

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ERICSSON INC. AND TELEFONAKTIEBOLAGET LM ERICSSON
Petitioners,

v.

KONINKLIJKE KPN N.V.
Patent Owner.

Case No. IPR2024-00237

Patent No. 11,259,338

DECLARATION OF CRAIG BISHOP

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I. INTRODUCTION

I, Craig Bishop, declare as follows:

1. I have been retained as an independent expert witness on behalf of Ericsson Inc. and Telefonaktiebolaget LM Ericsson (“Petitioners”) related to Inter Partes Review (“IPR”) of U.S. Patent No. 11,259,338 (“the ’338 patent”).

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

3. I have been asked to opine on the date of public accessibility for one 3GPP deliverable: TS 23.401 v12.6.0 (Ex. 1005).

4. In doing so I have also considered my own academic background, knowledge, and professional experiences in the field of wireless communications and 3rd Generation Partnership Project (3GPP) standards-development, as described below.

5. Whilst I have attempted to organize the information presented in this declaration into helpful sections and/or divisions, my opinions are supported by the information in the declaration in its entirety.

II. QUALIFICATIONS

6. My complete qualifications and professional experience are described in my *curriculum vitae*, a copy of which has been attached as Appendix 1. The following is a summary of my relevant qualifications and professional experience.

7. I earned my Bachelor of Electronic Engineering degree with Honors from Polytechnic of Central London in 1989. In 2005, I earned my MSC in Computer Science with Distinction from the University of Kent.

8. After graduating with my first degree, I worked as an operations engineer at the British Broadcasting Corporation (BBC) for 4 years, then as a civil servant at the UK Radiocommunications Agency until 1996, during which time I became involved in telecommunications standardization in the European Telecommunication Standards Institute (“ETSI”), working in particular in Technical Committee Radio Equipment and Systems (TC RES2) concerned with the standardization of Private Mobile Radio (PMR). From 1994 through 1996, I acted as Rapporteur for voice and data related PMR standards ETS 300 113, ETS 300 219 and ETS 300 390. I participated as the only TC RES2 delegate on behalf of the UK Radiocommunications Agency, generating proposals in support of UK administration and business requirements, downloading and reviewing other meeting input documents, and proposing changes as necessary to ensure input documents and the resulting specifications were in line with said requirements.

9. In 1996, I joined Samsung Electronic Research Institute as a Senior Standards Engineer where I worked for 16 years, eventually becoming Director of Standards and Industry Affairs in 2011. My work at Samsung mainly focused on the standardization of Global System for Mobile Communications (GSM)/ General Packet Radio Service (GPRS), Universal Mobile Telecommunications System (UMTS), the IP Multimedia subsystem (IMS), and Long-Term Evolution (LTE)/ Evolved Packet System (EPS) systems. Initially, I participated in ETSI Special Mobile Group (SMG) committees SMG1, SMG2, SMG4, SMG5, and SMG9, and relevant UMTS related sub-committees working on the air interface radio access network protocols, service, and terminal aspects of UMTS and GSM/GPRS until 1999. In particular, I was a participant in the ETSI SMG2 meetings leading up to selection of Wideband Code Division Multiple Access (WCDMA) as the radio access technology for the Frequency Division Duplex (FDD) mode of UMTS.

10. Beginning in 1998, I worked as a Principal Standards Engineer on the 3rd Generation Partnership Project (3GPP) on UMTS. I have been involved with 3GPP since its inception. I attended the inaugural 3GPP Technical Specification Group (TSG) meetings held in December 1998, and I began attending Working Group (WG) meetings in 1999. Specifically, I was a regular participant in Radio Access Network (RAN) WG1, Services & System Aspects (SA) WG1, Terminals (T) WG2, but I also attended TSG RAN and T plenary meetings and sometimes

other Working Groups and covering similar technical aspects as in my previous work in ETSI. As an example, SA WG1 was, and is, a Working Group responsible for the specification of the Service Requirements for the latest wireless cellular standards. As part of this work, I would prepare meeting contributions in support of Samsung's research and development activities. Also, by way of preparation for each meeting, I would download all contributions and review those of interest to Samsung, and where necessary, prepare additional input to the meeting based on said review.

11. Beginning in 2000, I acted as project manager and then as system engineering manager at Samsung, providing technical requirements for the team working on Samsung's UMTS modem development. This involved scrutiny of ongoing standardization work, particularly in RAN WG1, RAN WG2, and TSG Core Network (CN) WG1, from which I would download, and assess the impact of, contributions on Samsung's development projects, ensuring that Samsung's development team was kept informed about the latest developments as layers 2 and 3 of the UMTS standard were stabilized.

12. During this period, in addition to authoring and presenting technical contributions for the 3GPP standard, and producing technical requirements for the radio modem, I acted as Rapporteur for 3GPP Technical Reports covering User Equipment ("UE") capability requirements (3GPP TR 21.904) from 1999–2000, and the Evolution of the 3GPP System (3GPP TR 21.902) in 2003 (the first Study Item

to consider the 3GPP system beyond UMTS towards LTE/EPS).

13. In 2005, I became Head of Advanced Technologies, Standards and Regulation (ATSR) at Samsung. In addition to my managerial duties which included responsibility for standards, research, and regulatory engineers including three standards engineers who were regularly attending 3GPP RAN WG2 and Core Network and Terminals (CT) WG1 Working Groups, I personally continued to work on 3GPP standardization issues. From 2005 until 2008, I regularly attended and participated in SA WG2 meetings, mainly focusing on IP Multimedia Subsystem (IMS) including voice over IMS but also looking at wider Evolved Packet System (EPS) related issues for LTE (4G). From 2008 until 2011, I regularly attended and participated in SA WG1 meetings. I also attended SA plenary meetings from 2008 until I left Samsung in 2013. As well as generating contributions in support of Samsung's research and development as preparation for each meeting, I would download and review documents from other 3GPP members, identifying those of interest to Samsung and, where necessary, preparing additional contributions on behalf of Samsung. The work required a sound working knowledge of the broader 3GPP system to ensure effective management of the ATSR team, effective participation in meeting discussions, expert assessment of third-party standards contributions, and provision of implementation guidance to Samsung developers.

14. From 2005 until I stopped attending SA WG1 meetings in 2011, I

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authored and presented over 100 contributions to SA WG2 and SA WG1 meetings at 3GPP and appeared as an author/co-author on 18 patent applications related to User Equipment operation in the IMS and the 3GPP Core Network.

15. In 2011, I became Director of Standards and Industry Affairs at Samsung, and in November of that year I was elected to the Board of ETSI on which I served for a term of 3 years until November 2014. In this position I gained further perspective on the organisation, management, and activities of ETSI and its Technical Committees.

16. Since leaving Samsung in January 2013, I have formed my own consulting company, which is a member of ETSI, and as part of various projects undertaken, I have continued to regularly access the ETSI and 3GPP document servers, and to keep abreast of ETSI and 3GPP document handling and publication practices.

17. Through my extensive work in ETSI and on 3GPP standardization issues over the years, I have become very familiar with ETSI and 3GPP practices for when and how the technical standards (including revisions thereto) and other standards-related contributions are made publicly available, including in the 1999-2011 timeframe when I was attending or monitoring various 3GPP Working Groups including SA WG2.

18. For purposes of my analysis in this declaration, I have been informed

that a person of ordinary skill in the art (“POSITA”) in the field of the ’338 patent at the time of the alleged invention of the ’338 patent would have had a degree in electrical engineering or a similar discipline, with at least three years of relevant industry or research experience, including designing or developing cellular systems.

III. PUBLIC AVAILABILITY OF 3GPP TECHNICAL SPECIFICATIONS AND OTHER DOCUMENTS TO POSITAS

19. Based on my years of experience working in various capacities in 3GPP and on 3GPP standards issues, I am familiar with the regular business practices of the 3rd Generation Partnership Project (3GPP) relating to technical documents including specifications, draft standards and proposals, and standards-related technical contributions, as well as the business practices through which 3GPP makes these documents public.

A. Prominence and Purpose of 3GPP

20. 3GPP was inaugurated in December 1998 to produce Technical Specifications and Technical Reports for the Universal Mobile Telecommunications System (UMTS), a 3G Mobile System based on evolved GSM core networks and a new radio access network known as UTRA (UMTS Terrestrial Radio Access). Appendix 2 at 2,3 (3GPP Partnership Project Description); Appendix 3 at 1; Appendix 4 at 5. At that time, various standards organisations agreed to cooperate to produce a “complete set of globally applicable Technical Specifications” that would then be transposed into standards by the relevant standardization bodies (also

known as Organizational Partners). Appendix 2 at 3, 5 (3GPP Partnership Project Description). 3GPP “attracted a very strong commitment from organisations and companies around the world, reflecting the truly global nature of the project.” Appendix 4 at 7.

21. 3GPP is a global initiative partnership made up of Organizational Partners, Market Representation Partners, and Individual Members. Appendix 5 at 7 (3GPP Working Procedures, 1999); Appendix 2 at 10. Today, 3GPP unites seven telecommunications standard development organisations (“Organizational Partners”) from around the world: the Association of Radio Industries and Businesses (ARIB) and the Telecommunication Technology Committee (TTC) from Japan, the China Communications Standards Association (CCSA) from China, the Telecommunications Standards Development Society, India (TSDSI) from India, the Telecommunications Technology Association (TTA) from Korea, the European Telecommunications Standards Institute (ETSI), and the Alliance for Telecommunications Industry Solutions (ATIS) from the United States.¹ These Organizational Partners are regional standards organisations that have the authority to define, publish, and set standards for their respective regions. Appendix 2 at 12.

¹ The number, and some of the names, of Organizational Partners that make up 3GPP have changed over time.

3GPP also includes “Market Representation Partners” that represent various industry perspectives and offer market advice. Appendix 5 at 7, 8 (3GPP Working Procedures, 1999, “Market Representation Partnership”); Appendix 2 at 14; Appendix 4 at 5. Additionally, 3GPP includes individual member companies (“Individual Members”) that participate in 3GPP through their membership in a 3GPP Organizational Partner. Appendix 5 at 8 (3GPP Working Procedures, 1999, “Individual Membership”); Appendix 6 at 5 (textbook including a chart showing 3GPP structure at the time of publication); Appendix 8 at 9, 10. As an example of how prominent 3GPP was and remains in the industry, there were 372 participating Individual Members by September 2014. Appendix 7 at 9 (3GPP Project Coordination Group document showing 3GPP membership numbers over 10 years to 2014. There are 856 individual members as of October 2023. Appendix 9.

22. As noted in paragraph 20, a primary goal of 3GPP is to provide an environment to produce technical specifications and technical reports that define and standardize technologies covering cellular telecommunications networks, including User Equipment or Mobile Device (UE) technologies, Radio Access Network (RAN) technologies, Core Network (CN) technologies, and service and system capabilities such as work on codecs, security and quality of service. The specifications also provide hooks for interworking with non-3GPP networks including but not limited to Wi-Fi networks.

23. Given the prominence of 3GPP in the wireless communication industry, beginning in 1999 and continuing through today, interested POSITAs were tracking the developments of the latest 3GPP specifications and reports to ensure timely development of products and services by their companies that were consistent with the standards being developed. In other words, it is my opinion that a POSITA would have to be familiar with 3GPP and with the specification-related documents produced as part of the 3GPP process in order to properly perform his or her job. Without access to and knowledge of the 3GPP documentation, including for example the substantive contents of 3GPP technical specifications, an engineer could not develop products that were interoperable with the worldwide 3G, 4G (and later 5G) standards. Because 3GPP documents were an important aspect of a POSITA's professional experience, textbooks and articles about cellular communications commonly directed readers to the 3GPP website for information regarding standards development. Appendix 4 at 9 (directing readers to the 3GPP website at the conclusion of the chapter on the success of 3GPP in the standards development process). As a POSITA myself, I would regularly visit the 3GPP website for the latest developments in 3G standards setting and refer colleagues involved in the development of 3G devices to the 3GPP website as a valuable reference.

24. My personal experience at Samsung confirms 3GPP's prominence in the wireless industry. For example, engineers and managers at Samsung who were

responsible for implementing 3GPP compliant modem software (and who were not attending 3GPP meetings or involved with development of the 3GPP standard in any direct way) would often enquire as to which version of a given 3GPP specification they should be developing. Further, between 2000 and 2004, part of my role at Samsung involved advising software engineers implementing the 3GPP standard on the correct interpretation of the specifications and ensuring that they were made aware of any changes and proposals made during the 3GPP standards development process that would impact their work. I also for a time maintained an internal company database that tracked 3GPP approved changes, to help the software engineers at Samsung implementing the 3GPP standard more readily stay informed as to changes that would impact their work. The database also included links to relevant 3GPP documents so that engineers could access the documents directly. In short, the technical output of 3GPP was well known at Samsung, even for engineers who were not directly involved with elaborating the 3GPP system or contributing to the 3GPP standard process.

B. 3GPP Document Policies and Practices

25. 3GPP's policy was to make 3GPP documents available to the public, including to interested POSITAs. The free availability of 3GPP documents to any interested member of the public was widely recognized in the industry. As an example of the prominence of 3GPP and its place in the wireless standards industry,

I note that textbooks directed readers to the 3GPP website for information about relevant standards. For example, Appendix 6 at 6, 9 “The latest specifications can be obtained from 3GPP [9]”, “[9] <http://www.3GPP.org>”. Appendix 8 at 10 “3GPP TSs and TRs are publicly available at the 3GPP web site at either of the following URIs: <http://www.3gpp.org/specs/specs.htm>

<http://www.3gpp.org/ftp/Specs/archive/>”. Because the purpose of 3GPP was worldwide adoption of a common standard, no restrictions on distribution or discussion were placed on 3GPP documents. Appendix 10 at 9 “No password is needed to access any information on the 3GPP Web site, all information is openly published”.

C. 3GPP Structure and Standards Development Process

26. Within 3GPP, responsibility for producing specifications was delegated to the Technical Specification Groups (TSGs). Appendix 5 at 11 (3GPP Working Procedures, 1999, “TSG tasks”). At its inception, 3GPP was divided into four Technical Specification Groups (TSGs), each covering a particular category of technology. Appendix 2 at 31 (3GPP Partnership Project Description); Appendix 6 at 5, 6 (textbook listing four TSGs and noting the subsequent addition of a fifth TSG); Appendix 4 at 6, 11, 12. Each TSG is further divided into a number of Working Groups (WGs). Appendix 8 at 8, 9; Appendix 4 at 5; *see also* Appendix 5 at 21 (3GPP Working Procedures, 1999, defining “Working Group”). Two of the

TSGs from 1999 are still in existence in 2023: TSG Radio Access Networks (RAN) and TSG Service & Systems Aspects (SA). The activities of two other TSGs, TSG Core Networks (CN) and TSG Terminals (T), were amalgamated under Core Network and Terminals (CT) following the closure of TSG T in 2005, with responsibility for terminal test specifications being moved to a RAN working group (RAN WG5). The fifth TSG, GSM EDGE Radio Access Networks (GERAN), was responsible for evolution of the GSM radio technology from 2000 until that TSG closed in 2016 and its work was transferred to a RAN working group (RAN WG6) which was itself closed in July 2020.

27. The TSGs held quarterly plenary meetings² where members' contributions, draft specifications/reports, and other documents that had been agreed upon by the Working Groups were presented for discussion and approval. Appendix 5 at 18 (3GPP Working Procedures, "Deliverable types," stating that Technical Specifications and Technical Reports are "drawn up by the TSGs" and are approved by TSGs). Appendix 8 at 10 "3GPP Deliverables". Once a Technical Specification was or Change Requests creating a new version of a Technical Specification were, formally approved by TSG plenary, the latest version of said Technical Specification

² Except in 1999 when 5 meetings were held.

would be created by the Mobile Competence Centre (MCC³) and uploaded to the file server. Appendix 10 at 6, Appendix 11 at 1. In that way, the conclusion of 3GPP TSG plenary meetings serves as notice that new versions of specifications incorporating Change Requests approved by the TSG meeting will shortly be made available on the public 3GPP server.

28. As part of the standards development process, delegates could submit contributions on behalf of the Individual Members. Members had an incentive to stay updated on 3GPP developments because those members usually wanted to contribute to the standard and make suggestions as to what technology and/or features should (or should not) be included. Delegates also attended 3GPP meetings to keep their employers abreast of developments related to the standards that would ultimately apply to those members and the products those members (e.g., companies) produced. 3GPP members around the world' and the interested POSITAs employed by them' would have been motivated to stay up to date regarding 3GPP technology evolution to ensure their research and development programmes remained relevant to the systems being specified and that their products were compliant with the published 3GPP specifications. In light of this need to follow the standards

³ Part of the ETSI secretariat supporting 3GPP activities.

development process, delegates often distributed 3GPP-related documents far beyond the attendees at 3GPP meetings. This was certainly my experience at Samsung.

D. 3GPP Specifications and Reports

29. The technical specifications and reports developed by 3GPP were, and still are, driven by the technical contributions of 3GPP members. As part of that development process, various types of documents were produced. The 3GPP process involved the consideration of temporary⁴ documents (“TDocs,” also referred to as “contributions,”), many of which constituted technical proposals for how the system should be implemented and were adopted as the basis for parts of the technical specifications.

30. As I noted in paragraphs 20 and 22, a primary purpose of 3GPP is to prepare, approve, and maintain globally applicable Technical Specifications and

⁴ The term “temporary” is used to designate documents that are submitted to and dealt with by 3GPP TSGs and WGs in the process of elaborating the standards, but do not constitute permanent 3GPP deliverables such as Technical Specifications and Reports. Temporary documents are permanently archived by and freely available from 3GPP once they have been submitted.

Technical Reports. Appendix 5 at 6 (3GPP Working Procedures, “Purpose”). A “Technical Specification,” as defined by 3GPP, is “[a] 3GPP output document containing normative provisions approved by a Technical Specification Group.” Appendix 5 at 21. 3GPP would (and still does) periodically freeze a complete set of standards (referred to as a “Release”⁵), and each set would include many new specifications. Appendix 10 at 6. 3GPP would also make publicly available draft specifications that would usually be included as part of the next Release once approved.

31. It was widely known that Technical Specifications (and Technical Reports) were publicly available on 3GPP’s website. It was also well known that the latest version of a given specification that was under change control would be made available following each TSG Plenary meeting responsible for that specification, and

⁵ As denominated by the major version field (see paragraph 35). E.g., v4.x.x versions are part of release 4, v8.x.x versions are part of release 8. The exception to the matching major version field number and the release number is v3.x.x versions, which are part of Release 99 (rather than release 3, to be consistent with the GSM release designation).

that TSG Plenary meetings usually occur four times per year. Appendix 10 at 6, Appendix 11 at 1.

32. Latest and previous versions of technical specifications could be easily accessed from the 3GPP website. The specifications page provided direct links to the specifications area in the 3GPP website's file repository. Appendix 11 at 1. In the 2014 timeframe, the specifications page listed the specifications by the date of the approval of the latest versions reflecting the TSG plenary meeting date. Appendix 11 at 1.

33. Additionally, the 3GPP specifications followed a clear numbering scheme to help the public, including interested POSITAs, identify the subject matter of each specification. Appendix 12 at 1. As described on the 3GPP Numbering Scheme webpage, all 3G and GSM specifications had a specification number of 4 or 5 digits,⁶ where the first two digits defined the series. Appendix 12 at 1. The Numbering Scheme webpage included a table showing the subject matter corresponding to each series. Appendix 12 at 1. For example, the "23 series" focused on the technical realization ("stage 2") of the system. Appendix 12 at 1. I note that

⁶ Four-digit specification numbers were used for GSM specifications transferred from ETSI, *i.e.*, pre-3GPP Rel-4.

the specification referenced in this Declaration is a 23 series specification focussing on stage 2 technical realization of the release 12 3GPP standard. An interested POSITA could narrow down the relevant specifications based on whether the specification applied to only evolved UTRA, to 3G, to GSM, or to GSM, 3G and evolved UTRA. (GSM only specifications were transferred from ETSI to 3GPP in July 2000.) For a specification in the 21–35 series, this could be determined based on the third digit of the specification number, where a “0” would indicate that the specification applied to both systems. Appendix 12 at 1. Specifications outside the 21–37 series in 2014⁷ applied only to GSM systems. Appendix 12 at 1.

34. The specifications were stored on the 3GPP website’s file repository as zipped files, where the filenames followed the structure: SM[-P[-Q]]-V.zip. This format corresponded to the numbering scheme discussed in paragraph 33. “S” represented the series number; “M” represented the mantissa (the part after the series number); “P” represented an optional part number; “Q” represented an optional sub-part number; and “V” represented the version number (without the separating dots). Appendix 12 at 1, 2.

⁷ Series 37, and since 2016, series 38 specifications cover other radio access technologies including 5G.

35. The Working Groups would create incremental versions of the draft specifications⁸ (*e.g.*, V0.2.1, V1.0.0, V1.1.0, etc.). These versions were made available on the 3GPP website's file repository which is accessible from the 3GPP specifications page. The version numbering scheme for Technical Specifications and Technical Reports was standardized by 3GPP. The version number included three fields: the major version field, the technical version field, and the editorial version field. Appendix 13 at 1. The major version field reflects the stage of the specification, with "0" representing an immature draft and a value of "3" or greater representing a specification that has been approved by the relevant TSG and thus had been moved to change control. Appendix 13 at 1. The technical version field begins at zero and is incremented every time a technical change is made to the specification (either as part of the drafting process or as part of an approved change request). Appendix 13 at 1. The editorial version field begins at zero and is incremented each time a non-

⁸ This was prior to the versions receiving formal approval by the relevant Technical Specification Group upon being deemed sufficiently complete. After that, they are placed under change control, and each subsequent version is based on Change Requests approved by the relevant Technical Specification Group.

technical change is made to the specification (*e.g.*, to fix a typo or formatting issue).

Appendix 13 at 1.

36. The first document on which I opine in this Declaration is a version of the technical specification with the following label: “V12.6.0.” Consistent with the 3GPP version numbering scheme, the specification has a major version field value of “12” which means it represents a specification approved by the applicable TSG, as part of 3GPP Release 12. The second field value, “6” means that a sixth technical change⁹ had been approved for the technical specification since that specification’s initial approval. And the third digit, “0” means that no non-technical (editorial) changes had been made to the technical specification since the latest version had been approved by the TSG plenary group (TSG RAN in this case).

37. I understand that the alleged invention in the ’338 patent relates to cellular telecommunications networks, and more particularly to methods, systems, and computer program products for handling, or assisting in handling, of connection setup requests in such networks. Any POSITA interested in methods, systems, and computer program products for handling, or assisting in handling, of connection setup requests in such networks would have been monitoring 3GPP’s activities in this area and would probably have been already participating as a full or associate

⁹ Or set of technical changes.

member or observer in the standard development process or would have at least known that information regarding the proposed revisions to the technical specifications under discussion were available through 3GPP.

E. The 3GPP Online File Repository

38. 3GPP makes TDocs, draft and approved technical specifications, technical reports, and other materials freely available to interested POSITAs (and to any interested member of the public) through the public file repository on the 3GPP website. Interested POSITAs would have been well aware of 3GPP and of the 3GPP website in the 2014 timeframe.

39. As described in paragraph 25, 3GPP documents were accessible to any member of the public through the 3GPP website. Any interested individual, including interested POSITAs, could have downloaded documents from the 3GPP website's file repository without providing any login credentials or other exclusive access criteria. Appendix 10 at 9 "No password is needed to access any information on the 3GPP website, all information is openly published."

40. An interested POSITA could have also accessed the 3GPP file repository directly through the web address www.3gpp.org/ftp. Regardless of how an individual initially accessed the public files, the indexed navigation of the files followed a clear pattern: the top two levels of indexing within the file repository are based wholly on subject matter, as reflected by the division of subject matter.

Appendix 14. As shown in the archived pages of Appendix 14, the 3GPP file repository organized “Specs” (commonly understood as shorthand for “Technical Specifications”).




41. 3GPP’s public file repository provides a reliable mechanism for identifying the date a document was uploaded to the website. When a document is uploaded, the file server automatically assigns the document a time stamp, an accurate and automatically computer-generated electronic record of when the document was uploaded, as part of the regular business practices of 3GPP. *“The timestamp of the file can be relied upon as a precise indication of the moment of upload”* Appendix 10, at 10 (3GPP FAQs (added emphasis)). This has always been the practice regarding uploading documents to the file repository, and my personal experience further confirms that the time stamps have always been a reliable way to indicate when a file was uploaded to the 3GPP website. In my experience, whilst the servers used for 3GPP file repository have been updated since 1999 and responsibility for the GSM standard has moved from ETSI to 3GPP in 2000, the original upload date for files including specifications has always been preserved, providing a true and accurate indication of their earliest availability for download.

IV. EXHIBIT 1005 (“TS 23.401 V12.6.0”)

42. 3GPP TS 23.401 v12.6.0 (Ex. 1005) is a Technical Specification titled “Technical Specification Group Services and System Aspects; General Packet Radio

Service (GPRS) enhancements for Evolved Universal Terrestrial Radio Access Network (E-UTRAN) access (Release 12).” Ex. 1005 at 1. The specification states that it was produced by 3GPP in September 2014. Ex. 1005 at 1. To obtain this document, I directed a web browser to the URL: https://www.3gpp.org/ftp/Specs/archive/23_series/23.401. Appendix 15. I selected the link for “23401-c60.zip” and downloaded a zip file of the same name. The zip file contained a Microsoft Word document, titled “23401-c60.doc.” A true and correct copy of the Word document within the zip file (23401-c60.doc), in PDF form, is provided as Ex. 1005.

43. TS 23.401 v12.6.0 was available to download from 3GPP’s public file on September 17, 2014, as evidenced by the upload date corresponding to that file:

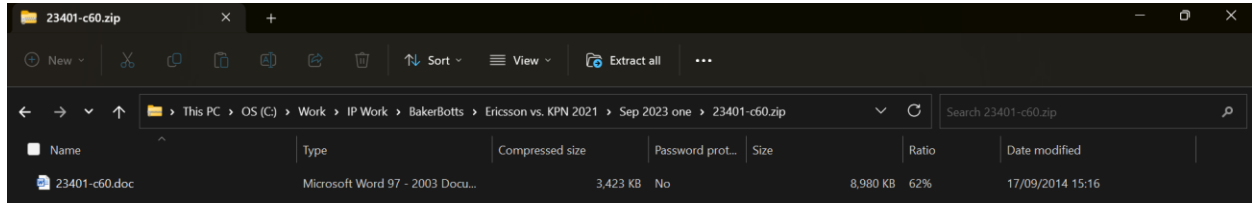
 23401-c50.zip	2014/06/20 6:26	3423,5 KB
 23401-c60.zip	2014/09/17 14:16	3422,3 KB
 23401-c70.zip	2014/12/05 15:07	3426,1 KB

Appendix 15, at 3.

44. The word document within the zip file “23401-c60.doc” has a date stamp of “17/09/2014.” (European data format). An excerpt of the zip file directory is provided below. Selecting the link for “23401-c60.doc” with a date stamp of “17/09/2014” I have confirmed that the technical contents of the file “23401-

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c60.doc” are the same as those provided in TS 23.401 v12.6.0. A true and correct copy of the Microsoft Word document titled “23401-c60.doc” is the TS 23.401 v 12.6.0 that is provided in Ex. 1005.



45. As I described above in paragraphs 25, 31-33, 38-40, technical specifications were readily available through the 3GPP website in the 2014 time period. Interested POSITAs would have been well aware of 3GPP and of the 3GPP website, and they would have known that 3GPP documents were available to the public. ¶¶ 23–25, 31-33. As specifically explained in paragraphs 31-33, the specifications area of the 3GPP file repository was accessible from the 3GPP website’s specifications page (which, in turn, was directly accessible from the 3GPP Home Page through the “Specifications” link). Additionally, the Specifications page provided a direct link to versions of technical specifications grouped according to their approval date. ¶ 31-33. As described in paragraphs 38-40, an interested POSITA had the ability to narrow the relevant specifications of interest based on the subject matter covered by each Working Group, as well as the specification numbering scheme.

46. With that knowledge, to download TS 23.401 v12.6.0, an interested POSITA could have navigated to the specifications area of the file repository via the direct link on the specifications page. Appendix 11 at 1. As described in paragraph 40, that navigation structure was simple, as it was based on the filename structure. Thus, an interested POSITA would have been capable of navigating to relevant 3GPP specifications on the 3GPP website using reasonable diligence.

47. As I described in paragraph 41, the upload time stamp indicates that 23401-c60.zip was uploaded to 3GPP's publicly available website on September 17, 2014, and that any member of the public could have downloaded the zip file, extracted the Word document enclosed, and viewed the contents of the Word document without restriction on that date, and anytime thereafter. As I described in paragraph 41, based on my personal knowledge and experience, this time stamp accurately reflects the date the document was uploaded to the 3GPP public file repository, and I have no reason to believe this time stamp is inaccurate. I have therefore determined that TS 23.401 v12.6.0 was available for any member of the public to download from the 3GPP website as of September 17, 2014. Further, as described in paragraph 25, 3GPP documents were freely available and were not burdened by any confidentiality requirements or restrictions on further dissemination.

48. It is my opinion, therefore, that by October 2014, an interested POSITA

using reasonable diligence could have located TS 23.401 v12.6.0 on the 3GPP website, downloaded the reference without providing any credentials, and disseminated the reference to others without restriction.

V. CONCLUSIONS

49. As described under section IV of the present document, it is my opinion that 3GPP TS 23.401 v12.6.0 titled “Technical Specification Group Services and System Aspects; General Packet Radio Service (GPRS) enhancements for Evolved Universal Terrestrial Radio Access Network (E-UTRAN) access (Release 12).” and provided as Ex. 1005, was publicly available on the 3GPP file server no later than September 17, 2014. Further an interested POSITA exercising reasonable diligence could have downloaded the zip file, extracted the Word document enclosed, viewed the contents of the Word document, and further disseminated said document without restriction on September 17, 2014, and thereafter.

IX. DECLARATION

Pursuant to Section 1746 of Title 28 of United States Code, I that the foregoing is true and correct and that the foregoing is based upon personal knowledge and information and is 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.

Declaration of Craig Bishop
In Support of Petition for *Inter Partes* Review of
U.S. Pat. No. 11,259,338

Executed on November 30, 2023.

By:  _____
Craig Bishop