

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

UNIFIED PATENTS
Petitioner

v.

OZMO LICENSING LLC
Patent Owner

U.S. Patent No. 9,264,991

DECLARATION OF INGRID HSIEH-YEE, PH.D.

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I. Introduction

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

1. I have been retained as an independent expert witness on behalf of Unified Patents for proceedings before the United States Patent and Trademark Office (“PTO”) regarding the authenticity and public availability of certain prior art references in relation to US Patent No. 9,264,991.

2. I am being compensated for my work in this matter at my customary hourly rate. I am also being reimbursed for any reasonable 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.

A. Qualifications and Professional Experience

3. My complete qualifications and professional experience are described in my academic curriculum vitae (**EX-1011**). The following is a brief summary of my relevant qualifications and professional experience.

4. I was a professor in the Department of Library and Information Science at the Catholic University of America for 32 years and retired at the end of August 2022. I have experience working in an academic library, a medical library, and a legislative library. 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.

5. I am an expert on library cataloging and classification and have published two editions on this subject, *Organizing Audiovisual and Electronic Resources for Access: A Cataloging Guide* (2000 and 2006). I taught 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. I am familiar with metadata schema design and implementation. In my teaching I covered the design and implementation of metadata in databases, search engines, digital repositories, digital libraries, and digital archives. I also covered how information organization affects the discovery and access to digital resources on the Internet. 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.

6. I am very 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 reasonably rely upon MARC records when forming their opinions.

7. A MARC record consists 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. **EX-1012** is a true and correct copy of Parts VII to X of “Understanding MARC Bibliographic: Machine-Readable Cataloging” (<http://www.loc.gov/marc/umb/um07to10.html>) 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.

8. The Online Computer Library Center (OCLC) is the largest bibliographic network of the world, with more than 540 million records and thousands of member institutions (many of which are libraries of some type) in more than 100 countries. OCLC was founded in 1967 to promote and support library cooperation. 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” (source: <https://www.oclc.org/content/dam/oclc/membership/articles-of-incorporation.pdf>).

9. OCLC members can contribute original cataloging records in MARC 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 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).

10. After a MARC record is created in Connexion, it also becomes searchable and viewable on WorldCat, which is a free web portal for the general public to explore the collections of 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 the general public interpret the record. Thus, the

information stored in MARC records in Connexion is available to the interested public through the user-friendly WorldCat web portal.

11. Library online catalogs gained acceptance in the early 1980s and many libraries migrated their systems to the World Wide Web in the mid-1990s. Library online catalogs are based on MARC records that represent their collections in order to help the public understand what materials are publicly accessible in those libraries. Most libraries with online catalogs have made their catalogs freely available on the Web. These online catalogs offer user-friendly search interfaces. Strong user interest in keyword searches and the popularity of Google have led to the “googlization” of library search systems. As a result, many library catalogs nowadays provide a single search box for users to conduct keyword searches, with additional support for searches by author, title, subject terms, and other data elements such as ISBN (International Standard Book Number). Library catalogs these days also offer features for users to narrow their search results by language, year, format, and other elements. Many libraries display MARC records on their online catalogs with labels for the data elements to help the public interpret MARC records. Many libraries also offer the option to display MARC records in MARC fields.

12. Libraries create MARC records for works they acquire, including books, serials, motion pictures, and publications in other formats. Monograph

cataloging is fairly common in libraries, and most libraries make a newly cataloged monograph available to the public soon after the cataloging work is completed, usually within a week. Libraries can create original cataloging records or use an existing record in OCLC to create a copy cataloging record. As soon as the cataloging record is completed, it is added to the library's online catalog for users. If the record is an original record, it is also entered into OCLC WorldCat. If it is a copy cataloging record, the library's holding symbol is attached to the existing original record in OCLC WorldCat to facilitate searching and interlibrary loan.

13. Conference proceedings can be cataloged as monographs or serials, depending on a library's policy. Once a record for a conference proceedings is found, users can see the title, conference name, subjects, and sponsors clearly identified in the record and the call number will enable users to access the desired title quickly. Conference proceedings cataloged as monographs are treated as regular monographs, meaning the newly cataloged monographs typically become publicly accessible soon after the cataloging work is completed, usually within a week. When conferences have the same conference name over time and are held on a regular basis, libraries may choose to catalog the proceedings of such conferences as a serial. This means that only one serial record is created for all the proceedings of a named conference, and no individual records are created for newly received conference proceedings. This approach saves cataloging time, and newly received

conference proceedings are made available for user access soon after serial check-in, usually within one week.

14. 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.” (RDA is available as a subscription database at <https://www.rdatoolkit.org/>). 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 serial, and the serial record (encoded in MARC) 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 track 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, usually within a week.

16. I am personally familiar with many online catalogs, databases, and search engines. In preparing for this declaration, I used the following authoritative information systems to search for records:

- Google Scholar (<https://scholar.google.com>)
- IEEE Xplore (<https://ieeexplore.ieee.org>)
- Online catalog of the Linda Hall Library (<https://catalog.lindahall.org/>)
- Public catalog of the U.S. Copyright Office (<https://cocatalog.loc.gov/>)
- WorldCat (<https://www.worldcat.org>)

B. Scope of This Declaration

17. I have been asked to offer an opinion on the authenticity and public availability date of the following document:

- Ganu, S., Raju, L., Anepu, B., Zhao, S., Seskar, I., & Raychaudhuri, D. (2004, September). Architecture and Prototyping of an 802.11-Based Self-Organizing Hierarchical Ad-Hoc Wireless Network (SOHAN), in *PIMRC 2004, 2004 IEEE 15th International Symposium on Personal, Indoor and Mobile Radio Communications* (IEEE Cat. No. 04TH8754), volume 2, pp. 880-884, **EX-1005** (“Ganu”).

C. Evidence Considered in Forming My Opinions

18. In the preparation of this declaration, I have reviewed the documents referenced below and any other documents I reference herein, and each of these is a type of material that experts in my field would reasonably rely upon when forming their opinions:

- (1) The document referenced above in Section I.B;
- (2) Bibliographic and MARC records for *PIMRC 2004, 2004 IEEE 15th International Symposium on Personal, Indoor and Mobile Radio Communications*, available at https://catalog.lindahall.org/permalink/01LINDAHALL_INST/191

da7s/alma994151173405961 from the online catalog of the Linda Hall Library, accessed and obtained on September 28, 2022, **EX-1016**;

- (3) Copy of *Ganu*, obtained from IEEE, **EX-1015**;
- (4) IEEE Xplore metadata record for *Ganu*, available at <https://ieeexplore.ieee.org/document/1373825>, and front matter of volume 2, *2004 IEEE 15th International Symposium on Personal, Indoor and Mobile Radio Communications*, available at <https://ieeexplore.ieee.org/xpl/conhome/9435/proceeding?isnumber=29981> from the IEEE Xplore Digital Library, accessed and obtained between September 28, 2022 and October 7, 2022, **EX-1013**;
- (5) Copyright registration record for *PIMRC 2004*, available at <https://cocatalog.loc.gov/cgi-bin/Pwebrecon.cgi?v1=1&ti=1,1&Search%5FArg=PIMRC&Search%5FCode=TALL&CNT=25&PID=9J8gxJHd8I4rTK-m9z8uNoDbHwbHg&SEQ=20220928203215&SID=1> from the public catalog of the U.S. Copyright Office, accessed and obtained on September 28, 2022, **EX-1014**.

II. Authenticity and Public Availability of *Ganu* (EX-1005)

A. Authentication

19. **EX-1005** is a true and correct copy of Architecture and Prototyping of an 802.11-Based Self-Organizing Hierarchical Ad-hoc Wireless Network (SOHAN), (“*Ganu*”), by Ganu et al., in *PIMRC 2004, 2004 IEEE 15th International Symposium on Personal, Indoor and Mobile Radio Communications* (IEEE Cat. No. 04TH8754), volume 2, pp. 880-884, that I obtained from the Linda Hall Library. I began my research on WorldCat by searching for “PIMRC 2004” for records, and a retrieved record at <https://www.worldcat.org/title/56907254> informed me that the Linda Hall Library—one of the largest public research libraries for scholarly publications in science, engineering and technology—was one of the holding libraries. It is my experience that many such research libraries routinely subscribe to IEEE works including conference proceeding. I searched Linda Hall Library’s online catalog for records, and the search result confirmed the holdings information. I then asked the Document Delivery Service of the library for a scanned copy of *Ganu*, and received their copy on September 29, 2022. This Linda Hall Library copy of *Ganu* is presented as **EX-1005** in this declaration.

20. Page 1 (internal page 880) of **EX-1005** shows the title, authors, abstract and four author keywords for *Ganu*, including Ad-hoc network, discovery and routing protocols, sensor networks, and system prototyping. The bottom of this page

shows *Ganu* has a “2004” copyright date and IEEE is the copyright holder. It also shows *Ganu* is published in a work with an ISBN of “0-7803-8523-3”. **EX-1005** shows that *Ganu* has a total of five pages (from pages 880 to 884), including eight sections, eight figures, one table and nine references.

21. For the purpose of authentication, I obtained a copy of *Ganu* from the publisher IEEE. Because *Ganu* was presented at an IEEE conference, I searched the IEEE Xplore Digital Library—a well-known information system of technical articles—for *Ganu* by the article title, and the search result showed that *Ganu* was indexed by a record at <https://ieeexplore.ieee.org/document/1373825>. I followed the PDF link in the record to purchase this article from the publisher. The IEEE copy is presented as **EX-1015** in this declaration.

22. **Ex-1015** is a true and correct copy of *Ganu* obtained from IEEE. Page 1 (internal page 880) shows the title, authors, abstract and four author-generated keywords for *Ganu*: Ad-hoc network, discovery and routing protocols, sensor networks, and system prototyping. The bottom of this page shows *Ganu* has a “2004” copyright date and IEEE is the copyright holder. It also shows *Ganu* is published in a work with an ISBN of “0-7803-8523-3”. **EX-1015** shows that *Ganu* has a total of five pages, including eight sections, eight figures, one table and nine references. This IEEE copy has pages numbered 880 to 884.

23. I have closely compared the Linda Hall Library copy of *Ganu* (**EX-**

1005) with the IEEE copy (**EX-1015**) and found them to be identical. The Linda Hall Library copy is in a condition that creates no suspicion about its authenticity. Specifically, this copy is not missing any intermediate pages, the text on each page appears to flow seamlessly from one page to the next, and there are no visible alterations to the document. Moreover, **EX-1005** was found in the custody of a well-known public research library, a place where, if authentic, it would likely be found. Accordingly, I see no reason to question the authenticity of the Linda Hall Library copy of *Ganu* (**EX-1005**).

24. Page 22 of the Linda Hall Library copy (**EX-1005**) is the cover that shows this work is “Proceedings Volume 2 of 4” for the “2004 IEEE 15th International Symposium on Personal, Indoor and Mobile Radio Communications” that took place in Barcelona from “5/8 September” and the conference is also known as “PIMRC 2004.” Page 6 is the title page that shows the same conference information as the cover. Page 7 is the copyright page that shows a 2004 copyright date, with the Institute of Electrical and Electronics Engineers, Inc. as the copyright holder. The top of this page shows a hand-written call number of “TK5103.2 .I33 2004 v.2 quarto” at this library. This page also shows the IEEE Catalog Number for this publication is “04TH8754”, its ISBN is “0-7803-8523-3” and the Library of Congress number assigned to it is “2004106476”.

25. Page 8 (internal page iii) is the page listing patrons of the conference.

The upper-left side of the page shows “11-4-04” (*i.e.*, November 4, 2004) that indicates this publication was added to the library collection on November 4, 2004. My knowledge of this annotation practice is based on my experience with the Linda Hall Library and their collection. My discussion of the library MARC record below will show that a MARC record was created on this same date, confirming this publication was added to the Linda Hall Library collections and became publicly discoverable. The bottom of this page shows a stamp of “Linda Hall Library, Kansas City, MO.” Pages 9 to 21 are the table of contents of Volume II and page 11 shows *Ganu* is an “Invited Paper” included in “Session TueAmOR6: Ad-Hoc Networks (4)” and it runs from pages 880 to 884.

B. Linda Hall Library Records for *Ganu*

26. EX-1016 contains a true and correct copy of the bibliographic and MARC records for *PIMRC 2004 : 2004 IEEE 15th International Symposium on Personal, Indoor, and Mobile Radio Communications : proceedings : Barcelona, Spain, 5-8 September, 2004* that contains *Ganu*. I personally located, identified, and obtained these records from the online catalog of the Linda Hall Library. Because the records could not be downloaded cleanly, I used screenshots of these records to produce **EX-1016**. These are the type of records experts in my field would reasonably rely upon when forming their opinions.

27. Page 1 of EX-1016 shows this publication is a “conference

proceeding” that is “[a]vailable at Linda Hall Library Books – 2nd Floor (TK5103.2 .I33 2004)”. The “Location Items” field shows the proceedings consists of four volumes and all of them are “Loanable” (*i.e.*, available for users to check out). Pages 2 and 3 show details of the bibliographic record, including the title, other title, creator and contributor, subjects, identifiers, publisher, creation date, physical format, frequency, general notes and citations/references note.

28. The bottom of page 3 shows a link to “Display Source Record” that brings up the MARC record. Page 4 of **EX-1016** is a screenshot of the MARC record. Because part of Field 245 could not be captured this way, I copied the record and included the copy as page 5 to show the entire record. The first six digits of Field 008 show the MARC record was created on “041104” (*i.e.*, November 4, 2004). Field 005 is automatically generated by computers to show the last time when the library modified this MARC record, and the first eight digits show “20041104” (*i.e.*, November 4, 2004) as the last record modification date. Subfields “a” and “c” of Field 040 show that “LHL” is the cataloging agency that created the original MARC record. According to the *Directory of OCLC Members* (<https://www.oclc.org/en/contacts/libraries.html>), “LHL” is the OCLC library symbol for the Linda Hall Library. Data in Fields 008, 005 and 040 inform my opinion that Linda Hall Library cataloged this conference proceedings as a book and created the original MARC record for it on November 4, 2004, making it

discoverable in their online catalog from that day on. A common library practice is to make newly cataloged books available to the public soon after the cataloging work is completed, usually within one week. It is therefore my opinion that the copy of this conference proceedings (and *Ganu* contained therein) would have been publicly accessible no later than November 11, 2004, at the Linda Hall Library. According to the profile of Linda Hall Library at in “Libraries.org: A directory of libraries throughout the world” (<https://librarytechnology.org/library/2294>), the Linda Hall Library has had a few online catalog systems. The library contracted with Horizon in 1994 for their automation system and changed their system to Voyager in 2010, meaning Horizon would likely be the library online catalog in 2004.

29. Two Fields 020 in the MARC record (**EX-1016**) show the 13-digit and 10-digit ISBNs of this publication. Field 111 shows the conference name as the author, Field 245 shows the full conference title, Field 246 shows a variant title is provided to help users discover this conference proceedings. Field 260 shows the Institute of Electrical and Electronics Engineers of Piscataway, New Jersey as the publisher, and the work carries a 2004 copyright date. Field 300 shows the proceedings has four volumes. Field 500 shows the IEEE Catalog Number for this work is “04TH8754” and Field 710 shows IEEE is included as an additional access point. The 10-digit ISBN, conference name, title, publisher, physical description, and IEEE Catalog Number match the information presented in the front matter of

this publication (**EX-1005**), confirming this MARC record represents the *PIMRC 2004* conference proceedings.

30. The subject matters of this proceedings are represented in Field 090 by a locally assigned Library of Congress Classification (LCC) number of “TK5103.2” that represents general works in wireless communication systems (see Class T schedule at https://www.loc.gov/aba/publications/FreeLCC/LCC_T2022TEXT.pdf), and in Fields 650 by four Library of Congress subject headings, with “Wireless communication systems”, “Mobile communication systems”, “Personal communication service systems” and “Software radio” as the main topics, each followed by a form subdivision of “Congresses” encoded in subfield “v” (“\$v”) to indicate the main topics are treated at a conference.

31. The MARC record (**EX-1016**) and the Linda Hall copy (**EX-1005**) inform my opinion that the Linda Hall Library cataloged the proceedings of *PIMRC 2004* as a book on November 4, 2004, making it discoverable in their online catalog from that date on. Interested users would have been able to conduct subject searches by the LCC number (Field 090) and the Library of Congress subject headings (Fields 650) to discover this work in that same catalog. They would also have been able to discover and access the proceedings by other access points in the MARC record,

including ISBNs (Fields 020), meeting name (Field 111), main title (Field 245), variant title (Field 246), and the publisher IEEE (Field 710).

C. IEEE Metadata Record

32. **EX-1013** is a true and correct copy of the metadata record for *Ganu* that I obtained from the IEEE Xplore Digital Library. I personally located, identified, and obtained this record. This is the type of record experts in my field would reasonably rely upon when forming their opinions.

33. Page 1 of **EX-1013** shows the title, authors and abstract of the *Ganu* article. It also shows IEEE as the publisher, and indicates the full text of *Ganu* is available in PDF. The record shows *Ganu* has seven paper citations, two patent citations, and 46 full text views. The left side of page 1 shows document sections and headings. Page 2 shows *Ganu* was published in *2004 IEEE 15th International Symposium on Personal, Indoor and Mobile Radio Communications* (IEEE Cat. No. 04TH8754), and its DOI (digital object identifier) is “10.1109/PIMRC.2004.1373825”. The metadata record also shows the conference took place from “05-08 September 2004” in Barcelona, Spain, and the ISBN of the print conference proceedings is “0-7803-8523-3”. The “Date Added to IEEE Xplore” field shows the metadata record was added to this digital library on “03 January 2005”.

34. The title, authors, abstract, document sections, ISBN of the conference

proceedings and the conference information in the IEEE metadata record (**EX-1013**) match the information presented in the Linda Hall Library copy of *Ganu* (**EX-1005**) and confirm that *Ganu* was indexed by IEEE and the metadata record became publicly accessible in the IEEE Xplore Digital Library from January 3, 2005 on. Interested users would have been able to purchase this article from IEEE after they discovered this metadata record. If users were from institutions that subscribed to IEEE Xplore, they would have been able to access IEEE Xplore from their library system and access the *Ganu* article for free.

35. As evidence that *Ganu* is included in the conference proceedings of *PIMRC 2004*, additional materials from IEEE Xplore are discussed here. The IEEE metadata record (**EX-1013**) includes a link to volume 2 of the PIMRC 2014 conference proceedings at <https://ieeexplore.ieee.org/xpl/conhome/9435/proceeding?isnumber=29981>. Page 4 of **EX-1013** is a screenshot of volume 2 of “2004 IEEE 15th International Symposium on Personal, Indoor and Mobile Radio Communications (IEEE Cat. No.04TH8754), 5-8 Sept. 2004” captured from the IEEE Xplore Digital Library. Pages 5 to 12 are a PDF copy of a portion of the table of contents of volume 2 that shows articles from pages 815 to 944, and page 8 shows the *Ganu* article appears in this volume from pages 880 to 884.

36. Pages 13 to 28 are front matter of the print version of the PIMRC 2004

conference proceedings that I downloaded from IEEE Xplore. These pages are freely available from the conference link above. Page 13 is the cover that shows “PIMRC 2004” is the conference that took place in Barcelona from “5/8 September” and the full name of the conference is “2004 IEEE 15th International Symposium on Personal, Indoor and Mobile Radio Communications”. The page also shows that this is the cover for “Proceedings Volume 2 of 4” and there are five sponsors for the conference.

37. Page 14 is the title page that shows the same conference information as the cover, and page 15 is the copyright page that shows a 2004 copyright date with the Institute of Electrical and Electronics Engineers, Inc. as the copyright holder. This page also shows the IEEE Catalog Number for this publication is “04TH8754”, its ISBN is “0-7803-8523-3” and the Library of Congress number assigned to it is “2004106476”. Pages 16 to 28 are the table of contents for Volume II and page 18 shows *Ganu* is an “Invited Paper” included in “Session TueAmOR6: Ad-Hoc Networks (4)” and it runs from pages 880 to 884. I have compared the cover, title page, copyright page obtained from the IEEE Xplore Digital Library with the corresponding pages in the Linda Hall Library copy of *Ganu* (**EX-1005**) and found them to be the same. The only difference is the cover from the IEEE Xplore Digital Library is black and white, while the cover in the Linda Hall Library copy is color.

D. Copyright Registration Record

38. **EX-1014** is a true and correct copy of the copyright registration record for *PIMRC 2004* that contains *Ganu*. I obtained this record from the public catalog of the U.S. Copyright Office by first accessing the <http://www.copyright.gov/> website, selecting the “Learn More” link under “Search Copyright Records” and following the link for “Official Public Catalog (1978 to present)” under “Online Records Collections” to perform a title search by “PIMRC” to retrieve the record. I personally located, identified and obtained this record. This is the type of record experts in my field would reasonably rely upon when forming their opinions.

39. The “Type of Work” field identifies this publication as “Serial” meaning it is a continuing resource. The title field shows “The ... IEEE international symposium on personal, indoor and mobile radio communications : PIMRC ... : proceedings” as the generic serial title, and the “Serial Publication Year” shows this record is for the “2004” issue. The Frequency field shows this serial is published “Annually” and the Copyright Claimant field shows IEEE as the copyright holder. The “Issues Registered” field shows this copyright registration record is for “symposium 15, 2004. Created 2004; Pub. 2004-09-05; Reg. 2004-11-22; TX0006079528” (*i.e.*, for the 15th symposium, 2004, created in 2004, published on September 5, 2004, and registered with the Copyright Office on November 22, 2004, with the registration number TX0006079528). This record clarifies that the 2004

conference proceedings for the *15th IEEE International Symposium on Personal, Indoor and Mobile Radio Communications, PIMRC 2004*, was published on September 5, 2004, and interested users would have been able to access this publication after it was published.

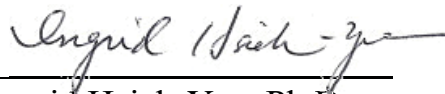
E. Summary of My Opinion on *Ganu*

40. The copyright registration record (**EX-1014**) shows September 5, 2004 as the publication date for the *PIMRC 2004* proceedings, the date notation on the Linda Hall Library copy of *Ganu* (**EX-1005**) shows the work was added to the library collection on November 4, 2004, and the MARC record shows this work was cataloged and indexed by subject matter on the same date (**EX-1016**). The IEEE metadata record (**EX-1013**) shows *Ganu* was indexed and added to the IEEE Xplore Digital Library on January 3, 2005, making it discoverable from that date on. These data and my knowledge of common library cataloging and processing practices inform my opinion that *PIMRC 2004, 2004 IEEE 15th International Symposium on Personal, Indoor and Mobile Radio Communications* that contains *Ganu* would have been publicly discoverable from November 4, 2004, on. A common library practice is to make newly cataloged monographs available for public access soon after the cataloging work is completed, usually within a week. It is therefore my opinion that the copy of this conference proceedings (and *Ganu* contained therein) would have been publicly accessible no later than November 11, 2004, at the Linda Hall Library.

III. Conclusion

41. 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 made under penalty of perjury.

Date: 11-28-2022

Executed: 
Ingrid Hsieh-Yee, Ph.D.