876007**Related Titles:** Also issued online as: Signal processing. Image communication
(Online) 1879-2677**Notes:** Current publication frequency: Quarterly
A publication of the European Association for Signal Processing.**Physical Description:** v. : ill. ; 27 cm.**Holdings Notes:** Document Supply 8275.985600 Vol. 1, issue 1 (1989)-v. 24, issue 10 (2009)***UKRR Retained Title
Science Technology and Business (P) RU 45 -E(16) Vol.1 (1989)-v. 16 (2001);
Deficient: Vol.1, no.3, 4, 1989; vol.8, no.3, 1996**Shelfmark(s):** Document Supply 8275.985600
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Appendix 1005-B

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0220 |a 0923-5965
040 |a Uk |c Uk |d Uk
08204 |a 621.388 |2 21
084 |a RU 45 |2 blsrisc
222 0 |a Signal processing. Image communication
24500 |a Signal processing. |p Image communication.
24630 |a Image communication
260 |a Amsterdam : |b Elsevier, |c 1989-
300 |a v. : |b ill. ; |c 27 cm.
310 |a Quarterly
336 |a text |2 rdacontent
337 |a unmediated |2 rdamedia
338 |a volume |2 rdacarrier
3620 |a Vol. 1, no. 1 (June 1989)-
595 |a SEE ALSO CARD INDEX.
500 |a A publication of the European Association for Signal Processing.
650 0 |a Image processing |v Periodicals.
7102 |a European Association for Signal Processing.
77608 |i Also issued online as: |t Signal processing. Image communication (Online) |x 1879-2677
945 |a SIGNAL PROCESSING IMAGE COMMUNICATION
85241 |a British Library |b DSC |j 8275.985600
866 0 |a Vol. 1, issue 1 (1989)-v. 24, issue 10 (2009) |z UKRR Retained Title
85271 |a British Library |b STI |k (P) |h RU 45 |m -E(16) |2 blsrisc
866 0 |a Vol.1 (1989)-v. 16 (2001); Deficient: Vol.1, no.3, 4, 1989; vol.8, no.3, 1996
SYS 009876007

Appendix 1005-C

PUBLIC AVAILABILITY DATE REQUEST

Customer name	Ingrid Hsieh-Yee
Organisation	
Our reference	190196a
Customer reference	
Price	£00.00
Item	Transcoding of MPEG bitstreams. By Keesman, G., Hellinghuizen, R., Hoeksema, F., & Heideman, G. Published in Signal Processing: Image Communication, Volume 8 Issue 6, pages 481-500 (September 1996).



Ingrid Hsieh-Yee
1024 Harbor Dr.
Annapolis, MD 21403
USA

17th December 2019

Dear Ms Hsieh-Yee,

Re: Transcoding of MPEG bitstreams. By Keesman, G et al. Published in Signal Processing: Image Communication, Volume 8 Issue 6, pages 481-500 (September 1996).

Only one of the two copies of this item held by the library is available for inspection and therefore we are unable to provide a definitive Public Availability Date for the article. We can only give you the date of the one copy that is currently available. We can confirm that the British Library Public Availability Date (PAD) for one of the two copies held is the **21st of August 1996**. This particular copy of the item would have been available for public use from that date onwards.

A scan of the cover page and table of contents page with date stamp has been attached.

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Yours sincerely

Mr Ziaad Khan

British Library Research Service
Tel: +44 (0) 20 7412 7903 research@bl.uk

SIGNAL PROCESSING


IMAGE COMMUNICATION

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SIGNAL PROCESSING IMAGE COMMUNICATIONS
*ETOC



8275.985600 VOL 8 PART 6

1/1

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Theory, Techniques & Applications

A publication of the European Association for Signal Processing (EURASIP)

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SIGNAL PROCESSING

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Journal [2] F.J. Harris, "On the use of windows for harmonic analysis with the discrete Fourier transform", *Proc. IEEE*, Vol. 66, No. 1, January 1978, pp. 53-83.
Conference Proceedings [3] D. Coulon and D. Kayser, "A supervised-learning technique to identify short natural language sentence", *Proc. 3rd Internat. Joint Conf. on Pattern Recognition*, Coronado, CA, 8-11 November 1976, pp. 85-89.
Contributed Volume [4] E.F. Moore, "The firing squad synchronization problem", in: E.F. Moore, ed., *Sequential Machines, Selected Papers*, Addison-Wesley, Reading, MA, 1964, pp. 213-214.

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Citations of Neri, 1995 – 1999

Source document

Neri, A., Russo, G., & Talone, P. (August 1994). Inter-block filtering and downsampling in DCT domain. *Signal Processing: Image Communication*, 6(4), 303-317.

Citations of Neri from 1995 to 1999 (in chronological order)

Merhav, N., & Bhaskaran, V. (May 1995). *A fast algorithm for DCT domain filtering*. Hewlett-Packard Laboratories, Technical Publications Department.

Prost, R., & Diab, C. (November 1996). Downsampling versus folding in the DCT domain. *IEEE transactions on signal processing*, 44(11), 2887-2891.

Merhav, N., & Kresch, R. (August 1998). Approximate convolution using DCT coefficient multipliers. *IEEE Transactions on Circuits and Systems for Video Technology*, 8(4), 378-385.

Merhav, N., & Bhaskaran, V. (November 1998). *U.S. Patent No. 5,832,135*. Washington, DC: U.S. Patent and Trademark Office.

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Mitchell, J. L., Pennebaker, W. B., Fogg, C. E., & LeGall, D. J., MPEG VIDEO: COMPRESSION STANDARD, Chapman & Hall, 1996.

Citations from 1997 to 1998 (in chronological order)

Kleihorst, R. P., van der Werf, A., Brüls, W. H. A., Verhaegh, W. F., & Waterlander, E. (1997, November). MPEG2 video encoding in consumer electronics. *Journal of VLSI signal processing systems for signal, image and video technology*, 17(2-3), 241-253.

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Bavier, A. C., Montz, A. B., & Peterson, L. L. (1998, June). Predicting MPEG execution times. In *ACM SIGMETRICS Performance Evaluation Review* (Vol. 26, No. 1, pp. 131-140). ACM.