

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC,
Petitioner

v.

WILDSEED MOBILE LLC,
Patent Owner

Case IPR2023-00244
U.S. Patent No. 10,251,021

**DECLARATION OF ROBERT STILLERMAN IN SUPPORT OF PATENT
OWNER'S RESPONSE**

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Patent Trial and Appeal Board
U.S. Patent and Trademark Office
P.O. Box 1450
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Wildseed Mobile EX2007
Google v. Wildseed Mobile
IPR2023-00244

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I, Robert Stillerman, declare as follows:

I. INTRODUCTION

1. I have been retained by Wildseed Mobile LLC to provide my opinions regarding U.S. Patent No. 10,251,021 (the “’021 Patent” or the “Patent in Review”) currently under review by the Patent Trial and Appeal Board (PTAB). Specifically, I have been asked to consider the patentability of the Patent in Review as of its priority date.

2. I understand that the PTAB has instituted an *Inter Partes Review* (“the IPR”) regarding the patentability of the Patent in Review, with Google LLC as Petitioner, and Wildseed Mobile LLC, as Patent Owner.

3. I understand that a related pending litigation entitled, “Wildseed Mobile LLC v. Google LLC and YouTube LLC,” Case No. 3:22-cv-04928, in the United States District Court Northern District of California, San Francisco Division, has been stayed pending this IPR.

II. BACKGROUND AND QUALIFICATIONS

4. Details of my professional qualifications and background are set out in my *Curriculum Vitae* (EX2008).

5. I received a B.S. in Electrical Engineering from Columbia University. In connection with that degree, I was a member of the Tau Beta Pi and Eta Kappa Nu honor societies. I received an M.S. in Electrical Engineering and Computer

Science from the University of California, Berkeley. I received an M.B.A with distinction from INSEAD, International Business School in Fontainebleau, France.

6. I am currently the President of RS International Consulting Inc. (dba RS International) (“RSI”), based in Palo Alto, California. RSI is a technology consulting firm active since 2001. RSI has provided a wide variety of services, including software development and consulting, website and web application development, business consulting, expert witness, and litigation support services.

7. I have over 45 years of experience in the field of software. This includes extensive experience in software design, development methodology, deployment, maintenance, change control and other aspects of software-based systems. I have extensive experience in web-based applications. I am familiar with protocols, such as client-server and peer-to-peer, used for communications between networked and interworked computer systems. I have experience with Internet Advertising.

8. I have experience with communications methodologies and systems, including wireless systems used, for example, for cellular communications, point-to-point communications, point-to-multipoint communications, radio frequency identification (RFID), wide area networks, local area networks, personal area networks, voice, and data. I have experience with networking products, such as switches and routers.

9. I have designed, developed, and managed the design and development of computer and communications software, hardware, and systems. I have experience with the delivery of services to enterprises and consumers via different technologies and communications systems. I have experience with devices used for voice and data communication for consumers and network services providers. I have experience in call centers and call center operation. I have been involved with, and designed, processes for use in project management, change management, client onboarding and training, and installation and configuration of systems. I have experience in installation of electronic and wireless equipment, including outside plant and indoor wiring.

10. During my career, I have worked for several communication equipment suppliers. I worked for Bell Telephone Laboratories as a Member of Technical Staff designing hardware and software for an electronic switching system for toll network applications. At Bell Telephone Laboratories, I worked with the proprietary signals between controllers and peripheral equipment. I worked for ITT as a development manager. In that position, I designed hardware and software for an electronic, class 5 central office switching system. I also worked on analog line and trunk test panels. At Bell Labs and ITT, I developed equipment that was part of the public telephone network infrastructure. I worked for BNR Inc., a subsidiary of Bell Northern Research (part of Northern Telecom),

designing hardware and software for an Electronic Private Branch Exchange (PBX) system, which is a business communications system, and working on the specification of an “office of the future system.” I worked for IBM/ROLM Systems, designing and testing portions of its Electronic PBX, voicemail system, phones, analog and digital line and trunk circuit interfaces, and applications such as Automatic Call Distribution, Call Monitoring and other features used in call centers. At IBM/ROLM, I was a section manager, and was responsible for multiple development projects consisting of both hardware and software, including early projects involving computer-telephony integration, a capability now used widely in call center operations. At IBM/ROLM, I led a team of Product Managers involved in product development. I helped define IBM/ROLM’s Product Development Process, which was a methodology that the company applied to development activities in order to manage and track product development, including formal documentation of each phase of a project.

11. I worked for Unisys Corporation where I was involved with computer-based industrial and commercial applications, including electronic document interchange, shop floor systems, Enterprise Resource Management software and CAD/CAM applications. I managed the operation of a demonstration center for showcasing our portfolio of solutions.

12. I worked as Director of Product Management for First Pacific Networks, a company that produced cable telephony products, in which hybrid fiber coax installations were used for distribution of signals between the cable head end and the subscriber set top box/receiver. In this role, I responded to customer Requests for Proposals and helped close the first deployment of a hybrid coax network for telephone service in the United Kingdom.

13. I worked for Harris Corporation's Communication Division where I held several positions, including Director of Marketing and Vice President of Business Development. In my role as head of Marketing, I managed teams for market development, product management, marketing communications and technical marketing for wireless products used widely in the network infrastructure for fixed communication as well as for fixed and mobile networks. In my role as head of Business Development, I was involved in the evaluation and acquisition of businesses outside of Harris. In that capacity, I was responsible for finding target companies and evaluating their business value to Harris. Following an acquisition, I managed the integration of the acquired company unit to Harris.

14. I worked on wireless technologies at Wireless Dynamics, Inc. and at RSI, and have experience and knowledge regarding a range of wireless technologies and standards for the operation of such technologies. This includes RFID technologies, telematics, the use of smartphones, mobile communications

networks, Wi-Fi, Bluetooth, Zigbee, WiMax, self-organizing sensor networks, portable devices and other technologies.

15. I worked at VoiceTip, a startup targeting Voice over IP services for small businesses, including messaging, conferencing, voicemail, and IP-based voice services.

16. I consulted at Tocca, Inc., which offers SaaS solutions for hosting virtual spaces and virtual events, based on cloud services. In my consulting role for Tocca, I have written software and led several teams in product development, customer services, customer onboarding, system configuration and deployment, and other activities.

17. I worked as a software developer for many different types of applications. I have worked with many different operating systems, using many different computer languages, and many different software libraries and code sets.

18. I designed, wrote, and licensed software as a service (“SaaS”) to institutions such as Stanford University and the University of California. I designed and implemented many websites and web applications.

19. In prior cases I have been involved with many different technologies such as: software, the internet, software applications, internet advertising, electronic devices, mobile devices, smartphones, tablets, RFID devices, recording devices, security devices and systems, computer networks, communications

networks, software algorithms, user interfaces, switching devices, switching systems, gateways, messaging, voice storage and retrieval, paging and mobile networks, tracking devices and systems, thermal performance of computing devices, Voice over IP Networks and Systems, wireless and mobile networks and related standards, Wi-Fi, Bluetooth, WiMax, Z-Wave, call centers, facsimile products and protocols, web technologies, hard drive forensics and analysis, email protocols and transmission, cell phone record analysis, cable systems, GSM networks and standards, PBXs, computer server architectures, manufacturing process technologies, antivirus software, and others.

20. In prior cases, I have examined in detail the information transmitted and received among devices communicating with each other for the exchange of information, for call handling and flows, for web applications and web servers using techniques such as packet capture. Similarly, I have evaluated the data exchanged across a network for the transmission of electronic mail (“email”).

21. I have extensive experience with large software code bases, with many different operating systems, and with many different programming languages, both from my direct work experience and from analyzing software as a consultant and expert in other cases. I have offered opinions relating to the functionality and operation of such software.

22. I have served as an expert on the deployment and installation of complex technologies, such as wireless network services in rural and metropolitan areas, call centers operated by different companies, and equipment used in server farms in computer equipment rooms. I have been qualified to serve as an expert witness in forensic analysis, computer software, communications equipment, and various other technologies.

23. I am not an attorney, but I have experience with the patent system, both as a consultant and expert witness in patent cases. I have been deposed and have served as an expert in many legal matters.

24. I submit this Declaration based on the information I have reviewed for purposes of this IPR, and based on my own personal knowledge and experience, except where stated otherwise. I am prepared to testify beyond this Declaration concerning the matters discussed herein if requested to do so.

25. If asked to testify beyond this Declaration, I may use materials I have relied upon in forming my opinions and documents and other materials I have reviewed. I may also present demonstratives, animations, slides, or other graphics to demonstrate my methodology or other relevant facts and the bases for my opinions in this case.

26. Because of my education, background, training, and experience, I am qualified as an expert in the technical areas relevant to the patent at issue in this proceeding.

27. The opinions expressed in this Declaration are based upon the information made available to me as of the date of this Declaration. I understand that I may be asked to review information produced by either party after the date of this Declaration and to update this Declaration as necessary to reflect any additional analysis and conclusions.

28. My company, RSI, is paid for my work in connection with this IPR at the rate of \$600 per hour plus reimbursement for any reasonable expenses. Neither my company nor my company's compensation is dependent upon my opinions, the outcome of this review, or on any issue in it.

III. LEGAL PRINCIPLES

29. I am not an attorney and have not been asked to offer my opinion on the law. However, I understand that I am obliged to follow existing law. I have therefore been asked to apply the following legal principles in my analysis.

30. I understand that in an *Inter Partes* Review proceeding the party challenging the patent's validity must prove by a preponderance of the evidence that the patent claims are invalid.

31. I understand that validity based on novelty, i.e., anticipation and obviousness is governed by 35 U.S.C. §§ 102–103 (Pre-AIA) which read as follows:

35 U.S.C. 102 (PRE-AIA) CONDITIONS FOR PATENTABILITY;
NOVELTY AND LOSS OF RIGHT TO PATENT

A person shall be entitled to a patent unless —

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent, or
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States, or
- (c) he has abandoned the invention, or
- (d) the invention was first patented or caused to be patented, or was the subject of an inventor's certificate, by the applicant or his legal representatives or assigns in a foreign country prior to the date of the application for patent in this country on an application for patent or inventor's certificate filed more than twelve months before the filing of the application in the United States, or
- (e) the invention was described in — (1) an application for patent, published under section 122(b), by another filed in the

United States before the invention by the applicant for patent or
(2) a patent granted on an application for patent by another filed
in the United States before the invention by the applicant for
patent, except that an international application filed under the
treaty defined in section 351(a) shall have the effects for the
purposes of this subsection of an application filed in the United
States only if the international application designated the
United States and was published under Article 21(2) of such
treaty in the English language; or

(f) he did not himself invent the subject matter sought to be
patented, or

(g) (1) during the course of an interference conducted under
section 135 or section 291, another inventor involved therein
establishes, to the extent permitted in section 104, that before
such person's invention thereof the invention was made by such
other inventor and not abandoned, suppressed, or concealed, or
(2) before such person's invention thereof, the invention was
made in this country by another inventor who had not
abandoned, suppressed, or concealed it. In determining priority
of invention under this subsection, there shall be considered not
only the respective dates of conception and reduction to
practice of the invention, but also the reasonable diligence of
one who was first to conceive and last to reduce to practice,
from a time prior to conception by the other.

[35 U.S.C. § 102.]

35 U.S.C. 103 Conditions for patentability; non-obvious subject matter.

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

(b)

(1) Notwithstanding subsection (a), and upon timely election by the applicant for patent to proceed under this subsection, a biotechnological process using or resulting in a composition of matter that is novel under section 102 and nonobvious under subsection (a) of this section shall be considered nonobvious if-

(A) claims to the process and the composition of matter are contained in either the same application for patent or in separate applications having the same effective filing date; and

(B) the composition of matter, and the process at the time it was invented, were owned by the same person or subject to an obligation of assignment to the same person.

(2) A patent issued on a process under paragraph (1)-

(A) shall also contain the claims to the composition of matter used in or made by that process, or

(B) shall, if such composition of matter is claimed in another patent, be set to expire on the same date as such other patent, notwithstanding section 154.

(3) For purposes of paragraph (1), the term "biotechnological process" means-

(A) a process of genetically altering or otherwise inducing a single- or multi-celled organism to-

- (i) express an exogenous nucleotide sequence,
- (ii) inhibit, eliminate, augment, or alter expression of an endogenous nucleotide sequence, or
- (iii) express a specific physiological characteristic not naturally associated with said organism;

(B) cell fusion procedures yielding a cell line that expresses a specific protein, such as a monoclonal antibody; and

(C) a method of using a product produced by a process defined by subparagraph (A) or (B), or a combination of subparagraphs (A) and (B).

(c)

(1) Subject matter developed by another person, which qualifies as prior art only under one or more of subsections (e), (f), and (g) of section 102, shall not preclude patentability under this

section where the subject matter and the claimed invention were, at the time the claimed invention was made, owned by the same person or subject to an obligation of assignment to the same person.

(2) For purposes of this subsection, subject matter developed by another person and a claimed invention shall be deemed to have been owned by the same person or subject to an obligation of assignment to the same person if —

(A) the claimed invention was made by or on behalf of parties to a joint research agreement that was in effect on or before the date the claimed invention was made;

(B) the claimed invention was made as a result of activities undertaken within the scope of the joint research agreement; and

(C) the application for patent for the claimed invention discloses or is amended to disclose the names of the parties to the joint research agreement.

(3) For purposes of paragraph (2), the term "joint research agreement" means a written contract, grant, or cooperative agreement entered into by two or more persons or entities for the performance of experimental, developmental, or research work in the field of the claimed invention.

[35 U.S.C. § 103.]

32. I understand that to be patentable, an invention must not have been obvious to a person of ordinary skill in the pertinent art at the time the invention

was made. A claim is invalid for obviousness if the differences between the subject matter sought to be patented and the prior art are such that that the claimed subject matter as a whole would have been obvious, at the time the invention was made, to a person having ordinary skill in the art to which that subject matter pertains.

33. In determining whether a claimed invention is invalid for obviousness, one should consider the scope and content of the prior art, the level of ordinary skill in the relevant art, the differences between the claimed invention and the prior art, and whether the claimed invention would have been obvious to one of ordinary skill in the art in light of those differences. I understand that hindsight must not be used when comparing the prior art to the invention for obviousness. I understand that it is improper to stitch together an obviousness finding from discrete portions of prior art references without considering the references as a whole.

34. Obviousness may be shown by demonstrating that it would have been obvious to modify what is taught in a single piece of prior art to create the patented invention. In addition, obviousness may be shown by showing that it would have been obvious to combine the teachings of more than one item of prior art. In determining whether a piece of prior art could have been combined with other prior art or with other information within the knowledge of one of ordinary skill in the art, multiple approaches and rationales may be considered, including:

- Combining prior art elements according to known methods to yield predictable results;
- Simple substitution of one known element for another to obtain predictable results;
- Use of a known technique to improve similar devices, methods, or products in the same way;
- Applying a known technique to a known device, method, or product ready for improvement to yield predictable results;
- Applying a technique or approach that would have been “obvious to try” (choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success);
- Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art; or
- Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention.

IV. LEVEL OF ORDINARY SKILL IN THE ART

35. I understand that a person of ordinary skill in the art (“POSITA”) is a hypothetical person who is presumed to have known the relevant art at the time of the invention. The claims of the Patent in Review generally relate to portable media device players.

36. I have been informed by counsel for Wildseed Mobile LLC that the person of ordinary skill in the art (“POSITA”) is generally familiar with the type of problems encountered in the field and the prior art solutions to those problems and possesses an ordinary level of creativity.

37. In my opinion, a person of ordinary skill in the art (“POSITA”) of the Patent in Review would have had a degree in computer science, computer engineering or related field and one year of experience working with portable devices. Additional education could compensate for less practical experience and vice versa. My opinions expressed herein would not change if applying Petitioner’s level of skill, found in Dr. Houh’s Declaration at ¶20. Petitioner’s asserted grounds fail under either proposed level of ordinary skill.

38. I believe that I would qualify as at least a person of ordinary skill in the art in the 2007 timeframe, and that I have a sufficient level of knowledge, experience, and education to provide an opinion in the field of Patent in Review. I am familiar with what a person of ordinary skill in the art knew at that time

because of my lengthy experience with engineering subjects of a similar nature to the concepts presented in the Patent in Review.

V. METHODOLOGY

39. In arriving at my opinions, I relied upon material that I reviewed as part of my investigations and my analyses.

40. In particular, I considered:

- The Declaration of Dr. Henry Houh, under 37 C.F.R. § 1.68 in Support of Petition for *Inter Partes* Review and Exhibits (“Houh” or “Houh Declaration”).
- Petition for *Inter Partes* Review Under 35 U.S.C. § 312 and 37 C.F.R. § 42.104 and Exhibits (“Petition”)
- The prior art references cited in the Petition and Houh Declaration
- Decision - Granting Institution of *Inter Partes* Review (“Decision”)
- The Patent in Review and its file history
- Deposition Transcript of Dr. Henry Houh (“Houh Dep. Tr.”)
- Other materials noted in my declaration.

41. I refer to citations in the publications by paragraph number. I refer to citations in the Houh Declaration by paragraph number.

42. When I provide an example, or say, “for example,” I am not limiting my analysis to only that example.

43. As shorthand for arguments that are repeated throughout this declaration, I may describe the absence of a required disclosure in a cited reference or in a combination of references as “the Sasaki Retrieved Information Deficiency” for reference later in the declaration.

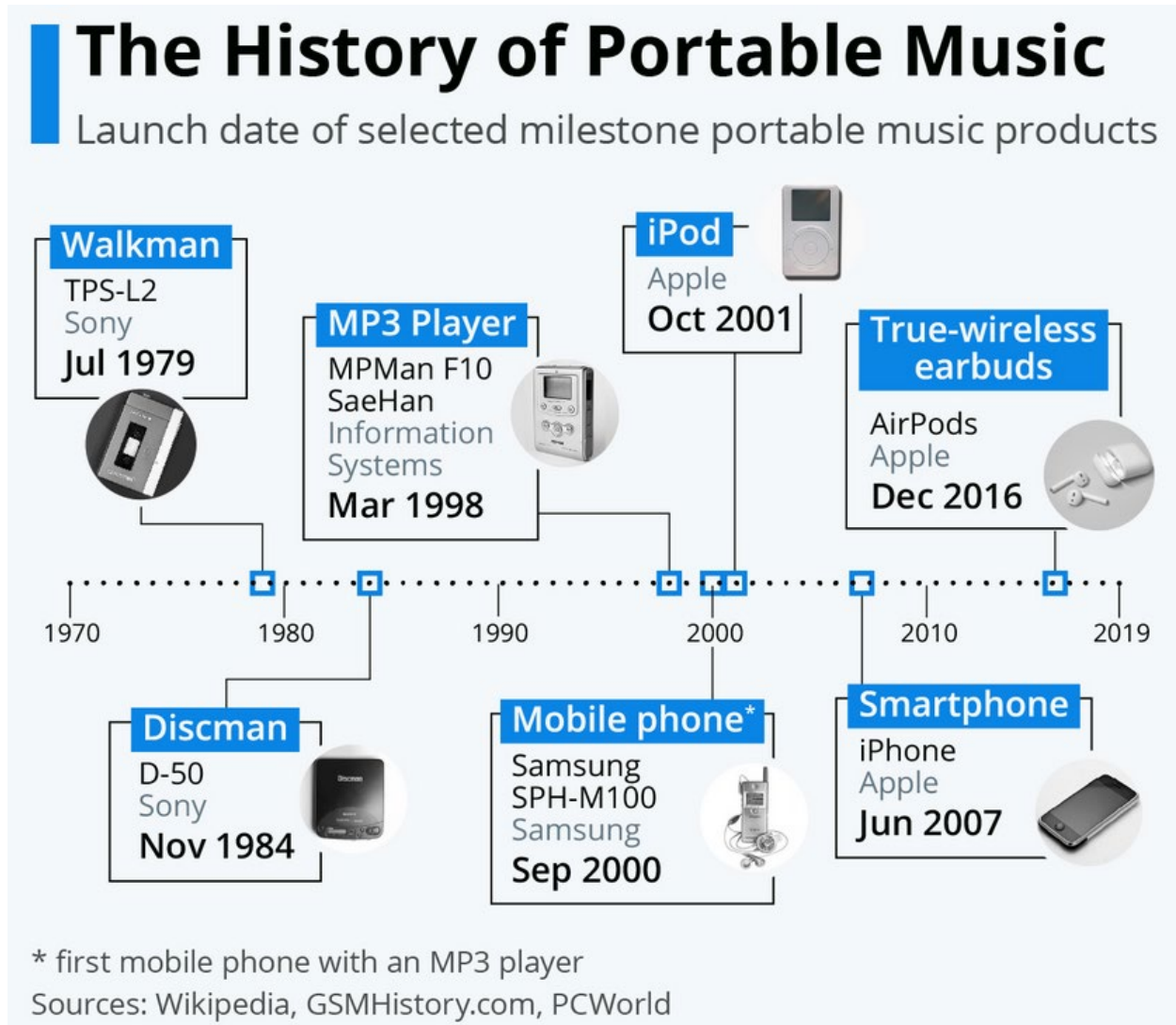
44. References to documents and testimony herein are meant to provide examples of supporting information but are not intended to be comprehensive or an exhaustive list of all known support.

VI. TECHNOLOGY BACKGROUND

A. Portable Media Player

45. Portable media players are consumer electronic devices that are capable of being carried, and can store and play digital media, such as audio, images and video. Data is typically stored on a disc, in memory, e.g., flash memory, or an SD card, etc. Early players used removable media, such as a CD, DVD or cassette.

46. The first commercially successful portable media player is generally recognized as Sony’s Walkman. The chart below depicts the launch date of well-known portable media players. Today, smartphones are recognized as portable media players.



EX2010 at 1.

B. Digital Media

47. Digital media is a form of media that is stored in a digital format.

Digital media is contrasted with analog media, which is a time-varying signal representing some communication. Digital media can be thought of as a sampled analog media signal capable of being formatted and represented by some encoding method. MP3 is an example of a digital audio encoding format. MP3 players can store and play back audio media/files of that format.

C. Downloading and Streaming

48. Downloading and streaming are two techniques/technologies for accessing media from a remote source.

Streaming is the process of playing media over the internet, without downloading it onto your device. This means that you can access content in real-time, as long as you have an internet connection. For example, when you watch a video on YouTube or Netflix, you are streaming content. With streaming, you don't have to wait for the entire file to download before you can start watching or listening.

Downloading, on the other hand, is when you transfer a file from the internet onto your device, such as a computer, phone, or tablet. Once the file has been downloaded, you can access it without an internet connection. For example, when you download a song from iTunes or a movie from Amazon Prime Video, you are downloading content.

EX2011 at 2.

49. The Cambridge Dictionary offers a definition of streaming:

Streaming: the activity of listening to or watching sound or video directly from the internet

EX2012 at 1.

50. Verizon offers further insight into streaming.

How does streaming work?

Music, video and other types of media files are prearranged and transmitted in sequential packets of data so they can be streamed

instantaneously. And unlike traditional downloads that are stored on your device, media files are automatically deleted once you play them.

EX2013 at 2.

51. U.S. Patent Application Publication No. 2005/0262251 A1 (Klemets) offers the following definition of streaming:

The term “streaming” is typically used to indicate that the data representing the media is provided over a network to a client computer on an as-needed basis rather than being pre-delivered in its entirety before playback. Thus, the client computer renders streaming content as it is received from a network server, rather than waiting for an entire “file” to be delivered.

EX2014, at ¶2.

D. Internet Radio

52. Internet Radio is a streaming service that offers an alternative transmission means for radio over-the-air broadcast. Internet Radio stations are often affiliated with broadcast radio stations but make their content available via an Internet connection. Just as is the case with the familiar broadcast radio services, the audio content is scheduled and not offered as an on-demand service.

Internet radio is an audio service that uses the Internet as a distribution medium of broadcasting instead of the traditional radio waves. The proper term used for internet radio is webcasting, as it is not actually broadcast through wireless signals. It is a form of streaming media

where content is usually provided live instead of being prerecorded like some podcasts.

EX2015 at 1.

53. U.S. Patent Application Publication No. 2013/0218970 A1 (Svendsen) offers the following definition of Internet radio:

Internet radio is a broadcasting service transmitted via the Internet. any internet radio stations are completely independent from traditional (“terrestrial”) radio stations, and broadcast only on the Internet, which is usually referred to as streaming.

EX2016, at ¶2.

E. Podcast

54. A podcast is audio that is downloaded so it can be played on a media player device. The Cambridge Dictionary offers a definition of a podcast, explaining that a podcast can be downloaded.

a radio program that is stored in a digital form that you can download from the internet and play on a computer or on an MP3 player

EX2017 at 1.

55. The Merriam-Webster Dictionary offers a similar definition. a program (as of music or talk) made available in digital format for automatic download over the Internet

EX2018 at 1.

VII. PATENT IN REVIEW: THE '021 PATENT

A. Summary of '021 Patent

56. U.S. Patent No. 10,251,021 is entitled “Venue and Event Recommendations for a User of a Portable Media Player Device.” It was issued to Feldman and Nelson on April 2, 2019. For purposes of this declaration, I have been asked to use the date of U.S. Provisional Application No. 60/945,677 filed June 22, 2007, as the priority date.

57. The '021 Patent relates to portable media player devices and venue or event recommendations. “The present invention relates to the field of portable media player devices. More specifically, the present invention relates to venue or event recommendations for a user of a portable media player device.” '021 Patent at 1:17-20.

58. According to the '021 patent, a portable media player device “is a transportable device that plays one or more media file types, including text, audio, video, graphics, interactive, and other media file types.” '021 Patent at 1:26-29. A portable media player device must be “a handheld device (also referred to as palm-sized device).” '021 Patent at 1:33-34. The patent further specifies that “a portable media player device does not include a general purpose laptop or tablet computer, nor any computing device attached or installed on a mobile vehicle (such as a dash mounted radio or DVD player in an automobile).” '021 Patent at 1:29-35.

59. The specification describes a “method and system for providing venue and/or event recommendations for a user of a portable media player device, thereby further increasing the user experience of the user of the portable media player device.” ’021 Patent at 2:44-47. According to the patent, “the venue and/or event recommendations are for venues and/or events of potential interest to the user at locations proximally located to an inferred current location of the user, based at least in part on an inferred entertainment interest of the user.” ’021 Patent at 2:48-52.

60. The specification teaches that the location of the user can be inferred “based at least in part on current and/or recent geographic locations of the portable media player device.” ’021 Patent at 2:53-55. The entertainment preferences of the user can be inferred “based at least in part on the media files or content stored in and/or accessed using the portable media player device.” ’021 Patent at 2:56-58.

61. The specification provides an example of a user of a portable media player device receiving a recommendation for a music venue or event based on the inferred music genre preference of the user and the inferred location of the user:

Thus, in various embodiments, a user of a portable media player device having media of a particular genre stored on or accessed using the portable media player device may receive a recommendation for a venue or event that is related to that particular genre and is proximally located to the inferred current location of the user of the portable

media player device. For example, a server may generate a recommendation for a nearby concert by an alternative rock band for a user of a portable media player device that has inferred interest in alternative rock, inferred based at least in part on media of an alternative rock or like genre stored on and/or accessed via his portable media player device.

'021 Patent at 2:60-3:4.

62. The specification also provides an example of generating a recommendation for an art museum or gallery based on a user's interests inferred based on image media stored on, or accessed using, the portable media player device:

A recommendation may also be generated based in part upon interest inferred based at least in part image media stored in and/or accessed via the portable media player device. For example, images of a modern or related art painting stored in and/or accessed via the portable media player device may infer a particular interest in art and influence the server to generate a recommendation for a Pablo Picasso modern art exhibit presently at a modern art museum or gallery proximally located to the inferred current location of the user of the portable media player device

'021 Patent at 3:4-14.

63. Figure 1 of the '021 patent, reproduced below, is a diagram depicting a representative environment in which the patented invention may be implemented.

'021 Patent at 3:58-60. Figure 1 shows portable media player device 10 in

communication with server 20 via network 40 and access point 30. '021 Patent at 3:60-4:19. Additionally, computer 50 may be associated with personal media player device 10. '021 Patent at 3:58-60.

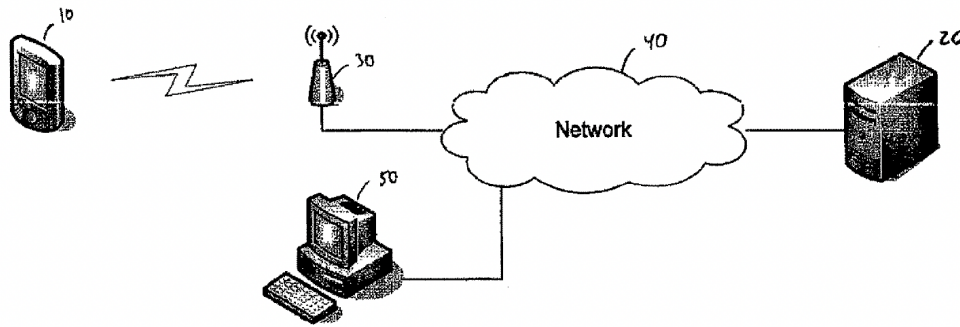


Figure 1

'021 Patent at FIG. 1.

64. Figure 2 of the patent, depicted below, is a flowchart that illustrates a method performed by a server to generate a recommendation for a venue or event that is of interest to the user of a portable media player device and proximally located to the user's current location. '021 Patent at 4:20-25.

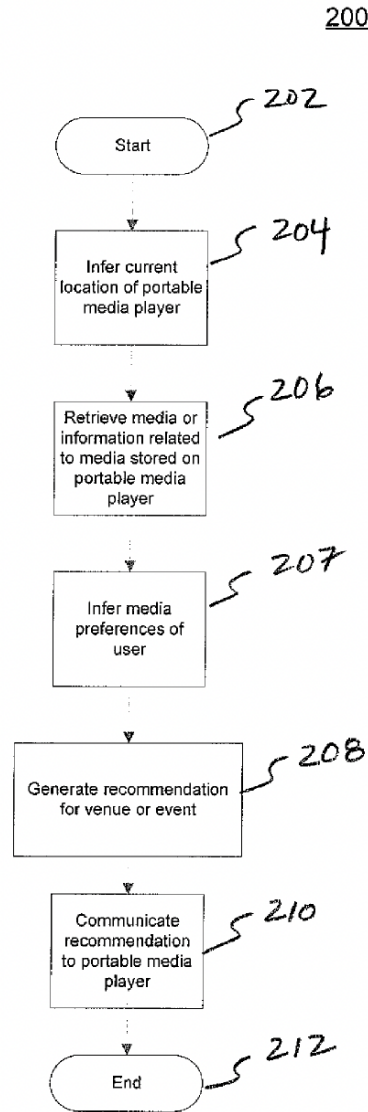


FIGURE 2

'021 Patent at FIG. 2.

65. At block 204, the server infers the current location of a user of a portable media player device:

The method begins at a block **204** where, in an embodiment, a server such as server **20** of FIG. 1 infers a current location of the user. The inference may include receiving or determining a current location (or

successively receiving a series of locations) of a portable media player device associated with the user.

'021 Patent at 4:41-46.

66. At block 206, the server retrieves “media or information about media stored on and/or accessed using the user's portable media player device.” '021 Patent at 5:11-14. The patent teaches that the server retrieves the media or information about the media from either local or remote storage:

This media or information about media stored on or accessed using the portable media player device may be retrieved by the server by various methods such as for example via network **40** and wireless access point **30** as described in conjunction with FIG. 1. Information about media stored on or accessed using the portable media player device may also be retrieved from storage within the server itself.

'021 Patent at 5:14-21.

67. At block 207, the server determines one or more media preferences of the user based in part upon the media and/or information about the media retrieved at block 206:

At a next block **207**, the server may determine one or more media preferences or interest for the user based in part upon the media and/or information about the media stored on or accessed using the portable media player device. In various embodiments, the server can analyze the media and the information about the media stored on or accessed using the portable media player device to identify user preferences for particular genres of media. Thus, in various embodiments, the server

may analyze e.g. the meta data associated with a wide variety of media stored on or accessed using the portable media player device such as music, podcasts, books or audiobooks, video, photos or other images for various trends that can be translated into user preferences for a particular genre of music, film, video or art. The meta data may include data about the media title, media type, artist, subject matter, and so forth.

'021 Patent at 5:29-44.

68. At block 208, the server generates a recommendation based on the inferred location of the user of the portable media player device and the user's inferred entertainment preferences:

At block **208**, the server may make a recommendation for a venue or event (or provide information) based at least in part on the inferred current location of the user and the determined media preference of the user of the portable media player device. In various embodiments, the server may generate the recommended venues/events (or information) using collaborative filtering, or other recommendation techniques that can take into account the media stored in or accessed using the user's portable media player device, other information about the user's media preferences, and venues or events proximally located (or that will occur in a proximate location) to the current location of the user of the portable media player device. In generating a recommendation for a venue or event (or information), the server may access databases or information from various sources or service

providers, e.g., a ticket sales and distribution company or an [sic]
local online entertainment city guide.

'021 Patent at 5:60-6:9.

69. At block 210, the server communicates the recommendation to the
portable media player device:

After the server generates the recommendation (or information), the
process moves to block **210** where the server may communicate the
recommendation to the user by transmitting the recommendation (or
information) to e.g. the portable media player device. In various
embodiments, as alluded earlier, this may include transmitting the
recommendation (or information) by sending either a short message
service (SMS) message, an email message, a pager message or a
facsimile message to the user or by placing a call to the user. In
various embodiments, directions to the event, venue or other location
of interest from the current location of the portable media player
device can also be sent to the portable media player device (not
shown).

'021 Patent at 6:32-44.

70. Independent claim 1 of the '021 Patent recites, for example, a non-
transitory computer-readable media (NTRM) comprising instructions which,
when executed by a processor of a computer server, cause the server to control
receipt of information about the media of a portable media player device, infer
entertainment preferences, access sources of information regarding nearby venues,
identify a venue as being of interest to the user of the portable media player device,

generate a recommendation of a venue, and control communication of the recommendation to the user.

B. '021 Patent Claims

71. The structure of the claims of the Patent in Review reveals that claims 1, 10, and 16 are independent claims. Claims 2-9 depend from claim 1; claims 11-15 depend from claim 10; claims 17-19 depend from claim 16. It is my understanding that to demonstrate unpatentability, the burden is on the Petitioner to demonstrate that their prior art references must disclose, teach, or suggest all limitations of a given claim. To the extent that the cited references do not disclose, teach, or suggest the limitations of an independent claim, then those references also do not disclose, teach, or suggest all the limitations of any dependent claims depending therefrom.

C. '021 Patent File History

72. After filing the application that became the '021 patent, the Applicant, on April 14, 2016, filed a preliminary amendment, cancelling the original claims and adding new claims, including claim 21, which issued as claim 1. EX1002, '021 File History at 0255-0260. Claim 21 included a limitation requiring the server to infer the entertainment preferences of the user of the media player device based at least in part on the retrieved plurality of media or retrieved information about said plurality of media:

infer, based at least in part on the retrieved plurality of media or the retrieved information about said plurality of media, one or more entertainment preferences of a user of the media player device;

'021 File History at 0256.

73. After a double patenting rejection over the parent '960 patent, the Applicant filed a terminal disclaimer. '021 File History at 0231-0237, 0215-0216. The Examiner then rejected claim 21 as anticipated by the Spiegelman reference. '021 File History at 0177-0194, 0196.

74. On January 3, 2018, the Applicant amended claim 21 to require the server to infer the user's entertainment preferences based at least in part on the one or more types of media stored on, or accessed by, the portable media player device:

infer, based at least in part on the retrieved ~~plurality of media~~, ~~or~~ the retrieved information about ~~said plurality of the media~~, and one or more plurality of media types of the media stored on or accessed by the portable media player device, one or more entertainment preferences of a user of the ~~media player~~ portable media player device;

'021 File History at 0164.

75. The Applicant also amended dependent claim 22 to identify the plurality of media types used to infer the user's entertainment preferences (i.e., textual, image, music, podcast, and video):

22. (Currently Amended) The one or more ~~NTCRM~~non-transitory computer-readable media of claim 21, wherein the plurality of media types comprises textual media, image media, music media, podcast media, and video media ~~generate a recommendation comprises generate a recommendation based at least in part on a genre of music played at the venue or event of interest and on a music genre preference of the user inferred by the computer server based at least in part on music media stored in, or accessed using, the media player device.~~

'021 File History at 0164.

76. The Applicant argued that “nothing in Spiegelman discloses or suggests that the event recommendations are based on the type of media accessed or stored by the consumer.” '021 File History at 0172.

77. On February 16, 2018, the Examiner agreed that the amendment overcame Spiegelman, but rejected the amended claims 21 and 22 over the combination of Spiegelman and Martin. '021 File History at 0143-0159. With respect to claim 22, the Examiner stated that Spiegelman discloses “wherein the plurality of media types comprises music media, podcast media, and video media” (citations omitted) but not textual media and image media.” '021 File History at 0150. The Examiner then relied on Martin to meet the remaining media types required by claim 22, stating: “However, Martin further discloses: textual media and image media” (citations omitted). The Examiner then explained why it would have been obvious to a POSITA to combine Spiegelman and Martin. '021 File History at 0151. Thus, the Examiner’s understanding of claim 22 was that it required each of the recited media content types, not simply two or more. If the

Examiner's understanding of the claim was that it simply required two or more of the recited media types, then Spiegelman's disclosure of three media types would have been sufficient to reject the claim.

78. On April 10, 2018, the Applicant responded by arguing that, while Martin discloses performing "taste analysis," it does not disclose basing recommendations on the type of media accessed by the user. '021 File History at 0120-0121.

79. On May 16, 2018, the Applicant amended claim 21 to require a plurality of media content types rather than "one or more" media content types:

~~infer one or more entertainment preferences of a user of the portable media player device, based at least in part on the retrieved media, the retrieved information about the media, and one or more a plurality of media content types of the media stored on or accessed by the portable media player device; one or more entertainment preferences of a user of the portable media player device;~~

'021 File History at 0093.

80. The Applicant further clarified, when distinguishing Martin, that claim 21 requires determining a user's preferences for more than one type of media. In contrast, "Martin is only concerned with identifying a user's taste (i.e., preference for a particular genre) for one type of content (e.g., audio/music)." '021 File History at 0101. The Applicant also distinguished Martin on the basis that claim 21 requires the server to rely on a plurality of media content types for determining the user's preferences: "There is no focused and specific examples

within Martin that utilize a plurality of media content types stored or accessed by a user for recommending mediasets to the user or group of users.” ’021 File History at 0101. The Applicant did not dispute the Examiner’s prior interpretation of claim 22.

81. On June 4, 2018, the Examiner agreed that the Applicant’s arguments overcame the Spiegelman-Martin combination, but rejected claim 21 over the combination of Spiegelman and Baudino and claim 22 over the combination of Spiegelman, Baudino, and Martin. ’021 File History at 0065-0080. With respect to claim 22, the Examiner stated that the combination of Spiegelman and Baudino discloses music, podcast, and video media but not textual and image media. The Examiner further stated that Martin discloses textual media and image media and that it would have been obvious to a POSITA to combine Spiegelman with Baudino and Martin. *Thus, the Examiner again interpreted claim 22 as requiring each of the recited media content types.*

82. The Applicant responded by amending claim 21 to incorporate claim 22’s language, with the modification of changing music and podcast media to the broader “audio media.” The recitation of the four media types includes the word “**and**,” indicating that all four media types are required: “wherein the plurality of media content types comprises textual media, image media, audio media, **and** video media.” ’021 File History at 0051. The amended claim 21 is shown below :

21. (Currently Amended) One or more non-transitory computer-readable media (NCRM) comprising instructions written thereon that, ~~in response to~~wherein execution ~~of the instructions~~ by one or more processors of a computer server, is to cause the computer server to:

control receipt of media or information about the media, the media being stored on a portable media player device or accessed using the portable media player device;

infer one or more entertainment preferences of a user of the portable media player device based at least in part on the retrieved media, the retrieved information about the media, and a plurality of media content types of the media stored on or accessed by the portable media player device, wherein the plurality of media content types comprises textual media, image media, audio media, and video media;

access one or more sources of information about venues or events proximal to a current location of the user;

identify at least one of said venues or events as being of interest to the user based at least in part on the one or more entertainment preferences inferred by the server and the current location of the user;

generate a recommendation indicating the identified venue or event as a venue or event of interest to the user; and

control communication of the recommendation to the user.

'021 File History at 0051.

83. The Applicant admitted that “[t]he amendments to claim 21 are based in part on the subject matter previously recited by claim 22.” ’021 File History at 0058. The Applicant pointed out that the Examiner previously conceded that Spiegelman and Baudino fail to disclose textual and image media and that the Examiner had relied on Martin’s disclosure of “e-book” and “picture” to satisfy those media types. The Applicant then argued that it was improper to combine Martin with Spiegelman and Baudino: “It is improper to combine the Martin reference with the Spiegelman and Baudino references because the Martin reference is not considered as a whole and does not suggest the desirability of

making the combination.” ’021 File History at 0059. The Applicant did not contest the combination of Spiegelman with Baudino and did not contest that the combination of Spiegelman and Baudino disclosed audio and video media. ***Thus, the Applicant adopted the Examiner’s interpretation that claim 21 requires each of the recited media types.***

84. On November 6, 2018, the Examiner issued a notice of allowance. ’021 File History at 0030-0039. In the Notice, the Examiner agreed with the Applicant’s argument against combining Martin with Spiegelman and Baudino. ’021 File History at 0030-0039. The Examiner stated: “The combination [sic] Spiegelman and Baudino did not disclose that the Media could comprise textual media and image media. For this the Examiner relied upon Martin.” ’021 File History at 0037. The Examiner further explained that the Applicant’s argument against combining Martin with Spiegelman and Baudino was persuasive. ’021 File History at 0037. Thus, the Examiner once again reiterated that claim 21 was not satisfied without Martin’s disclosure of textual and image media. ’021 File History at 0037-0038. Notably, the Examiner allowed the claims over Spiegelman and Baudino, which in combination taught generating preferences based on “songs, movies, etc.” (i.e., audio and video media). ’021 File History at 0037, 0069-0071. Ultimately, claim 21 issued as claim 1. ’021 File History at 0034-0039, 0045-0046.

D. '960 Patent File History

85. The prosecution history of the parent '960 patent also provides guidance as to the meaning and scope of the challenged claims of the '021 patent.

86. Claim 1 of the originally filed application that led to the '960 patent included a limitation requiring a server to infer a media preference of a user:

wherein the recommendation is based at least in part on the . . .
inferred media preference of a user of the portable media player
device, *wherein the inferred media preference is determined based at
least in part on media stored on or accessed using the portable media
player device.*

EX2001, '960 File History at 0018. The initial version of claim 1 did not require basing the inference of the user's preferences on more than one type of media. '960 File History at 0018.

87. After a rejection by the Examiner, the Applicant amended claim 1:

inferring, by the server, based at least in part on the retrieved one or more of media or
media-associated meta data, one or more entertainment preferences of a user of the portable
media player device;

'960 File History at 0077. The amended claim 1 did not yet require basing the inference of a user's entertainment preferences on more than one of media or media-associated metadata.

88. After another rejection, however, the Applicant further amended claim 1 to require basing the inferred entertainment preferences of the user on a *plurality*

of media or retrieved information about said *plurality* of media.

inferring, by the server, based at least in part on the retrieved ~~one or more of plurality~~
~~of media or the retrieved information about said plurality of media~~ media-associated meta
~~data~~, one or more entertainment preferences of a user of the portable media player device;

'960 File History at 0119.

89. Further, in distinguishing the Ng reference cited by the Examiner, Applicant argued that entering user preference information does not satisfy the *inferring* portion of this claim limitation: “Thus, Ng teaches that a user ‘preference’ is either *entered by the user* of the device . . . or is *inferred based on the user’s location*” ’960 File History at 00131.

90. After further rejections (but no further amendment to this limitation), the Applicant appealed to the PTAB ’960 File History at 0217-0245. In the Board’s decision, the panel addressed the inferring step, finding:

The recited step of “inferring, by the server, based at least in part on the retrieved plurality of media or the retrieved information about said plurality of media, one or more entertainment preferences of a user of the portable media player device” infers the user preferences based on the retrieved media or the retrieved information about the retrieved media. **In other words, “entertainment preferences of a user” are not the recited basis for the “inferring”; instead, those preferences are themselves inferred.** Considering the proper interpretation of the disputed claim limitation, the Examiner has not identified any teachings in Ng that would meet the claimed step of inferring.

'960 File History at 0299 (emphasis added). Claim 1 of the '960 patent then issued with this language.

VIII. CLAIM CONSTRUCTION

A. Claim Construction Principles

91. I understand that the first step in determining patentability of claims is to properly construe them. I understand that the words of a claim are generally given their ordinary and customary meaning, which I understand is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention. I understand that the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification.

92. I understand that certain terms used in the claims of a patent may require construction to clarify their meaning. I understand that claim construction first turns to the “intrinsic evidence,” which consists of the claims themselves, the specification, and the prosecution history. I understand that the claims can provide helpful context for how the claim term is used. I understand that the specification is highly relevant to the claim construction analysis and usually dispositive concerning the meaning of a claim term. I further understand, however, that it is

inappropriate to import limitations from preferred embodiments recited in the specification into the claim language.

93. I understand that “extrinsic evidence” may also be considered when determining the meaning of a claim or a term used in the claim. I understand that there are different sources of extrinsic evidence, including dictionaries, inventor testimony, expert testimony, and learned treatises. I understand that intrinsic evidence is generally favored over extrinsic evidence, and that extrinsic evidence may not be used to contradict the meaning of the claim term when read in light of the intrinsic evidence.

94. I understand that the words of a claim are generally given their ordinary and customary meaning as understood by a person of ordinary skill in the art when read in the context of the specification and prosecution history. I understand that an exception to this rule is where a patentee acts as a lexicographer to set out a definition of a claim term. I understand that to act as a lexicographer, a patentee must clearly set forth a definition of the disputed claim term other than its plain and ordinary meaning. I understand that to find lexicography, the patentee must clearly express an intent to redefine the term.

B. “wherein the plurality of media content types comprises textual media, image media, audio media, and video media”

95. Claim 1 recites in part “One or more non-transitory computer-readable media (NTRM) comprising instructions written thereon, wherein

execution of the instructions by one or more processors of a computer server is to cause the computer server to:” Limitation [1.1.2] recites the following:

infer one or more entertainment preferences of a user of the portable media player device based at least in part on the retrieved media, the retrieved information about the media, and a plurality of media content types of the media stored on or accessed by the portable media player device, wherein the plurality of media content types comprises textual media, image media, audio media, and video media;

’021 Patent at Claim 1.

96. With respect to the term “wherein the plurality of media content types comprises textual media, image media, audio media, and video media,” it is my opinion that all four media types are required by the plain meaning of the claim in light of the specification and file history. Looking at the claim language itself, the words “comprising” and “and” in this term indicate that all four media types are required. This interpretation is supported by the intrinsic record. At least the following statements made by the Applicant and Examiner during prosecution of the ’021 Patent indicate that they agreed with and relied on this interpretation:

- “Regarding claim 22: ... Spiegelman further discloses: wherein the plurality of media types comprises music media, podcast media, and video media. Spiegelman does not disclose: textual media and image media. However, Martin further discloses: textual media and image media.” (citations omitted). ’021 File History, 0150-0151.

- “Regarding claim 22: ... The combination [sic] Spiegelman and Baudino further discloses: wherein the plurality of media types comprises music media, podcast media, and video media. The combination [sic] Spiegelman and Baudino does not disclose: textual media and image media. However, Martin further discloses: textual media and image media.” (citations omitted). ’021 File History, 0074-0075.
- “The amendments to claim 21 are based in part on the subject matter previously recited by claim 22. The Office Action at page 10 concedes that *Spiegelman* and *Baudino* fail to disclose ‘textual media and image media’ previously recited by claim 22. However, the Office Action at page 10 asserts that *Martin* ... discloses ‘e-book’ and ‘picture.’ By rejecting claim 22 in this manner, the Office Action is misapplying the law regarding motivation to combine, and the Office Action has failed to set forth a prima facie case of obviousness for at least the reasons discussed below. ... It is improper to combine the *Martin* reference with the *Spiegelman* and *Baudino* references because the *Martin* reference is not considered as a whole and does not suggest the desirability of making the combination.” ’021 File History, 0058-0059.

- “The combination of Spiegelman and Baudino did not disclose that Media could comprise textual media and image media. For this the examiner relied upon Martin. In the remarks received 8/31/2018 the applicant argued improper hindsight in combining these references. The examiner was persuaded by applicant’s remarks[.]” ’021 File History, 0058.

97. The other independent claims – claims 10 and 16 – include similar limitations:

the inferred preferences are based at least in part on the accessed media, media content types of the accessed media from among a plurality of media content types, and information about the accessed media, wherein the plurality of media content types comprises textual media, image media, audio media, and video media, and
’021 Patent at Claim 10, element [10.4.2].

infer one or more preferences of a user of the portable media player device based at least in part on the received media or the information about the media, and media content types of the media accessed by the portable media player device from among a plurality of media content types, wherein the plurality of media content types comprises textual media, image media, audio media, and video media;
’021 Patent at Claim 16, limitation [16.2.1].

98. It is my opinion that these limitations in claims 10 and 16 also require each of the four recited media content types.

99. In his declaration, Dr. Houh did not provide an opinion as to whether all four media types are required. Additionally, in his deposition, he testified that he does not have an opinion as to whether all four media types are required:

Q So you don't know whether the plain and ordinary meaning of this claim term requires the four recited media types?

A My point here is in my declaration. It was not necessary to address that particular claim construction issue. I understand that could be addressed in claim construction. ...

EX2009, Houh Dep. Tr. at 65:10-16.

C. “infer one or more entertainment preferences of a user ...”

100. Claim 1 recites “infer[ring] ... entertainment preferences of a user ... based at least in part on the retrieved media, the retrieved information about the media, and a plurality of media content types.” ’021 Patent at Claim 1. The plain language of the claim requires that the entertainment preferences be inferred. The plain and ordinary meaning of “infer” is “to derive as a conclusion from facts or premises.” EX2019 at 1. If a user preference is explicitly provided, as in Sasaki for example, then this preference is not derived from anything—let alone “based at least in part on the retrieved media, the retrieved information about the media, and a plurality of media content types,” as claimed—and accordingly is not inferred. ’021 Patent at Claim 1.

101. This construction is consistent with Applicant’s statements regarding a similar “inferring” limitation made during prosecution of the parent ’960 patent

to distinguish the Ng reference. As discussed above, Applicant distinguished the Ng reference by stating, “Ng teaches that a user ‘preference’ is either entered by the user of the device . . . or is inferred based on the user’s location.” ’960 File History at 0131. The Applicant, thus, argued against a claim scope that covers the user simply providing user preference information or inferring the preferences based on something other than “the retrieved media, the retrieved information about the media, and a plurality of media content types,” as claimed. ’960 File History at 0131. Patent Owner’s construction also is consistent with the Board’s finding regarding the parent ’960 patent claims. On appeal from a final rejection, the Board found that “‘entertainment preferences of a user’ are not the recited basis for the ‘inferring’; instead, *those preferences are themselves inferred.*” ’960 File History at 0299 (emphasis added).

102. This interpretation is also consistent with the specification. The specification provides an example where the user’s interest in the “alternative rock” music genre is inferred. ’021 Patent at 2:66-3:4. The inference is based on (i.e., derived from) “media of an alternative rock or like genre stored on and/or accessed via his portable media player device.” ’021 Patent at 2:66-3:4. The specification does not provide any examples where the word “infer” is used to mean a user explicitly providing a user preference.

103. The institution decision suggests that the claims can encompass “forming inferences based on known or stored preferences.” DI at 24 n.8. Claim 1, however, requires that the user preferences themselves are inferred, not that they form the basis of the inference.

104. The institution decision also suggests that Sasaki discloses inferring an entertainment preference of a user by determining what content would match the generic keywords disclosed and that any distinction of Ng would not have disavowed this type of inference:

Different users for example, may have different (subjective) opinions of what “entertainment preference” arises from generic key words such as ROCK and LOVE, so that a match by the server of such a generic word provided by different users is an inference of an entertainment preference. On this preliminary record, Patent Owner does not explain sufficiently that it disavowed this type of an inference during prosecution, but Patent Owner will have an opportunity to clarify the issue during trial.

DI at 26. For this distinction of Ng to be as narrow as the Board implies, a user “preference” would need to be an exhaustive list of every piece of media content that falls within the user’s taste. Anything short of an exhaustive list would require the server to perform some “inference” to determine whether a specific media item falls within the user’s preferences. This interpretation is contrary to how a POSITA would understand the applicant’s statement distinguishing Ng. In distinguishing

Ng, the Applicant distinguished user preference information entered by the user.

'960 File History at 0131. The specification makes clear that a music genre, such as ROCK or LOVE, is such a user preference. '021 Patent at 2:66-3:4 (teaching an inferred interest in the “alternative rock” music genre). Thus, because Sasaki discloses user preference information entered by the user, the distinction of Ng applies to Sasaki.

105. Accordingly, in order to meet the plain language of the claims, the recited “entertainment preferences of a user” cannot simply be provided by the user or inferred from other known or stored preferences, but rather, must be “*infer[red]* ... based at least in part on the retrieved media, the retrieved information about the media, and a plurality of media content types.” '021 Patent at claim 1.

106. The other independent claims – claims 10 and 16 – include similar limitations:

... one or more inferred preferences of the user ...
'021 Patent at Claim 10, element [10.4.1].

infer one or more preferences of a user ...;
'021 Patent at Claim 16, limitation [16.2.1].

107. It is my opinion that these limitations in claims 10 and 16 also require the one or more user preferences to be derived rather than explicitly provided.

IX. PRIOR ART PUBLICATIONS CITED BY THE PETITIONER

A. U.S. Patent Application Publication No. 2006/0250994 A1 ("Sasaki")

108. U.S. Patent Application Publication No. 2006/0250994 is entitled "Content Recommendation System and Method, and Communication Terminal Device." It was published by Sasaki, Sako, Terauchi, Inoue, Takehara, Yamashita, Miyajima, Nakamura, Matsuda, and Asukai on November 9, 2006. It claims priority to a Japanese Patent Application No. JP 2005-090696, filed on March 28, 2005.

109. Sasaki generally relates to a system for recommending content for two connected communication devices in which the recommended content is transmitted from a first communication device and received by a second communication device.

According to the content recommendation system, according to the embodiment, piece of content recommendation information, selected from among pieces of content recommendation information stored in storage means of a first communication device, is transmitted by transmitting means, whereby the piece of content recommendation information is provided to a second communication device, connected to the first communication device. In addition, receiving means of the second communication device receives the piece of content recommendation information from the first communication device,

and the received piece of content recommendation information is stored in storage means of the second communication device.

Sasaki at ¶12.

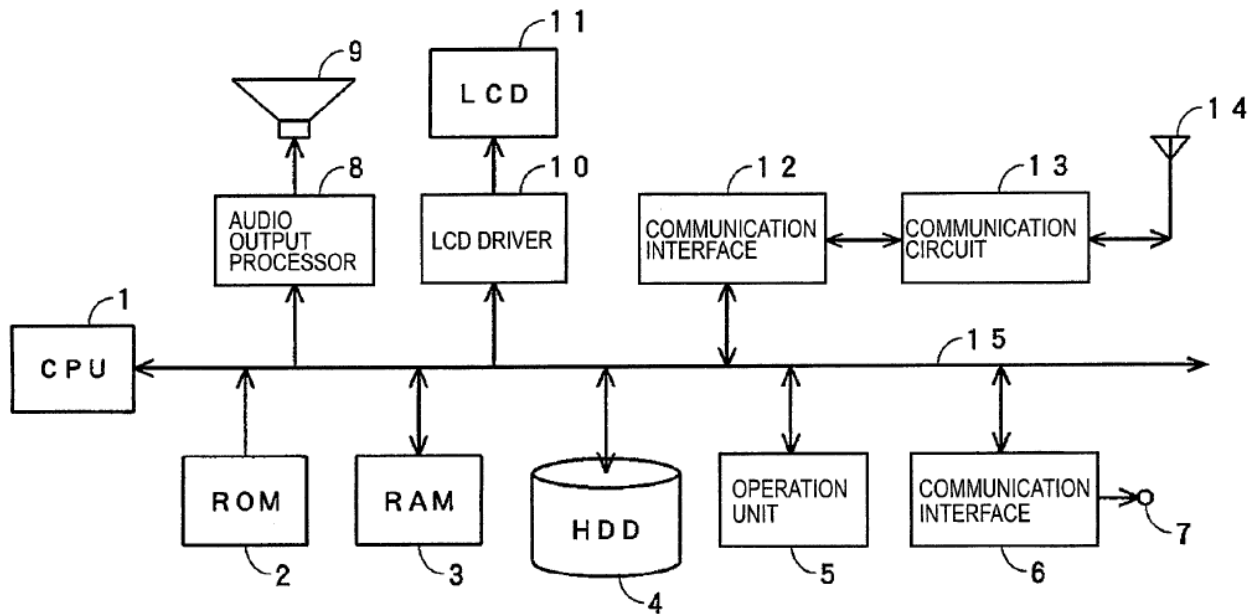
110. Sasaki discloses two distinct embodiments, called “First Embodiment” (Sasaki at Page 3) and “Second Embodiment” (Sasaki at Page 10). The specification discusses the two embodiments in separate sections with separate headings. Sasaki at Pages 3, 10.

1. Sasaki’s First Embodiment

111. Sasaki’s first embodiment is described by the following heading: “1. First Embodiment (Transmission and Reception of Content Recommendation Information by Two Terminal Devices).” Sasaki at Page 3. This embodiment discloses two terminal devices communicating with each other. Sasaki at ¶¶29-111.

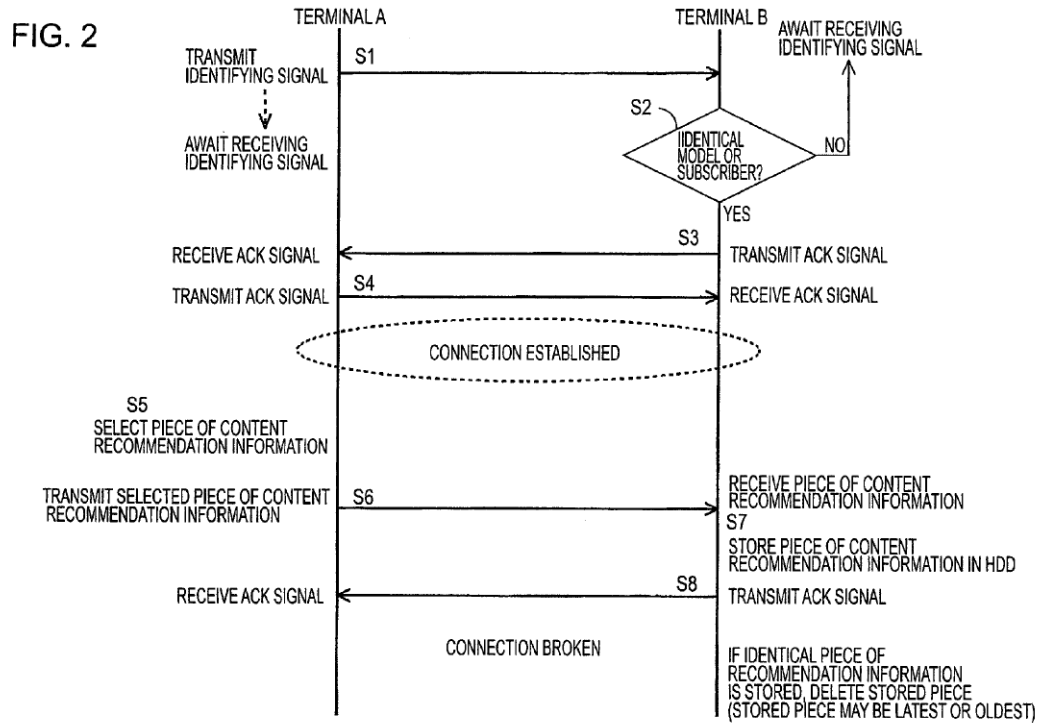
112. Subsection 1-1 describes the terminal devices themselves. Sasaki at ¶¶29-50. Sasaki discloses a block diagram of a terminal device, including a central processing unit (CPU), “a central processing unit (CPU) 1, a read-only memory (ROM) 2, a random access memory (RAM) 3, a hard disk drive (HDD) 4, an operation unit 5, a communication interface 6, a communication terminal 7, an audio output processor 8, a speaker 9, an LCD (liquid crystal display) driver 10, an LCD 11, a communication interface 12, a communication circuit 13, and a transmitting/receiving antenna 14.” Sasaki at ¶29. This is illustrated in Figure 1.

FIG. 1



Sasaki at FIG. 1.

113. Subsection 1-2 describes the operation of the terminal devices, through an example involving terminal devices A and B. Sasaki at ¶¶50-82. Terminal devices A and B each intermittently emit a unique identifying signal. Sasaki at ¶52. When the two devices are within a predetermined distance, they begin a process to establish a connection. Sasaki at ¶53. As depicted in Figure 2, at step S1, terminal device A sends an identifying signal that is received by terminal device B. Sasaki at ¶54. At step S2, terminal device B determines whether or not terminal device A is an identical model as terminal device B or a subscriber to a service. Sasaki at ¶55. If so, in steps S3 and S4 terminal devices A and B send and receive acknowledgement signals and establish a connection. Sasaki at ¶¶56-57.



Sasaki at FIG. 2.

114. Once a connection is established at step S5, Terminal Device A selects a piece of content recommendation information and at step S6, transmits it to Terminal B. Sasaki at ¶¶57, 59. Sasaki teaches that terminal device A can include additional information with the content recommendation information, such as the name, date and time of transmission, and “place of transmission.” Sasaki at ¶59. Sasaki teaches that, if the terminal has a built-in GPS, the GPS information or latitude and longitude of the terminal can be transmitted as “place of transmission” information. Sasaki at ¶69. Sasaki also teaches that a terminal device can convert numerical longitude and latitude information into map information and that place

of transmission can also be determined by using radio waves from nearby cellular base stations. Sasaki at ¶¶80-81. Figure 3B illustrates exemplary content recommendation information along with date and time, place of transmission, recommender, and sample data. Sasaki at ¶71.

FIG. 3B

DATE AND TIME	PLACE	RECOMMENDER	RECOMMENDATION COMMENT INFORMATION, ETC.	SAMPLE
12/15/2004, 10:30	FRONT GATE AT TDL	○○, TARO	THIS VIEW, MOUNT FUJI! BEAUTIFUL!	MtFuji.jpg
12/24/2004, 19:00	XX HOTEL, LOBBY	SATO, ΔΔ	MOST FAVORITE CHRISTMAS MUSIC	Santa'sComing.mp3
12/25/2004, 09:15	TOKYO STATION	MIKE □□	MOVING LOVE STORY STARRING X□ KEIKO	Romacne.mpg
12/31/2004, 20:45	MEIJI SHRINE	○Δ, JIRO	IN THIS MYSTERY NOVEL, MYSTERY IS UNSOLVED TO THE LAST.	(none)

Sasaki at FIG. 3B.

115. Sasaki further teaches that the user of a terminal device can enter entertainment preference information, so that the device can selectively use pieces of content recommendation information. Sasaki at ¶73. An example of user preference information, including information such as music genre and artist name, is shown in Figure 3C. Sasaki at ¶73.

FIG. 3C

CONTENT TYPE	PREFERENCE KEY WORDS
MUSIC	MIKE XXXXX; ROCK; BEATLES; LOVE
PHOTOGRAPH	MOUNT FUJI; NIGHT VIEW; LANDSCAPE; PROSPECT; MOUNTAINS, SEA, SKY; DUSK; SUNSET

Sasaki at FIG. 3C.

116. Subsections 1-3 of Sasaki describes a variant of the first (terminal-to-terminal) embodiment in which terminal A transmits a piece of content

recommendation information together with the identifying signal. Sasaki at ¶84.

Upon receiving the identifying signal from terminal A, terminal B automatically checks whether the recommendation information from terminal A matches the preference information entered by the user of terminal B. Sasaki at ¶84. If there is a match, terminal B stores the content recommendation information sent by terminal A. Sasaki at ¶¶86-87. Alternatively, terminal A transmits content recommendation information after the connection with terminal device B is established. Sasaki at ¶90. At that time, terminal device B automatically checks whether the content recommendation information includes information that matches the user preferences recorded in terminal device B. Sasaki at ¶90. If so, the content recommendation information is stored. Sasaki at ¶90.

117. Subsection 1-4 of Sasaki describes another variant of the first (terminal-to-terminal) embodiment in which terminal device A provides content recommendation information only in response to a request of terminal device B. Sasaki at ¶94. After a connection is established between terminal devices A and B, terminal device B transmits user preference information to terminal device A. Sasaki at ¶98. After receiving the preference information from terminal device B, terminal device A searches the content recommendation information in the hard drive of terminal device A and determines whether it matches the user preference information received from terminal device B. Sasaki at ¶99. If there is a match,

terminal device A selects the matched content recommendation information and transmits it to terminal device B. Sasaki at ¶100. If not, terminal device A breaks the connection with terminal device B without sending content recommendation information. Sasaki at ¶99.

118. Subsection 1-5 of Sasaki describes another variant of the first (terminal-to-terminal) embodiment in which terminal devices A and B transmit content recommendation information to each other in a bidirectional manner before terminating the connection. Sasaki at ¶¶103-104.

2. Sasaki's Second Embodiment

119. Sasaki additionally discloses a second embodiment in which one of the terminal devices is replaced by a server at a “service spot,” which is a predetermined area such as a bookstore museum or other attraction. Sasaki at ¶¶112-114. The server provides content recommendation information to a user's terminal device and the terminal device receives and stores the content recommendation information. Sasaki at ¶115. The server architecture is similar to the architecture of the communication terminal with the absence of four components: the audio output processor 8; speaker 9; LCD driver 10; and LCD 11. Sasaki at ¶113.

120. Sasaki teaches an example where terminal device A is replaced by the server. Terminal device B intermittently transmits an identifying signal. Sasaki at

¶116. The server is in a state of awaiting receiving an identifying signal from a terminal device. Sasaki at ¶117. When the server receives the identifying signal from terminal device B, it determines whether or not the identifying signal has been transmitted from a “normal member.” Sasaki at ¶117. If so, a connection is established between the server and terminal device B. Sasaki at ¶118. After the connection is established, the server determines whether it stores content recommendation information that matches a preference of the user of terminal device B. Sasaki at ¶119. If there is a match the server transmits the content recommendation information to terminal device B. Sasaki at ¶120.

121. Sasaki teaches that the user preference information can be uploaded to the server from a personal computer using the Internet. Sasaki at ¶128. Alternatively, a user’s preference information can be transmitted to the server from a terminal device. Sasaki at ¶130.

B. U.S. Patent Application Publication No. 2005/0020223A1 (“Ellis”)

122. U.S. Patent Application Publication No. 2005/0020223 is entitled “Enhanced Radio Systems and Methods.” It was published by M. D. Ellis and C. S. Ellis on January 27, 2005. It claims priority to U.S. Provisional Patent Application No. 60/270,463, filed February 20, 2001.

123. Ellis generally relates to an enhanced radio system (ERS) that can capture and play broadcast radio stations. EX1005, Ellis at Abstract.

124. The user (of the system) may tune to a station, scan through stations, rewind to hear what was missed and fast-forward through unwanted content, as well as perform other actions as noted below. Ellis at Abstract.

The user may tune to a station, or scan through stations, rewind to hear what was missed (even while the system is turned off), and fast-forward through undesired content. The system allows a user to rate content, and to be notified when that content is being played on any station. The system may recognize content as it is broadcast and may jump to desirable content, save a copy of desirable content, or skip over undesirable content. The system may make radio station recommendations. The system may support multiple sets of configuration information to allow its use by multiple listeners and in multiple locations. The system allows the user to respond easily to radio content, download and upload audio content, and send radio content to another user. The system may allow a user to download information about content that the user wishes to record a copy of. The system may include security features to prevent the unauthorized downloading, uploading, and saving of copies of the radio content. The system may provide other radio related and radio content related information. The system may provide a karaoke mode. The system may also allow the user to integrate a telephone with the radio. The system may report usage information to a collection facility.

Ellis at Abstract.

125. Ellis discloses an illustrative block diagram of such a system. Ellis at ¶59, FIG. 1 (shown below).

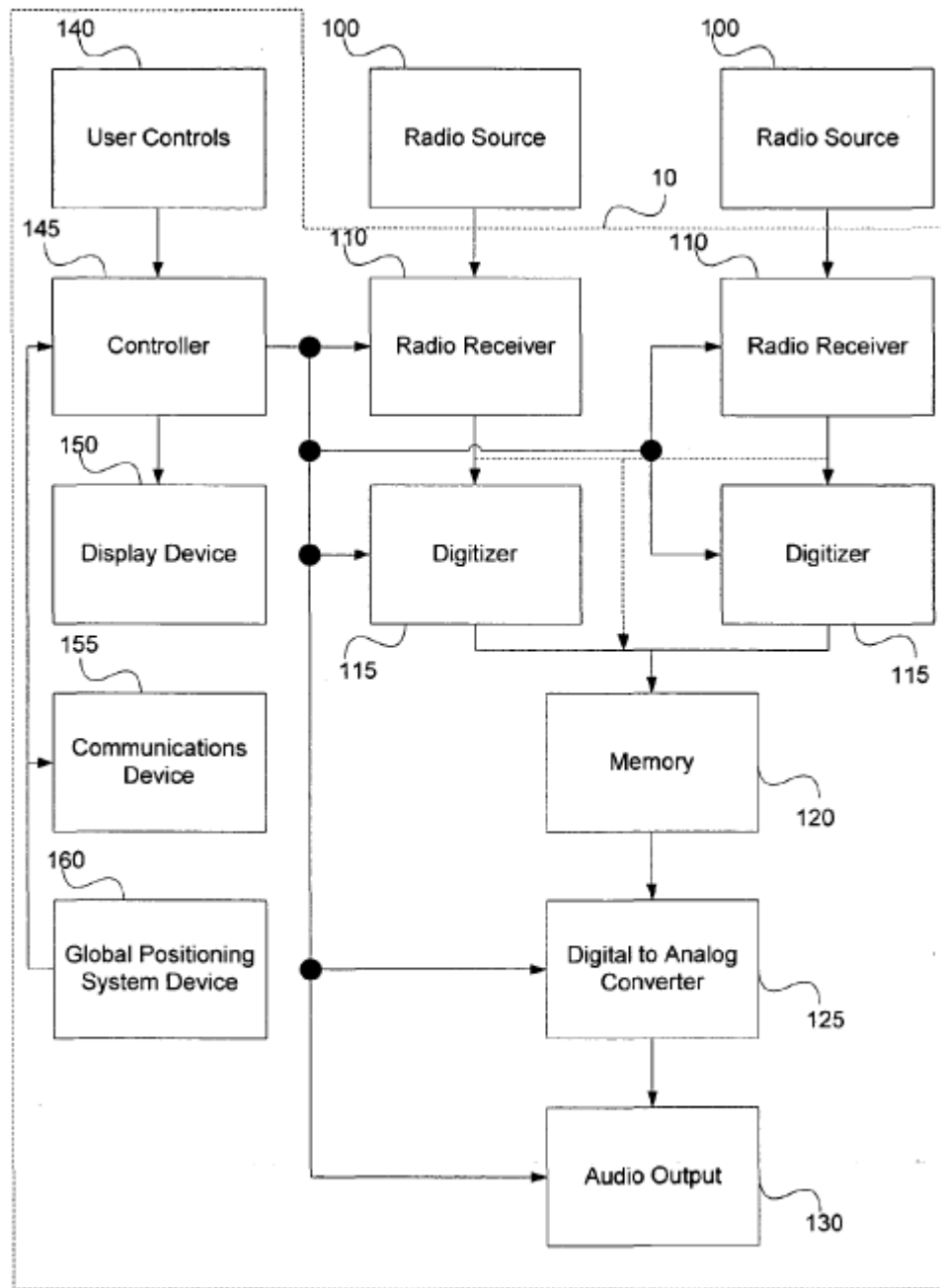


FIG 1

Ellis at FIG. 1.

126. The system comprises a radio receiver 110 that can be controlled by a controller 145.

127. The ERS can convert analog radio signals to digital format using digitizer 115. Ellis at ¶140. User controls allow the user to control and display information. The ERS may receive internet radio. Ellis at ¶142.

128. The ERS may contain communications device 155 for communicating over a variety of communications media. Ellis at ¶144.

129. The ERS may contain a GPS device 160 which the ERS can use to determine its location. Ellis at ¶145.

130. The ERS may compare information about the user's likes and dislikes with information about radio stations to create recommendations. The user may enter information about her likes and dislikes. This information may be obtained automatically, by monitoring the content she listens to. Ellis at ¶42.

131. The ERS may obtain information about a station from an in-band signal, or over a separate communication channel. Information may be downloaded from a databased of station characteristics over an Internet connection. The ERS may monitor the content of the station to compare with user's preferences. Ellis at ¶43.

X. THE PETITION AND HOUH DECLARATION FAIL TO SHOW THAT A POSITA WOULD HAVE COMBINED THE CITED REFERENCES AND EMBODIMENTS

A. A POSITA Would Not Have Sought to Combine Sasaki and Ellis

132. In 2007, the time of the invention of the challenged patent, a POSITA would not have been motivated to combine Sasaki and Ellis. At the time of the invention, portable devices were not as compact as they are today.

133. Ellis relates to an Enhanced Radio System (ERS), for playing audio media. Ellis teaches that the ERS can receive audio media in a number of different ways, including AM, FM, Internet, cable, and satellite. Ellis at ¶140. Each of these ways of receiving audio content requires various related components, such as receivers, digitizers, and antennas. Ellis at ¶¶140, 141, 147, FIGs. 1-3. Additionally, the ERS can have an integrated CD player and play audiotapes. Ellis at ¶¶212, 448. Thus, the ERS of Ellis is highly specialized for receiving and playing a variety of types of *audio* media.

134. The terminal device of Sasaki is, in contrast, a device in which design choices were made to accommodate a variety of media types. The terminal device of Sasaki includes a speaker for audio playback and a screen that can display images and video. Sasaki at ¶¶1, 46. A POSITA would have understood at the time of the invention that the hard drive of Sasaki would need to be substantial to accommodate video data. Sasaki at ¶1. A tradeoff is that the terminal device of

Sasaki cannot receive media content in as many ways as the ERS of Ellis. Sasaki teaches that media content would be saved to the terminal device from an external device such as a personal computer:

The terminal device according to this embodiment can receive audio data such as music, and image data such as still images and video, for example, from an external device such as a personal computer connected through the communication interface 6 and the communication terminal 7, and can record and store the audio data and the image data in the HDD 4.

Sasaki at ¶45.

135. Except for “sample” data, Sasaki does not disclose that the terminal device receives media content over wireless communication channels or via cable. There is no disclosure in Sasaki of receiving AM, FM, Satellite or Cable Radio.

136. Sasaki does disclose an antenna for wireless communication. Sasaki at ¶¶41, 48. Sasaki teaches that the terminal device uses the antenna to communicate with another terminal device to send and receive recommendation information or with a server to receive recommendation information. Sasaki at ¶¶52-60, 116-121. While Sasaki discloses that recommendation information can include “sample” data, this is not the primary way in which media is received by the device. Sasaki at ¶¶22, 132. Instead, Sasaki teaches that a user would purchase media content, for example via the Internet using a personal computer. Sasaki at ¶¶9, 132. The media

would then be transferred from the personal computer to the portable terminal device. Sasaki at ¶45.

137. A POSITA would have understood that it would not be feasible to include all of the equipment for receiving audio media in the various ways that Ellis discloses and the components for storing and displaying image and video media that Sasaki discloses.

138. Further, the disclosure of Ellis contrasts audio and video media. Ellis at ¶6. According to Ellis, radio listeners and television viewers have different needs:

Radio listeners typically have different needs than television viewers. For example, television viewing typically happens in a fixed environment in a home, while radio listening often happens in varied, often mobile, environments. People may listen to the radio in a shower. People often listen to radio in a car, or carry a radio on their person as they pursue other activities. A television viewer may sit and watch a program through its completion. A radio listener more often listens casually while pursuing other activities, and may often switch between stations based on hearing a short duration item, such as a song, commercial, or traffic/weather report. Program schedules are quite important to television viewers, but are rarely used by radio listeners.

Ellis at ¶6.

139. Ellis also teaches that video requires more storage resources than audio and that audio components are less expensive than video components:

Because digitized audio content requires much less memory than digitized video content, it is less expensive to store a significant amount of radio content. A radio tuner is also less costly than a television tuner, so a system that monitors multiple radio stations at once is quite feasible. Because a radio listener is quite likely to be interested in the programming on multiple radio stations at the same time, a system with multiple tuners and significant but inexpensive memory is also quite useful.

Ellis at ¶10.

140. As discussed above, at the time of the invention, there would have been very different tradeoffs when designing a portable multi-media device as opposed to an audio-only device. Due to less compact and costlier components at the time of the invention, a POSITA would have been constrained in adding components to a portable device. Further, as Ellis teaches, video viewers and audio listeners have different needs.

141. Another key difference between Sasaki and Ellis is that Sasaki relates strictly to content recommendation. “The present invention relates to a system, device, and method for providing recommendation information concerning various types of content, Such as music content and audio/visual (AV) content[.]” Sasaki at [0003]. The disclosures in Sasaki relate to how two embodiments operate to

provide content recommendations: a First Embodiment featuring two terminal devices in communication, and a Second Embodiment, featuring a server at a service spot communicating with a terminal device. The second embodiment discloses the server in communication with more than one terminal device. Sasaki at ¶¶123-125.

142. In Sasaki, there is no discussion of venues, events, or facilities.¹ This is based on Sasaki's interest in providing content recommendations to users. Any location information that is collected is for the purpose of enhancing the content recommendations. Sasaki at ¶¶59, 68. For example, Sasaki discloses collecting the date and time of transmission, as well as the GPS location information, and perhaps the owner name, all intended to enhance the recommendation. Sasaki at ¶¶59, 68. Sasaki has no interest in venues or events. The only reason to add functionality for venues and events to Sasaki is the application of hindsight, to stitch together disclosures that offer features of the Patent in Review.

143. Due to these differences, a POSITA would not have looked to Ellis to improve the teachings of Sasaki.

¹ Sasaki at ¶114 discussed facilities where the service spot may be located.

There is no discussion of facilities used for events or venues.

B. Dr. Houh's Declaration Does Not Explain Why A POSITA Would Have Been Motivated to Combine Sasaki's Two Embodiments

144. As I discuss below, Dr. Houh relies on disclosures related to Sasaki's first and second embodiments throughout his declaration. As I discussed in detail above in Section IX.A, Sasaki's two embodiments are distinct.

145. Sasaki's first embodiment relates to portable terminal devices communicating with each other. In that embodiment, the terminal devices establish a connection with each other and send content recommendation information to each other. The first embodiment teaches that the content recommendation information can be transmitted with additional information, such as date and time, identifying information of the sender, and place of transmission information.

146. Sasaki's second embodiment relates to a server communicating with a portable terminal device. In the second embodiment, the server and terminal device establish a connection and the server transmits content recommendation information to the terminal device. There is no disclosure of the terminal device sending content recommendation information to the server.

147. Disclosures related to Sasaki's first embodiment do not necessarily apply to the second embodiment. In fact, Sasaki expressly states, "***Differently from the above-described first embodiment*** in which content recommendation information is transmitted and received between terminal devices to which an embodiment of the present invention is applied, in a second embodiment of the

present invention, content recommendation information is transmitted and received between a server at a service spot and a terminal device. In the second embodiment, a system and method according to embodiments of the present invention are applied.” Sasaki at ¶112 (emphasis added). Dr. Houh’s declaration ignores the issue of Sasaki’s two distinct embodiments. Dr. Houh does not explain why a POSITA would have been motivated to combine the two embodiments or otherwise explain how disclosures regarding Sasaki’s second embodiment relate to Sasaki’s first embodiment, and vice versa.

XI. THE HOUH DECLARATION AND THE PETITION FAIL TO SHOW OBVIOUSNESS OF THE ’021 PATENT’S CLAIMS

A. Claim 1 of the Patent in Review

1. Claim limitation [1.1.2]

infer one or more entertainment preferences of a user of the portable media player device based at least in part on the retrieved media, the retrieved information about the media, and a plurality of media content types of the media stored on or accessed by the portable media player device, wherein the plurality of media content types comprises textual media, image media, audio media, and video media;

148. As discussed above in Section VIII.B, this limitation requires the server to infer a user’s entertainment preferences based at least in part on each of the four recited media content types: textual media, image media, audio media, and video media. Dr. Houh’s declaration does not establish that the cited prior art renders this limitation obvious.

149. Ellis teaches an Enhanced Radio System (ERS) that relates to audio content only. Ellis states that “this invention relates to enhanced radio reception and processing features, utilizing multiple radio receivers, digital storage of radio content, independent control of radio reception and playback, listener profiles, and two-way communication features.” Ellis at ¶2.

150. The examples cited in the Petition each refer to determining preferences based on what a user has *listened to*:

The system may also monitor the content *listened to* by the user, and automatically determine the groups liked and disliked

Ellis at ¶212.

The system may also determine user preferences automatically by monitoring what content the user *listens to*.

Ellis at ¶185.

In step 2220, the system may determine user information automatically by monitoring the content the user *listens to*. For example, the system may add points to a specific song, artist, genre, or other type of item or grouping, based on the user *listening to* an entire item.

Ellis at ¶221; Pet. at 34-35.

151. Additionally, Ellis repeatedly refers to users of the ERS as “listeners” including the following examples:

Radio *listeners* typically have different needs than television viewers.

Ellis at ¶6.

Since radio *listeners* frequently sing along ...

Ellis at ¶13.

Radio *listeners* often listen in multiple environments—in different rooms of the house, in the car, in the office, and using a portable system.

Ellis at ¶16.

Radio *listeners* also need an Internet environment to coordinate their enhanced radio listening activities.

Ellis at ¶17.

The *listener* may send messages 4242 to other listeners and receive messages from other listeners[.]

Ellis at ¶138.

[A] radio station may decide to highlight and group a set of songs that may appeal to a subset of its *listeners*.

Ellis at ¶215.

152. Additionally, Ellis discloses four embodiments in Figures 6A-6D, relating to a car dashboard (Figure 6A), portable (6B), home/office device (6C), and shower device (6D) embodiments. Ellis at FIGS. 6A-6D, ¶¶65, 155-158. Each embodiment discloses playing only audio content. The dashboard embodiment connects to a sounds system. Ellis at FIG. 6A, ¶155. The portable embodiment connects to headphones. Ellis at FIG. 6B, ¶156. The home/office embodiment connects to speakers. Ellis at FIG. 6C, ¶157. The shower device embodiment depicts tuning in to an AM radio station. Ellis at FIG. 6D.

153. In both of Sasaki's embodiments, the user of the portable terminal device expressly provides user preference information. With respect to the first (terminal-to-terminal) embodiment, Sasaki teaches that preference information of a user of the portable terminal device is entered:

As shown in FIG. 3C, *by entering*, in the preference information area of the HDD 4, *preference information including content types and preference keywords of the user of the terminal device*, and using the preference information to selectively use pieces of content recommendation information, only a piece of content recommendation information that matches user's preferences can be obtained.

Sasaki at ¶73 (Emphasis added).

154. With respect to Sasaki's second embodiment, Sasaki teaches that the user of a terminal device can provide preference information by using a personal computer connected to the Internet or by transmitting it from the terminal device itself:

Updating of the preference information recorded in the server can be performed, for example, *by using a personal computer* at a home to access a service site through a network such as the Internet.

Sasaki at ¶128 (Emphasis added).

In addition, it is also possible to perform updating information in a server by *transmitting user's latest preference information from a terminal device to the server*, and providing content recommendation information corresponding to the latest preference information.

Sasaki at ¶130 (Emphasis added).

155. Sasaki's disclosure of a user expressly providing user preference information as described above does not constitute "inferring" a user's preferences because they are not *derived*, as required by the plain meaning of the claim language.

156. Dr. Houh's declaration and the Petition do not allege that Ellis discloses inferring a user's preferences based on any type of media other than audio media. EX1003, Houh Decl. at ¶¶88-95; Pet. at 34-36. Dr. Houh alleges that Ellis discloses techniques for inferring a user's preferences. Houh Decl. at ¶¶88-93 (citing Ellis at ¶¶221, 185, 212); Pet. at 34-36. However, each of these techniques for determining a user's preferences relates to audio media, the only type of media content that Ellis's system relates to.

157. Dr. Houh's declaration and the Petition also state that Ellis teaches "determining the user's preferences a 'specific group of content' that 'may be based on type of content.'" Houh Decl. at ¶94 (citing Ellis at ¶¶212, 214); Pet. at 35. Dr. Houh and the Petition further states that "[g]roups of content can include songs, commercials, genre, artist or other criteria." Houh Decl. at ¶94. It is necessary to clarify that where Ellis states "type of content" it means type of *audio content*. Ellis's paragraph 212 relates to Figure 18, which "shows an illustrative process for supporting groups of items of *audio content*." Ellis at ¶212 (emphasis

added). The entire discussion of Ellis's paragraph 214 relates to Figure 19, which also relates to "grouping items of *audio* content." Ellis at ¶213 (emphasis added).

158. Dr. Houh's declaration and the Petition state that Sasaki discloses a system that "collects information about different media content types, such as 'music,' 'still pictures,' 'video,' and 'text.'" Houh Decl. at ¶94 (citing Sasaki at ¶74); Pet. at 35-36. Dr. Houh's declaration does not allege Sasaki discloses inferring a user's preferences. Houh Decl. at ¶¶88-95. Dr. Houh admitted in his deposition that he is relying on Ellis, not Sasaki, for the disclosure of determining a user's preferences:

Q But I want to make sure I understand what you're relying on here and what your opinions are. So is it your opinion that Sasaki discloses the "infer" limitation?

A I'm using Ellis as the reference in this combination that provides the disclosure for "inferring one or more entertainment preferences of a user of the portable media player device based at least in part on the retrieved media." Because it's Ellis that discusses monitoring the content listened to by the user and automatically determine the groups liked and disliked by the user. And then it's Ellis teaching about determining the user preferences that really is what's bringing in that in the prior art, that renders this claim element obvious.

Houh Dep. Tr. at 35:14-36:8.

Q ... Are you providing an opinion that Sasaki infers a user's entertainment preferences?

A ... I mean, my opinion is based on the combination of Ellis and Sasaki. ... But in that combination what I am relying for for the inferring the entertainment preferences part of the element is the disclosures in Ellis of monitoring the user's listening to determine their likes and dislikes, for example. And I haven't explicitly pointed to anything in Sasaki for that part of it.

Houh Dep. Tr. at 37:19-22, 38:2-3, 39:5-11.

159. Therefore, in the combination of Sasaki and Ellis there is no disclosure of a server that infers a user's preferences based in part on image media, video media, or textual media.

160. Dr. Houh's declaration concludes that combining these features from Ellis and Sasaki renders obvious this claim limitation:

Thus, Sasaki's server the receives user preference information about different media content types, such as music, still pictures, video, and text in view of Ellis teachings automatically determining a user's preferences about songs, commercials, shows, genres, groupings and other content, by monitoring and tracking a user's usage information retrieved from a portable media player device, where the usage information is about media on or accessed by a portable media player device, render obvious "infer one or more entertainment preferences of a user of the portable media player device based at least in part on the retrieved media, the retrieved information about the media, and a

plurality of media content types of the media stored on or accessed by the portable media player device, wherein the plurality of media content types comprises textual media, image media, audio media, and video media.”

Houh Decl. at ¶95.

161. Dr. Houh’s declaration fails to adequately explain why he reached this conclusion. Dr. Houh simply recites various teachings from Sasaki and Ellis and then states in conclusory fashion that Sasaki and Ellis render this limitation obvious. Dr. Houh does not even acknowledge that the combination of Sasaki and Ellis does not disclose a server that infers a user’s preferences based at least in part on image media, video media, and textual media. In my opinion, because Dr. Houh’s declaration and the Petition do not even address this lack of disclosure in the combination of Sasaki and Ellis, the Petition fails to meet the burden of showing that the combination of Sasaki and Ellis (and Jacobi) renders this limitation obvious.

2. Claim Limitation [1.1.3]

access one or more sources of information about venues or events proximal to a current location of the user;

162. This claim limitation requires the server to determine the current location of the user. In my opinion, because Dr. Houh’s declaration and the Petition fail to identify any instance in the cited art of a server determining the current location of the user, the Petition fails to carry the burden of showing that

the cited art renders this limitation obvious. Dr. Houh's mixes and matches features from Sasaki's two embodiments without any explanation of why a POSITA would have been motivated to combine them.

163. In Sasaki's first embodiment, Sasaki teaches portable terminal devices that transmit content recommendation information along with other information including location information (often referred to as "place of transmission" in Sasaki) to other portable terminal devices. Sasaki at ¶¶59, 60, 68, 69, 71. The location information is sent together with the content recommendation information:

In step S6, terminal device A transmits the selected piece of content recommendation information. In this case, information transmitted from terminal device A to terminal device B is not only the piece of content recommendation information. In addition, by adding an owner name or authentication ID of terminal device A, which is information specifying a recommender of content, and information such as a date and time of transmission and a place of transmission, the above information can be transmitted as one set of information.

Sasaki at ¶59 (Emphasis added).

As described above, the content recommendation information to be transmitted does not contain only the information shown in FIG. 3A. Necessary information, such as an owner of a transmitting terminal device, a date and time of transmission, and a place of transmission, is added to the content recommendation information, whereby a set of content recommendation information is transmitted.

Sasaki at ¶68 (Emphasis added).

164. Sasaki's Figure 3B further illustrates that location information ("place of transmission") is received by the receiving terminal device along with the rest of the content recommendation information. Sasaki at ¶65.

FIG. 3B

DATE AND TIME	PLACE	RECOMMENDER	RECOMMENDATION COMMENT INFORMATION, ETC.	SAMPLE
12/15/2004, 10:30	FRONT GATE AT TDL	○○, TARO	THIS VIEW, MOUNT FUJI! BEAUTIFUL!	MtFuji.jpg
12/24/2004, 19:00	XX HOTEL, LOBBY	SATO, △△	MOST FAVORITE CHRISTMAS MUSIC	Santa'sComing.mp3
12/25/2004, 09:15	TOKYO STATION	MIKE □□	MOVING LOVE STORY STARRING X□ KEIKO	Romacne.mpg
12/31/2004, 20:45	MEIJI SHRINE	○△, JIRO	IN THIS MYSTERY NOVEL, MYSTERY IS UNSOLVED TO THE LAST.	(none)

Sasaki at FIG. 3B (annotated).

165. In Sasaki's second embodiment, a server sends recommendation information to a portable terminal device. Sasaki at ¶115 ("At the service spot, the installed server provides content recommendation information to a user's terminal device and the terminal device receives and stores the content recommendation information in the HDD 4 of the terminal device."). There is no teaching in Sasaki's second embodiment of the portable terminal device sending content recommendation information to the server. Because location information is part of the content recommendation information (Sasaki at ¶¶59, 60, 68) there is no disclosure in Sasaki of a terminal device sending location information to the server.

166. The only disclosure in Sasaki of a terminal device sending information to the server is when a user of the portable terminal device transmits *user preference information* to the server. Sasaki at ¶130. User preference

information is distinct from content *recommendation information*. Sasaki at ¶¶130, 119, 120. The server uses the user preference information to determine whether it should send content recommendation information to a user. Sasaki at ¶119 (“in step S25, the CPU 1 of the server determines whether or not the HDD 4 of the server stores a piece of content recommendation information which matches a preference of the member of terminal device B.”). As illustrated by Figure 3C, which shows an example of user preference information (Sasaki at ¶65), the user preference information does not include location information:

FIG. 3C

CONTENT TYPE	PREFERENCE KEY WORDS
MUSIC	MIKE XXXXX; ROCK; BEATLES; LOVE
PHOTOGRAPH	MOUNT FUJI; NIGHT VIEW; LANDSCAPE; PROSPECT; MOUNTAINS, SEA, SKY; DUSK; SUNSET

Sasaki at FIG. 3C.

167. For these reasons, Sasaki does not teach a portable device that transmits its location information to a server.

168. Additionally, in his deposition, Dr. Houh was unable to identify any disclosure in Sasaki in which the terminal device transmits its location to the server:

Q So there's no explicit disclosure of the terminal device B transmitting place of transmission information to the server?

A I mean, I didn't see one as I was looking through in that section.

...

Houh Dep. Tr. at 162:2-6.

169. The Petition and Dr. Houh's ¶96 allege that Sasaki teaches a server in communication with a portable media player device. Houh Decl. at ¶96; Pet. at 36. However, as discussed above, Sasaki does not teach that the portable device transmits its location information to the server. Dr. Houh also alleges that "Sasaki teaches that its portable media player device can directly transmit information representing latitude and longitude (detected by the GPS) of its current position," relying on paragraphs 69 and 81 of Sasaki. Houh Decl. at ¶96; Pet. at 36. However, this discussion relates to Sasaki's first embodiment, in which one portable terminal device sends its "place of transmission" along with the content recommendation information to another portable terminal device. Sasaki at ¶¶59, 60, 68, 69, 81. Therefore, these disclosures of Sasaki do not disclose a server determining the location of a portable terminal device.

170. The Petition and Dr. Houh's ¶97 allege that Sasaki discloses that "location information could be 'positional information' using 'radio waves from a plurality of base stations'" Houh Decl. at ¶97 (quoting Sasaki at ¶81); Pet. at 36. This discussion in Sasaki pertains to Sasaki's first embodiment, which relates to terminal-to-terminal communications. Sasaki at ¶¶29-111. Again, there is no teaching of the portable terminal device transmitting its location to a server.

171. The Petition and Dr. Houh’s ¶98 allege that “Sasaki teaches that the place of transmission is ‘necessary information’ and is part of the ‘content recommendation information.’” Houh Decl. at ¶98 (quoting Sasaki at ¶68); Pet. at 36-37. Again, this disclosure pertains to Sasaki’s first embodiment, which does not include a server. In Sasaki’s second embodiment, there is no transmission of content recommendation information from a portable terminal device to a server.

172. The Petition and Dr. Houh’s ¶99 allege that Ellis teaches a technique that uses geographic position information to acquire information about local events, relying on Ellis at ¶¶225, 233-234, and Figures 28A and 28B. Houh Decl. at ¶99; Pet. at 37. While these disclosures in Ellis describe how the Enhanced Radio System of Ellis can determine its own location, they do not disclose transmitting that location to a server.

173. The Petition and Dr. Houh’s ¶100 allege that Ellis teaches downloading information about local events and facilities from a web site. Houh Decl. at ¶98; Pet at 37. Ellis does not disclose a server downloading these events. Additionally, this disclosure in Ellis does not teach transmitting location information to a server.

174. The Petition and Dr. Houh’s ¶101 conclude that the limitation is rendered obvious by “Sasaki’s server in communication with a portable media player device that directly transmits information representing location information

in view of Ellis’s technique of using the user’s geographic location to access information about events and facilities that are local to the user[.]” Pet. 37-38.

Again, Sasaki does not disclose a portable device that transmits its location information to a server or the server determining the location of the portable device in any other manner. Similarly, Ellis does not disclose a portable device transmitting location information to a server either. Nowhere in his analysis of this claim limitation has Dr. Houh explained where the prior art discloses the server determining the location of the portable device. Dr. Houh’s declaration, therefore, does not adequately explain how the prior art teaches a server that accesses information about venues or events *proximal to a current location of the user*. In light of this, it is my opinion that the Petition and Dr. Houh have not established that the cited art renders obvious this claim limitation.

B. Claim 2 [2.0] of the Patent in Review

The one or more NTCRM of claim 1, wherein the audio media comprises music media and podcast media.

175. Claim 2 depends from claim 1. Because claim 1 contains limitations that are not rendered obvious by the cited art, either alone or in combination, claim 2 cannot be rendered obvious either.

176. Claim 2 recites that the “audio media comprises music media and podcast media.” In other words, both music and podcast are required.

177. For the “podcast” element, Dr. Houh quotes the following definition of podcast from Lim: “A podcast is a digital recording of a radio broadcast or similar programme, made available on the Internet in a number of separate files for downloading to a personal audio player.” Houh Decl. at ¶115 (quoting EX1001, Lim at ¶2). In my opinion, this definition is consistent with the plain and ordinary meaning of “podcast.” As I discuss above in Section VI, this definition is also consistent with dictionary definitions and other extrinsic sources.

178. In his ¶115, Dr. Houh relies on Ellis at ¶214, stating “A POSITA would recognize that a radio show broadcast via the internet, as disclosed in Ellis, corresponds to a podcast media.” Houh Decl. at ¶115. In ¶214, Ellis states that “a group may be based on a specific radio show, and may contain all content broadcast in that show.” Ellis at ¶214. Dr. Houh’s analysis falls short for at least two reasons. First, Ellis at ¶214 does not teach that the disclosed radio show is broadcast *via the Internet*. Ellis at ¶214. Second, even assuming the radio show of Ellis is broadcast via the Internet as Dr. Houh states, an Internet radio broadcast is streamed rather than downloaded. As I discussed in the technology background in Section VI.C, downloading involves storing a media file and saving it in storage. In contrast, streaming does not involve storing the file. Therefore, the radio show broadcast disclosure of Ellis relied upon by Dr. Houh does not meet the definition of a podcast because it is not downloaded to the portable media player device.

179. For the above reasons, in my opinion, the Petition and Dr. Houh have not met the burden of showing that claim 2 would have been obvious.

C. Claim 4 [4.0] of the Patent in Review

The one or more NTCRM of claim 1, wherein execution of the instructions is to cause the computer server to infer the current location of the user of the media player device based on obtained location information associated with the portable media player device.

180. This claim depends from claim 1. Since claim 1 contains limitations that are not rendered obvious by the cited art, alone or in combination, claim 4 cannot be rendered obvious either.

181. In his ¶117, Dr. Houh relies on Sasaki paragraphs 69 and 81, alleging that “Sasaki teaches that the portable media player device associated with the user directly transmits location information (either GPS or radio wave positional information) to the server.” Dr. Houh’s allegation is incorrect. As I describe in detail with respect to claim limitation [1.1.3], Sasaki does not teach that the portable media player device transmits location information to the server. Sasaki’s disclosures at paragraphs 69 and 81 relate to the first embodiment, in which one terminal device transmits content recommendation information, along with “place of transmission” information, to another terminal device.

182. In his ¶120, Dr. Houh relies on Sasaki’s server allegedly receiving location information from a portable media device to conclude that claim 4 is

rendered obvious. I discuss in detail with respect to limitation [1.1.3] in Section XI.A.2, that Sasaki does not disclose a server receiving location information from a portable device and incorporate that discussion here. In my opinion, because Dr. Houh's conclusion relies on incorrect allegations about Sasaki's teachings, the Petition and Dr. Houh have not met the burden of showing that claim 4 would have been obvious.

D. Claim 5 of the Patent in Review

183. Claim 5 depends from claim 4. Since claim 4 contains limitations that are not rendered obvious by the cited art, alone or in combination, claim 5 cannot be rendered obvious either.

1. Claim limitation [5.1]

Wherein, to infer the current location, execution of the instructions is to cause the computer server to:

184. In his ¶198, Dr. Houh relies on his discussion of claim 4 and Sasaki's alleged disclosure of a server's that infers the current location of the user. As I discussed with respect to claim 4, Sasaki does not disclose a server that infers the current location of the user. Therefore, the Petition and Dr. Houh's analysis fails to show that this limitation is obvious.

2. Claim limitation [5.2]

control receipt of the location information associated with the portable media player device or from a wireless access point through which the portable media player device has established a network connection with the computer

server; and determine a current location of the portable media player device based on the location information.

185. This limitation requires the server to receive location information associated with the portable media player device or from a wireless access point through which the portable media player has established a network connection with the computer service. In his analysis Dr. Houh fails to identify any prior art that teaches a server receiving location information from a portable device.

186. In his ¶199, Dr. Houh alleges that “Sasaki’s server is in communication with the portable media player device and receives location information from the portable media player device.” This interpretation of Sasaki is incorrect. I discuss in detail with respect to claim limitation [1.1.3] in Section XI.A.2 that Sasaki does not disclose either a server that receives location information from a portable device or a portable device that transmits its location information to a server and I incorporate that discussion here.

187. In his ¶200, Dr. Houh alleges that discloses using radio waves from a plurality of base stations (citing Sasaki at ¶81). Dr. Houh further alleges that in Sasaki the portable media player device can directly communicate location to the server. Although Sasaki discloses that the portable terminal device can use radio waves from base stations to determine its location, the location information is not sent to the server. Sasaki at ¶81. This disclosure in Sasaki relates to Sasaki’s first embodiment, which discloses communications between terminal devices. I discuss

in detail with respect to claim limitation [1.1.3] in Section XI.A.2 that Sasaki does not disclose a portable device that transmits location information to a server and incorporate that discussion here.

188. In his ¶¶201-204, Dr. Houh relies on Havinis and discusses some of Havinis's teachings related to a mobile device determining its location. I note that Dr. Houh does not allege that Havinis teaches sending this determined location information to a server. Houh Decl. at ¶¶201-204.

189. In his ¶205, Dr. Houh alleges that "Sasaki teaches using the information representing the location of the portable media player device to determine the location of the portable media player device by converting the location information 'into map information ... or a building name or the like.'" (citing Sasaki at ¶80). Sasaki's teaching in ¶80 that the portable terminal device can convert location information into map information relates to the first embodiment. There is no disclosure in Sasaki of transmitting the location information to a server. See Section XI.A.2 above.

190. In his ¶206, Sasaki alleges that this limitation is rendered obvious by "Sasaki's server that receives information representing the location of the portable media player device to determine the location of the portable media player device in view of Havinis's teaching that location information is timing advance values and site location data transmitted from at least one base station in a wireless

network[.]” Again, Dr. Houh mischaracterizes the teachings of Sasaki. Sasaki does not disclose a server that receives information representing the location of the portable device. Therefore, Dr. Houh’s analysis is incorrect. In my opinion, the Petition and Dr. Houh have not met the burden of showing that claim 5 would have been obvious in view of the cited art.

E. Claim 6 of the Patent in Review

191. Claim 6 depends from claim 4. Since claim 4 contains limitations that are not rendered obvious by the cited art, alone or in combination, claim 6 cannot be rendered obvious either.

192. Dr. Houh states that this claim is substantially similar to claim 4. I incorporate my analysis with respect to claim 4 here.

1. Claim limitation [6.1]

determine a current location of the portable media player device based on results of triangulation of signals from various wireless access points or based on known current locations of other portable media player devices in communication with the computer server.

193. In his ¶208, Dr. Houh asserts that “Sasaki’s server receives location information so that it can determine the portable media player device’s current location.” Houh Decl. at ¶208. This is incorrect. As I discuss in Section XI.A.2 regarding claim [1.1.3], Sasaki does not disclose a server that receives location information. That analysis applies here as well.

194. In his ¶¶209-210, Dr. Houh discusses the teachings of Havinis, alleging that it teaches techniques for a mobile device to determine its location, such as by using information transmitted from base transceiver stations and a triangulation algorithm. I note that Dr. Houh does not allege that Havinis discloses transmitting its location to a server. Houh Decl. at ¶¶209-210.

195. In his ¶211, Dr. Houh alleges that this limitation is rendered obvious by “Sasaki’s server that receives information representing the location of the portable media player device in view of Havinis’s teaching that the location of a mobile device can be calculated using a triangulation method with timing advance values and site location data transmitted from three base stations (wireless access points)[.]” Again, Dr. Houh mischaracterizes Sasaki. Sasaki does not disclose a server that receives information representing the location of the portable media player device. Because Dr. Houh’s analysis relies on a misinterpretation of Sasaki, it is my opinion that he has not shown that this claim limitation is obvious over the cited art.

F. Claim 9 of the Patent in Review

The one or more NTCRM of claim 1, wherein execution of the instructions is to cause the computer server to: obtain the media or the information about the media from a storage within the computer server; or control receipt of the media or the information about the media from a remote storage device.

196. Claim 9 depends from claim 1. Since claim 1 contains limitations that are not disclosed by the cited art, alone or in combination, claim 9 cannot be disclosed either.

197. Claim 9 recites “wherein execution of the instructions is to cause the computer server to: obtain the media or the information about the media from a storage within the computer server; or control receipt of the media or the information about the media from a remote storage device.” Thus, execution of the instructions causes the server to obtain either “*the media*” or “*information about the media*” from storage within the computer server or receive “*the media*” or “*information about the media*” from a remote storage device.

198. At ¶130, Dr. Houh relies on Sasaki at ¶¶19, 98, and 112. Dr. Houh states that Sasaki discloses a server that receives and stores user preference information.

199. At ¶131, Dr. Houh relies on Sasaki at ¶126. Dr. Houh alleges that Sasaki teaches that the server can retrieve user preference information from a hard drive.

200. At ¶132, Dr. Houh refers to Section 1.1 of his declaration and alleges that the user preference information is the usage data collected about what a user listened to or accessed using a portable media device player. I disagree. In Sasaki, the user preference information includes descriptive keywords *entered by the user*

that describe the user's preferences. Sasaki at ¶73. Sasaki discloses that such preference information can include information such as music genres, artist names and album titles. Sasaki at FIG. 3C. Sasaki does not disclose collecting usage data about what a user listened to or accessed.

201. At ¶133, Dr. Houh refers to Section 1.0 of his declaration and relies on Sasaki at ¶119. Dr. Houh alleges that Sasaki teaches programs in ROM to control a server in communication with a portable media player device.

202. At ¶134, Dr. Houh alleges that HDD4 is storage within the server of Sasaki.

203. At ¶135, Dr. Houh concludes that Sasaki's server that obtains user preference information renders this claim obvious. In his conclusion, Dr. Houh alleges that Sasaki's user preference information is an example of "information about media":

Thus, *Sasaki's server that obtains user preference information (e.g., information about media)* from a hard drive in the server for subsequent processing renders obvious "wherein execution of the instructions is to cause the computer server to: obtain the media or the information about the media from a storage within the computer server; or control receipt of the media or the information about the media from a remote storage device."

Houh Decl. at ¶135 (emphasis added).

204. Dr. Houh's analysis is incorrect because Sasaki's user preference information is not "information about media" as recited by claim 9. The term "information about the media" is introduced in claim 1 and its meaning is illustrated in the following clause: "... *infer one or more entertainment preferences* of a user of the portable media player device *based at least in part on* the retrieved media, *the retrieved information about the media*[".]'" '021 Patent at Claim 1 (emphasis added). Thus, "information about the media" is information that the server uses to infer the user's preferences, it is not the user preference information itself. Further, Sasaki requires the user to enter preference information, so there is no inference disclosed in Sasaki. Sasaki at ¶130.

205. In his deposition, Dr. Houh agreed that "information about the media" is different than user preference information:

Q And in the context of Claim 1, what is the difference between the user's entertainment preferences and the information about the media?

A Well, I mean, Claim 1 is talking about inferring one or more entertainment preferences of the user -- and then I'm going to skip some words -- based at least in part on the information about the media. ...

But at least based in part on the retrieved information about the media. And so those are different in the sense that the user preference -- that the information about the media is something which helps inform the preference of the user, you know, as the claim requires that it's based in part on.

Houh Dep. Tr. at 56:12-57:11.

Q Are the entertainment preferences of a user distinct from the information about the media?

A I mean, I think the claim is pretty clear with respect to those words, which is you -- the computer server has to be caused to infer one or more entertainment preferences of a user. And that would be what the user actually prefers. But it's based in part on the retrieved media, the retrieved information about the media, and a plurality of media content types of the media stored, and it goes on. What that's saying is that the computer server must be -- must infer this, infer the entertainment preferences of a user based on the information about the media.

Houh Dep. Tr. at 58:13-59:6.

206. Thus, Dr. Houh's analysis incorrectly equates Sasaki's user preference information with "information about the media." Because Dr. Houh has misinterpreted this claim limitation in his analysis, he has failed to show that claim 9 is rendered obvious by Sasaki.

G. Claim 10 of the Patent in Review

1. Claim limitation [10.3]

control transmission, to the server, of location information associated with the portable media player device to facilitate the server in inferring a current location of a user of the portable media player device; and

207. Dr. Houh's declaration fails to identify any instance in the cited art of a portable media player device transmitting location information to a server. The

Petition and Dr. Houh's declaration mixes and matches features from Sasaki's two embodiments without any explanation of why a POSITA would have been motivated to combine them.

208. In Sasaki's first embodiment, Sasaki teaches portable terminal devices that transmit content recommendation information along with other information including location information (often referred to as "place of transmission" in Sasaki) to other portable terminal devices. Sasaki at ¶¶59, 60, 68, 69, 71. The location information is sent together with the content recommendation information:

In step S6, *terminal device A transmits the selected piece of content recommendation information*. In this case, information transmitted from terminal device A to terminal device B is not only the piece of content recommendation information. *In addition, by adding an owner name or authentication ID of terminal device A, which is information specifying a recommender of content, and information such as a date and time of transmission and a **place of transmission**, the above information can be transmitted as one set of information.*

Sasaki at ¶59.

As described above, the content recommendation information to be transmitted does not contain only the information shown in FIG. 3A. **Necessary information, such as** an owner of a transmitting terminal device, a date and time of transmission, and a **place of transmission**, **is added to the content recommendation information**, whereby **a set of content recommendation information is transmitted**.

Sasaki at ¶68.

209. Sasaki's Figure 3B further illustrates that location information ("place of transmission") is received by the receiving terminal device along with the rest of the content recommendation information. Sasaki at ¶65.

FIG. 3B

DATE AND TIME	PLACE	RECOMMENDER	RECOMMENDATION COMMENT INFORMATION, ETC.	SAMPLE
12/15/2004, 10:30	FRONT GATE AT TDL	○○, TARO	THIS VIEW, MOUNT FUJI! BEAUTIFUL!	MtFuji.jpg
12/24/2004, 19:00	XX HOTEL, LOBBY	SATO, △△	MOST FAVORITE CHRISTMAS MUSIC	Santa'sComing.mp3
12/25/2004, 09:15	TOKYO STATION	MIKE □□	MOVING LOVE STORY STARRING X□ KEIKO	Romacne.mpg
12/31/2004, 20:45	MEIJI SHRINE	○△, JIRO	IN THIS MYSTERY NOVEL, MYSTERY IS UNSOLVED TO THE LAST.	(none)

Sasaki at FIG. 3B (annotated).

210. In Sasaki's second embodiment, a server sends recommendation information to a portable terminal device. Sasaki at ¶115 ("At the service spot, the installed server provides content recommendation information to a user's terminal device and the terminal device receives and stores the content recommendation information in the HDD 4 of the terminal device."). There is no teaching in Sasaki's second embodiment of the portable terminal device sending content recommendation information to the server. Because location information is part of the content recommendation information (Sasaki at ¶¶59, 60, 68) there is no disclosure in Sasaki of a terminal device sending location information to the server.

211. The only disclosure in Sasaki of a terminal device sending information to the server is when a user of the portable terminal device transmits *user preference information* to the server. Sasaki at ¶130. User preference

information is distinct from content *recommendation information*. Sasaki at ¶¶130, 119, 120. The server uses the user preference information to determine whether it should send content recommendation information to a user. Sasaki at ¶119 (“in step S25, the CPU 1 of the server determines whether or not the HDD 4 of the server stores a piece of content recommendation information which matches a preference of the member of terminal device B.”). As illustrated by Figure 3C, which shows an example of user preference information (Sasaki at ¶65), the user preference information does not include location information:

FIG. 3C

CONTENT TYPE	PREFERENCE KEY WORDS
MUSIC	MIKE XXXXX; ROCK; BEATLES; LOVE
PHOTOGRAPH	MOUNT FUJI; NIGHT VIEW; LANDSCAPE; PROSPECT; MOUNTAINS, SEA, SKY; DUSK; SUNSET

Sasaki at FIG. 3C.

212. For these reasons, Sasaki does not teach a portable device that transmits its location information to a server.

213. Additionally, in his deposition, Dr. Houh was unable to identify any disclosure in Sasaki in which the terminal device transmits its location to the server:

Q So there's no explicit disclosure of the terminal device B transmitting place of transmission information to the server?

A I mean, I didn't see one as I was looking through in that section.

...

Houh Dep. Tr. at 162:2-6.

214. The Petition and Dr. Houh's ¶151 rely upon Sasaki's first embodiment, citing Sasaki at ¶¶69, 81. Pet. at 51. For this, the Petition and Dr. Houh assert that latitude and longitude can be directly transmitted. Houh Decl. at ¶151; Pet. at 51. However, neither indicates where the latitude and longitude are transmitted. This claim limitation requires them to be transmitted to the server. There is no server in Sasaki's first embodiment. It is clear from the specification of Sasaki that paragraphs 69 and 81 relate to the first embodiment that relates to portable terminal devices communicating directly with each other. Sasaki at ¶¶29-111. The "place of transmission" information is sent in the same transmission as the recommendation information. Sasaki at ¶¶59, 60, 68. In Sasaki's second embodiment, the terminal device does not send recommendation information to the server. Sasaki at ¶¶112-135. Therefore, there is no disclosure in Sasaki of a portable terminal device sending location information to the server.

215. The Petition and Dr. Houh's ¶152 again rely upon Sasaki's first embodiment, citing Sasaki at ¶80. Pet. at 51. Dr. Houh states that "Sasaki teaches that the server uses the information representing the latitude and longitude to infer a location of the user of the mobile device." Houh Decl. at ¶152. Dr. Houh's

interpretation of Sasaki is incorrect. Paragraph 80 is part of Sasaki's discussion of the first embodiment, where one terminal device sends location information to another terminal device. Sasaki at ¶¶59, 60, 68. Paragraph 80 states that the terminal device or a personal computer can convert the numerical latitude and longitude information into map information. There is no disclosure of a server in this discussion. Sasaki in several instances states that information can be transferred between the terminal device and a user's personal computer. Sasaki at ¶¶36, 45, 128, 132. However, this is not a communication between the terminal device and a server.

216. In his ¶153, Dr. Houh relies upon Ellis, citing ¶225. Dr. Houh states that Ellis discloses multiple methods to determine the portable media player device's current location. The discussion of Ellis at ¶225 describes the radio device of Ellis determining its location through GPS, allowing a user to enter it, or by monitoring radio stations that may be received and comparing them against geographical information in a radio station database. Ellis at ¶225. These techniques each relate to the alleged portable device determining its location. There is no disclosure in Ellis of the portable device transmitting its location to a server. Ellis at ¶225.

217. The Petition and Dr. Houh's ¶154 state in conclusory fashion that "a portable media player device that uses communication circuitry to transmit

location information to a server so that the server can determine the user of the portable media player device's location renders obvious" this limitation. Pet. at 51. Dr. Houh's conclusion is incorrect because he has not identified a disclosure of a portable media player device transmitting location information to a server. In my opinion, because his obviousness conclusion relies on a non-existent disclosure, Dr. Houh's testimony does not provide sufficient support to meet Petitioner's burden.

218. Therefore, in my opinion, Dr. Houh has not provided testimony sufficient to support Petitioner's burden of showing that this limitation is obvious. Dr. Houh's declaration inappropriately uses disclosures from Sasaki's two embodiments without explaining why a POSITA would have been motivated to combine them. There is no disclosure in the cited art of a portable device sending location information to a server. In my opinion, the combination of Sasaki and Ellis (and Jacobi) does not render obvious limitation [10.3].

2. Claim limitation [10.4.2]

the inferred preferences are based at least in part on the accessed media, media content types of the accessed media from among a plurality of media content types, and information about the accessed media, wherein the plurality of media content types comprises textual media, image media, audio media, and video media, and

219. Dr. Houh and the Petition assert that this limitation is substantially similar to limitation [1.1.2] and refers to the analysis for that limitation. Pet. at 52;

Houh Decl. at ¶159. In my opinion, the Petition and Dr. Houh fail to show that this claim limitation is rendered obvious for the same reasons that he fails to show that claim limitation [1.1.2] is rendered obvious. See Section XI.A.1 above.

H. Claim 16 of the Patent in Review

1. Claim limitation [16.2.1]

infer one or more preferences of a user of the portable media player device based at least in part on the received media or the information about the media, and media content types of the media accessed by the portable media player device from among a plurality of media content types, wherein the plurality of media content types comprises textual media, image media, audio media, and video media;

220. As the Petition and Dr. Houh note, this claim is substantially similar to claim limitation [1.1.2]. Pet. at 59; Houh Decl. at ¶180. My analysis and discussions for that claim limitation apply here as well.

221. In my opinion, Dr. Houh has not provided sufficient testimony to support meeting Petitioner's burden. In my opinion, the combination of Sasaki and Ellis (and Jacobi) does not disclose limitation [16.2.1].

2. Claim limitation [16.2.2]

infer a current location of the user of the portable media player device based on obtained location information associated with the portable media player device;

222. As the Petition and Dr. Houh note, this claim is substantially similar to claim limitation [4]. Pet. at 59; Houh Decl. at ¶180. My analysis and discussions for that claim limitation apply here as well.

223. In my opinion, Dr. Houh has not provided sufficient testimony to support Petitioner's burden. In my opinion, the combination of Sasaki and Ellis (and Jacobi) does not disclose limitation [16.2.2].

XII. CONCLUSION

224. This declaration reflects my opinions as currently held. However, my analysis may continue such that I may consider additional information that may result in additional observations.

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

226. 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 are made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

Executed this 24th day of August 2023, at Palo Alto, CA.



Robert Stillerman