

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Amazon.com, Inc. and Amazon Web Services, Inc.,
Petitioners,
v.

DivX, LLC,
Patent Owners.

Case IPR2025-01223

U.S. PATENT NO. 11,611,785

DECLARATION OF SYLVIA D. HALL-ELLIS, PH.D.

I. INTRODUCTION

1. My name is Sylvia D. Hall-Ellis. I have been retained as an expert by Fenwick & West LLP, Counsel for Amazon.com, Inc. and Amazon Web Services, Inc. (referred to herein as “Amazon”).

2. I have written this declaration at the request of Amazon to provide my expert opinion regarding the authenticity and public availability of a publication. My declaration sets forth my opinions in detail and provides the basis for my opinions regarding the public availability of this publication.

3. I reserve the right to supplement or amend my opinions, and basis for them, in response to any additional evidence, testimony, discovery, argument, and/or other additional information that may be provided to me after the date of this declaration. If called to testify in the above-captioned matter, I will testify with regard to the opinions and bases set forth below.

4. I am being compensated for my time spent working on this matter at my normal consulting rate plus reimbursement for any additional reasonable expenses. My compensation is not in any way tied to the content of this declaration, the substance of my opinions, or the outcome of this proceeding. I have no other interests in this proceeding or with any of the parties.

5. All of the materials that I considered are discussed explicitly in this declaration.

II. QUALIFICATIONS

6. I am currently an Adjunct Professor in the School of Information at San José State University. I obtained a Master of Library Science from the University of North Texas in 1972 and a Ph.D. in Library and Information Science from the University of Pittsburgh in 1985. Over the last fifty years, I have held various positions in the field of library and information resources. I was first employed as a librarian in 1966 and have been involved in the field of library sciences since, holding numerous positions.

7. I am a member of the American Library Association (“ALA”) and its Association for Library Collections & Technical Services (“ALCTS”) Division, and I served on the Committee on Cataloging: Resource and Description (which wrote the new cataloging rules) and as the chair of the Committee for Education and Training of Catalogers and the Competencies and Education for a Career in Cataloging Interest Group. I also served as the Chair of the ALCTS Division’s Task Force on Competencies and Education for a Career in Cataloging. Additionally, I served as the Chair for the ALA Office of Diversity’s Committee on Diversity, as a member of the REFORMA National Board of Directors, and as a member of the Editorial Board for the ALCTS premier cataloging journal, *Library Resources and Technical Services*, as a Co-Chair of the Membership Committee for the Library Research Round Table (LRRT) of the American Library

Association, and as a member of the LRRT Nominating Committee. Currently I serve as a member of the CORE Margaret Mann Citation Committee.

8. I have also given over one-hundred presentations in the field, including several on library cataloging systems and Machine-Readable Cataloging (“MARC”) standards. My current research interests include library cataloging systems, metadata, and organization of electronic resources.

9. My full *curriculum vitae* is attached to the corresponding *inter partes* petition as Exhibit 1032.

III. PRELIMINARIES

A. Scope of this declaration.

10. I am informed by counsel to assume a priority date for the patent at issue of August 30, 2011. As I will explain below, it is my opinion that the publication discussed in my declaration were publicly accessible more than three months before August 30, 2011.

11. I am not an attorney and will not offer opinions on the law. I am, however, rendering my expert opinion on the authenticity of the documents referenced herein and on when and how each of these documents was disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter or art, exercising reasonable diligence, could have located the documents more than three months before August 30, 2011.

12. I am informed by counsel that an item is considered authentic if there is sufficient evidence to support a finding that the item is what it is claimed to be. I am also informed that authenticity can be established based on the contents of the documents themselves, such as the appearance, contents, substance, internal patterns, or other distinctive characteristics of the item, taken together with all of the circumstances. I am further informed that an item is considered authentic if it is at least 20 years old, in a condition that creates no suspicion of its authenticity, and in a place where, if authentic, it would likely be. Lastly, I have been informed that a document's authenticity can be established by comparison with an authentic specimen.

13. I am informed by counsel that a printed publication qualifies as publicly accessible as of the date it was disseminated or otherwise made available such that a person interested in and ordinarily skilled in the relevant subject matter could locate it through the exercise of ordinary diligence.

14. While I understand that the determination of public accessibility under the foregoing standard rests on a case-by-case analysis of the facts particular to an individual publication, I also understand that a printed publication is rendered "publicly accessible" if it is cataloged and indexed by a library such that a person interested in the relevant subject matter could locate it (*i.e.*, I understand that cataloging and indexing by a library is sufficient, though there are other ways that

a printed publication may qualify as publicly accessible). One manner of sufficient indexing is indexing according to subject matter category. I understand that the cataloging and indexing by a single library of a single instance of a particular printed publication is sufficient, even if the single library is in a foreign country. I understand that, even if access to a library is restricted, a printed publication that has been cataloged and indexed therein is publicly accessible so long as a presumption is raised that the portion of the public concerned with the relevant subject matter would know of the printed publication. I also understand that the cataloging and indexing of information that would guide a person interested in the relevant subject matter to the printed publication, such as the cataloging and indexing of an abstract for the printed publication, is sufficient to render the printed publication publicly accessible.

15. I understand that routine business practices, such as general library cataloging and indexing practices, can be used to establish an approximate date on which a printed publication became publicly accessible.

B. Person of Ordinary Skill in the Art

16. I am told by counsel that the subject matter of this proceeding relates generally to well-known, conventional techniques for encoding videos for adaptive bitrate streaming.

17. I am informed by counsel that a “person of ordinary skill in the art at the time of the invention” (“POSITA”) is a hypothetical person who is presumed to be familiar with the relevant field and its literature at the time of invention. This hypothetical person is also a person of ordinary creativity, capable of understanding the scientific principles applicable to the pertinent field.

18. I was told by counsel that a POSITA in the 2010-2011 timeframe would have had a working knowledge of the digital video coding and processing art that is pertinent to the 785 patent, including adaptive bit rate streaming. A POSITA would have had a bachelor’s or master’s degree in electrical engineering, computer engineering, or a related field, including specialized training or coursework in digital video coding and processing and related technologies. A POSITA would also have had four or more years of practical experience relating to digital video coding and processing, including various software and/or hardware architectures used to perform digital video coding and processing. Lack of practical experience can be remedied by additional education, and vice versa.

19. It is my opinion that such a person would have been engaged in research, learning through study, and practice in the field and possibly through formal instruction the bibliographic resources relevant to his or her research. By no later than early 2010 (and more specifically, before August 30, 2011), such a person would have had access to a vast array of long-established print resources in

the field, as well as to a rich set of online resources providing indexing information, abstracts, and full text services for publications relevant to the field of this dispute, including at least the publication discussed in this declaration.

C. Authoritative Databases

20. In preparing this declaration, I used authoritative databases, such as the OCLC WorldCat, the Library of Congress Online Catalog, and the Internet Archive, to confirm citation details of the publications discussed.

21. *OCLC WorldCat Database*. The 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 Among other services, OCLC and its members are responsible for

¹ Third Article, Amended Articles of Incorporation of OCLC Online Computer Library Center, Incorporated (available at <https://www.oclc.org/content/dam/oclc/membership/articles-of-incorporation.pdf>)

maintaining the WorldCat database,² used by independent and institutional libraries throughout the world.

22. *ACM Digital Library*.³ This index is produced by the Association for Computing Machinery, the world's largest scientific and educational computing society. The *ACM Digital Library* contains the full text of all ACM publications, hosted full-text publications from selected publishers, and the ACM Guide to Computing Literature—a comprehensive bibliography of computing literature beginning in the 1950s with more than a million entries. All metadata in the database are freely available on the Web, including abstracts, linked references, citing work, and usage statistics. Full-text articles are available with subscriptions.

23. *Library of Congress Online Catalog*. The Library of Congress (LC) One of the largest research libraries in the world and officially serving the United States Congress, the Library of Congress is the de facto national library and the oldest federal cultural institution in the country. Its universal collections are not limited by subject, format, or national boundary, including resources from all parts of the world. The Library of Congress collections include more than 32 million catalogued books and other print materials in 470 languages; more than 61 million manuscripts; the largest rare book collection in North America over 1 million

² <http://www.worldcat.org/>

³ <https://dl.acm.org/>

U.S. government publications; 1 million issues of world newspapers spanning the past three centuries; 33,000 bound newspaper volumes; 500,000 microfilm reels; U. S. and foreign comic books—over 12,000 titles in all, totaling more than 140,000 issues; films; 5.3 million maps; 6 million works of sheet music; 3 million sound recordings; more than 14.7 million prints and photographic images including fine and popular art pieces and architectural drawings.

24. *Internet Archive*. The Internet Archive is a non-profit digital library founded in 1996 that maintains an archive of digital information. A substantial portion of this archive consists of publicly available information collected from the world wide web using software called crawlers. Crawlers navigate to a webpage and create snapshots of webpages as they existed at a certain point in time.

25. The *WayBack Machine*, a service offered by the *Internet Archive*, allows users to search its web archive and to represent, graphically, the date when each webpage was captured. Some sites are “not archived because they were password protected, blocked by robots.txt, or otherwise inaccessible to our automated systems. Site owners might have also requested that their sites be excluded from the WayBack Machine.”

26. Both the PTAB and the Federal Circuit have recognized the contents of the WayBack Machine as “inherently reliable.” *Analog Devices, Inc. v. Xilinx, Inc.*, IPR2020-01606, Paper 63 at 7 (P.T.A.B. Apr. 20, 2022) (citing *Valve Corp. v.*

Ironburg Inventions Ltd., 8 F.4th 1364, 1374–75 (Fed. Cir. 2021) (agreeing that the WayBack Machine is a “source[] whose accuracy cannot reasonably be questioned”).

27. All Internet Archive captures made by the *WayBack* Machine have a URL that begins with the identification of the Internet Archive page (<https://web.archive.org/web/>), followed by information stamping the capture with the date and time it was made. The format of this date stamp is as follows: year in yyyy, month in mm, day in dd, time code in hh:mm:ss (e.g., 20071120082013 means November 20, 2007, at 8:20:13 a.m.). These elements are then followed by the URL of the original capture site. Many captures viewed on the *WayBack Machine* have a banner at the top with the capture date prominently displayed. Other capture dates of the same URL appear to the right and left of the date in the banner. Some captures may lack this banner, but all captures have the date stamped URL format described above.

28. When links on a captured web page are clicked, the *WayBack Machine* is programmed to produce the archived file with the closest available subsequent capture date to that of the page containing the link that was clicked. I

and other librarian professionals are familiar with the Internet Archive and the *Wayback Machine*.⁴

D. Indexing

29. A researcher may discover material relevant to his or her topic in a variety of ways. One common means of discovery is to search for relevant information in an index of periodical and other publications. Having found relevant material, the researcher will then normally obtain it online, look for it in libraries, or purchase it from a publisher, a bookstore, a document delivery service, or other provider. Sometimes, the date of a document's public accessibility will involve both indexing and library date information. However, date information for indexing entries is often unavailable. This is especially true for online indices.

30. Indexing services use a wide variety of controlled vocabularies to provide subject access and other means of discovering the content of documents. The formats in which these access terms are presented vary from service to service.

31. Before the widespread development of online databases to index articles in journals, magazines, conference papers, and technical declarations, libraries purchased printed volumes of indices. Graduate library school education mandated that students learn about the bibliographic control of disciplines, the

⁴ For more information about the Internet Archive see the WayBack Machine FAQ, https://archive.org/about/faqs.php#The_Wayback_Machine.

prominent indexing volumes, and searching strategies required to use them effectively and efficiently. Half of the courses that I studied in library school were focused on bibliography and resources in academic disciplines.

32. Librarians consulted with information seekers to verify citations, check availability in union catalogs, printed books catalogs, and the OCLC database, and make formal requests for materials, *e.g.*, books, conference proceedings, journal articles. Requests were transmitted using Telex machines, rudimentary email systems, and the United States Postal Service. During my career, I have performed and supervised staff who handled these resource sharing tasks.

33. A major firm known for the breadth of subjects and comprehensive treatment in the preparation of index volumes, the H. W. Wilson Company offered these reference resources since the firm was founded in 1898. The *Reader's Guide to Periodical Literature* is one of the best-known titles available from H. W. Wilson. Each volume includes a comprehensive index for 300 of the most popular and important periodicals published in the United States and Canada. Information seekers have subject access expressed in plain language terminology, author access, and cross references to find the desired results from their searches. The family of index titles included *Science & Technology Index*, *Business Periodicals*, *Applied Science & Technology Index*, *Humanities Index*, *Biological & Agricultural*

Index, and *Industrial Arts Index*. These printed indices have been superseded by digital database offerings available to information seekers through Ebsco.

34. Online indexing services commonly provide bibliographic information, abstracts, and full-text copies of the indexed publications, along with a list of the documents cited in the indexed publication. These services also often provide lists of publications that cite a given document. A citation of a document is evidence that the document was publicly available and in use no later than the publication date of the citing document.

IV. LIBRARY CATALOGING PRACTICES

A. MARC RECORDS AND THE ONLINE LIBRARY CATALOG

35. I am fully familiar with the library cataloging standard known as the MARC standard, which is an industry-wide standard method of storing and organizing library catalog information.⁵ MARC was first developed in the 1960s by the Library of Congress. A MARC-compatible library is one that has a catalog consisting of individual MARC records for each of its items. Today, MARC is the

⁵ The full text of the standard is available from the Library of Congress at <http://www.loc.gov/marc/bibliographic/>.

primary communications protocol for the transfer and storage of bibliographic metadata in libraries.⁶

36. MARC is a framework into which descriptive bibliographic data are transcribed to interact with the software in online library catalogs to provide access to books, journals, and other resources in the collection. The bibliographic data provide points of access and can be searched by a person of ordinary skill in the art (“POSITA”) to identify and obtain resources in the library collection. An information seeker (or POSITA) can search a local online library catalog or the holdings of a group of libraries in a state or region or in the global catalog WorldCat.

37. MARC records are not designed for public viewing. Although a significant number of libraries provide access to the MARC version of a bibliographic record, the public display is designed to show information in a

⁶ Almost every major library in the world is MARC-compatible. *See, e.g., MARC Frequently Asked Questions (FAQ)*, Library of Congress, <https://www.loc.gov/marc/faq.html> (last visited May 19, 2025) (“MARC is the acronym for MACHine-Readable Cataloging. It defines a data format that emerged from a Library of Congress-led initiative that began nearly forty years ago. It provides the mechanism by which computers exchange, use, and interpret bibliographic information, and its data elements make up the foundation of most library catalogs used today.”) MARC is the ANSI/NISO Z39.2-1994 (reaffirmed 2016) standard for Information Interchange Format.

succinct manner that is quickly understood and useful to the information seeker. Libraries determine the default search for the online catalog to make the entry of search terms efficient and result in a successful search. Information seekers can enter a keyword, title, author, or standard number for the item. Libraries may also provide a search capability called “Summon” that allows the information seeker to enter known information about the item to conduct a search.

38. Since at least the early 1970s and continuing to the present day, MARC has been the primary communications protocol for the transfer and storage of bibliographic metadata in libraries.⁷ As explained by the Library of Congress:

You could devise your own method of organizing the bibliographic information, but you would be isolating your library, limiting its options, and creating much more work for yourself. Using the MARC standard prevents duplication of work and allows libraries to better share bibliographic resources. Choosing to use MARC enables libraries to acquire cataloging data that is predictable and reliable. If a library were to develop a “home-grown” system that did not use MARC records, it would not be taking advantage of an

⁷ A complete history of the development of MARC can be found in *MARC: Its History and Implications* by Henrietta D. Avram (Washington, DC: Library of Congress, 1975) and available online from the Hathi Trust (<https://babel.hathitrust.org/cgi/pt?id=mdp.39015034388556;view=1up;seq=1>; last visited May 19, 2025).

industry-wide standard whose primary purpose is to foster communication of information.

Using the MARC standard also enables libraries to make use of commercially available library automation systems to manage library operations. Many systems are available for libraries of all sizes and are designed to work with the MARC format. Systems are maintained and improved by the vendor so that libraries can benefit from the latest advances in computer technology. The MARC standard also allows libraries to replace one system with another with the assurance that their data will still be compatible.

Why Is a MARC Record Necessary? LIBRARY OF CONGRESS,
<http://www.loc.gov/marc/umb/um01to06.html#part2> (last visited May 19, 2025).

39. Examining the MARC records for a specific item reveals the comprehensive data transcribed about a particular item at the time that cataloging and classification occurred. In addition to the creator, title, subjects, and standard numbers, additional information may provide additional and relevant data depending on the type of resource. Understanding the full extent of bibliographic data for an item and the points of access associated with it provides essential information that can be used to determine the indexing and public availability for documents described in this Declaration.

B. MARC RECORDS

40. A MARC record comprises 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 follow. For example, a work's title is recorded in field 245, the primary author or creator of the work is recorded in field 100, an item's International Standard Book Number ("ISBN") is recorded in field 020, an item's International Standard Serial Number ("ISSN") is recorded in field 022, an item's Library of Congress call number is recorded in field 050, and the publication date is recorded in field 260 under the subfield "c." *Id.*⁸ If a work is a periodical (or serial), then its publication frequency is recorded in field 310, alternate publication frequency is recorded in field 321, and the publication dates (*e.g.*, the first and last publication) are recorded in field 362, which is also referred to as the enumeration/chronology field. See <http://www.loc.gov/marc/bibliographic/bd3xx.html> (last visited May 19, 2025).

⁸ In some MARC records, field 264 is used rather than field 260 to record publication information. See <http://www.loc.gov/marc/bibliographic/bd264.html> (last visited May 19, 2025) ("Information in field 264 is similar to information in field 260 (Publication, Distribution, etc. (Imprint)). Field 264 is useful for cases where the content standard or institutional policies make a distinction between functions").

41. The library that created the record is recorded in Field 040 in subfield “a” with a unique library code. When viewing the MARC record online via Online Computer Library Center’s (“OCLC”) bibliographic database, hovering over this code with the mouse reveals the full name of the library. I used this method of “mousing over” the library codes in the OCLC database to identify the originating library for the MARC records discussed in this Declaration. Where this “mouse over” option was not available, I consulted the Directory of OCLC Libraries to identify the institution that created the MARC record.⁹

42. MARC records also include several fields that include subject matter classification information. An overview of MARC record fields is available through the Library of Congress at <http://www.loc.gov/marc/bibliographic/>. For example, 6XX fields are termed “Subject Access Fields.” See <http://www.loc.gov/marc/bibliographic/bd6xx.html>. Among these, for example, is the 650 field; this is the “Subject Added Entry – Topical Term” field. See <http://www.loc.gov/marc/bibliographic/bd650.html>. The 650 field is a “[s]ubject added entry in which the entry element is a topical term.” *Id.* These authenticated subject entries “are assigned to a bibliographic record to provide access according to generally accepted thesaurus-building rules (*e.g.*, *Library of Congress Subject Headings* (LCSH), *Medical Subject Headings* (MeSH)).” *Id.*

⁹ <https://www.oclc.org/en/contacts/libraries.html>

43. Further, MARC records include call numbers, which themselves indicate a subject and physical location within the library collections. For example, the 050 field is the “Library of Congress Call Number.” See <http://www.loc.gov/marc/bibliographic/bd050.html> (last visited April 28, 2025). A defined portion of the Library of Congress Call Number is the classification number, and “source of the classification number is *Library of Congress Classification* and the *LC Classification-Additions and Changes*.” *Id.* Thus, included in the 050 field is a subject matter classification. Each item in a library has a single classification number. A library selects a classification scheme (*e.g.*, the Library of Congress Classification scheme just described or a similar scheme such as the Dewey Decimal Classification scheme or the National Library of Medicine Classification scheme) and uses it consistently. When the Library of Congress assigns the classification number, it appears as part of the 050 field. If a local library assigns the classification number, it appears in a 090 field. In either scenario, the MARC record includes a classification number that represents a subject matter classification.

44. Each item in a library has a single classification number. A library selects a classification scheme (*e.g.*, the Library of Congress Classification scheme just described or a similar scheme such as the Dewey Decimal Classification scheme) and uses it consistently. When the Library of Congress assigns the

classification number, it appears as part of the 050 field, as discussed above. For MARC records created by libraries other than the Library of Congress (*e.g.*, a university library or a local public library), the classification number may appear in a 09X (*e.g.*, 090) field. See <http://www.loc.gov/marc/bibliographic/bd09x.html> (last visited May 19, 2025).

C. OCLC

45. The 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.”¹⁰ Among other services, OCLC and its members are responsible for maintaining the WorldCat database (<http://www.worldcat.org/>), used by independent and institutional libraries throughout the world.

¹⁰ Third Article, Amended Articles of Incorporation of OCLC Online Computer Library Center, Incorporated (available at <https://www.oclc.org/content/dam/oclc/membership/articles-of-incorporation.pdf>).

46. OCLC also provides its members online access to MARC records through its OCLC bibliographic database. When an OCLC member institution acquires a work, it creates a MARC record for this work in its computer catalog system in the ordinary course of its business. MARC records created at the Library of Congress were initially tape-loaded into the OCLC database through a subscription to MARC Distribution Services daily or weekly. Once the MARC record is created by a cataloger at an OCLC member institution or is tape-loaded from the Library of Congress, the MARC record is then made available to any other OCLC members online, and therefore made available to the public. Accordingly, once the MARC record is created by a cataloger at an OCLC member institution or is tape-loaded from the Library of Congress or another library anywhere in the world, any publication corresponding to the MARC record has been cataloged and indexed according to its subject matter such that a person interested in that subject matter could, with reasonable diligence, locate and access the publication through any library with access to the OCLC bibliographic database or through the Library of Congress.

47. When an OCLC member institution creates a new MARC record, OCLC automatically supplies the date of creation for that record. The date of creation for the MARC record appears in the fixed field (008), characters 00 through 05. The MARC record creation date reflects the date on which the item

was first acquired or cataloged. Initially, field 005 of the MARC record is automatically populated with the date the MARC record was created in year, month, day format (YYYYMMDD) (some of the newer library catalog systems also include hour, minute, second (HHMMSS)). Thereafter, the library's computer system may automatically update the date in field 005 every time the library updates the MARC record (*e.g.*, to reflect that an item has been moved to a different shelving location within the library). Field 005 is visible when viewing a MARC record via an appropriate computerized interface. The initial field 005 date (*i.e.*, the date the MARC record was created) does appear. The date upon which the most recent update to field 005 occurred also appears in field 005. Thus, when an item's MARC record has been printed to hardcopy—as is the case with the exhibits to this declaration—the date reflected next to field 008 is necessarily on or after the date the library first cataloged and indexed the underlying item.

48. Once one library has cataloged and indexed a publication by creating a MARC record for that publication, other libraries that receive the publication do not create additional MARC records—the other libraries instead rely on the original MARC record. They may update or revise the MARC record to ensure accuracy, but they do not replace or duplicate it. This practice does more than save libraries from duplicating labor, it also enhances the accuracy of MARC records. It also allows librarians around the world to know that a particular MARC record is

authoritative. In contrast, a hypothetical system wherein duplicative records were created would result in confusion as to which record is authoritative.

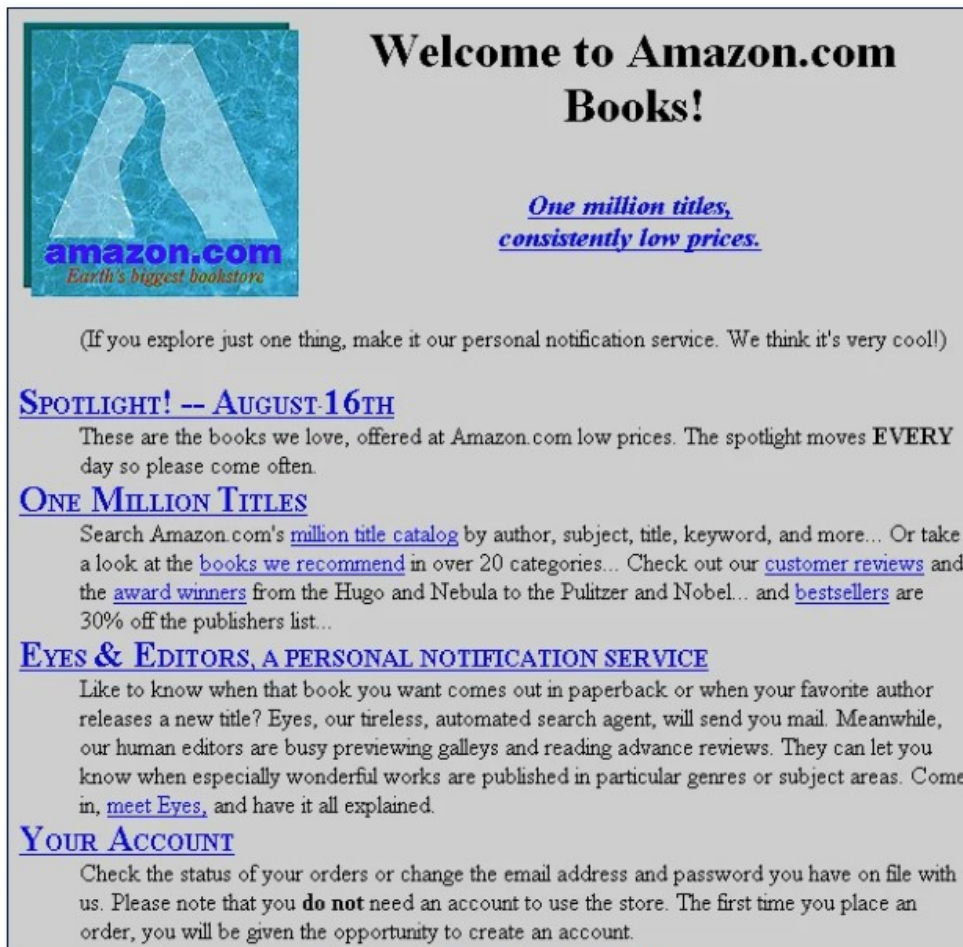
49. The date of creation of the MARC record by a cataloger at an OCLC member institution reflects when the underlying item is accessible to the public. Upwards of two-thirds to three-quarters of book sales to libraries come from a jobber or wholesaler for online and print resources. These resellers make it their business to provide books to their customers as fast as possible, often providing turnaround times of only a single day after publication. Libraries purchase a significant portion of the balance of their books directly from publishers themselves, which provide delivery on a similarly expedited schedule. In general, libraries make these purchases throughout the year as the books are published and shelve the books as soon thereafter as possible in order to make the books available to their patrons. Thus, books are generally available at libraries across the country within just a few days of publication.

D. AMAZON.COM

50. Amazon.com is an online store that carries many items, including books. Amazon.com launched in 1995, and at first, it only sold books. From the start, Amazon.com provided robust search features by which customers could search for books. For example, as shown below, customers could search the

Amazon.com book catalog for books by author, subject, title, keyword, and more.¹¹

Today, these search features are even more robust.¹²



The original Amazon website (August 1995)
Source: Restored by [Taran Van Hemert](#)

51. When Amazon.com lists a book for sale on its website, Amazon.com includes this book in its searchable catalog of books, making that book easily findable and available for purchase by interested consumers. Thus, books listed

¹¹ <https://www.versionmuseum.com/history-of/amazon-website>

¹² amazon.com/advanced-search/books

for sale on Amazon.com are generally publicly available as of the date they are listed.

V. PUBLICATION IN THIS PROCEEDING

A. *Video Compression for Flash, Apple Devices, and HTML5* by Jan Ozer. [Exhibit 1005]

52. Attached to the corresponding *inter partes* petition as Exhibit 1005 is a copy of a book titled *Video Compression for Flash, Apple Devices, and HTML5* by Jan Ozer (hereafter “Ozer”) and issued by Doceo Publishing with a 2011 copyright date. I obtained Exhibit 1005 from counsel. The text in Exhibit 1005 is complete; no pages are missing, and the text on each page appears to flow seamlessly from one page to the next; further, there are no visible alterations to the document. Exhibit 1005 is a true and correct copy in a condition that creates no suspicion about its authenticity.

53. Attached to the corresponding *inter partes* petition as Exhibit 1024 is a true and correct copy of the MARC record for the Ozer book titled *Video Compression for Flash, Apple Devices, and HTML5* obtained from the OCLC bibliographic database. I personally identified and retrieved the MARC record that is Exhibit 1024. As previously noted, the library that created the record is recorded in field 040 with a unique library code. For Exhibit 1024, that library code is VYFDLC,” which means that the MARC record for this book was created at the Fordham University Libraries (Bronx, New York). As can be seen in field 008

(“Date entered on file”) in the MARC record for this exhibit, a cataloger at the Fordham University Libraries created OCLC record number 758376721 on October 24, 2011 (“111024”). The library continues to update and enhance this MARC record to meet current cataloging rules. The most recent enhancement to Exhibit 1024 occurred on January 27, 2024, as shown in field 005 (“20240127”).

54. Exhibit 1024 further includes an entry in field 050 (“TK6680.5 \$b .O94 2011”)—as described above, this includes a subject matter classification number consistent with the Library of Congress classification system (analogous to the Dewey Decimal classification system) and an entry in field 082 (“006.696”)—as described above, this includes a subject matter classification number consistent with the Dewey Decimal classification system. Exhibit 1024 further includes five descriptor terms reading “Video compression \$v Handbooks, manuals, etc.” (*see* attached to the corresponding *inter partes* petition as Exhibit 1025, Library of Congress subject heading sh93007921 and *see* attached to the corresponding *inter partes* petition as Exhibit 1026, Library of Congress subject heading sh85058659), “Web publishing \$v Handbooks, manuals, etc.” (*see* attached to the corresponding *inter partes* petition as Exhibit 1027, Library of Congress subject heading sh96009077 and Exhibit 1026, Library of Congress subject heading sh85058659), “Streaming video \$v Handbooks, manuals, etc.” (*see* attached to the corresponding *inter partes* petition as Exhibit 1028, Library of Congress subject heading

sh2005005237 and Exhibit 1026, Library of Congress subject heading sh85058659), “Streaming technology (Telecommunications) \$v Handbooks, manuals, etc.” (see attached to the corresponding *inter partes* petition as Exhibit 1029, Library of Congress subject heading sh99000996 and Exhibit 1026, Library of Congress subject heading sh85058659), and “Webcasting \$v Handbooks, manuals, etc.” (see attached to the corresponding *inter partes* petition as Exhibit 1030, Library of Congress subject heading sh97008674 and Exhibit 1026, Library of Congress subject heading sh85058659) in the 650 fields. Thus, as of its cataloging, the publication corresponding to the MARC record attached hereto as Exhibit 1024 was indexed according to its subject matter by virtue of at least three independently sufficient classifications: the field 050 entry, the field 082 entry, and the field 650 entries. Further, as of October 24, 2011, the MARC record attached hereto as Exhibit 1024 was accessible through any library with access to the OCLC bibliographic database or the online catalog at a library that added this book to its collection, which means that the corresponding publication was publicly available on or shortly after that same date through any library with access to the OCLC bibliographic database or through an individual library.

55. WorldCat indicates that the Ozer book titled *Video Compression for Flash, Apple Devices, and HTML5*, as cataloged at the Fordham University

Libraries, is currently available from 12 libraries.¹³ In view of above, the Ozer monograph was publicly available in a library on or shortly after October 24, 2011, because by that date it had been received, cataloged, and indexed at the Fordham University Libraries and made part of the OCLC bibliographic database. For these reasons, it is my opinion that the Ozer book was published and accessible to the public in a library on or shortly after October 24, 2011.

56. Further supporting the public availability of the Ozer book is the *Streaming Learning Center* website captured by the Internet Archive (*see* attached to the corresponding *inter partes* petition as Exhibit 1031 at 3-9). Mina Ching, a Record Request Processor at the Internet Archive, stated in her affidavit dated June 21, 2025, that this website was captured on May 15, 2011, at 10:10:07 p.m., as indicated by the URL.¹⁴ Thus, on or shortly before May 15, 2011, the *Streaming Learning Center* website announced the publication of the Ozer book and provided a description about the book and each chapter, information about the author, and a link to Amazon.com for easy ordering and purchasing. Exhibit 1031 at 3-9.

¹³ <https://search.worldcat.org/title/758376721>

¹⁴

<https://web.archive.org/web/20110515221007/https://streaminglearningcenter.com/articles/slc-releases-book-video-compression-for-flash-apple-devices-and-html5.html>

57. Further supporting the public availability of the Ozer book is the Amazon.com website offering the Ozer book for sale captured by the Internet Archive (*see* attached to the corresponding *inter partes* petition as Exhibit 1031 at 10-13). Mina Ching, a Record Request Processor at the Internet Archive, stated in her affidavit dated June 21, 2025, that Amazon.com page offering the Ozer book for sale was captured on May 11, 2011, at 1:44:37 a.m., as indicated by the URL.¹⁵ Thus, Amazon.com offered for sale the Ozer book on or shortly before May 11, 2011 (*see* Exhibit 1031, 10-13). As was noted above, this means that the Ozer book was included in Amazon.com's searchable catalog of book on or shortly before May 11, 2011. *Supra* § IV.D.

58. In view of the above, the Ozer book was publicly available on the internet from Amazon.com on or shortly before May 11, 2011, because by that date it had been received, catalogued, and indexed by Amazon and had been made part of the searchable Amazon.com catalog of books. Further, the Ozer book's availability was communicated to its intended audience (those interested in, studying, and/or applying digital video coding and processing) through the *Streaming Learning Center* website's publication announcement on or shortly before May 15, 2011. For these reasons, it is my opinion that Exhibit 1005 (Ozer)

¹⁵ <https://web.archive.org/web/20110511014437/https://www.amazon.com/Video-Compression-Flash-Apple-Devices/dp/0976259508>

was published and accessible to the public online on or shortly before May 11, 2011, but no later than May 15, 2011.

VI. SUMMARY OF OPINIONS

59. In view of the foregoing, it is my opinion that the publication described above was publicly available no later than the corresponding date listed in the table below:

Exhibit	Publication	Publicly Available By
Attached to the corresponding inter partes petition as Exhibit 1005	Ozer, Jan. <i>Video Compression for Flash, Apple Devices, and HTML5</i> . Galax, VA: Doceo Publishing, c2011.	May 11, 2011, but no later than May 15, 2011

60. In signing this Declaration, I recognize that the Declaration will be filed as evidence in a case before the Patent Trial and Appeal Board of the United States Patent and Trademark Office. I also recognize that I may be subject to cross-examination in the case and that cross-examination will take place within the United States. If cross-examination is required of me, I will appear for cross-examination within the United States during the time allotted for cross-examination.

61. I hereby declare that all statements made herein of 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.

June 27, 2025


Sylvia D. Hall-Ellis, Ph.D.