

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

IPR2025-00540

DECLARATION OF GEORGE EDWARDS

IN REGARD TO THE PETITIONS FOR *INTER PARTES* REVIEW OF
U.S. PATENT NO. 8,793,336

1. I have been retained as an expert in computer science to provide analysis and opinions related to whether certain claims of U.S. Patent No. 8,793,336 (“the ’336 Patent”) are rendered obvious by prior art asserted by Petitioner Samsung. I understand that Samsung has asserted that claims 1-3, 6-1-16, 19-21, and 23-27 are rendered obvious by the combination of Patent WO02/17652 (“Randall”) and Patent US7,047,030 (“Forsyth”) under 35 U.S.C. §103.

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 IPR2025-00540. I am prepared to testify as to the matters discussed here.

3. My 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.

4. A detailed list of my qualifications is set forth in my *curriculum vitae*, a copy of which is attached as Exhibit A. Within the broad field of computer science, my specific areas of expertise encompass software engineering, distributed systems, software architecture, software analysis, computer programming, mobile device software, Internet software, computer networks,

location-based systems, and embedded software. I have direct experience building and analyzing web applications, mobile apps, cellular networks, email and multimedia messaging services, and databases. Therefore, I believe I am qualified to express expert opinions related to the '336 Patent.

5. In forming my opinions, I have considered:

- U.S. Patent No. 8,793,336 (“the '336 Patent”);
- Samsung’s Petition for Inter Partes Review and attached exhibits (the “Petition”);
- Samsung’s Defendants’ Invalidity Contentions of U.S. Patent 8,793,336 in *Mobile Data Technologies, LLC v. Samsung Electronics Co. Ltd., and Samsung Electronics America, Inc.* No. 2:24-cv-00435-JRG-RSP (E.D. Tex.) (Samsung’s “Invalidity Contentions”);
- my education, training, and experience in the field; and
- other materials cited in this declaration.

6. Patent WO02/17652 (“Randall”) is assigned to Symbian Ltd. I am informed and understand that it is being asserted in IPR2025-00540 as prior art to the '336 patent. I am informed and understand that Petitioner alleges that the reference discloses a mobile client-server architecture utilizing an extensible database system; a “Forums” service in which mobile users may engage in messaging or content sharing; client and server programs that

operate on Symbian OS to facilitate asynchronous communication between mobile devices; and the foundational infrastructure of the claimed mobile information channel, including support for dynamic content sharing and message delivery.

7. Patent US7,047,030 (“Forsyth”) is also assigned to Symbian Ltd. I am informed and understand that it is also being asserted in IPR2025-00540 as prior art to the ’336 patent. I am informed and understand that Petitioner alleges that the reference discloses the concept of “group objects” to enable enhanced group-based communication among mobile device users; use of persistent data and object-oriented storage to organize messages, multimedia files, and user interactions; support for various group messaging scenarios, including sharing images, scheduling events, and maintaining collaborative records; and interfaces and mechanisms that could be combined with Randall’s Forums infrastructure to provide a full-featured mobile information channel as claimed in the ’336 patent.

8. I am informed and understand that Samsung has served its Invalidity Contentions in the parallel proceeding in case 2:24-cv-00435-JRG-RSP (E.D. Tex.). In these Invalidity Contentions, it asserts a Nokia 9210 Communicator phone enabled with internet access (the “Nokia 9210 System”) as prior art and alleges that it invalidates the ’336 patent. Samsung alleges that the Nokia 9210

System discloses mobile messaging; content capture and sharing of messages, images, audio, and documents via contacts, email threads, or groups; group messaging features and document/media handling via forums, newsgroups, and web-based channels. (Ex. 2033, Invalidity Contentions Ex. A23, p.1.)

9. In my opinion, the Nokia 9210 System is, for the purposes that Samsung relies on it in their Invalidity Contentions, the same prior art as the combined Randall and Forsyth references. As an initial matter, the Nokia 9210 System operates on the Symbian OS, which emerged from a strategic joint venture formed in June 1998 by Psion, Ericsson, Motorola, and Nokia to establish Symbian Ltd. (Ex. 2037, p. 5.) The objective of this collaboration was to develop a standardized operating system for mobile devices called Symbian OS. (Ex. 2037, p. 5-7.) The Nokia 9210 Communicator was the first commercially available device to utilize Symbian OS, featuring Nokia's Series 80 user interface, which stemmed from Symbian Ltd.'s internal 'Crystal' design initiative. (Ex. 2037, p. 5-6, 10.) Accordingly, the Nokia 9210 System is a Symbian OS-based device.

10. The Nokia 9210 System features that Samsung relied on in their Invalidity Contentions are adequately described in Randall and Forsyth as they both discuss Symbian OS, the base of the Series 80 v1.0 Operating System of the Nokia 9210 System. Randall describes a client server architecture

foundational to Symbian OS utilizing an “extensible database” system. (Randall, p. 7, 15-p. 8, 4.) Randall then discusses a “Forums” service that “allows several people to be part of a ‘channel’ or room,” facilitating asynchronous communication between mobile devices. (Randall, p. 40, 15-26.) Similarly, Forsyth discusses object-oriented storage and persistent data management enabling persistent groups. This allows the use of “group objects” to be implemented “in a distributed manner across a client server architecture” to enable enhanced group-based communication among users (Forsyth, 2:61-3:34.) Symbian OS is also directly named in Forsyth as an “object based operating system” in an implementation of “Forums,” a service enabling “group based communication services” “between mobile devices.”

11. I note that the labeling of the claim terms diverges beginning with claim element 1[A]. The Invalidity Contentions do not parse the claim into as many elements as the Petition does. The rest of this analysis references the limitations as in the Invalidity Contentions and notes the corresponding limitations in the Petition. (Petition, p. 94.)

12. Samsung’s evidence for claim limitation 1[A] from the Invalidity Contentions, which corresponds to limitations 1[A] and 1[B] in the Petition, is taken from the Nokia 9210 User Guide. For limitation 1[A] in the Samsung Invalidity Contentions (limitations 1[A] and 1[B] in the Petition), Samsung’s

Invalidity Contentions rely on “the Contacts application to create, edit, and manage all contact information, such as phone numbers and addresses.” (Ex. 2033, Invalidity Contentions Ex. A23, p. 5.) This feature of the Symbian OS is disclosed in Forsyth and/or Randall, as evidenced by the declaration of Petitioners’ expert, Dr. Houh. Dr. Houh states, “Forsyth is directed to a ‘group communication method’ using a ‘group object’ to specify identities of group members. (*See, e.g.*, Forsyth, 1:15-16, 2:17- 27.) This ‘group object’ can also be used to ‘share, amongst a pre-defined group, personal content such as photographs, opinions, music playlists, music tracks etc.’” (EX-1006, 4:9-11.)” (Ex. 1003, ¶189.) While Forsyth discusses a specific Forums application, the application “runs on the object based operating system Symbian OS” where “group objects can be defined independently of any specific task or application.” (Forsyth, 2:40-53.) Forsyth’s disclosure of utilizing group objects for creating, editing, and managing contact information is a capability provided by Symbian OS.

13. Forsyth states that its “group object” can be actual contact information, which would be stored by the Symbian OS: “A ‘group object’ is therefore a collection of information that describes or references at least the minimum amount of information about 2 or more entities (usually individual, but possibly also different aspects of the same individual) required for activities to

be engaged in between them, or content to be shared or exchanged. It can be actual contact information for each member of a group.” (Forsyth, 2:17-24.) Forsyth also states that the option to “[define] the recipients of a message, or... [define] the desired participants to be involved in group communication” is enabled by the use of group objects, which is a capability provided by Symbian OS where “group objects can be defined independently of any specific task or application.” (Forsyth, 2:40-53.)

14. Randall also discloses a function that “lets you create circles of contacts of people with similar interests who you may never have met before, but have picked up their text details on a website where you share interests in common.” (Ex.1003, ¶100, quoting Randall, p. 82.)

15. Also for limitation 1[A], Samsung’s Invalidation Contentions refer to the Nokia 9210 User Guide, which states “You can create contact groups to save time by sending e-mails and short messages to all members of the contact group in one action.” (Ex. 2033, Invalidation Contentions Ex. A23, p. 6.) This capability of the Symbian OS is disclosed in the Randall-Forsyth combination: “Forums ... facilitates open discussion amongst a group and allows multiple chat-style conversations to take place simultaneously.” (Petition, p. 23 citing Forsyth.) Petitioners also cite Randall, stating that “a forum allows several people to be part of a ‘channel’ or room, which is usually themed.” (Petition,

p. 23.) In both of these disclosures, the underlying capability for storing the contact records of the people in a group is provided by the Symbian OS. Thus, the disclosure in the Invalidity Contentions is the same as in the Randall and Forsyth combination.

16. Samsung's Invalidity Contentions also include citation to Nokia's internet browsing features allowing users to "interactively post and respond" to content. (Ex. 2033, Invalidity Contentions Ex. A23, p. 7-8.) Randall and Forsyth also disclose the same internet browsing features of the Symbian OS. Randall describes a "data services framework" allowing integration with web-based services such as a BBC service for weather or a Yellow Pages service, where a "two-way flow of information" enables the user interaction with web services. (Randall, 20:16-28.) This contributes to the dynamic content sharing and message delivery of Symbian. Forsyth similarly describes the integration with web services via a "central server [that] can act as a store for resources which group-members may wish to discuss and share" such as "web sites." (Forsyth, 3:19-34.) Forsyth goes on to describe "Social Browsing" where users can "see the internet sites other people have browsed to... on a per-person basis," allowing users to share images and maintain collaborative records through web interfaces. (Forsyth, 13:5-20.)

17. Furthermore, Petitioners' expert, Dr. Houh, states that internet browsing to post and respond to content is disclosed in Randall and Forsyth. Specifically, Dr. Houh states that "based on Randall's disclosure of GSM and WAP, a POSITA would have understood the client-side application is either (1) a standalone application supporting WAP or GSM-messaging protocol (discussed below) or (2) a web browser (such as a WAP microbrowser)." (Ex. 1003, ¶52.) Randall discusses communication methods including GSM and WAP as being utilized as "good, functional transport solutions" for ServML, which is a "a means of storing, accessing, and interacting with data using a client-server architecture" that "takes advantage of the power of Symbian advanced clients" and therefore provided by Symbian OS. (Randall, 45:5-15, 58:5-20.) The capability to provide a microbrowser for display of a webpage is utilized by the Forums Application and provided by the Symbian OS.

18. In the Invalidity Contentions, Samsung points to the 9210 User Guide (Ex. 2033, Invalidity Contentions Ex. A23, p. 6) which shows the image of a user interface below:



- 1 Press **Recipient** in the corresponding message editor. A dialog listing your contacts opens, see figure 70.

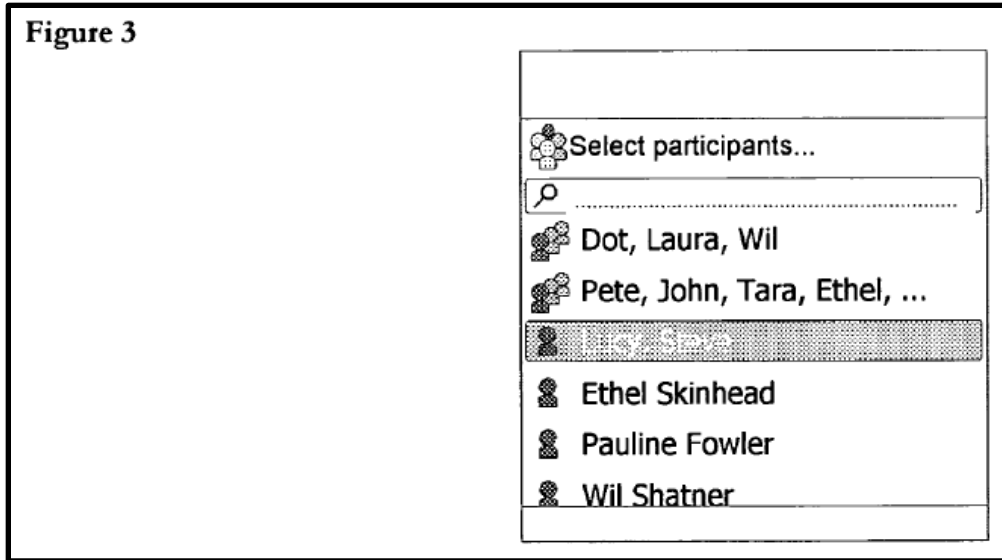


Figure 70

Nokia 9210 User Guide at 165.

19. The second image indicates the same user interface by which a user can access a Contacts Directory and can select a contact, with the Guide stating “Press Recipient in the corresponding message editor.” (Ex. 2033, Invalidity Contentions Ex. A23, p. 5.) This “user interface” capability of a Contacts Directory is also disclosed in Forsyth Fig. 3 as shown below for the Forums application. As in the Nokia User Guide, a user simply highlights an address and selects it.

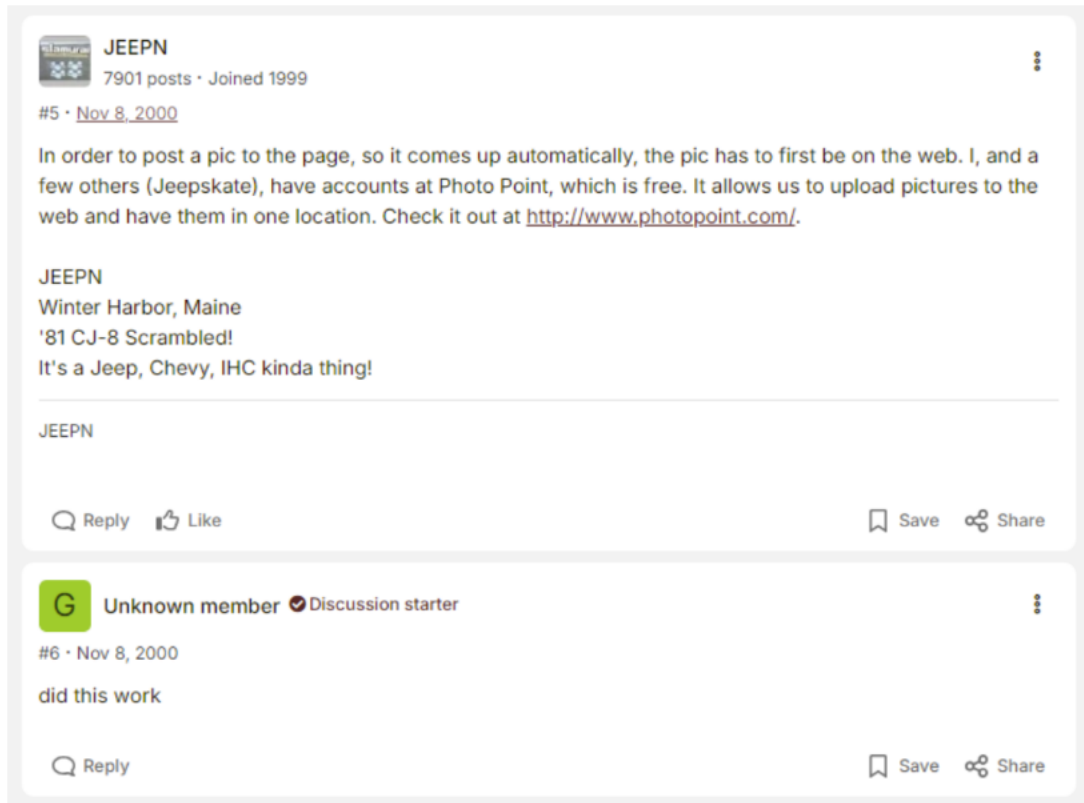
Figure 3



20. Samsung's Invalidity Contentions include citation to a WAP capability: "[w]ith Certificate manager you can manage digital certificates which you use when connecting to WWW sites, WAP services, mail servers, and when installing software." (Ex. 2033, Invalidity Contentions Ex. A23, p.23.) Randall and Forsyth disclose that the Forums servers use of WAP. Randall discusses communication methods including GSM and WAP as being utilized as "good, functional transport solutions" for ServML, which is a "a means of storing, accessing, and interacting with data using a client-server architecture" that "takes advantage of the power of Symbian advanced clients" and therefore provided by Symbian OS. (Randall, 45:5-15, 58:5-20.) Thus, the disclosure in the Invalidity Contentions is the same as in the Randall and Forsyth combination.

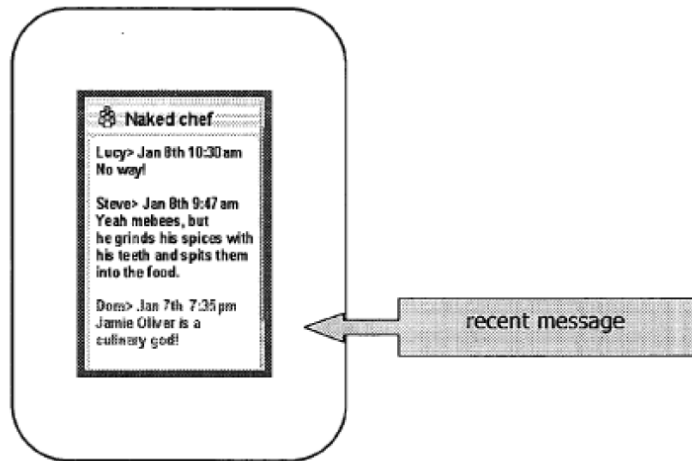
21. Invalidity Contentions limitation 1[B], “generating a second web-based interface different than the first web-based interface, wherein the second web-based interface provides each of the one or more additional users access to at least a portion of the shared content via the given mobile information channel to thereby facilitate interaction between the first user and the one or more additional users,” corresponds to Petition’s limitations 1[C]-1[D]. For this limitation, Samsung’s Invalidity Contentions cite the same passages from the Nokia 9210 User Guide that they did for Invalidity Contentions limitation 1[A]. (Ex. 2033, p. 21-29.) Accordingly, I incorporate my arguments from above.

22. Also for Invalidity Contentions limitation 1[B], Samsung’s Invalidity Contentions state that “Nokia 9210 System allowed determination of “information associated with wireless messaging such as username and date/time, such as in the following exemplary forums, newsgroups, websites, and messengers.” (Ex. 2033, Invalidity Contentions Ex. A23, p. 29.) Samsung included the following snippet in the Invalidity Contentions as an exemplary forum:



(Ex. 2033, Invalidity Contentions Ex. A23, p. 30.)

23. This is the same depiction found in Forsyth's Figure 7, which Petitioners cite as evidence of a user interface. (Petition, p. 37.)



Forums—Forsyth, Figure 7

24. For Invalidity Contentions limitation 1[B], Samsung also relies on the disclosure of “Word Processor” for its ability to write and edit content in the Nokia 9210 User Guide. (Ex. 2033, Invalidity Contentions Ex. A23, p. 22.) Forsyth’s Claim 3 expressly recites that group objects are capable of being used by any of the following applications: “(a) e-mailing application (b) text based messaging application (c) voice telephony (d) multi-media messaging (e) productivity applications (including word processing, spreadsheets, and presentation applications).” These applications would function similarly to Forums, which “runs on the object based operating system Symbian OS,” such that the applications run on the Symbian OS in devices like the Nokia Communicator. (Forsyth, 2:40-53.)

25. For Invalidity Contentions limitation 1[B], Petitioners' Invalidity Contentions also rely on the Nokia 9210 System User Guide for its disclosure that "[s]ome servers have access restrictions that require a valid user name and password. In this case, you will be prompted for your user name and password before the Web page can be retrieved." (Ex. 2033, Invalidity Contentions Ex. A23, p. 22.) Randall discloses this feature as implemented in the Symbian OS: "There is a need for authentication of the user when they access their data perhaps via their WID. This authentication should prevent access to their information both locally and on the 10 server (for instance if their device is stolen). The authentication can use a number of different mechanisms: a basic WID and password/passphrase is likely to be first line of access. Once past this stage the WID may store private key(s) transparently to the user of the WID that will allow access to services. The private key effectively represents the ownership of the WID to the server side session." (Randall, p. 48.)

26. Also for limitation 1[B], Samsung's Invalidity Contentions cite the Nokia 9210 User Guide disclosure of "When you receive a short message or picture message, a text indicating the number of messages that have been received and the indicator will appear on the display and a tone will sound, unless the communicator is set to a silent profile." (Ex. 2033, Invalidity Contentions Ex. A23, p. 23.) This feature of the Symbian OS is disclosed by

Forsyth. “After a user receives notification of a Forum message, he can check the status of his Forums, as shown in FIG. 6. This view distinguishes Forums with unread (new) messages from those with read (old) ones. The new Forum (subject: Naked Chef is therefore shown highlighted, although colour may not be enough to act as the only distinguishing attribute. There may also be some graphical indication of the number of unread (new) messages.” (Forsyth, 6:28-36.) Forsyth also discloses that the notification feature provided by the Symbian OS can be turned off. “In either case, the users' devices simple send a notification to the Forum of each site visited (when notification is allowed by the user—it may be turned off).” (Forsyth, 13:12-14.)

27. Samsung’s Invalidity Contentions limitation 1[C] corresponds to the Petition limitation 1[E]: “wherein the given mobile information channel supports messaging between the first user and the one or more additional users over a wireless network.” Samsung’s Invalidity Contentions allege “[t]his limitation is disclosed and/or rendered obvious by Nokia 9210 System for the reasons discussed above. See [1A]-[1B].” (Ex. 2033, Invalidity Contentions Ex. A23, p. 32). Accordingly, I incorporate my arguments above and conclude that the relied upon portions of the Nokia 9210 User Guide are duplicative of the Forsyth-Randall disclosure.

28. Samsung's Invalidation Contentions limitation 1[D] corresponds to the Petition's limitation 1[F]: "wherein the mobile information channel is configured to permit the first user to send messaging content to the one or more additional users and to receive messaging content from the one or more additional users." Again, Samsung's Invalidation Contentions allege "[t]his limitation is disclosed and/or rendered obvious by Nokia 9210 System for the reasons discussed above. See [1A]-[1B]." (Ex. 2033, Invalidation Contentions Ex. A23, p. 32). Accordingly, I incorporate my arguments from above and conclude that the relied upon portions of the Nokia 9210 User Guide are duplicative of the Forsyth-Randall disclosure.

29. Additionally, Samsung's Invalidation Contentions cite other Nokia 9210 System features, referencing the Nokia 9210 User Guide's disclosure of user notification upon receipt of a text message. (Ex. 2033, Invalidation Contentions Ex. A23, p. 23.) Such features of the Symbian OS are likewise expressly addressed in Forsyth, which discloses that when "a user receives notification of a Forum message, he can check the status of his Forums." (Forsyth, p. 6:28–31.) Randall also describes the use of client and server programs on the Symbian OS to facilitate content creation and editing, allowing users to "create, edit, and delete content" and manage such permissions for each user, including the owner of the content and guest users. (Randall, p. 34, 20-26.)

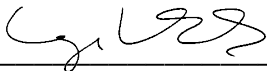
Randall also describes the “extensible” nature of the Symbian OS system that allows “new data service functionality” to be “dynamically added to existing client resident applications,” enabling the storage and sharing of various types of information or media. (Randall, p. 9, 25-p. 10, 3.) Forsyth describes “group based activities” allowing users to organize messages multimedia files using persistent data structures. (Forsyth, 13:54-56.) This enables mechanisms for sharing multimedia content within group communication scenarios, allowing users on the Symbian OS to both engage in collaborative content creation, document editing, and sharing of multimedia content.

30. In conclusion, it is my opinion that the Nokia 9210 System is, for the purposes that Samsung relies on it in the Invalidity Contentions, the same prior art as the combined Randall and Forsyth references. This is because the cited Nokia 9210 System features in the Invalidity Contentions filed against the ’336 Patent are all primarily based in Symbian OS, which is also the core of the Randall and Forsyth references used in IPR2025-00540.

31. 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.

Dated: June 13th, 2025



George Edwards, PhD