

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SNAP INC.,
PETITIONER

v.

NOKIA TECHNOLOGIES OY,
PATENT OWNER.

IPR2025- 01338
U.S. Patent No. 7,724,818

DECLARATION OF SYLVIA HALL-ELLIS, PH.D.

I, Sylvia D. Hall-Ellis, Ph.D., declare as follows:

I. INTRODUCTION

1. My name is Sylvia D. Hall-Ellis. I have been retained as an expert by Snap Inc. (“Snap” or “Petitioner”), who I am informed is a petitioner to this IPR proceeding.

2. I have written this declaration at the request of the Petitioner to provide my expert opinion regarding the authenticity and public availability of a publication, identified in Section IV below. My Declaration sets forth my opinions in detail and provides the basis for my opinions regarding the authenticity and public availability of this publication. If called to testify in the above-captioned matter, I will testify with regard to the opinions and bases set forth below.

3. I reserve the right to supplement or amend my opinions, and bases 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.

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 report, 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 and relied upon 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 in San José, California. 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 have served as the Chair for the ALA Office of Diversity's Committee on Diversity, as a member of the REFORMA National Board of Directors, as a member of the Editorial Board for the ALCTS premier cataloging journal, *Library Resources and Technical*

Services, as a Co-Chair for the Library Research Round Table (LRRT) of ALA, and 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 hereto as **Exhibit A**.

III. PRELIMINARIES

A. Scope of Declaration and Legal Standards

10. 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 before the dates discussed below with respect to the specific documents.

11. 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.

12. 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.

13. 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. Persons of Ordinary Skill in the Art

14. I am told by counsel that the subject matter of this proceeding generally relates to video coding, including digital video coding and decoding.

15. I have been 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 the inventions. This hypothetical person is also a person of ordinary creativity, capable of understanding the scientific principles applicable to the pertinent field.

16. I am told by counsel that a person of ordinary skill in this subject matter or art would have had a bachelor’s degree in electrical or computer engineering, computer engineering, computer science or a closely related scientific field such as physics, and two to three years of work experience with video encoding/decoding. I have been further informed by counsel that a person of ordinary skill in the art would have been familiar with and able to understand the information known in the art relating to these fields, including the publications discussed in this declaration.

IV. PUBLICATION IN THIS PROCEEDING

A. *H.26L Over IP and H.324 Framework: Proposal from the 14th Meeting, September 18, 2001* [Exhibit 1012]

17. Exhibit 1012 attached to my Declaration is a copy of a proposal

presented and discussed at the 14th meeting of the Video Coding Experts Group (VCEG) working as part of the team focused on Question 6 for Study Group 16 of the International Telecommunication Union (ITU).¹ I found a copy of Exhibit 1012 on the ITU website and downloaded it.² The VCEG was charged with the responsibility to investigate and make recommendations for the development of a technical standards document regarding advanced video coding. Developed by Stephan Wenger and Thomas Stockhammer and dated September 18, 2001, the proposal was titled *H.26L Over IP and H.324 Framework* and addressed the transport of H.26L over IP and H.324 networks.

18. The history and work on Study Group 16 can be found on the ITU website.³ Members of Study Group 16 began working on Question 6 following the development of the H.120 digital video coding standard in 1984.⁴ H.120 was revised in 1988 and efforts continued during the early days of the JPEG work for still image compression and the pioneering development of ITU-T H.261 for video compression.⁵

19. By 2001 the VCEG team was charged to develop visual signal coding methods appropriate for conversational (e.g., videoconferencing and video

¹ <https://www.itu.int/en/ITU-T/studygroups/2013-2016/16/Pages/q6.aspx>.

² https://www.itu.int/wftp3/av-arch/video-site/0109_San/VCEG-N52.doc.

³ <https://www.itu.int/ITU-T/2001-2004/com16/sg16-q6.html>.

⁴ <https://www.itu.int/en/ITU-T/studygroups/com16/video/Pages/default.aspx>.

⁵ *Id.*

telephony) and non-conversational (e.g., multimedia streaming, broadcast TV, IPTV, file download, media storage/playback, or digital cinema).⁶ The recommendations would eventually be incorporated into the ITU Series H: Audiovisual and Multimedia Systems: Infrastructure of Audiovisual Services -- Coding of Moving Video documents. Exhibit 1012 is a true and correct copy of the proposal developed by Stephan Wenger and Thomas Stockhammer that was shared with committee members at their 14th meeting, which was held on September 21-24, 2001, in Santa Barbara, California. The work on Question 6 for Study Group 16 continues to the present day and can be followed on the ITU website.⁷

20. I understand that persons interested and ordinarily skilled in the subject matter or art exercising reasonable diligence could have located the ITU documents from the ITU website using the common search terms discussed above and/or reasonable diligence. It is my opinion that the documents produced for ITU Study Group meetings were publicly accessible digitally as early as October 22, 1998, as I explain below.

21. I understand that prior to February 1998, ITU would have been known to persons at least of ordinary skill in the art as the “United Nations specialized agency for information and communication technologies.”⁸ Established in 1865,

⁶ <https://www.itu.int/en/ITU-T/studygroups/2013-2016/16/Pages/q6.aspx>.

⁷ <https://www.itu.int/en/ITU-T/studygroups/2022-2024/16/video/Pages/vceg.aspx>.

⁸ <https://www.itu.int/en/about/Pages/default.aspx>.

ITU promotes cooperation among international telegraphy networks of the day and continues its work in three areas: radiocommunications, standardization, and development.⁹ Furthermore, I understand that persons of ordinary skill in the art would have reasonably considered this organization and its website—<http://www.itu.org>—as reliable and useful sources of information for research, study, development, or design of systems for all aspects of information technology including Internet access, transport protocols, voice and video compression, home networking, and myriad other aspects of ICTs, hundreds of ITU standards allow systems to work—locally and globally.

22. In view of the above, the proposal titled *H.26L Over IP and H.324 Framework* prepared for the 14th meeting of the Video Coding Experts Group document was publicly available on the ITU website by September 21, 2001, because by that date it had been distributed to VCEG members and posted on the ITU website. For these reasons, it is my opinion that Exhibit 1001 was published and accessible to the public by September 21, 2001.

VI. CONCLUSION

23. 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-

⁹ *Id.*

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.

24. 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.

Dated: July 18, 2025

Respectfully submitted,



Sylvia D. Hall-Ellis, Ph.D.