

IPR2025-00536
U.S. Patent No. 9,032,039

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

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

Petitioners

v.

MOBILE DATA TECHNOLOGIES LLC,

Patent Owner

IPR2025-00536
U.S. Patent No. 9,032,039

**DECLARATION OF MAHDI ESLAMIMEHR, PH.D. IN SUPPORT OF
PATENT OWNER'S PRELIMINARY RESPONSE**

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I, Mahdi Eslamimehr, declare as follows:

I. INTRODUCTION

1. I have been retained by Mobile Data Technologies, Inc. (“MDT”) as an independent expert consultant in petition for the *Inter Partes* Review (“IPR” or “Petition”) involving U.S. Patent No. 9,032,039 (“the ‘039 Patent”) presently assigned to MDT. I have been asked to consider the arguments raised by the Petition regarding the validity of the ‘039 Patent. In particular, I have been retained as an expert in computer science to provide analysis and opinions related to whether certain claims of the ‘039 Patent are rendered obvious by prior art asserted by Petitioners (Samsung Electronics Co. Ltd. and Samsung Electronics America, Inc.). I understand that Petitioners have asserted that claims 1-4, 8, 9, 13-15, 17-20, 22-25, and 28-30 (the “Challenged Claims”) are rendered obvious under 35 U.S.C. §103 by the combination of Randall-Forsyth (Ground 1) and of Pelkey-Eck (Ground 2).

2. I submit this Declaration as a statement of the opinions I have formed and the factual basis for the opinions. I understand that this Declaration is submitted in regard to IPR2025-00536. I am prepared to testify as to the matters discussed herein.

3. I am over 18 years of age. I have personal knowledge of the facts stated in this Declaration and could testify competently to them if asked to do so.

4. My current employer, Quandary Peak Research, is paid a consulting fee for my time working on this matter. I have no personal interest in this matter, and my compensation does not depend in any way on the opinions I express or the outcome.

II. QUALIFICATIONS

5. My current employer, Quandary Peak Research, is paid a consulting fee for my time working on this matter. I have no personal interest in this matter, and my compensation does not depend in any way on the opinions I express or the outcome.

6. I, Mahdi Eslamimehr, hold a Ph.D. in Computer Science from the University of California, Los Angeles (UCLA), complemented by an M.S. in Computer Science from Linköping University, Sweden, and an MBA from the London School of Economics and Political Science. Currently, I serve as Executive Vice President at Quandary Peak Research, overseeing Intellectual Property (IP) evaluations and Mergers & Acquisitions (M&A) transactions. Additionally, I am a Professor at the University of Southern California, Department of Computer Science, where I exclusively teach advanced-level courses to Master's and Ph.D. students, specifically Advanced Software Engineering and Software Economics.

7. My professional expertise closely aligns with the technological domains central to regarding mobile computing, wireless communications, network

integration, and complex software architectures. My executive role at Quandary Peak involves in-depth evaluation and strategic consulting on complex IP and M&A matters, frequently involving software patents related to mobile technologies, network functionalities, and integrated application channels similar to those described in the patent at issue.

8. In my academic role at the University of Southern California, I teach and mentor graduate students on advanced software engineering principles, including the design, implementation, and evaluation of complex software systems and their economic impacts. My research and teaching focus extensively on software system integration, concurrency, software reliability, and performance analysis, key technical areas directly applicable to the integration of mobile device functionalities with networked application-based information channels highlighted in the multi-domain solution technologies.

9. My industry experience, notably as Chief Technology and Operating Officer at Clarity Global and through senior research roles at Samsung Electronics R&D Center and Ericsson AB, provided direct involvement in developing and managing software solutions for resource-constrained, network-centric mobile environments. These roles required extensive knowledge of telecommunications protocols, mobile device integration, and distributed software architectures, closely paralleling the technical focus of the patent. For example, while a software engineer

at Ericsson from 2006 to 2007, I contributed to analyzing several features related to Symbian OS (different versions) and Symbian-based mobile phones (a wide range of handheld devices). My work involved close collaboration with mobile platforms, integrating Symbian functionalities, and enhancing the software experience for end users.

10. Furthermore, my scholarly contributions, including numerous peer-reviewed publications and conference presentations, emphasize advanced software testing, reliability engineering, concurrency analysis, and software economic valuation, thereby underscoring my deep theoretical and practical expertise relevant to assessing complex technological innovations.

III. SUMMARY OF OPINIONS

11. It is my opinion that the challenged claims are patentable and that the Petition in this proceeding has not established otherwise. The combinations of references proposed in the Petition do not disclose each limitation of the Challenged Claims, and a person of ordinary skill in the art at the time of the invention (the “skilled artisan”) would not have combined the references in the manner suggested in the Petition.

12. On the contrary, a skilled artisan would not have been motivated to combine the references. Furthermore, even assuming a skilled artisan had been motivated to combine the references in the manner suggested in the Petition, the

resulting combination would not have met the claim language. This is true for each of Ground 1 and Ground 2.

13. Petitioners have created combinations that are the result of hindsight, the result of using the challenged patents as a roadmap to select various portions of prior art references and attempting to combine them without a sufficient reason outside the challenged patents for doing so.

14. In forming my opinions in this Declaration, I have considered:

- a. U.S. Patent No. 9,032,039 and its file / prosecution history before the U.S. Patent and Trademark Office, including the following references;
- b. Petitioners' Petition for Inter Partes Review and attached exhibits;
- c. the Declaration of Henry Houh, Ph.D. submitted as EX1002 in the Petition proceeding;
- d. references cited therein in support of the Petition; and
- e. my education, training, and experience in the field.

IV. LEGAL PRINCIPLES

A. Claim Construction

15. I understand that the claims of a patent are read in light of the specification of the patent as understood by a person of ordinary skill in the art at the time of the invention (a "skilled artisan"). I understand that "the time of the invention" refers to the effective filing date of the patent in question. For purposes of my analysis, I am considering the effective filing date to be June 18, 2002, the

filing date of the original provisional application 60/389,430 to which the '039 Patent claims priority, but my opinions in this Declaration would not change if any claim of the '039 Patent is not entitled to claim priority to the provisional application. I reserve the right to opine further on the question of priority if it later becomes relevant.

16. I understand that claim terms are given their ordinary and customary meaning as would be understood by a skilled artisan in the context of the entire disclosure. A claim term, however, will not receive its ordinary meaning if the patentee acted as its own lexicographer and clearly set forth a definition of the claim term in the specification. In this case, a claim term will receive the definition set forth in the patent.

17. I understand that evidence that is intrinsic to the patent and prosecution history is given more weight than extrinsic evidence. For example, if there are specific statements in the specification that define the invention, those statements are strong evidence of a definition for a term.

18. In this Declaration, unless otherwise stated, I have used what I believe to be the ordinary and customary meanings for the terms used in the claims in the context of the challenged patent.

B. My Understanding of Obviousness

19. I understand that a patent claim is invalid if the claims would have been obvious to a skilled artisan at the time of invention (which, as stated above, I am presently treating as June 18, 2002, since I understand that date is currently not in dispute). I understand that the obviousness inquiry should not be done with hindsight, but from the perspective of a skilled artisan without knowledge of the teachings of the challenged patent.

20. I understand that a claim is obvious when 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 to a skilled artisan at the time the invention was made. That is, I understand that one does not evaluate the “obviousness” of individual claim elements, but rather must compare the claimed subject matter as a whole to the prior art.

21. I understand that obviousness can be established by combining multiple prior art references to meet each and every claim element, but I also understand that when making a proposed combination of references, care must be taken to avoid hindsight bias. That is, I am informed by counsel that the determination of obviousness cannot be based on the hindsight combination of components selectively culled from the prior art to fit the parameters of the patented invention, effectively using the claims as a roadmap.

22. I understand that, to support a conclusion of obviousness, there must be an apparent reason for a skilled artisan to combine or modify the prior art references as recited in the claims.

23. As part of this inquiry, I have been asked to consider the level of ordinary skill in the field that someone would have had at the time the claimed invention was made. In determining the level of ordinary skill, I considered the following: (1) the levels of education and experience of persons working in the field; (2) the types of problems encountered in the field; and (3) the sophistication of the technology.

C. Relevant Level of Ordinary Skill in the Art

24. I have been asked to consider the level of ordinary skill in the art that a skilled artisan would have had as of June 2002. It is my opinion that a person of ordinary skill in the art (whom I refer to as a “POSITA”) would have been a person with a bachelor’s degree in information systems, electrical engineering, computer engineering, or computer science, as well as two or more years of relevant industry experience, which would include experience in handheld wireless devices and web site design. More academic experience would compensate for less industry experience and more industry experience would compensate for less academic experience.

25. In 2002 timeframe, my work included work with mobile devices and the Symbian operating system. Furthermore, based on my review of the materials in this matter, as well as from my post-graduate educational background and years of professional experience, I am familiar with the level of ordinary skill in the art as of 2002.

V. THE CHALLENGED PATENT

A. Specification

26. The '039 Patent describes a method that enables a mobile device user to transfer content from the mobile device to a server for insertion into a previously established application-based information channel so that the mobile device user can interact with one or more additional users. The '039 Patent describes in col. 10, lines 8-28:

The content management site in the illustrative embodiment is designed to generate and otherwise manage dynamic, time-sensitive, task-oriented mobile sites, including wireless collaborative workspaces and communities. The content management site allows content such as data, media, multimedia, messages, news, features, events, polls, competitions and advertising to be rapidly created, entered into the system, and then subsequently syndicated, distributed, shared, collaborated with or acted upon by users of mobile devices.

By utilizing the content management site, system users can create one or more personal or business mobile sites with various sets of features, and then share such sites via the mobile Internet or other wireless network with friends, family, colleagues, or other groups of any type.

The content management site makes it simple for unsophisticated users to upload, enter, create, syndicate, distribute or otherwise manage content that is important to them, in a manner that allows such content to be accessed, shared, and acted upon from a mobile device.

27. The invention also transfers information associated with at least one wireless networking functionality of the mobile device from the mobile device to the server. The '039 Patent indicates in col. 5, lines 51-65:

Examples of such information include information specifying at least one messaging action implementable over the wireless network, information specifying at least one collaboration action implementable over the wireless network, and information specifying at least one location-based service action implementable over the wireless network. Other types of information associated with wireless networking functionalities may also or alternatively be used.

28. The content and the information associated with the at least one wireless networking functionality of the mobile device is integrated into the previously established application-based information channel. This element is described in col. 5, lines 51-65 and col. 10, lines 8-28 of the '039 Patent, which are set forth above.

29. The invention also enables other content from at least one of the additional users to be inserted into the previously established application-based information channel. For example, the '039 Patent indicates in col. 18, lines 16-22:

Furthermore, the invention allows users to more efficiently communicate, collaborate and otherwise

interact with their friends or colleagues instantly and seamlessly within a single system that provides a mobile web site integrating existing wireless networking functionalities, such as IM, SMS, MMS, location-based services, or email, with personally authored content.

B. Representative Claims

30. The Challenged Claims include independent claims 1, 17, 18, 19, 22, and 23. Petitioners identify independent claims 1, 17, and 18 as client-side claims and independent claims 19, 22, and 23 as server-side claims. Claims 17 and 22 are “computer readable medium” claims performing the method of claim 1 and claim 19, respectively.

31. Petitioners treat claims 1 and 18 together as reciting substantially overlapping limitations, claims 19 and 23 together. In addressing claims 19 and 23, Petitioners cross-reference arguments for corresponding limitation in claims 1 and 18. Accordingly, for ease of presentation, I generally treat them similarly.

32. Independent Claim 1 of the ‘039 patent recites:

1. A method comprising:
 - capturing content at a mobile device;
 - identifying a previously established application-based information channel into which the captured content is to be inserted, the identified application-based information channel permitting interaction between a user of the mobile device and one or more additional users;
 - determining information associated with at least one wireless networking functionality of the mobile device;

providing the captured content from the mobile device to at least one server for insertion in association with the determined information into the identified application-based information channel; and
receiving other content, at the mobile device via the identified application-based information channel, from at least one of the additional users.

33. Independent Claim 17 of the '039 patent recites:

17. A non-transitory computer-readable storage medium having embodied therein executable code of one or more software programs, wherein said executable program code when executed by a processing element of the mobile device causes the mobile device to perform the method of claim 1.

34. Independent Claim 18 of the '039 patent recites:

18. A mobile device comprising:
at least one processing element comprising a processor coupled to a memory; and
at least one network interface;
said at least one processing element being configured to:
capture content at the mobile device;
identify a previously established application-based information channel into which the captured content is to be inserted, the identified application-based information channel permitting interaction between a user of the mobile device and one or more additional users;
determine information associated with at least one wireless networking functionality of the mobile device;
provide, via said at least one network interface, the captured content from the mobile device to at least one server for insertion in association with the

determined information into the identified application-based information channel; and

receive other content, via the identified application-based information channel, from at least one of the additional users.

35. Independent Claim 19 of the '039 patent recites:

19. A method comprising:

receiving, at a server from a mobile device, content for insertion into a previously established application-based information channel, the previously established application-based information channel permitting interaction between a user of the mobile device and one or more additional users;

receiving, at the server from the mobile device, information associated with at least one wireless networking functionality of the mobile device;

integrating the content and the information associated with said at least one wireless networking functionality of the mobile device into the previously established application-based information channel; and

inserting other content from at least one of the additional users into the previously established application-based information channel.

36. Independent Claim 22 of the '039 patent recites:

22. A non-transitory computer-readable storage medium having embodied therein executable code of one or more software programs, wherein said executable program code when executed by a processing element of the server causes the server to perform the method of claim **19**.

37. Independent Claim 23 of the '039 patent recites:

- 23.** A server comprising:
- at least one processing element comprising a processor coupled to a memory; and
 - at least one network interface;
- said at least one processing element being configured to:
- receive, from a mobile device, content for insertion into a previously established application-based information channel, the previously established application-based information channel permitting interaction between a user of the mobile device and one or more additional users;
 - receive, from the mobile device, information associated with at least one wireless networking functionality of the mobile device;
 - integrate the content and the information associated with said at least one wireless networking functionality of the mobile device into the previously established application-based information channel; and
 - insert other content from at least one of the additional users into the previously established application-based information channel.

VI. THE PRIOR ART

A. Randall (EX1005)

38. International Published Patent Application No. WO02/1762, to Randall et al., for “Database For Use With A Wireless Information Device” (“Randall”), published on February 28, 2002, based on an application filed August 22, 2001. It claims priority to three applications dating back to August 22, 2000. It is assigned to Symbian Limited.

39. Randall is directed to “a database for use with a wireless information device” (Randall, 1:7) and “the use of an open, universal data infrastructure for wireless information devices which can be used by application developers to write new applications by extending the attributes of the database using a standard protocol, as opposed to a closed and proprietary protocol” (Id., 3:10-13). Randall contrasts this to “the need to custom build the data sharing infrastructure for each new application.” Randall, 2: 25-27. In other words, Randall is directed to providing an infrastructure for “new applications requiring access to shared content.” Id., 3:17-19.

40. Randall describes an implementation called the ADS system, described as in information distribution architecture. The core structures of the ADS system include(a) Internet servers hosting extensible databases; (b) wireless information devices which can access information on these databases; and (c) applications resident on these devices which present a common set of APIs to plug-ins from commercial service providers.” Id., 7:16-19. The extensible database “is at the heart of much of the ADS system’s extensibility.” Id., 66. The data is resident on a server, referred to as the “i-server”. Id. Table 1, for example, “is an example application view of Alice's [a Hypothetical user] i- data.” Randall, 66:17-67.

41. The new services and functions Randall purports to allow include different types mobile call features. *See* Randall, 63 (“Section H An illustration: how

the ADS system framework is used in making a telephone call”). As identified in Appendix 1, specific features include “Ring Back” (which allows a caller’s phone to ring automatically when both the caller and intended recipient phones are “clear, on and have network coverage”) and “Home Divert” (which allows user to quote divert all calls on [his/her] home phone to [their] mobile, or vice versa”). Randall, 80. Another example in Appendix 1 is “Take a picture,” which describes using “a special type of mobile phone with the photographic lens in it.” Id. Without providing specific implementation details, Randall explains that the user’ phone “takes a digital picture, which you can send to your friends, and “[y]ou can then call them and chat about it.” Id. There is no indication that such sending of a picture is part of a Forum or sent with any other information pertaining to the user or their device.

42. While Randall indicates the devices are able to communicate over different types of networks, such as GSM (id., 11-13), it states that “devices based on the Symbian platform, are smarter than current generation GSM phones...” (Id., 1:19-21).

B. Forsyth (EX1006)

43. US Patent No. 7, 047, 030 to Forsyth, for Group Communication Method For A Wireless Communication Device, issued on May 16 2006 based on an application filed May 2, 2002. It claims priority to an application filed May 2, 2001. The application is assigned to Symbian Limited.

44. In general, Forsyth describes a group communication method that leverages the use of a group object, which can be used across different applications. As described in the summary of the present invention, once end users that form a group are identified, “a group object [is] constructed that defines or references members of the group in a way that enables communication to take place from the device and all members of the group.” 2:6-9. The group object may be used by a first application for defining members of the group, as well as “a second application running on the device, unrelated to the first application,” to enable unrelated communication among the group. 2:10-16.

45. Clearly stated by Forsyth: “Fundamental to forums is the idea of there being an object which defines solely the identities of members of a group: as such, it is content and application independent.” 5: 15-17. This confirms that (i) the group object is the basis for communications in Forums, (ii) the object defines solely the identities of members of a group; they are content independent, and (iii) group objects are also application independent.

46. Forsyth notes that an implementation of the present invention it's called Forums. As described, “it is designed specifically to allow current and very popular Internet type services (e.g. chat/instant messaging between groups) to be handled effectively between mobile devices and to enable a new generation of group-based communications services.” 2: 40-47. Forsyth continues by describing the basis for

such effective handling, namely the use of group objects. “The content and application independent group object is therefore a foundation stone for building applications which enable a huge range of new group-based communications/interaction functions.” 3:14-18.

47. Forsyth describes the group object as separate from the content. “In one implementation, the group object is used to define the **addresses** of multiple recipients for a message.” 4:17-19. Moreover, “[t]hat **message** can subsequently be treated as a single ‘communication object’”, namely, a separate object. 4: 17-20. There is no disclosure of a single object with addresses, names, and content.

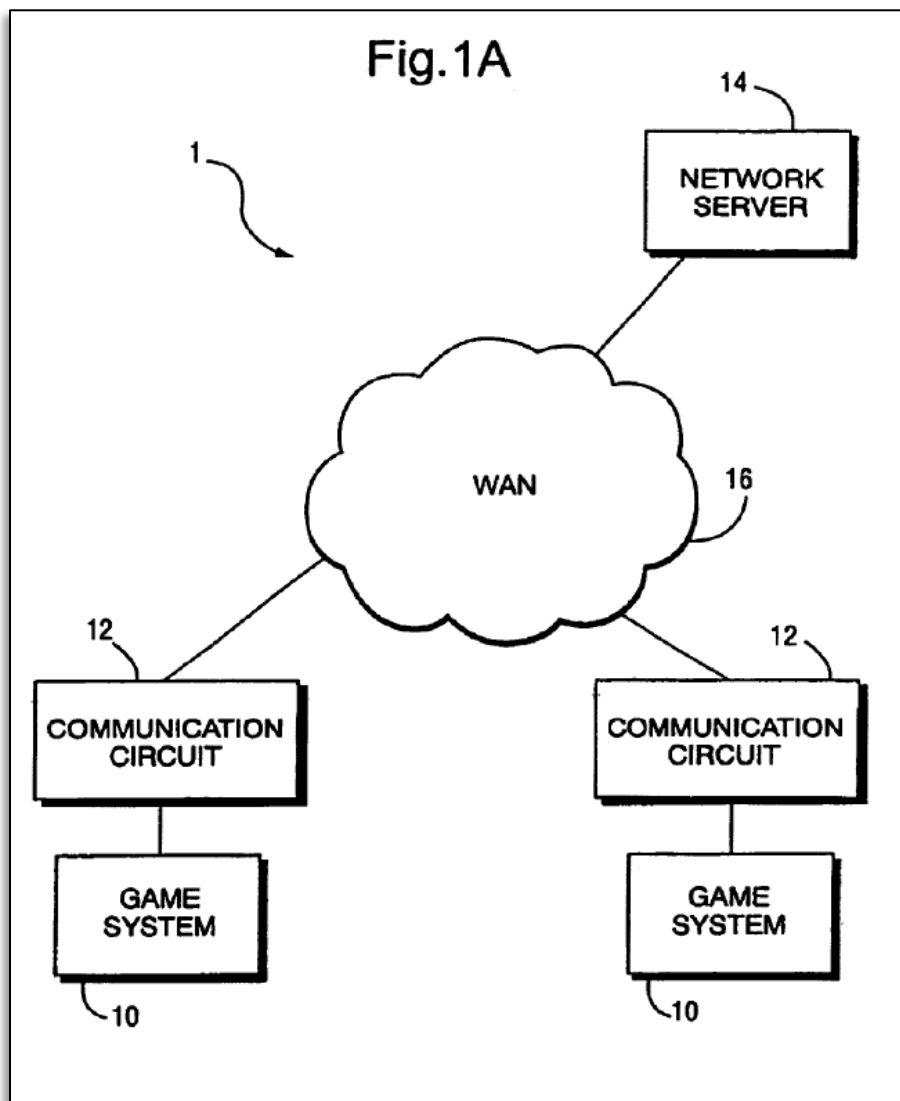
48. Forsyth describes several separate “scenarios.” In my opinion, each of these are text-based examples, although some describe the posting of, e.g., photos or MP3 files. However, when describing the photos and MP3 files, it is clear that they are not captured by the mobile device and uploaded by the mobile device into a Forum.

C. Pelkey (EX.1007)

49. US Patent No. 7,056,217 to Pelkey, for Messaging Service for Video Game Systems with Buddy List that Displays Game Being Played, issued on June 6, 2006, based on an application filed November 28, 2000. It claims priority to an application filed May 31, 2000. The application is assigned to Nintendo Co.

50. In general, Pelkey describes a messaging system that includes at least

two video game systems connected to a web server computer (e.g., connected via the Internet) that purportedly communicates messages between users of the video game systems. Abstract, 1:13-16. More specifically, Pelkey describes a basic architecture of the network, in which a messaging service can be implemented, as shown in FIG. 1A:



Pelkey describes a basic implementation in which game systems are connected via communications circuits (e.g., modems, network interfaces, etc.) to a wide area

network (e.g., the Internet). A network server is connected to the WAN and able to store games that may be played by users of the network. The messaging service, which can be provided by the network server or may use the network server, is used to communicate messages between users of the video game systems. 2:58 through 3:12.

51. Pelkey describes examples of the game systems that can be used in the messaging system, which include a console system (shown in figure 2) and a portable game system (shown in figures 3A, 3B, and 3C). For each game system (console and portable), a removable video game storage device (i.e., a game cartridge) is used, wherein a given cartridge includes a printed circuit board including a read-only memory (ROM) and potentially read/write memory, wherein the ROM stores instructions and other information pertaining to a particular video game. A user will insert a game cartridge of their choosing into game cartridge slot of the game system, enabling game machine circuitry to access information contained within ROM (and read/write memory), which information controls the game system to play the appropriate video game by displaying images and reproducing sound as specified under control of the ROM game program information. 3:49 through 4:17; 5:22-54.

52. Pelkey further notes that the game cartridge includes program code for a messaging service client. 6:42-46. Pelkey notes that access to the game network

(and thus access to the messaging service) is initiated when the user uses a cartridge having program code that includes code for the messenger service client. 9:55-56.

53. Pelkey describes various features of the messaging service (each of which is stored in the network server), including user registration (i.e., initial creation of user account and/or subsequent input of account username for logging in to account), creation of a user profile or updating user profile (i.e., user profile contains user-specific information, such as name, location, and other attributes or preferences, as well as profile image depicting their appearance or preferred appearance), and creation of a “buddy list” (i.e., a user-created list of other users (“buddies”) that he/she wishes to remain in contact. 6:48 through 7:59.

54. Pelkey notes that the message service allows for a connected user and his/her buddies to communicate with each other on an individual basis and/or via private chat sessions that can be set up. Pelkey describes such communications as typically text-based, but also possible to set up voice over Internet sessions between users. 7:51-56.

55. As such, it is clear that the messaging service of Pelkey is limited to the exchange of text-based messages and, possibly, in some instances, voice-based communication.

56. This is further evidenced by the fact that Pelkey points to the specific input device(s) of a given game system that is usable by a user to create such text-

based messages and/or voice communication. For example, “In the case of a game console, an on-screen keyboard may be used, and the game controls are usable to select characters from the on-screen keyboard to create messages. In another implementation, a separate keyboard (not shown) may be connected to the game console. In still another implementation, the input device may be a microphone to enable voice over IP communications. Voice over IP may be implemented within the messaging service.” 10:65 through 11:7. “In the case of a portable game system, an on-screen keyboard may be used to create messages. If voice input is supported, a microphone may also be used.” 11:8-10.

57. As admitted by Petitioners and their expert, Houh:

(i) Pelkey does not describe integration of messaging and sharing content like photos with multiple users (Ex.1003, ¶272);

(ii) Pelkey does not describe any in-game messaging (Ex.1003, ¶272; Petition, 63); and

(iii) Pelkey does not disclose details of the wireless network used to provide wireless messaging from the game system to the server (Petition, 75; Ex.1003, ¶300).

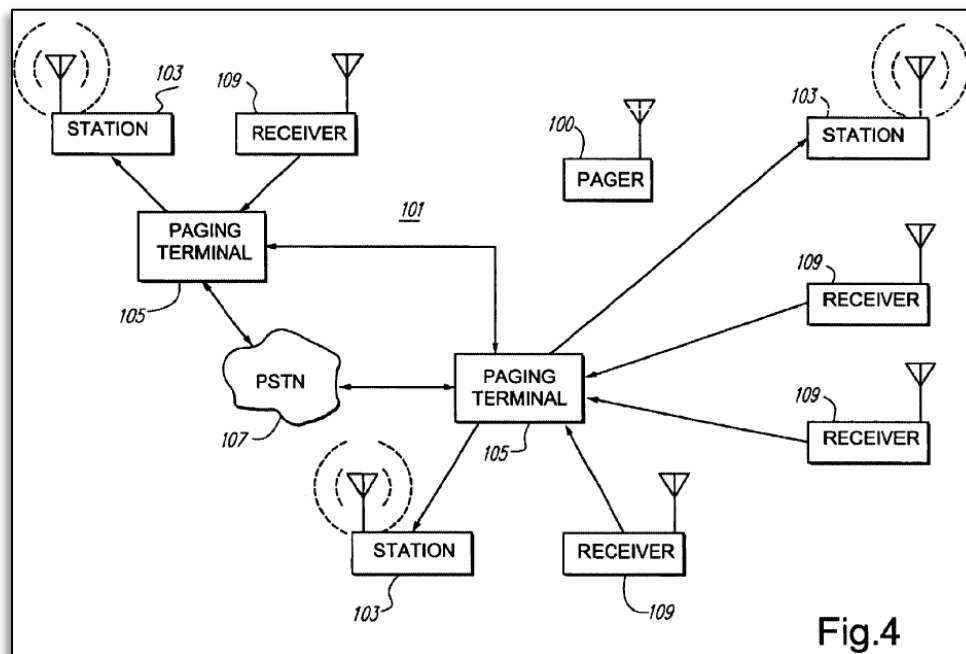
D. Eck (EX.1008)

58. US Patent No. 6,716,103 to Eck, for Portable Game Machine, issued on April 6, 2004, based on an application filed September 11, 2000. It claims priority

to an application filed October 7, 1999. The application is assigned to Nintendo Co.

59. Eck generally describes a pager cartridge for use with a portable game machine, in which the pager cartridge houses elements of a two-way pager. 5:8-10. Eck purports that the pager cartridge may be configured to transfer messages received over paging system to portable game machine when coupled to the portable game machine, wherein such messages may be visually and/or aurally communicated to a user of the portable gaming machine. 6:13-24.

60. Eck provides an architecture of a paging system, over which the pager cartridge is configured to communicate and transmit messages, as shown in FIG. 4:



Eck specifically states (5:45 through 6:7):

FIG. 4...discloses a two-way paging system 101 that includes paging stations 103, paging terminals 105, public switched telephone network

(PSTN) 107, paging receivers 109 and a pager 111. While only two paging terminals 105 are shown, a paging system may include many paging terminals. Likewise, the number of other components of paging system 101 is merely illustrative.

Paging stations 103 are also referred to as base stations or paging transmitters. In operation, callers who wish to page a system user use PSTN 107 to call the system user's pager telephone number. In a system including pager-equipped portable game machines, a computer of the game content provider may be connected to PSTN 107. Alternatively, pages can be originated through a computer network directly connected to a paging terminal. The call is routed, perhaps through a plurality of paging terminals from PSTN 107 to paging terminal 105 that formulates a page. The page is distributed over a communications network to each of paging stations 103. Paging stations 103 in turn transmit the page throughout the geographic coverage area of paging system 101. For example, the page may be broadcast over radio waves on a dedicated frequency. The paging system may operate using any well-known protocol such as Flex, ReFlex (e.g., ReFlex 25) or POCSAG.

If pager cartridge 100 is within the geographic coverage area of paging system 101, pager cartridge 100 receives the page and processes the message embedded within the page.

61. As such, the pager cartridge of Eck communicates messages over a very specific communication network (i.e., a paging system) requiring specific communication protocols and hardware for the transmission of such messages.

62. Eck notes that the pager cartridge is arranged in such a manner to allow other cartridges to be “piggy-backed” onto the pager cartridge when the pager

cartridge is coupled to (i.e., inserted into the slot) of the game machine. 5:38-43. In particular, Eck states (7:23-35) that:

Pager cartridge 100 is provided with first and second connectors 146 and 148. First connector 146 is configured to permit pager cartridge 100 to be selectively attached and electrically connected to game machine 10 via the connector 40 of game machine 10. In this way, the electronic components of the pager cartridge are accessible to and controllable by CPU 26 of game machine 10 and data (including messages) can be communicated between pager cartridge 100 and game machine 10. Second connector 148 permits game cartridges, read/write memory cartridges, digital cameras cartridges. GPS cartridges and the like to be electrically connected (“piggy-backed”) to pager cartridge 100 and, via connector 146 of pager cartridge 100, to game machine 10.

63. Eck further notes that a user of a pager cartridge can become a player in a virtual community for all users having a pager cartridge (which Eck refers to as “PagerWorld”). 10:20-23. The players are represented by a “persona character as players interact with each other (e.g., by sending messages and playing games).

64. As described below, Eck describes various embodiment using the pager cartridge, including both “traditional paging functions” and “be[ing] used in game play.” 9:60-61.

VII. DEFICIENCIES OF THE PETITION

A. Obviousness Based on Ground 1 – Randall-Forsyth

65. Petitioners and Houh opine that a POSITA would be motivated to combine Randall and Forsyth. I disagree with Petitioners and Houh.

66. The references, alone or in combination, fail to teach or suggest at least the claim limitation “identifying a[n] ... application-based information channel” (into which content from a mobile device, including captured content from a mobile device, is to be inserted), as generally recited in the independent claims.

67. Independent Claims 1 and 17 recite, in part, “identifying a previously established application-based information channel into which the captured content is to be inserted, the identified application-based information channel permitting interaction between a user of the mobile device and one or more additional users”.

68. Independent Claim 18 recites, in part, “identify a previously established application-based information channel into which the captured content is to be inserted, the identified application-based information channel permitting interaction between a user of the mobile device and one or more additional users”.

69. Independent Claims 19 and 22 recite, in part, “receiving, at a server from a mobile device, content for insertion into a previously established application-based information channel, the previously established application-based information channel permitting interaction between a user of the mobile device and one or more additional users”.

70. Independent Claim 23 recites, in part, “receive, from a mobile device, content for insertion into a previously established application-based information channel, the previously established application-based information channel

permitting interaction between a user of the mobile device and one or more additional users”.

71. Randall and Forsyth are devoid of any teaching or suggestion of at least the claim limitation “identifying a[n] ... application-based information channel” (into which content from a mobile device, including captured content from a mobile device, is to be inserted), as generally recited in the independent claims (e.g., limitation 1[B] of claims 1 and 17, limitation 18[D] of claim 18, limitation 19[A] of claims 19 and 22, and limitation 23[D] of claim 23).

1. Improper Combination of Randall and Forsyth

72. Based on my review of the petition and the expert declaration, it is my view that the petitioners and their expert are treating Randall and Forsyth as describing a singular system and application. There are numerous instances in the Petition and the Expert’s declaration that led me to this conclusion, including:

- a. Petitioners reference "Forums" in Randall and Forsyth as if they inherently represent the same underlying infrastructure and operational context, despite Randall focusing primarily on an extensible database architecture for sharing application data and Forsyth emphasizing application-independent group objects for communication.
- b. The Petition and expert declaration blend descriptions of Randall’s database features, such as serve-side extensibility, with

Forsyth's completely separate concept of portable, application-agnostic group objects, creating a misleading impression that these distinct features naturally complement or directly integrate.

c. Petitioners assert without adequate justification that Forsyth's server-side logic for handling message forwarding (based entirely on group object data) could seamlessly merge with Randall's independent concept of data-sharing infrastructure, even though Forsyth explicitly describes its group objects as fundamentally "application independent" and "content independent," which directly conflicts with Randall's specific, extensible application-data approach.

d. The Petition conflates Randall's generic mentions of messaging pathways (e.g., GSM, WAP) with Forsyth's explicit client-server communications in "Forums," despite no clear teaching in either reference that such messaging protocols could or would integrate directly into a combined "application-based information channel" as recited in the challenged patent claims.

73. This blending of Randall and Forsyth into a single conceptual framework lacks explicit support in either reference and improperly uses the challenged patent's claims as a hindsight-driven roadmap.

74. I see no basis for Petitioners' and their expert's approach to treating the

disclosures of each of Randall and Forsyth as directed to a single Symbian infrastructure or single Forum application. The fact that each refers to “Forums” does not change my opinion. Indeed, I have worked on and am aware of applications that, despite having the same name over time, changed materially in their structure and/or operation. One that comes to mind is "Google Hangouts," which has evolved significantly from its initial text-based chat and simple video conferencing functionalities to a fully integrated collaborative platform (Google Meet and Google Chat), involving substantial changes in underlying infrastructure, operational logic, and communication protocols. This demonstrates that a shared name alone does not justify treating distinct references as a unified disclosure.

2. Lack of Motivation to Combine Randall and Forsyth

75. I have reviewed Houh’s declaration, Ex.1003, relating to his opinion that a POSITA would have been motivated to combine Randall and Forsyth. *See* Ex.1003, ¶¶75-81. I disagree that Houh has set forth a valid motivation.

76. He begins by arguing that a “POSITA would have been motivated to combine Forsyth’s teachings regarding the use of group objects and additional features and functions to enhance the Forums service taught by Randall.” *Id.*, ¶75. Clearly, he is relying on the notion of “enhance[ing] the Forums service” of Forsyth with Randall’s infrastructure, including its extensible database. I disagree this is a motivation as Forsyth already describes the use of “content and application

independent group objects.” Forsyth, 3:14-18. Forsyth also describes group objects residing on a remote server and the use of pointers to such a central server (*id.*, 3:19-31), which indicates the use of a central database.

77. Houh also points to Randall’s network infrastructure and client-server architecture (Ex.1003, ¶75); however, Forsyth itself already acknowledges the use of a client server architecture (Forsyth, 3:24-31).

78. Houh notes that Forsyth explicitly motivates the combination by virtue of stressing the benefits of group objects, namely, because ““a group created in one application (e.g. for text based instant messaging) can immediately be used in other applications (e.g. a diary/agenda application could use that same group as the recipient list for an invitation to a meeting)’ [and] ‘data specifically created for one group and in one application can be re-used in a different application and the data viewed appropriately for that different application.’” Ex.1003, ¶77 quoting Forsyth, 2:27-32, 2:34-37. But this “strength” has nothing to do with Houh’s premise of “enhance[ing] the Forum service.” The benefit described by Houh relates to improving other applications and their implementations.

79. As such, I view Houh as using the ‘039 patent as a roadmap for his supposed motivation to combine Forsyth and Randall.

3. Ground 1 Lacks Disclosure of Limitations of Independent Claims

a) 1[B]/18[D]: “identifying a previously established application-based information channel”

(1) Forums’ reliance on group objects is application-independent

80. Petitioners assert that an individual Forum as used in the Forums application is an “application-based information channel.” I disagree with that assertion. An individual forum within the application “Forums” is not application-based, it is “group objects” based.

81. As discussed above, the Forums service of Forsyth relies on group objects, not on distinct application instances. In fact, Petitioners admit as much with their definition of group object as something that “defines or references members of the group in a way that enables communication to take place from the device and all other members of the group.” EX-1003, ¶71, citing Forsyth 2:6-9. The expert then opines “[t]his group object is application independent.” EX-1003, ¶71. Forsyth agrees – “No earlier system includes the concept of the content and application independent 'group' object. Prior art groups, in contrast, are all application specific.” EX-10062:37-39, emphasis added. Forsyth states explicitly that it is not application-specific and therefore cannot be “application based.”

82. Because of that independence, “a group created in one application ... can immediately be used in other applications.” EX-1006, 2:28-30. This is the very

definition of being application agnostic, not application-based, and as shown above, is the main point of novelty of the Forsyth patent. Forsyth goes on to say that “a user can organise people and entities (e.g., companies, clients etc.) into different group objects and can re-use that group object in many different applications (e.g. instant messaging, voice, e-mail etc.). EX-1006, 2:28-30 (emphasis added). These passages show that the communication channel in Forums is actually a data structure decoupled from any single application context. The Forum application is just one of many applications that may consume the very same group object. Put simply, a data construct (group object) that can be lifted intact from one application and reused in another is the antithesis of “application-based.” The Petition’s mapping therefore substitutes an application-independent, data-level group object for the claim’s application-specific channel, leaving a critical gap.

**(2) A POSITA would not view Randall/Forsyth as
‘application-based’**

83. From the standpoint of a POSITA circa in 2002, the Petition’s premise collapses once one examines how Symbian’s Forums actually stores group membership data. Forsyth explains that each Forum relies on a group object that “defines solely the identities of members of a group” and is therefore “application (and hence also content) independent,” expressly so it can be lifted unchanged into a diary, voice, e-mail, gaming, or any other application. Eck, 2:25-27. The ’039 claims, by contrast, require an “application-based information channel”, a medium

whose existence, membership, and data flow are anchored to a single software application selected on the mobile device. '039 Patent, 18:10-12¹.

84. Because Forsyth's stated design goal is cross-application portability, a POSITA would have recognized that mapping such an application-independent structure onto the '039 Patent's channel would demand a fundamental redesign: the group object would need to be cloned or irrevocably bound to a specific application context; server logic would need new namespace and access-control layers to prevent other apps from re-using the object; and the client would have to transmit extra metadata so the server could disambiguate a specific group object in, for example, a Messaging app from the exact same object when invoked by a Diary app. None of these adaptations is taught, or even hinted at in Randall or Forsyth, and Dr. Houh's declaration merely states that a POSITA "would have been motivated to combine" Forsyth's group objects with Randall's Forums infrastructure, relying on Forsyth's portability benefits without addressing the substantial, undocumented re-

¹ "Also, the system provides a platform for the development of a wide variety of personalized content applications for users of mobile devices, thereby allowing wireless network service providers not only to increase their subscriber base, but also to reduce turnover in their subscriber base." This citation indicates that the mobile device user is running an application on their device.

engineering that would be required. EX-1003, ¶78. Accordingly, equating an individual Forum with an “application-based information channel” is technologically untenable and rests on hindsight-driven speculation rather than concrete disclosure.

b) Petitioners fail to identify anything in Randall or Forsyth that teaches or suggests the claimed “information associated with [a] wireless networking functionality of the mobile device” (Limitation 1[C]/18[E])

85. As an initial matter, my opinion is that the “encapsulation” theory as put forth in the Petition is not disclosed in Randall. Randall shows only posting of application-layer data, never handset “encapsulation.” An example of this is where Randall describes opinion-poll users who “post their poll answers to the i-server,” intending to illustrate a simple upload of field values, not a packet-building step. Randall, p. 74. Likewise in Randall, it states that the database is “a remote server to which data is posted ... using a self-describing meta-language, such as XML,” again framing the client’s role as a direct data post, with no mention of SMS, WAP, or header creation. Randall, p. 4 And, Randall’s Figure 6 merely lists alternative transport pipes, “SMS/WAP/http/SMTP” beneath a generic “SOAP” layer, without attributing any header-generation work to the handset.

86. Therefore, in my opinion, in Randall’s narrative, diagrams, and examples, the mobile device is always a field-value publisher calling server APIs; no passage depicts the phone wrapping data in a protocol envelope or deriving

header fields. Petitioners' "encapsulation" theory therefore lacks any support in Randall.

87. Forsyth's mobile client never encapsulates its message in any transport-layer packet. Forsyth's states that communication relies on an "application independent object" holding only group-member identities (Abstract) and that, after a user creates a message, "these two are sent to the message server; the message server stores these two objects and forwards a copy of the message" (Forsyth, 6:8-10). Nothing in Forsyth instructs the handset to add GSM, WAP, or other protocol headers, and throughout the disclosure there is no mention of "encapsulate," "header," "bearer," or similar terms. Because the handset simply transmits application data to a server that handles delivery, Forsyth provides no disclosure of an encapsulation step, leaving limitation 1[C]/18[E] unsatisfied.

i. There is no technical basis for Petitioners' assumption that the handset must "determine" either the sender identity or the Forum name before transmitting a Forums message.

88. Forsyth places that logic squarely in the server: when a Forum is first created "the message server stores these two objects and forwards a copy of the message to each of the people on the address list," and for every later reply "the new message is sent to the server, which then forwards on the increment to all the people on the current (server-maintained) address list." Forsyth, 6:9-11, 19-22. Because the server already knows which user is logged in and which Forum thread is active, the

client merely selects an existing Forum from its personalized list, “After clicking on a Forum title in the summary view, the user is shown the messages posted to that Forum, as shown in FIG. 7”, and, when the user chooses “Forum reply,” “a new message is posted to the Forum.” Forsyth 6:37-39, 53-55.

89. Nothing in Forsyth instructs the handset to embed its own name or the Forum name in the outbound payload; since those attributes are implicit in the session context the server maintains. Accordingly, Petitioners’ theory that the client must “determine” and transmit such header fields to satisfy limitations 1[C]/18[E] and 1[D]/18[F] is unsupported by the cited references and contradicted by Forsyth’s explicit client-server architecture.

ii. Information about the Sender name, date/time, and Forum’s name is not “information associated with wireless networking functionality.”

90. Petitioners’ own mapping alleges that a Forum is the very “application-based information channel” recited in the claims (Petition, pp. 24-25, 28). By definition, therefore, any data that merely identifies the Forum itself, its title (“Naked Chef”), the list of invitees, nicknames, timestamps, and so forth, is information about the channel. It is not, and cannot become, “information associated with ... wireless networking functionality of the mobile device.”

91. Forsyth reinforces that distinction. The system stores channel metadata in a “group object” that “defines solely the identities of members of a group: as such,

it is content and application independent”. Forsyth, 5:16-17. Each Forum that a user sees in Figures 2-9 is simply a reuse of that object: “Each group exists as an application-independent object and can hence be accessed by different applications”. Forsyth, 5:55-57.

iii. Forsyth does not disclose WAP, and teaches away from GSM

92. As previously, Petitioners’ “encapsulation” mapping relies on the premise that the handset wraps each Forum post in a WAP or GSM-SMS packet (Petition, pp. 32-33), yet **Forsyth never once uses the terms “WAP” or “Wireless Application Protocol.”** In Forsyth, every client-side action ends when the user message is handed to a *message server* (Forsyth, 6:8-9); the specification is silent on any lower-layer packaging the handset might perform. Because the reference contains no discussion, textual or graphical, of WAP headers, bearer selection, or other transport details, it cannot supply the “information associated with ... wireless networking functionality” that Petitioners need for limitation 1[C]/18[E].

iv. The mobile device does not determine message type or content type.

93. Randall identifies several pre-configured transports, “SMS/WAP /http/SMTP” (Randall, Figure 6), and explains that its framework offers “the ability to use variable delivery mechanisms and perhaps conceal this selection process to the developer”. Randall, p. 56. Because the framework itself, rather than the handset, selects among these fixed paths and even hides the choice from developers, Randall

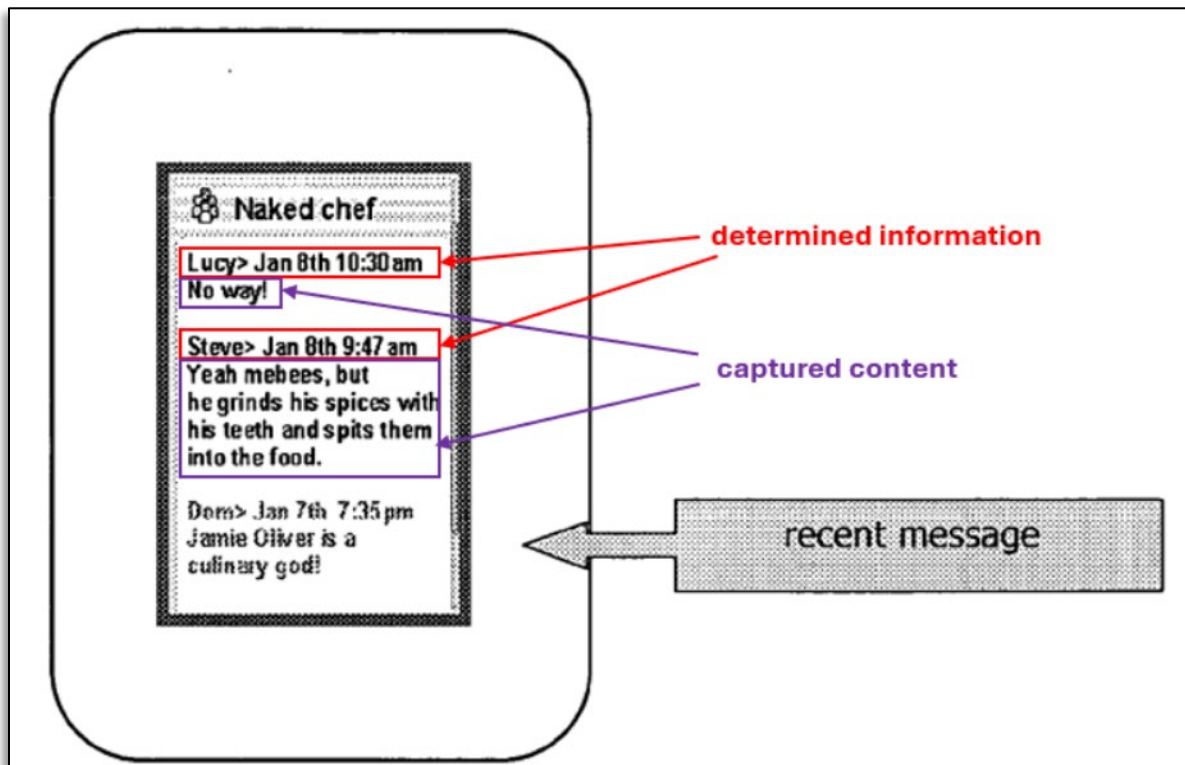
contains no disclosure in which the mobile device first determines its own wireless-networking capabilities and then picks a message or content type.

94. Forsyth likewise places transport decisions outside the handset. It teaches that “a message thread is stored only on the server ... but is also replicated on each client device”, and notes that “Communication can be over any bearer or protocol supported by the device.” Forsyth 4:35-37. The server governs storage and distribution, while the client merely receives or displays the chosen format; Forsyth never states that the handset inspects its interfaces or selects a message or content type based on wireless capability. Accordingly, neither reference teaches the disputed limitation, and both leave the mobile device without any role in determining message or content type.

- c) **Petitioners fail to identify “provid[ing]/[e] via said at least one network interface,] the captured content from the mobile device to at least one server for insertion in association with the determined information into the identified application-based information channel” (Limitation 1[D]/18[F])**

95. Claim limitation 1[D]/18[F] requires providing “captured content” “in association with the determined information” (i.e., the information associated with at least one wireless networking functionality). While I acknowledge that Randall and Forsyth mention GSM (*See* Randall, 1:11-13; Forsyth, 1:22-25), I disagree with Petitioners and Houh that the Randall-Forsyth combination teaches or even suggests this.

96. In addressing 1[D]/18[F], Petitioners and Houh continue their reliance on sender name, date/time, and Forum name as the “determined information” being provided with captured content as encapsulated within a GSM-SMS or WAP protocol message. They explain their argument with reference to their annotated Forsyth, Figure 7:



The “*determined information associated with*” the action of sending the Forums message (e.g., sender name, date/time, Forum name) is **provided** along with the text message entered by the user (captured content) **in the protocol message sent to the server.** (§V.B.1.b.3.) **As shown by Forsyth’s Figure 7 above,** this “*determined information*” (user identity, date/time, forum name) is **inserted “into the identified application-based information channel” with the “captured content”** and displayed on the Forum (Naked Chef) screen for each forum member. (EX-1003, ¶177).

Petition at 39.

97. I disagree. Neither Randall nor Forsyth provides an explicit teaching of the details of the wireless messaging functionality of GSM-SMS or WAP (a point that Houh agrees with (Ex1003, ¶160)). Moreover, Forsyth does not provide any indication as to the specific information relied on, sender name, date/time, and Forum name, being provided along with the asserted captured content (e.g., text message) in the protocol message sent to the server.

98. Petitioners' and Houh's reliance on what is displayed in Figure 7 is unfounded. What is displayed is not an indication of what information is included in a message within Forums. For example, just because "Steve" or "Naked Chef" is displayed does not mean such information was transmitted from the mobile device to a server.

99. To the contrary, Forsyth suggests that such information is not included in such a message. Figures 6-9 of Scenario 1 help make the point. As shown and described with reference to Figures 6-9, a user selects a previously established Forum (e.g., Naked Chef) (Figure 6). Forums thus has an indication of the specific Forum. 6:27-29; 6:36-39. After selecting "Forum Reply," the user enters a text message, which is posted to the selected Forum. 6:53-57. Contrary to Petitioners and their expert, there is no reason for the mobile device message to include in the message the user identity, as the system already knows which user is logged into the

system (having presented him/her with their individualized list of available Forums), or the Forum name (the user having already selected the particular Forum). The server thus may add any username, timestamp or Forum name; there is no indication that the mobile device determined this information and sent it to the server, as argued by Petitioners and required by the claim language.

100. Petitioners and Houh also make passing reference to a protocol message including “message type” and “content type.” Petition, 33 citing Ex.1003, ¶¶162-163; *id.*, 34. Notably, Petitioners do not reference this with regard to Limitation 1[D]/18F]. *See* Petition, 39-40. In any event, as discussed above, such information is not “determined” and is inconsistent with the ‘039 Patent’s specification to the extent it discloses use of WAP but never explicitly relies on message type or content type as the wireless networking information.

4. Petitioners’ 1[B] and 1[C] Arguments are Contradictory

101. Petitioners rely on Forsyth’s group-based text messaging teaching both limitation 1[B]/18[A]’s “previously established application-based information channel” and limitation 1[C]/18[E]’s “mobile device wireless networking functionality.” *See* Petition, 25-26, 31.

102. Contrary to Petitioners’ argument, a POSITA would have understood Forsyth’s reference to “group-based text messaging” to be a capability of Forums, and not a “wireless networking functionality.

103. A group object is “a collection of information that describes or references at least the minimum amount of information about 2 or more entities (usually individual ...) **required for activities to be engaged in between them.**” Forsyth at 2:17-22. In the context of text messaging, “the collection of information” required to create a group object is information about the participant in the group: **“In Forums, a new group object can be created when a user defines the recipients of a message.”** Forsyth at 2:48-49. Forums supports “group-based text messaging” by allowing a user to select “a group of participants”, which is stored as an “application independent object”, to create a Forum. Forsyth at 5:50-62. Thus, Forsyth’s “group-based text messaging” is a capability of Forums. Forums supports a text messaging activity because it is a “messaging tool.” Forsyth at 5:27-30. It is group based because “[i]n Forums, a new group object can be created when a user defines the recipients of a message, or (going beyond a simple messaging application) whenever the user defines the desired participants to be involved in group communication.” Forsyth at 2:48-53. Contrary to Petitioners’ mischaracterization (Petition, 31), Forsyth’s reference to “group-based text messaging” is not a “wireless networking functionality of **the mobile device**”, it is a capability of Forums, which is an application, as Petitioners argue.

B. Obviousness Based on Ground 2 – Pelkey-Eck

104. Petitioners contend in Ground 2 that the combination of Pelkey and Eck render the Challenged Claims obvious. I disagree for at least the reasons that a POSITA would not have been motivated to combine them as argued by Petitioners and, even if combined, Petitioners’ argument regarding the “previously established application-based information channel into which captured content is to be inserted” fails.

1. Lack of Motivation to Combine Pelkey and Eck

105. Petitioners state, without support, that a “POSITA would have been motivated to combine Eck’s teachings regarding PagerWorld with the network and message server architecture taught in Pelkey.” Petition, 62. I disagree.

106. Petitioners’ apparent rationale is that a “POSITA would be motivated to apply the network and message server architecture in Pelkey to Eck in order to avoid the charge-based system for exchanging messages and photos via pager cartridge in Eck. (EX-1003, ¶272.)” Petition, 63. I disagree that a POSITA would have been so motivated, including because Eck already addresses the supposed issue of cost in a different way, thus obviating the need Petitioners point to.

107. Specifically, Eck describes avoiding cost issues by allowing a user to use “user-generated custom libraries of words, phrases and graphics” to reduce message length. This practice is called “coding,” which Eck expressly

acknowledges can be used “to reduce message length” and thus “reduce message charges.” Eck, 16:59-60; see also id. 16:49-63 (“It can be seen that by using ‘coding’, the length of the messages may be reduced.”).

108. In my view, the argument is superficial. For example, neither Petitioners nor Houh address any additional costs of the proposed modification, such as communication and bandwidth costs of the proposed network or the added costs of the network server architecture and other costs of the technical implementation of the GSM-SMS or WAP. These could include increased server-side infrastructure requirements for handling GSM or WAP traffic, licensing and subscription fees associated with GSM/WAP communication services, additional hardware and software integration costs, recurring network usage charges from mobile network operators, and higher maintenance and security expenses to support more complex network protocols.

109. Additionally, neither Petitioners nor Huh point out the specific savings that would motivate the combination or prompt a user to switch to GSM-SMS or WAP, particularly in light of Eck’s disclosed “coding” approach for reducing costs, as described above.

110. Petitioners continue that “a POSITA would be motivated to modify the ‘pager cartridge’ in Eck as necessary to use PagerWorld in Pelkey given the disclosed benefits of PagerWorld including ‘exploration and adventure,’ ‘chat and

community interaction,’ and ‘character growth.’” Petition, 63 (citing Ex.1003, ¶272; Eck, 10:13-19). The statement makes no sense; a POSITA would not have viewed Pelkey and Eck in this way. First, the statement it admits that Eck, through its pager cartridge, already provides the benefits of ‘exploration and adventure,’ ‘chat and community interaction,’ and ‘character growth.’ Petitioners point to no actual reason Eck’s structure and operation would need to change. See Eck, 10:1-19 (explaining an application of “pager cartridge 100” is Multiple User Dungeon (MUD) games that provide these benefits).

111. Petitioners also reiterate Houh’s conclusory opinions that Eck’s PagerWorld game is a known technique, Pelkey’s client-server based messaging server is a known method/product, and “[r]eplacing the pager system infrastructure system in Eck with the client-server architecture in Pelkey is the simple substitution of one known element for another to achieve a predictable result (internet-based functionality).” Petition, 63 citing EX-1003, ¶272. But Houh never explains what those modifications would be given differences in operation and architecture. Indeed, the expert provides no explanation of how a pager cartridge could be replaced with a hypothetical “GSM-SMS or WAP cartridge” in the system of Eck. This would include making such GSM-SMS/WAP cartridge accept a digital camera cartridge in a piggy-back fashion. Some issues in making the alleged combination would include redesigning the cartridge interface to accommodate differing

electrical and communication protocols between pager and GSM/WAP systems, addressing increased power consumption and battery management demands typical of GSM or WAP devices, implementing necessary changes in software drivers and firmware to manage GSM/WAP-specific network registration, messaging protocols, and error-handling routines, and ensuring robust signal integrity and electromagnetic compatibility, particularly given the distinct operational frequency bands and interference concerns of GSM/WAP compared to paging systems.

2. Ground 2 Lacks Disclosure of Limitations of Independent Claims

112. Limitation 1[B]/18[D] recites a “previously established application-based information channel into which the captured content is to be inserted.”

113. In support of identifying the “previously established” aspect of the channel, Petitioners and Houh argue:

PagerWorld includes client software in the portable game machine (client program) and corresponding software in the server (server program). **As such, PagerWorld is persistent**, it remains in existence after individual users exit the world. PagerWorld is therefore a ‘previously established application-based information channel’....

Petition, 71 (citing Ex.1003, ¶289).

114. I understand that persistence, as used by Petitioners, general means remaining in existence after individual users exit; however, contrary to their arguments, persistence does not necessarily result from having both a client program and a server program. This architecture does not dictate persistence. Here, Houh

cites to Eck. See Ex.1003, ¶289 (citing Eck, 4:61-5:7, 9:40-59). But these cited passages merely described generally how to use Eck's game machine (e.g., insert game cartridge in the slot, operate power switch) (*See* Eck, 4:61-5:7) and the general pager functionality (e.g., pager cartridge provides two-way paging and is addressable, messages may be from system operator); neither portion relates specifically to PagerWorld. Petitioners' position that PagerWorld is persistent by virtue of it having both client and server programs is baseless.

115. Examples of client-server architecture that does not create persistent communication includes simple request-response systems such as standard HTTP web browsing sessions, transactional messaging applications like email delivery systems without mailbox storage, and instant messaging protocols that establish temporary sessions closed immediately after communication ends.

116. In addressing 1[B]/18[D], Petitioners argue that "the captured content (photo/images, sound/auto files) 'is to be inserted' into the 'previously established application-based information channel.'" Petition, 73 quoting 1[B]/18[D]. In support, they point to (i) a user customizing their person character and (ii) "PagerWorld supports transmission of messages 'with images and sound bytes to other pagers in the network....'" Petition, 73 citing Eck, 16:42-45, 24:30-36. Neither teaches or suggests the claim limitation.

117. Regarding the customization of the persona character, Eck does not describe what exactly this means or how this would be accomplished. In any event, a POSITA would not view the notion of customizing the persona character with “image data” as the same as inserting a photo/image into a channel, as Petitioners allege. Image data could have included, for example, just an indication of pixel value (e.g., for a person’s hair), such that a persona character could have similar color hair. This does not equate to inserting a photo or image into the alleged channel of PagerWorld.

118. As for Petitioners’ argument that PagerWorld includes transmitting messages with images and sound, there is no such disclosure. Petitioners conflate different embodiments and discussions in Eck; messages with images and sound have nothing to do with PagerWorld.

119. A POSITA reading Eck would have understood Eck to be describing different embodiments or uses of the pager cartridge, some “traditional paging functions” and others in connection with “game play” (Eck, 9:60-61) and PagerWorld. More specifically, the uses of the pager cartridge for sending photos and sounds identified by Petitioners and Houh do not relate to PagerWorld and thus do not relate to insertion of content in the alleged channel. See, e.g., Eck, 9:25-37 (summarizing the functionality of the “pager-equipped portable game machine,” explicitly enumerating sending messages separately from allowing playing of pager-

compatible games like PagerWorld); *id.*, 9:60-61 (“Apart from traditional paging functions, pager cartridge 100 can be used in game playing.”). Indeed, “pager cartridge 100 is a stand-alone accessory device...which can receive messages even when not attached to game machine 10.” Eck, 22:2-5.

120. Eck, 16:42-45, cited by Petitioners, is directed to this traditional pager functionality, never even suggesting the functionality apply to PagerWorld. See Eck, 16:41-17:4.

121. Eck, 24:30-36, also cited by Petitioners, also does not relate to PagerWorld. It is part of a discussion of an “Example Digital Camera,” including its structure and circuitry. See Eck, 23:35-24:65. Telling, the discussion in this section of radio circuitry integrated in the game machine and functionality is without reference to any game cartridge or PagerWorld. A POSITA would have understood that the message-sending functionality is separate from PagerWorld, the alleged application-based information channel. This includes the Message Center described in Eck, including the Compose Message screen 290, which relates only to text. Petitioners and their expert never directly address that the discussions of photos and sounds, on the one hand, and PagerWorld, on the other, are disparate embodiments.

VIII. CONCLUSION

122. I hereby declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct, and that all statements made

of my own knowledge are true and that all statements made on information and belief are believed to be true. I understand that willful false statements are punishable by fine or imprisonment or both. *See* 18 U.S.C. Section 1001. I reserve the right to modify my opinions as additional information becomes available to me.

Dated: June 17th, 2025

By: 

Mahdi Eslamimehr, Ph.D.