

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO., LTD. AND
SAMSUNG ELECTRONICS AMERICA, INC.

Petitioners

v.

SURECELL TRANSACTIONS LLC,
Patent Owner

Case No. IPR2026-00506
U.S. Patent No. 7,924,156

Case No. IPR2026-00507
U.S. Patent No. 11,347,949

Case No. IPR2026-00508
U.S. Patent No. 11,599,734

Case No. IPR2026-00509
U.S. Patent No. 11,687,741

Case No. IPR2026-00510
U.S. Patent No. 11,989,612

Case No. IPR2026-00511
U.S. Patent No. 12,039,396

DECLARATION OF SYLVIA HALL-ELLIS, PH.D.

I. INTRODUCTION

1. My name is Sylvia D. Hall-Ellis. I have been retained as an expert by Baker Botts LLP, Counsel for Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc. (“Samsung”).

2. I have written this declaration at the request of Samsung 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 and authenticity 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 and as a Member of the CORE Awards & Scholarship Coordination 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 submitted herewith as Appendix A.

III. PRELIMINARIES

A. Scope of this declaration.

10. I am informed by counsel to assume an earliest possible priority date for the patent at issue of May 6, 2005. As I will explain below, it is my opinion that the publication discussed in my declaration was publicly accessible at least one year before May 6, 2005.

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 at least one year before May 6, 2005.

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 RFID communication devices and methods.

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 would be a person with either (i) a Master of Science in Electrical Engineering or an equivalent field, or (ii) a Bachelor of Science in Electrical Engineering or an equivalent field and two years of experience in the field of RFID communications.

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 2000 (and more specifically, before May 6, 2005), 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 publications 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 U. S. Copyright Office database 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 maintaining the WorldCat database,² used by independent and institutional libraries throughout the world.

22. *ACM Digital Library*. 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 subscription.

D. Indexing

23. 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

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>)

² <http://www.worldcat.org/>

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.

24. 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.

25. 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 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.

26. 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.

27. 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.

28. 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

29. 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.³ 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 primary communications protocol for the transfer and storage of bibliographic metadata in libraries.⁴

30. MARC is a framework into which descriptive bibliographic data are transcribed to interact with the software in online library catalogs to provide access

³ The full text of the standard is available from the Library of Congress at <http://www.loc.gov/marc/bibliographic/>

⁴ 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 August 8, 2026) (“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.

to books, journals, and other resources in the collection. The bibliographic data provide points of access and can be searched by a 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.

31. 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 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.

32. 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.⁵ As explained by the Library of Congress:

⁵ 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

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 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.

(<https://babel.hathitrust.org/cgi/pt?id=mdp.39015034388556;view=1up;seq=1>; last visited August 8, 2026).

Why Is a MARC Record Necessary? LIBRARY OF CONGRESS,
<http://www.loc.gov/marc/umb/um01to06.html#part2> (last visited August 8, 2026).

33. 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

34. 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.*⁶ 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 August 8, 2026).

35. 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.⁷

⁶ 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 August 8, 2026) (“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”).

⁷ <https://www.oclc.org/en/contacts/libraries.html>

36. 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.*

37. 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 August 8, 2026). 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.

38. 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 August 8, 2026).

C. OCLC

39. 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.”⁸ 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.

40. 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 batch-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

⁸ 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>).

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.

41. 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)).

42. 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.

43. 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.

44. 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.

45. 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.

46. 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.

47. 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.

V. PUBLICATION IN THIS PROCEEDING

A. *Embedded C* by Michael J. Pont. (“Pont”) [Exhibit 1026]

48. Attached hereto as Exhibit 1026 is a copy of the book titled *Embedded C* by Michael J. Pont (hereafter “Pont”) and issued by Addison-Wesley in 2002. Exhibit 1026 is a true and correct copy of the title page, copyright page, “about the author,” [table of] contents, preface, and 11 chapters. I obtained Exhibit 1026 from counsel.

49. The text in Exhibit 1026 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 1026 is a true and correct copy in a condition that creates no suspicion about its authenticity.

50. The Pont book was published in hardcover and a digital version was available from the publisher, Addison-Wesley. The publisher’s website indicates that the Pont book was published on March 15, 2002, and is no longer in print.⁹ The ACM Digital Library lists a May 1, 2002, publication date. The Pont book is

⁹ <https://onlinelibrary.wiley.com/doi/book/10.1002/9781119310693>

available in the digital repository Academia.¹⁰

51. Attached hereto as Attachment 1A is a true and correct copy of the MARC record for this monograph from the University of Wisconsin Libraries online catalog. The library ownership is indicated by the presence of the library's code ("GZM") in field 049. The library continues to update and enhance this MARC record to meet current cataloging rules. The most recent enhancement to the MARC record occurred on March 23, 2018, as shown in field 005 ("20180323"). I personally identified and retrieved the library catalog record which is Attachment 1A.

52. Attached hereto as Attachment 1B is a true and correct copy of the MARC record for the Pont book titled *Embedded C* obtained from the OCLC bibliographic database. I personally identified and retrieved the MARC record that is Attachment 1B. As previously noted, the library that created the record is recorded in field 040 with a unique library code. For Attachment 1B, that library code is "DLC," which means that the MARC record for this book was created at the Library of Congress as part of the Cataloging in Publication (CIP) Program.¹¹

53. A cataloger prepares basic information about the forthcoming book which is included on the verso of the title page (also called the copyright page; see page iv of Exhibit 1026). The information is provided to save time needed for the

¹⁰ https://www.academia.edu/41292964/Embedded_c_micheal_pont

¹¹ <https://www.loc.gov/publish/cip/>

cataloging process at the library after the book is purchased. The CIP data includes the author (field 100), title and subtitle (field 245), ISBN (field 020), suggested subject headings (field 650), classification numbers for the Library of Congress classification number (field 050), and the Dewey Decimal classification number (field 082). These data elements are included in the MARC record that the Library of Congress contributes to the OCLC bibliographic database (see Attachment 1B). As can be seen in field 008 (“Date entered on file”) in the MARC record for this exhibit, a cataloger at the Library of Congress created OCLC record number 48710884 on December 31, 2001 (“011231”).

54. The library continues to update and enhance this MARC record to meet current cataloging rules. The most recent enhancement to Attachment 1B occurred on July 24, 2026, as shown in field 005 (“20260724”). I personally identified and retrieved the MARC record that is Attachment 1B. Therefore, the Pont book titled *Embedded C* (Exhibit 1026) was present, cataloged, and available in the Library of Congress on or shortly after the publication date of March 15, 2002. It would have been able to be located by a person of ordinary skill in the art using the library catalog system and was thus publicly accessible as of this date.

55. Attachment 1B further includes an entry in field 050 (“QA76.73.C15 \$b P65 2002”)—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 (“005.265”), a

subject matter consistent with the Dewey Decimal classification system. Attachment 1B further includes two descriptor terms reading “C# (Computer program language)” (see Attachment 1C, Library of Congress subject heading sh2001001705) and “Embedded computer systems \$x Design and construction” (see Attachment 1D, Library of Congress subject heading sh2008119360) in the 650 fields. Thus, as of its cataloging, the publication corresponding to the MARC record attached hereto as Attachment 1B 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.

56. Further, as of March 15, 2002, the MARC record attached hereto as Attachment 1B 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 before that same date through any library with access to the OCLC bibliographic database or through an individual library.

57. WorldCat indicates that the Pont book as cataloged at the Library of Congress is currently available from 128 libraries.¹² In view of above, the Pont monograph was publicly available on or shortly after March 15, 2002, because by that date it had been received, cataloged, and indexed at the Library of Congress and

¹² <https://search.worldcat.org/title/48710884>

made part of the OCLC bibliographic database. For these reasons, it is my opinion that Exhibit 1026 was published and accessible to the public on or shortly after March 15, 2002.

VI. SUMMARY OF OPINIONS

58. 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
1026	Pont, Michael J. <i>Embedded C</i> . Boston, MA: Addison-Wesley, 2002.	March 15, 2002

59. In signing this Declaration, I recognize that the Declaration will be filed as evidence in a case before the United States Patent and Trademark Office.

60. 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.

September 18, 2026


Sylvia D. Hall-Ellis, Ph.D.