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

IPR2025-00541
U.S. Patent No. 9,922,348

PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 9,922,348

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EXHIBIT LIST

Exhibit	Reference
1001	U.S. Patent 9,922,348 to Harper ("the '348 patent")
1002	Declaration of Henry Houh, Ph.D. in Support of Petition for *Inter Partes* Review of U.S. Patent 9,922,348
1003	Excerpts from Alan Neibauer, *How to Do Everything With Yahoo!* (2000) ("Neibauer")
1004	RESERVED
1005	U.S. Patent No. 7,574,486 B1 to Yin Cheng et al. (filed November 8, 2000, issued August 11, 2009) ("Cheng")
1006	U.S. Patent No. 6,434,403 B1 to Michiel R. Ausems et al. ("Ausems")
1007-1009	RESERVED
1010	U.S. Patent No. 6,487,583 B1 to Jamey Harvey et al. ("Harvey")
1011	U.S. Patent Application Publication No. 2001/0015759 A1 to Robert Francis Squibbs ("Squibbs")
1012	Excerpts from Uwe Hansmann et al., *Pervasive Computing Handbook* (2001) ("Hansmann")
1013	RESERVED
1014	U.S. Patent No. 6,907,566 B1 to Charles McElfresh et al. ("McElfresh")
1015-1017	RESERVED
1018	Excerpts from Sean Wagstaff, *Animation on the Web* (1999) ("Wagstaff")
1019	U.S. Patent No. 6,874,146 B1 to Sridhar Iyengar ("Iyengar")

Exhibit	Reference
1020	U.S. Patent No. 6,311,185 B1 to Robert E. Markowitz ("Markowitz")
1021	Excerpts from *Microsoft Computer Dictionary* (5th ed. 2002)
1022	File history of U.S. Patent No. 9,922,348 B2
1023	RESERVED
1024	Excerpts of file history of *Inter Partes* Reexamination of U.S. Patent No. 8,135,801 B2
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1034-1037	RESERVED

I. Introduction

Samsung Electronics Co. Ltd. and Samsung Electronics America, Inc. ("Petitioners") petition for *inter partes* review ("IPR") of claims 1-20 of U.S. Patent No. 9,922,348 ("the '348 patent," EX-1001).

II. Grounds for Standing

Petitioners certify the '348 patent is available for IPR and Petitioners are not barred or estopped.

III. Identification of Challenge

A. Prior Art

The '348 patent, filed March 2, 2017, claims priority through six continuations to U.S. Patent 7,599,983, filed June 18, 2003, which claims priority to U.S. Provisional Application No. 60/389,430, filed on June 18, 2002. Petitioners do not acquiesce that the '348 patent is entitled to priority of either of these applications. Regardless, each applied reference was filed or published before June 18, 2002.

1. Alan Neibauer, "How to Do Everything With Yahoo!"

("Neibauer"; EX-1003), published October 2000, is prior art under 35 U.S.C.

§102(b) because it was made available to the public at least at the Library of Congress.[1] (EX-1031, ¶¶6-9; EX-1026, ¶¶40-46.)

2. **U.S. Patent 7,574,486 to Cheng et al.** ("Cheng"; EX-1005), filed November 8, 2000, is prior art under 35 U.S.C. §102(e).

3. **U.S. Publication 2001/0015759 to Squibbs** ("Squibbs"; EX-1011), filed February 21, 2001, is prior art under 35 U.S.C. §102(e).

4. **U.S. Patent 6,434,403 to Ausems, et al** ("Ausems"; EX-1006), filed February 19, 1999, is prior art under 35 U.S.C. §102(e).

5. **U.S. Patent 6,907,566 to McElfresh, et al** ("McElfresh"; EX-1014), filed April 2, 1999, is prior art under 35 U.S.C. §102(e).

6. **U.S. Patent 6,487,583 to Harvey et al** ("Harvey"; EX-1010), filed February 25, 2000, is prior art under 35 U.S.C. §102(e).

B. Grounds For Challenge

Ground	Claims	Prior Art
1	1-3, 6-9, 12-14, 17-18	Neibauer, Cheng, Ausems
2	4-5	Ground 1 Prior Art + Squibbs
3	10-11, 15-16, 19-20	Ground 1 Prior Art + McElfresh

[1] PO did not dispute Neibauer's public availability in *Meta Platforms, Inc. v. Mobile Data Techs.*, IPR2024-00250 ("the Meta-MDT-IPR").

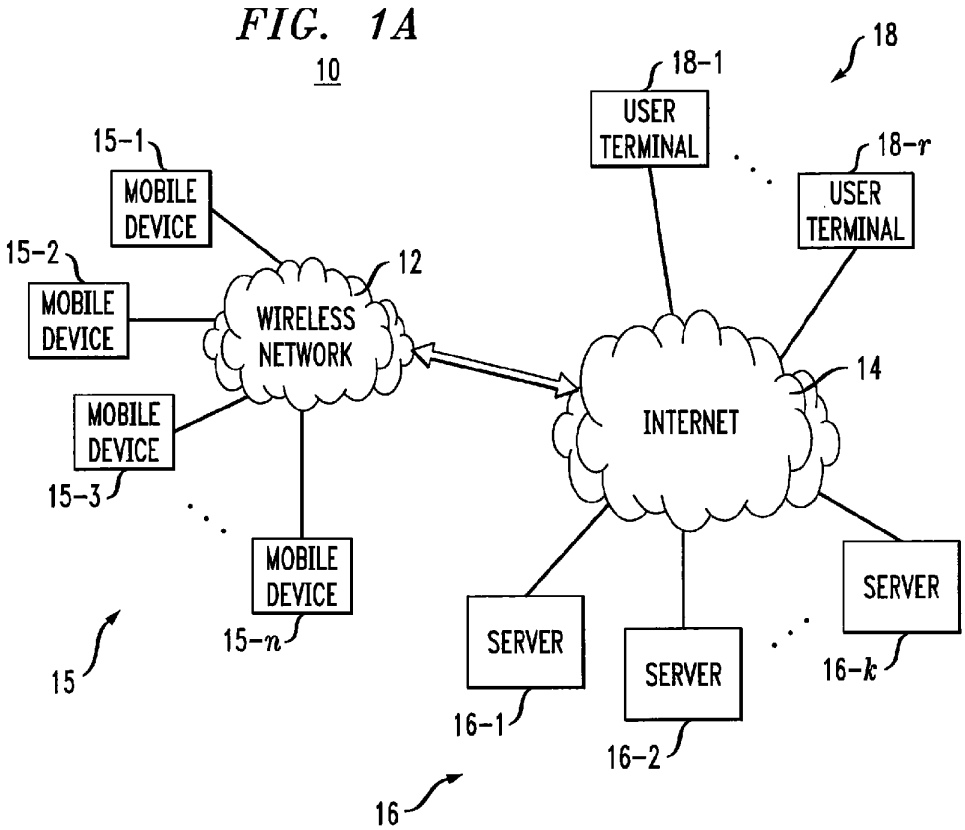
Ground	Claims	Prior Art
4	1-3, 6-9, 12-14, 17-18	Ground 1 Prior Art + Harvey
5	4-5	Ground 2 Prior Art + Harvey
6	10-11, 15-16, 19-20	Ground 3 Prior Art + Harvey

Submitted with this Petition is the Declaration of Henry Houh (EX-1002) ("Houh"), a qualified technical expert. (EX-1002, ¶¶8-18, Ex. A.)

IV. The '348 Patent

A. Patent Overview

The '348 patent "relates generally to network-based communications systems, and more particularly to techniques for information content management in such systems." (EX-1001, 1:29-31.) Figure 1A (below) "shows an example network-based communication system 10" including "wireless network 12 coupled to the Internet 14, a set of mobile devices 15, a set of servers 16 and a set of user terminals 18." (EX-1001, 3:62-67.)



'348 Patent, Figure 1A[2]

System 10 "provides at least one content management site accessible to a system user" including "M-channels" which "allow unsophisticated users to easily and efficiently author message data or other types of information content to be made accessible via a collaborative workspace, a data mailbox, a collaborative community, or other type of mobile site." (EX-1001, 5:27-29, 8:30-36.) Such mobile sites may be associated with "a group comprising multiple members having

[2] Unless otherwise noted all Figure annotations and emphasis added.

a common interest" (EX-1001, 6:39-41), "an event" (EX-1001, 6:60-61), "a game," (EX-1001, 7:42-43), or "a user of IM, SMS, MMS, email or other type of messaging service" (EX-1001, 7:54-56), among other associations. (EX-1001, 6:39-8:25.)

B. Level of Ordinary Skill in the Art

A person of ordinary skill in the art ("POSITA") would have had a bachelor's degree in electrical engineering, computer science, or similar field, with two years of experience in developing and implementing network-based computer systems that interact with mobile devices, such as systems for storing and retrieving information over the Internet or communicating using the Web using wireless mobile devices. A person could also have qualified as a person of ordinary skill in the art with some combination of (1) more formal education (such as a master's of science degree) and less technical experience, or (2) less formal education and more technical or professional experience.[3] (EX-1002, ¶¶31-32.)

C. Claim Construction

In *Mobile Data Techs. LLC v. Meta Platforms, Inc.*, No. 3:24-CV-00896-WHA (N.D. Cal.) (transferred from No. 7:22-cv-00244-ADA-DTG (E.D. Tex.))

[3] Patent Owner did not dispute this characterization of a POSITA in the Meta-MDT-IPR.

("the MDT-Meta-Litigation") and the Meta-MDT-IPR, the parties identified the following terms for construction. (EX-1025, 2-3; EX-1030, 8-16; EX-1033, 2-5.) The Board need not expressly construe any term for purposes of this proceeding because Petitioners establish the challenged claims are unpatentable under the constructions proposed in these proceedings and the claims' plain meaning, where different. *See Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999).

1. "Mobile Device"

Petitioners dispute PO's narrow Meta-MDT-IPR construction which is contrary to the express definition in the specification. (*See, e.g.,* EX-1001, 4:45-48.) Petitioners apply the plain meaning which is consistent with Meta's Meta-MDT-IPR and MDT-Meta-Litigation constructions. (EX-1002, ¶37.)

MDT-Meta-Litigation	
PO	plain and ordinary meaning; alternatively, "a piece of handheld equipment" (EX-1025, 3)
Meta	"any type of portable information processing device capable of being configured for communication over a network, including but not limited to a mobile telephone, a personal digital assistant (PDA), a palmtop computer, a hand-held computer, a laptop computer, a tablet computer, a global positioning system (GPS) receiver or other GPS-based navigational device, an MP3 player or other type of audio player, a pager, a watch or other timepiece, a camera, or a portable game player" (EX-1025, 3)

Meta-MDT-IPR	
PO	"a portable device with limited display space and limited navigational capabilities that connects to a mobile site and/or mobile channel via a wireless network" (EX-1030, 9)
Meta	construed based on express definition: "The term 'mobile device' as used herein is intended to include, without limitation, any type of portable information processing device capable of being configured for communication over a network" (EX-1033, 2-3)

2. "Web-Based Shared Information Channel"

In the Meta-MDT-IPR, Meta and PO agreed to the construction "a medium for transferring information accessible to more than one user via the web" which is consistent with the plain meaning of this term. (EX-1002, ¶38; EX-1030, 16; EX-1011, 25.)

V. Overview of Grounds

The challenged claims attempt to lay claim to techniques for allowing users to share information over the Internet with other users via mobile devices. But these techniques were well-known before the '348 patent.

All grounds rely on Neibauer (EX-1003), which describes features of Yahoo!. (EX-1002, ¶43.) Neibauer describes a feature called Yahoo! Clubs that allows users to create web-based communities for users to share information through photo sharing and other features. (EX-1002, ¶¶44-50; Neibauer, pp.477-480.) Neibauer also discloses the ability to access Yahoo! services via mobile devices. (EX-1002, ¶55; Neibauer, pp.166-174.) Neibauer renders obvious the

majority of the claim limitations and was relied upon by the PTO in a reexamination that rejected all claims of an earlier patent in the same family as the ’348 patent. (EX-1024, 4.)

All grounds also cite to Cheng (EX-1005), which additionally demonstrates it would have been obvious to provide the Yahoo! Clubs features from Neibauer to users via mobile devices. (EX-1002, ¶¶59, 72.) Cheng describes a proxy server that can convert any existing (non-mobile) webpage for use on a mobile device. (EX-1002, ¶¶62-66.) Cheng was also cited in the earlier reexamination mentioned above. (EX-1024, 04.) Ausems (EX-1006) is cited for the unremarkable proposition that a mobile device can obtain image data from a digital camera. (EX-1002, ¶¶70-71.)

Ground 2 cites to Squibbs (EX-1011) for location-based features of certain dependent claims. Ground 3 cites to McElfresh (EX-1014) for the data feed limitations certain dependent claims. Grounds 4-6 are substantially similar to Grounds 1-3, but add Harvey (EX-1010), solely to account for a potential construction of “*web-based shared information channel*” proposed by Meta in the MDT-Meta-Litigation. If the Board chooses not to adopt that construction here, it need not consider these additional grounds.

VI. Ground 1: Claims 1-3, 6-9, 12-14, and 17-18 Are Obvious Over Neibauer in View of Cheng and Ausems.

A. Independent Claim 1

Neibauer discloses features of a Yahoo! service known as Yahoo! Clubs. (Neibauer, pp.473-483.) Neibauer explains that "[a] *club* is a group of Yahoo! members who share a common interest. Each club has its own message board, chat room, as well as places to share photographs, news, addresses, and links." (Neubauer, p.473 (italics in original).) Yahoo! members could also create their own clubs. (Neibauer, pp.480-82.) An exemplary club created by a member is shown in Figure 21-13:

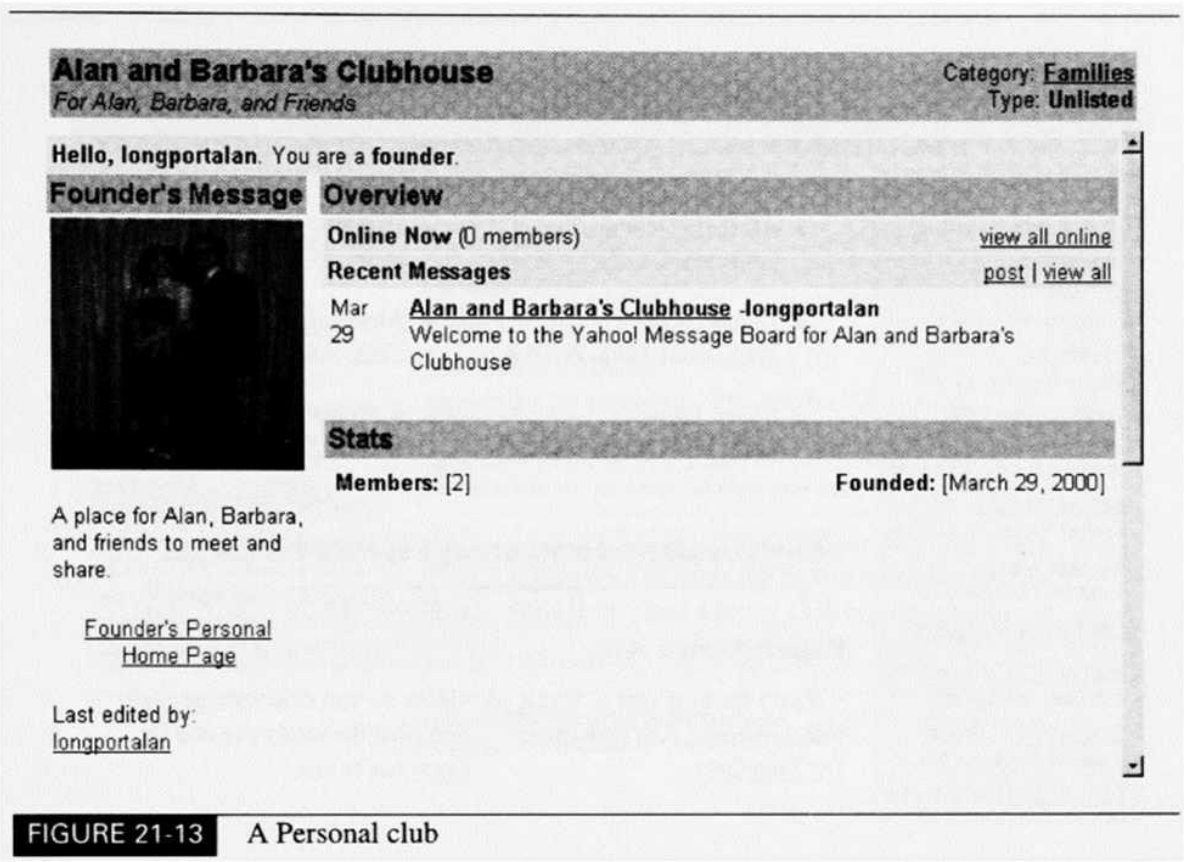


FIGURE 21-13 A Personal club

(Neibauer, p.483, Fig. 21-13.)

1. Preamble [1P]

To the extent the preamble is limiting, Neibauer discloses "[*a*]*n apparatus*." It would have been obvious based on Neibauer alone, or in combination with Cheng, to make the clubs features of Neibauer (including the club photo sharing feature) available to club members via mobile devices. The claimed "*apparatus*" includes one or more servers that operate to make these features available to mobile devices and that carry out the functions in claim 1.

2. Limitations [1A]-[1B]

The combination of Neibauer and Cheng renders obvious "*a processing element comprising a processor coupled to a memory*" [1A] and "*a network interface coupled to the processing element and configured to communicate with a plurality of mobile devices over at least one network*" [1B]. It would have been obvious that the claimed apparatus includes at least one "*processing element*," such as at least one server to carry out the clubs functions in Neibauer. A processor coupled to a memory is also a basic component that any server would need in order to function. (EX-1002, ¶¶101-02.) It would also have been obvious that the claimed apparatus would have included a "*network interface*," a basic component a server needs in order to communicate over a network such as the Internet. (EX-1002, ¶114; Neibauer, p.473 ("Access Yahoo! clubs by clicking Clubs on the

Yahoo! home page or by going directly to http://clubs.yahoo.com to open the page shown in Figure 21-6."), p.64 ("**http://** This is the prefix for the standard type of Internet Web site. The letters stand for Hypertext Transfer Protocol.") (bold in original), p.22 ("Each Yahoo! member gets 3MB of mail space on the Yahoo! server to store messages.").) These components are also separately disclosed in Cheng.

Limitation [1B] further states that the "*network interface*" is configured to communicate "*with a plurality of mobile devices over at least one network*." It would have been obvious that the processing element would have been able to communicate with mobile devices over a network such as the Internet. The '348 patent itself expressly defines a "mobile device" as including, among other things, a laptop computer. (EX-1001, 4:45-55.) It was well-known that conventional laptop computers provided the same functionality as desktop computers and could run web browser software and visit web pages on the Internet. (EX-1002, ¶104.) It therefore would have been obvious that the Yahoo! website, including the club photo sharing feature discussed above, would have been accessible to a user of a mobile device such as a laptop computer. (*Id.*)

Addressing Proposed Constructions in Co-Pending Proceedings: In the Meta-MDT-IPR, PO argues that "*mobile device*" means "a portable device with limited display space and limited navigational capabilities that connects to a

mobile site and/or mobile information channel via a wireless network." (EX-1030, 9.) Based on this construction, PO argues that Neibauer, alone or in combination Cheng, does not teach the claimed invention because, according to PO, Neibauer teaches only the use of a "conventional laptop," which is not a "*mobile device*." [4] (EX-1030, 43-44.)

PO's argument is wrong for at least two different reasons. *First*, PO's proposed construction of "*mobile device*" as excluding a laptop is inconsistent with the plain meaning of the term as informed by the specification. The '348 patent specification states that "[t]he term 'mobile device' as used herein is intended to include, without limitation, any type of portable information processing device capable of being configured for communication over a network," including, for example, "a laptop computer." (EX-1001, 4:45-55.) Thus, a laptop, as taught by Neibauer, is a "*mobile device*." (EX-1002, ¶107.)

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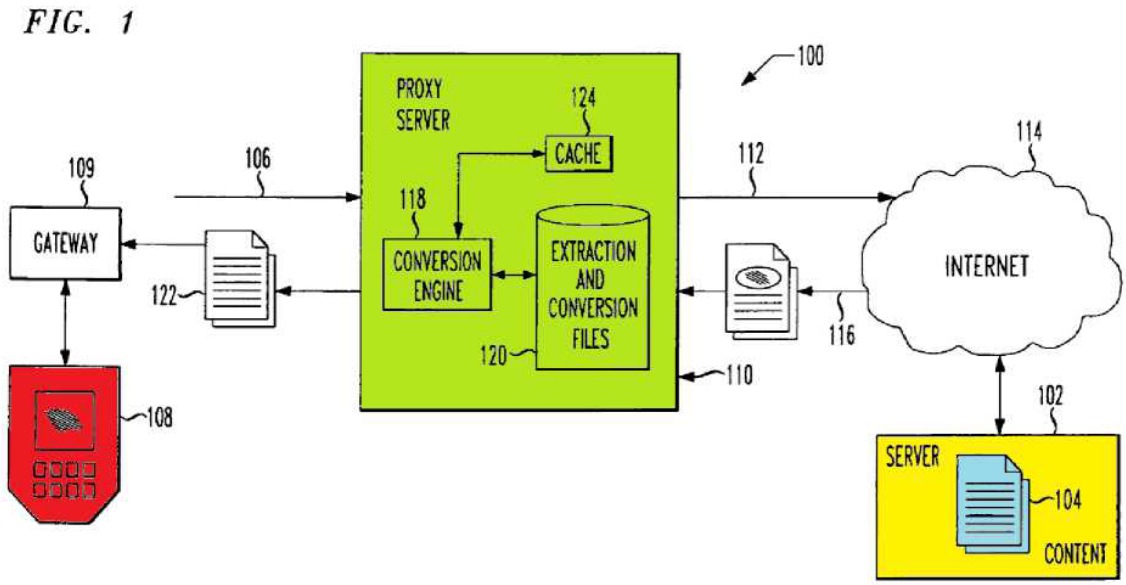
[4] In the Meta-MDT-IPR, PO relies on its construction of "*mobile device*" to argue that limitations [1D] and [1E] are not satisfied by the prior art. (EX-1030, 43-45.) Petitioners address the arguments here, as limitation [1B] also recites "*mobile devices*." Petitioners' arguments apply equally to limitations [1D] and [1E].

Second, even if Patent Owner's improper construction "*mobile device*" were accepted, the combination of Neibauer and Cheng still renders obvious limitation [1D]. Neibauer itself discloses services such as "Yahoo! Mobile" and "Yahoo! To Go" that enable content from Yahoo! services to be provided to handheld devices such as pagers, cell phones, web phones, and personal digital assistants (PDAs). (Neibauer, pp.166-174.) "Yahoo! To Go lets you receive Yahoo! information on your mobile device." (Neibauer, p.167.) For example, one option referred to as "Yahoo! On Your PDA" allowed users of browser-enabled PDAs to select particular Yahoo! content that would accessible from their PDA. (Neibauer, pp.171-174.) Although Neibauer does not expressly disclose that the Yahoo! Clubs feature was available on handhelds, it would have been obvious over Neibauer alone to allow user-created clubs to be accessed by handheld devices disclosed elsewhere in Neibauer. (EX-1002, ¶79.) This would have been viewed as a logical (and obvious) extension to the existing features described in Neibauer. (*Id.*)

Additionally, Cheng relies on an already-known technology known as "proxy servers," which were commonly used to provide security and interoperability between devices. (EX-1002, ¶65.) Cheng relies on this proxy server concept to convert non-mobile webpages into a format accessible by mobile devices. Figure 1 illustrates one embodiment:



Cheng, Fig. 1

Figure 1 above shows an origin web server **102** that contains original web page **104**. (Cheng, 3:36-37.) "The web page **104** is typically an HTML file with references to any component .wav, .mov, and/or Joint Photographic Experts Group (JPEG) files, which together comprise the web page **104**." (Cheng, 4:10-13.) "It is envisioned that each instance of web content **104** each have associated therewith a URL." (Cheng, 3:56-57.) Web page **104** could have been any web page in HTML format reachable via the Internet, such as any web page from the Yahoo! website as described in Neibauer. (EX-1002, ¶¶63, 74.)

Figure 1 further shows a mobile device **108** connected to proxy server **110**, optionally through gateway **109**. (Cheng, 3:33-36.) "Mobile devices **108** generally come in a variety of different sizes and have a variety of different screen interfaces… [T]he present invention provides the ability to uniquely tailor web

page **104** content for specific mobile devices **108**." (Cheng, 5:11-15.) Cheng explains that, in one example, mobile device **108** could be a mobile device with a Palm operating system that includes a web browser. (Cheng, 5:17-23, 2:8-15.)

The middle of Figure 1 shows proxy server **110**—Cheng's key feature. Proxy server **110** "'sits' between the clients (e.g., the mobile device(s) **108**) and the origin web server(s) **102** that provide Web content **104**." (Cheng, 3:31-33.) Proxy server **110** "obtains the code (e.g., HTML) of the user requested web page **104**, and modifies it at the proxy server **110** (once obtained)," which can include "reformatting and/or converting an entire web site or request specific Web content that is needed from the origin web server **102**." (Cheng, 3:41-48.) Proxy server **110** can also store a device profile for mobile device **108** based on the device and web browser types. (Cheng, 5:20-23.)

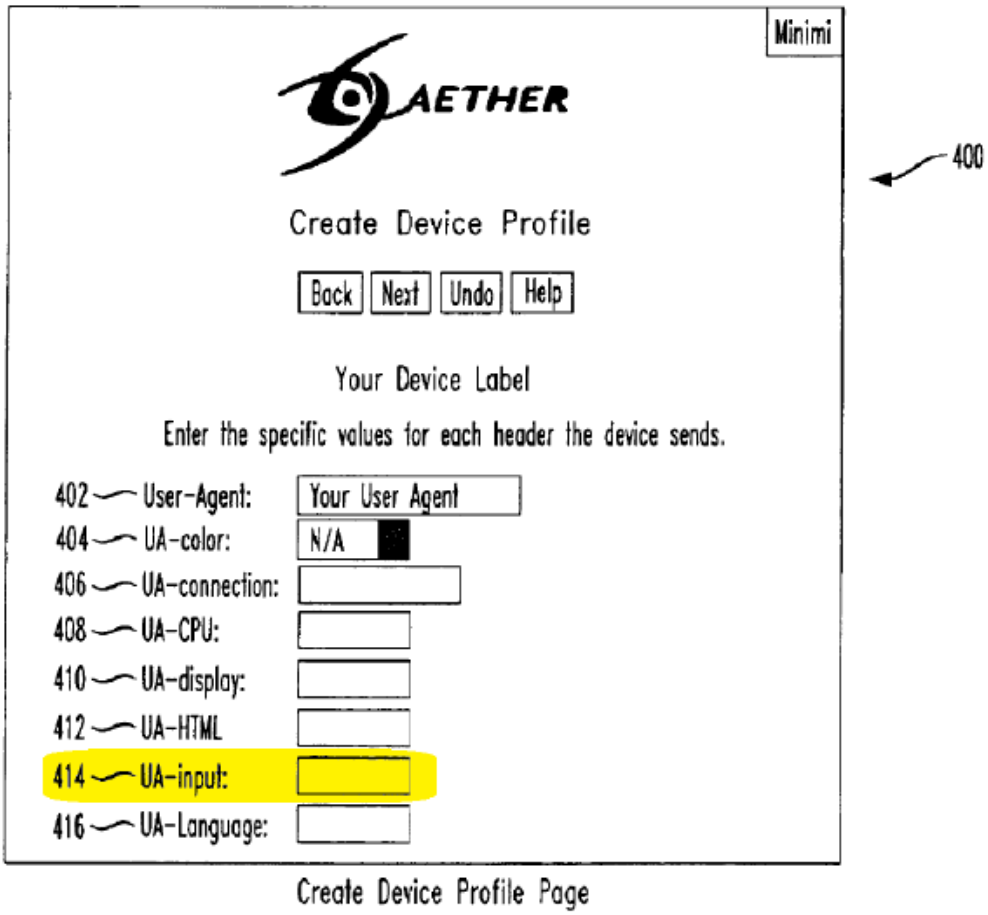
The general operation of proxy server **110** in Cheng is straightforward. As shown in Figure 1, mobile device **108** can issue a request **106** for an original web page **104** using standard HyperText Transport Protocol (HTTP), as was well-known in the art, with the request **106** being received by proxy server **110**. (Cheng, Fig. 1, 2:19-21, 3:58-67, 7:65-8:2; EX-1002, ¶67.) "Upon determining that the requested page **104** resides at the server **102**, the proxy server **110** makes a request **112** for the page. As shown, the proxy server **110** and the server **102** are connected via a network **114** such as the Internet." (Cheng, 3:65-4:2; *see also id.*, 2:21-24.)

Proxy server **110** then converts and/or reformats original web page **104** into reformatted web page **122**, which is transmitted to mobile device **108**. (Cheng, 2:24-29, 5:46-49, 4:56-60.) "The designated HTML content of the retrieved web page **104** is extracted, subsequently and/or converted, and transmitted as a reformatted web page **122** to the mobile device **108**." (Cheng, 5:46-49; *see also id.*, 3:22-26.)

PO also argues in Meta-MDT-IPR that Cheng only discloses a "one-way" transmission of data to a mobile device in response to a request from that device. (EX-1030, 31-33.) Patent Owner, however, ignores Cheng's teachings of receiving content from a mobile device.

For example, Cheng discloses creating device profiles for mobile devices that specify, among other things, the types of web user input (including text, files and images) that the mobile devices can support. The creation of a device profile for a mobile device is depicted in Figure 4 of Cheng:

FIG. 4



Cheng, Fig. 4

Here, Cheng teaches that a mobile device user can input text, image, and file data into the mobile device; that information is then transmitted from the mobile device to a website. Thereafter, the device profile information, received **from** the mobile device, enables Cheng's proxy server 110 to identify the mobile device 108 and to determine which webpage conversions to perform for that device. (*See* Cheng, 8:54-62, 7:59-65.)

Motivation to Combine Neibauer and Cheng: It would have been obvious to combine Neibauer with Cheng, predictably resulting in the club features relied

upon in Neibauer being made available to mobile devices over the Internet. Under the combination, client-side users would interface with the server via Cheng's proxy server, ensuring that photos downloaded to mobile devices, such as a smartphone, are properly formatted. (EX-1002, ¶73.)

The proposed combination would have been straightforward as Cheng provides "bolt-on" functionality, with the proxy server capable of converting and reformatting any existing HTML-based web page into a format suitable for display on a mobile device. (EX-1002, ¶74; Cheng, *e.g.*, 2:30-32 ("The [reformatting] may be done for at least one of groups of devices, individual devices, web site-specific conversions, <u>or for all web sites</u>.").) It would have been obvious that proxy server **110** could have been operated by the same or a different entity from the operator of the origin web server **102**. (EX-1002, ¶¶74-75.) In any case, combining Neibauer and Cheng would not have required changing the underlying functionality in Neibauer, further motivating the combination as discussed below. (EX-1002, ¶76.)

Neibauer is in the same field as the '348 patent—network-based communication systems for managing information content—and would have been reasonably pertinent to problems facing the inventors. (EX-1002, ¶77.) Cheng is also in the same field and would have been reasonably pertinent to several problems facing the inventors, including making web-based information content available on mobile devices. (*Id.*)

A POSITA would have been motivated to combine Neibauer and Cheng. Neibauer expressly motivates the combination, by disclosing services such as "Yahoo! Mobile" and "Yahoo! To Go" that enabled content from Yahoo! services to be provided to mobile devices. (Neibauer, 166-174.) A POSITA would also have been motivated to make the club features available to mobile devices to take advantage of growing popularity of such devices; indeed, Neibauer expressly discusses the use of browser-enabled PDAs, such as Palm, Windows CE and smartphone devices. (EX-1002, ¶¶78-81; Neibauer, 171-174.) Cheng further explains "users of wireless devices now demand that businesses deliver web content for viewing on desktop, or mobile/portable (e.g., handheld) devices." (Cheng, 1:18-22.) The '348 patent itself admits "[o]ne of the most rapidly expanding aspects of wireless networking involves the accessing of information content over wireless networks via web- enabled mobile devices," such as "mobile telephones, personal digital assistants (PDAs), palmtop computers, etc." (EX-1001, 1:35-39.) Market forces would thus have motivated a POSITA to combine Neibauer with Cheng in order to provide the club functionalities to users of mobile devices. (EX-1002, ¶¶82-83.)

Cheng further motivates the combination, explaining the proxy server conversion method provides a "create-once, deliver anywhere approach" that eliminates the need to build and maintain separate web pages for different types of

mobile devices and browsers. (Cheng, 2:8-19.) This would have provided a clear technological advantage by obviating the need to generate multiple different mobile versions of club-related pages. (EX-1002, ¶85.) Furthermore, Cheng's proxy server techniques were well-known and deployed for the very purpose of converting web page content into formats suitable for mobile devices. (EX-1002, ¶¶86-87.) A POSITA would also have had a reasonable expectation of success as Cheng relies on known and industry-standard technologies. (EX-1002, ¶¶88-89.)

With respect to the particular features in limitations [1A]-[1B], the "*processing element*" would have included origin web server **102** in Cheng (which would have performed the functions in Neibauer), and proxy server **110** (which would have made the features of Neibauer available to mobile devices).

Mapping the claimed "*processing element*" to origin web server **102** <u>and</u> proxy server **110** is consistent with the '348 patent, which makes clear that a processing element or server can itself comprise multiple servers. (EX-1001, 9:21-24 ("Each of the servers **33**, **35**, **37** and **39** [of processing elements **30**] may comprise one or more of the servers **16** or other elements shown in FIG. 1A, or suitable portions or combinations thereof."); EX-1002, ¶102.)

Even if the claim required that the "*processing element*" be contained within a single physical server (it does not), it would have been obvious to combine proxy server **110** and origin server **102** into a single server. (EX-1002, ¶103.) Cheng

explains that the computer system implementing the proxy server can "be replaced by, <u>or combined with</u>, any suitable processing system operative in accordance with the principles of the present invention…." (Cheng, 23:20-25.) A POSITA would have been familiar with well-known techniques for consolidating tasks within a single server when needed. (EX-1002, ¶103.) For example, a POSITA would have been motivated to combine these servers to improve performance of the overall system, as this would have eliminated the step of (and network overhead associated with) origin server **102** having to send the original web page **104** to proxy server **110**. (*Id.*)

With respect to the "*network interface*," Cheng discloses a communications port as part of proxy server **110** that facilitates communication over a network such as the Internet. (EX-1002, ¶114; Cheng, 23:44-51 ("Communications with external devices… occur utilizing communication port **1516**…."); Neibauer, p.4 (explaining that Yahoo! members need access to an Internet connection).) Alternatively, the "*network interface*" is also disclosed by Cheng's gateway **109**, which would have been part of the "*processing element*" and would have provided an interface between mobile devices and proxy server **110**. (Cheng, 3:33-36 ("If necessary, a gateway **109** may optionally be provided that interfaces between, for example, the mobile device **108** and the proxy server **110**."); EX-1002, ¶115.)

3. Limitation [1C]

As explained below, "*the processing element*" identified in [1A] above is "*configured to*" perform each of the functions of limitations [1D]-[1F].

4. Limitation [1D]

The Neibauer-Cheng-Ausems combination renders obvious "*receive first device-captured data from a first one of the mobile devices via the network interface*" [1D]. Neibauer discloses a photo sharing feature that allows a club member to select a photo to upload and share with club members. (Neibauer, p.477.) As explained in Neibauer:

> **Adding a Photograph to an Album**. You can add a photo to an album starting from the list of albums or the list of photos in an album. Just follow these steps:
>
> **1.** If you are viewing the Photo Albums page, click Add Photo on the right side of the name of the album where you want to insert the photo. If you are looking at the list of photos already in an album, click the Add Photo button on the top of the page.
>
> **2.** In the page that appears, enter either the path and name of the photo on your disk or click Browse to locate the file. You can also click the On The Web link to designate a photograph located on a Web page.
>
> **3.** Enter a name and description of the photo.
>
> **4.** Select an option from the Resize Photo section. Resizing allows Yahoo! to adjust the size of the photograph to make better use of

the club's Web space and to make the photos easier to view. You can select Don't Resize, Large, Medium, or Small.

5. Click Preview to see how your photo will appear, or click Upload to move a copy of the photo into the club's Web space.

(Neibauer, pp.477-478; *see also* pp.477-478 (showing clickable "Add Photo" option available on album pages).)

Neibauer, alone and in combination with Cheng, therefore renders obvious the processing element being configured "*to receive first device-captured data from a first one of the mobile devices via the network interface*." (EX-1002, ¶120.) It would have been obvious that the photo would have been "*first device-captured data*," such as a digital photograph. (EX-1002, ¶120; Neibauer, p.478, Fig. 21-10 (showing exemplary club photo album).)

The photo would have been received by the server from the mobile device, and more specifically under the combination of Neibauer and Cheng, by the proxy server **110** and origin web server **102**. The photo would also have been received "*via the network interface*," as explained in [1B], because that interface would have facilitated communications between the mobile device and the processing element over the Internet. (Cheng, 3:67-4:2 ("As shown [in Figure 1], the proxy server **110** and the server **102** are connected via a network **114** such as the Internet.").)

Claim 1 merely recites that device-captured data be received "*from a first one of the mobile devices*," which does not expressly require that the data have been captured using a camera of the mobile device itself. To the extent the claim is interpreted to impose such a requirement, it would have been obvious for the photo uploaded by a club member to have been captured by the mobile device itself, as portable communications devices prior to June 2002 included digital cameras that allowed devices to capture, store, and transmit digital images. (EX-1002, ¶121.)

Should PO contend incorporation of digital cameras into mobile devices was not well-known as of June 2002, Ausems discloses a mobile device that incorporated a digital camera for recording, storing, and transmitting digital images. Ausems explains that "[t]he popularity and use of Personal Digital Assistants (PDAs) and wireless telephones has increased in recent years…. Increasingly, wireless telephones are being combined with PDAs in order to perform more advanced functions, such as transmitting, receiving and displaying text messages." (Ausems, 1:12-30.) Ausems discloses one such mobile device combining the functionality of a PDA with a wireless telephone. (Ausems, 3:5-8.) This PDA telephone device 100 includes, among other things, a touchscreen display. (Ausems, *e.g.*, 1:57-58, 4:30-39, 6:9-14.) PDA telephone 100 in Ausems can also run a conventional mobile operating system such as Microsoft Windows

CE or Palm, and the operating system "may include a web browser in order to facilitate Internet access for a PDA telephone 100." (Ausems, 7:64-8:5.)

The device also includes digital camera 190 for recording and storing images, which can be transmitted. (Ausems, *e.g.*, 2:5-6 ("[T]he device also includes [a] digital camera for recording images…."), 5:17-22 ("Camera 190 records video images and stores them within. Additionally, video images recorded by camera 190 may also be transmitted from PDA telephone 100 in real time during a telephone call (thus allowing for video conferencing).").) Ausems thus discloses a mobile device that includes a camera for capturing image media. (EX-1002, ¶121.)

Motivation to Combine Neibauer, Cheng, and Ausems: It would have been obvious to combine Neibauer and Cheng with Ausems, predictably resulting the system under the proposed combination, further adapted such that the photo uploaded by the club member to the club photo sharing feature would have comprised "*device-captured data*," i.e., a photo captured by a digital camera incorporated into the mobile device. (EX-1002, ¶92.)

For example, under the combination with Ausems, the club member would have obtained image data using a digital camera of the mobile device, which would have been transmitted for upload to the club for sharing with other club members using Neibauer's photo sharing features. (EX-1002, ¶¶92; Neibauer, 477-478.)

Ausems is in the same field as the ’348 patent of wireless and mobile communications and would have been reasonably pertinent to problems facing the inventor including how to capture media data using a mobile device and share that data with other users. (EX-1002, ¶93.)

A POSITA would have been motivated to combine Neibauer, Cheng, and Ausems, as the ability to share media data captured by the mobile device would have expanded the universe of image data that the club member could share with other members. (EX-1002, ¶94.) The club member would no longer be restricted to sharing preexisting images; instead, she could capture a variety of images (via the digital camera in her mobile device) and share them with other club members. (*Id.*) A POSITA would have had a reasonable expectation of success. (EX-1002, ¶95.) As Ausems confirms, mobile devices with digital cameras and the ability to transmit images captured by digital cameras were already known. (*Id.*)

5. Limitation [1E]

The Neibauer-Cheng-Ausems combination renders obvious “*receive second device-captured data from a second one of the mobile devices via the network interface*” [1E]. This limitation merely repeats the function of [1D], but for a “*second one of the mobile devices*.” The same analysis above applies here because, under the proposed combination, a second club member could have used its second mobile device to upload a different photo to a group album using the same

technique described above for limitation [1D]. (Neibauer, e.g., p.477 ("Any member can place a photo in a group album….").) Cheng confirms that multiple mobile devices can be used with his proxy server techniques. (Cheng, e.g., 5:11-12, 5:26-29.) This would have allowed both the first and second mobile devices to use and add photos to the club photo sharing feature described in Neibauer. (EX-1002, ¶122.)

6. Limitation [1F]

The Neibauer-Cheng-Ausems combination renders obvious "*integrate the first and second device-captured data into a web-based shared information channel controllably accessible to first and second users of the respective first and second mobile devices via respective personalized content applications of the first and second mobile devices*" [1F]. Under the proposed combination, photos uploaded by club members would have been integrated into the club photo sharing feature ("*a web-based shared information channel*").

Neibauer discloses a user interface for allowing club members to select a photo album and view the photos within the selected album. First, with respect to selection of an album:

Photo Albums

Showing 1 - 2 of 2 albums (1024 KB total) **Add Album**

Album Name	Pictures	Creator	Type	Add Photo	Edit	Delete
Blueraja's BOND GIRL Album	12 (278 KB)	blueraja3	Group	Add Photo		
James Bond	21 (287 KB)	shaner303	Group	Add Photo		

(Neubauer, p.477.) The interface above lists a number of available photo albums. "Click an album name to see a list of the photographs stored there, as shown in Figure 21-10." (Neibauer, p.477.)

The James Bond Movie Series
The James Bond place to talk about the movies.

Category: James Bond Serie
Club Type: Liste

Blueraja's BOND GIRL Album

Back To: Album List

Created by blueraja3 on 22-Nov-1999

Add Photo

Showing 1 - 12 of 12 photos | View Thumbnails

Photo Name and Caption	Contributor	Size	Posted	Edit	Delete
Denise Richards - Stunning Blue Bikini	blueraja3	21 KB	22-Nov-1999		
Denise Richards - Seductive Stare	blueraja3	22 KB	22-Nov-1999		
Denise Richards - Sexiest Denise Pic	blueraja3	48 KB	22-Nov-1999		
Denise Richards - Too Sexy! Too Sexy!	blueraja3	13 KB	22-Nov-1999		
Famke Janssen - Modeling Lingerie	blueraja3	53 KB	22-Nov-1999		
Famke Janssen - Sexiest Bond Girl Ever	blueraja3	13 KB	22-Nov-1999		
Famke Janssen - Sexy Black Leather	blueraja3	10 KB	22-Nov-1999		

FIGURE 21-10 Club photo album

(Neibauer, p.478, Fig. 21-10.) Figure 21-10 above shows a partial list of photographs stored in the selected album. "For each photo you will see the title, contributor's name, the photo's size, and the date it was posted. Click a photo to see the photo on your screen." (Neibauer, p.477.) Although the example in Figure 2110 shows provided received from one contributor (blueraja3), as noted, any member can post a photo that will be accessible through a group album. (Neibauer,

p.477 ("Any member can place a photo in a group album….").) It therefore would have been obvious that when two club members upload photos to a particular club photo album, pursuant to limitations [1D]-[1E], that photo album would have included and listed the photos provided by both members. (EX-1002, ¶127.) The combination therefore renders obvious "*integrat*[*ing*] *the first and second device-captured data into a web-based shared information channel*," because the photos provided by the first and second users to a photo album would have been incorporated into the club photo sharing feature within the album.

The club photo sharing feature is also "*controllably accessible to first and second users of the respective first and second mobile devices via respective personalized content applications of the first and second mobile devices*," because the two club members would have accessed the club photo sharing feature over the Internet via their mobile devices. (EX-1002, ¶128.) The web browsers on the mobile devices also comprise "*personalized content applications*." This is consistent with the plain and ordinary meaning of "application," which simply refers to a software program for carrying out a particular task. (EX-1002, ¶128; *Microsoft Computer Dictionary* (5th ed. 2002) (**EX-1021**), p.31 ("**application** *n*. A program designed to assist in the performance of a specific task, such as word processing, accounting, or inventory management.") (bold and italics in original).)

Under the proposed combination, each club member would have used the web browsers on their mobile device to post personalized content using the club photo album feature. (EX-1002, ¶129; Neibauer, p.477-479.) For example, each club member can create their own "personal photo album," where the member can add photos to share with other members. (Neibauer, p.477.) Neibauer discloses numerous other club features that enable a member to create and view personalized content, including personalized messages using the private message board. (Neibauer, p.483, Fig. 2113 (showing personalized "Welcome" message posted by club founder).) A club member can also engage in online chat with other club members. (Neibauer, p.479.)

These features are "*controllably accessible*" to the first and second users through the club home page, as shown below:

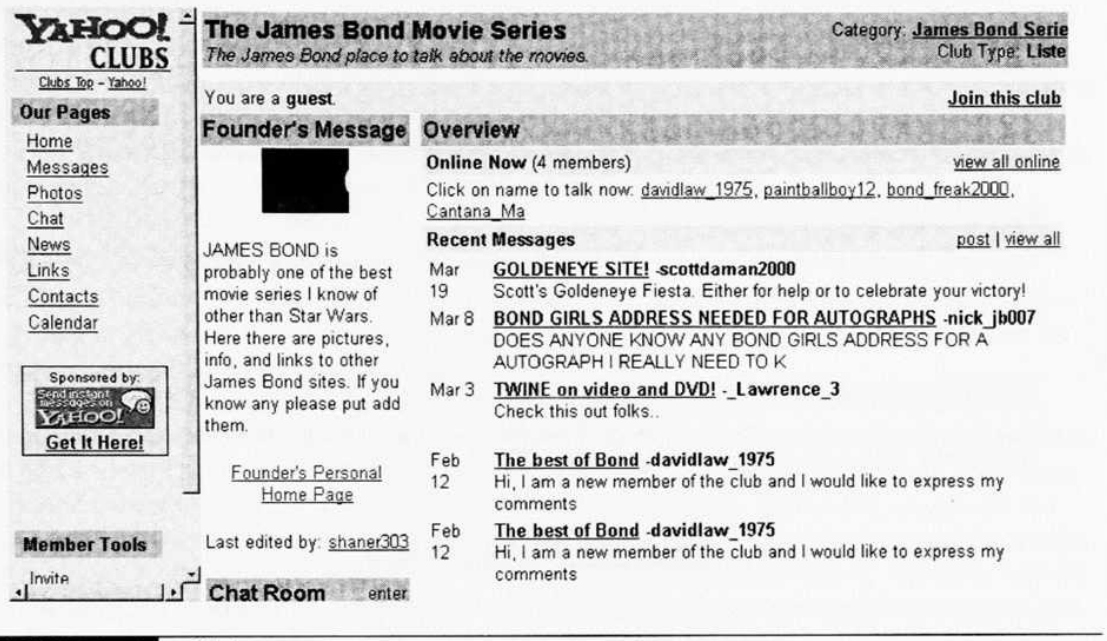


FIGURE 21-8 Club page

(Neibauer, p.475, Fig. 21-8.) The features of the club can be controllably accessed by users from the links shown under "**Our Pages**" on the left side of the club home page as shown in Figure 21-8. Including the photo sharing feature ("**Photos**"). (Neibauer, pp.477-480.) By allowing the user to access personalized content, under the proposed combination, each the web browser application on each mobile device "*comprises a personalized content application*." This is consistent with the '348 patent, which discloses use of a browser on the mobile device to access content on a mobile website. (EX-1001, 13:21-24 ("The mobile site home page **400** may be accessed, for example, by entering a corresponding URL of the mobile site into a browser at one of the mobile devices **15**."), 18:59-63 ("Also, the system

provides a platform for the development of a wide variety of personalized content applications for users of mobile devices….”).)

As a separate theory for the “*personalized content application*,” Neibauer discloses the ability of a user to customize their own Yahoo! home page using Yahoo! Companion, a toolbar added to the web browser window. (Neibauer, pp.56.) This feature allows the user to personalize and customize aspects of the content of the user’s My Yahoo! home page as viewed by the browser. (Neibauer, pp.66-74.) This provides another way in which the web browser would have comprised a “*personalized content application*.” In either case, the web browser applications on the mobile devices would have been applications that allowed club members to access personalized content through the features described above. (EX-1002, ¶132.)

Addressing Proposed Constructions in Co-Pending Proceedings: As noted above, in the MDT-Meta-Litigation, PO asserts that “*web-based shared information channel*” means “a medium for transferring information accessible to more than one user via the Internet.” In the Meta-MDT-IPR, PO provides a similar construction: “a medium for transferring information accessible to more than one user via the web.” Under these similar constructions, Neibauer’s club photo sharing feature discloses a “*web-based shared information channel*,” as it allows

provides a medium that allows club members to upload and later view photos via the Internet. (EX-1002, ¶133.)

Meta argued in the MDT-Meta-Litigation that "*web-based shared information channel*" should be construed as synonymous with "*mobile information channel*," which Meta argues means "a virtual location at the content management site at which user-authored content may be added for transmission to the mobile web site." (EX-1025, 1-2.) Meta further argues "*content management site*" within this construction means "a web site that allows a user without programming to create and manage content on a mobile web site, or a portion thereof." (EX-1025, 3.)

These constructions are also satisfied by the proposed combination because, as discussed above, Neibauer discloses a web-based user interface for creating a club that provides a virtual location at a content management website, i.e., the portions of the Yahoo! website for club creation and management that allow a club founder to create and manage content for the club. (EX-1002, ¶¶134-35; Neibauer, pp.480-82.) It would have been obvious the content management site in Neibauer would have further allowed the club founder to add user-authored content to the club. (Neibauer, pp.480-482 (describing how to create clubs and add content such as club name and photo); EX-1002, ¶135) This content would also have been made available on a "mobile web site, or a portion thereof," i.e., the club webpages

delivered to mobile devices, under Neibauer alone or in view of Cheng. (EX-1002, ¶135.) Petitioners have also provided separate Grounds 4-6 below, adding the Harvey reference (EX-1010) to address Meta's proposed construction of "*application-based information channel*," in the event it is adopted for purposes of this IPR and the prior art for Ground 1 is somehow found insufficient on this point.

B. Claim 2

The Neibauer-Cheng-Ausems combination renders obvious "*at least one of the first device-captured data and the second device-captured data comprises image data*" [2]. As explained for claim 1, both the first and second device-captured data comprises photo (image) data.

C. Claim 3

The Neibauer-Cheng-Ausems combination renders obvious "*at least one of the first device-captured data and the second device-captured data comprises video data*" [3]. It would have been obvious that the first or second device-captured data would have comprised "*video data*," under at least two different theories. First, it would have been obvious for a club member to upload an image file in GIF (Graphics Interchange Format), which was the *de facto* image standard for images on the Web. (EX-1002, ¶137.) It was well-known that GIF files were not limited to a single image – a GIF could contain a number of image frames for display sequentially to create videos or animations. (EX-1002, ¶137 (quoting EX-

1018, pp.235-236 ("[N]o format has come close to gaining the popularity and widespread acceptance of GIFs. This acceptance is due to the ease of creating GIFs… and to the fact that animated GIFs are supported in most browsers without the hassle of installing extra plugins.").) It therefore would have been obvious for the first or second "*device-captured data*" of claim 1 to have comprised "*video data*," which is nothing more than a collection of individual (still) images played in sequence. (EX-1002, ¶137.)

Cheng expressly discloses the ability to provide, to mobile devices, GIF images on web pages. (Cheng, 4:10-16.) The '348 patent does not place limits on the type, format, or length of "*video data*" that can be provided, and contains only a single brief reference to video. (EX-1001, 17:35-37; EX-1002, ¶138.)

Under a second theory, Ausems discloses a mobile device that includes video capture capabilities. (Ausems, 3:15-22 ("PDA telephone **100** may be equipped with optional enhanced feature sets, including…video conferencing/video capture capabilities…."), 5:17-22 ("Camera **190** records video images and stores them within. PDA telephone **100**. Additionally, video images recorded by camera **190** may also be transmitted from PDA telephone **100** in real time during a telephone call (thus allowing for video conferencing).").)

It therefore would have been obvious, under either theory, to implement the proposed combination such that the first or second "*device-captured data*" of claim

1 would have comprised "*video data*," predictably resulting in the club photo sharing feature further providing the ability to upload and share video data. A POSITA would have been motivated to implement this capability because video data may be more compelling and interesting to some users when compared to single (still) image data. (EX-1002, ¶140.)

D. Claim 6

The Neibauer-Cheng-Ausems combination renders obvious "*a given one of the first and second mobile devices comprises one of a mobile telephone, a tablet computer, a GPS-based navigational device, a watch and a portable game player*" [6]. Cheng and Ausems both confirm that the mobile devices would have comprised at least "*a mobile telephone*." (Cheng, 5:30-35; Ausems, *e.g.*, 3:5-8 ("FIGS 1*a*-1*d* illustrate PDA telephone **100** that provides the combined functionality of a Personal Digital Assistant (PDA) and a wireless telephone….").) Ausems further confirms that each mobile device could have been "*a GPS-based navigational device*." (Ausems, 5:38-47; EX-1002, 141.)

E. Claim 7

The Neibauer-Cheng-Ausems combination renders obvious "*a web server that includes the network interface and the processing element and wherein the web server is accessible to the first and second mobile devices over the Internet via the network interface*" [7]. The "*web server*" for claim 7 corresponds to the

combination of origin server **102** (which provides the functions of Neibauer) and proxy server **110** (which makes those functions available to mobile devices), as discussed for limitations [1A]-[1B] above These two servers collectively provide a "*web server*" that makes the web pages available to club members who access the photo sharing feature using mobile devices. (EX-1002, ¶142.) As fully explained for limitation [1A], the '348 patent allows a server to comprise more than one server. (EX-1001, 9:21-24; EX-1002, ¶¶102, 142.) The claimed "*web server*" would have included the claimed processing element and network interface as described for limitations [1A]-[1B], and would have been accessible to the first and second mobile devices over the Internet via the network interface, as explained for claim 1. (EX-1002, ¶¶114, 142.) As also explained for limitation [1A] it would also have been obvious to combine origin server **102** and proxy server **110**, to the extent the claim requires a single server. (EX-1002, ¶¶103, 142.) Under this alternative theory, therefore, the "*web server*" would also have included the claimed processing element and network interface. (EX-1002, ¶142.)

F. Claim 8

The Neibauer-Cheng-Ausems combination renders obvious "*the web-based shared information channel is configured to allow a given one of the first and second users to enter a message via the personalized content application of its corresponding mobile device and wherein the message is integrated with the first*

and second device-captured data into a persistent version of a given set of shared information content of the web-based shared information channel so as to be accessible with the first and second device-captured data to the first and second users of the respective first and second mobile devices via the respective personalized content applications of the first and second mobile devices" [8]. As explained for claim 1, the club photo sharing feature ("*the web-based shared information channel*") allows club members who upload photos to also enter a message via their web browsers, such as a name and textual description of their photos. (Neibauer, p. 478, ¶3 ("Enter a name and description of the photo.").) This message would have been entered, under the proposed combination with Cheng, using the mobile web browser ("*the personalized content application of its corresponding mobile device*"), as described for limitation [1F]. This message is then integrated with the photo data as shown in the photo album view:

The James Bond Movie Series Category: James Bond Serie
The James Bond place to talk about the movies. Club Type: Liste

Blueraja's BOND GIRL Album Back To: Album List

Created by blueraja3 on 22-Nov-1999

Showing 1 - 12 of 12 photos | View Thumbnails Add Photo

Photo Name and Caption	Contributor	Size	Posted	Edit	Delete
Denise Richards - Stunning Blue Bikini	blueraja3	21 KB	22-Nov-1999		
Denise Richards - Seductive Stare	blueraja3	22 KB	22-Nov-1999		
Denise Richards - Sexiest Denise Pic	blueraja3	48 KB	22-Nov-1999		
Denise Richards - Too Sexy! Too Sexy!	blueraja3	13 KB	22-Nov-1999		
Famke Janssen - Modeling Lingerie	blueraja3	53 KB	22-Nov-1999		
Famke Janssen - Sexiest Bond Girl Ever	blueraja3	13 KB	22-Nov-1999		
Famke Janssen - Sexy Black Leather	blueraja3	10 KB	22-Nov-1999		

FIGURE 21-10 Club photo album

(Neibauer, p.478, Fig. 21-10.) Figure 21-10 shows a partial list of photographs stored in an album. For each photo ("*device-captured data*"), the textual name and description ("*message*") entered by the uploading club member is displayed along with a link to the photo itself. (Neibauer, p.477.) For example, the first photo posted above is named "Denise Richards" and described as "Stunning Blue Bikini." As a result, each photo in an album integrates the device-captured data and textual message data into a "*persistent version of a given set of shared information content of the web-based shared information channel*," because both the photo and textual name and description are accessible to users via the club photo sharing feature. A person of ordinary skill in the art would have appreciated that the

integration of the message and photo is "*persistent*" because the two pieces of information are stored in association with each other and viewable together by both the first and second users through the user interface as described in Neibauer. (EX-1002, ¶144.) The "*persistent version*" is thus also accessible to the first and second users via their mobile devices and personalized content applications. (*Id.*)

G. Claim 9

The Neibauer-Cheng-Ausems combination renders obvious "*the message is delivered to one or more of the mobile devices over a wireless network*" [9]. It would also have been obvious that the message of claim 8 would have been delivered to one or more of the mobile devices "*over a wireless network*." (EX-1002, ¶145.) For example, Neibauer discloses in connection with the Yahoo! Mobile service that a mobile PDA could have included a "GSM Phone" modem. (Neibauer, p.171, ¶5.) GSM, which stands for **G**lobal **S**ystem for **M**obile Communication, was a dominant wireless (cellular) mobile network in widespread use in the United States the early 2000s. (EX-1002, ¶145.) Cheng similarly discloses wireless network device connectivity. (Cheng, *e.g.*, 2:4-7, 5:33 ("a cellular telephone"), 23:44-51 ("… wireless communication (e.g., radio frequency (RF), and the like)").) It therefore would have been obvious that the message would have been delivered to mobile devices over a wireless network, such as a known cellular communications network (like GSM). (EX-1002, ¶145.) A

POSITA would have been motivated to allow mobile devices to provide content over a wireless network to take advantage of the growing popularity of mobile and wireless computing. (EX-1002, ¶¶81, 145.)

H. Independent Claim 12

The Neibauer-Cheng-Ausems combination renders obvious "[*a*] *network-based communication system comprising a plurality of servers configured to communicate over said at least one network, a given one of the servers comprising the apparatus of claim 1*." [12]. This claim is obvious for the same reasons as claim 1. First, the proposed combination renders obvious "[*a*] *network-based communication system comprising a plurality of servers configured to communicate over said at least one network*,"[5] which would have included (under the proposed combination with Cheng) one or more origin servers **102** that contain web page content, along with at least proxy server **110**, that communicate over the Internet. (Cheng, 3:49-53 ("In general, embodiments of the present invention contemplate that architecture **100** comprises <u>one or more servers **102**</u> having web content (in the form of at least one web page **104**), <u>a proxy server **110**</u>, at least one

[5]There is no antecedent basis for "*said at least one network*" in claim 12, and as such, Petitioners have interpreted this language as requiring at least one network.

mobile device **108**, and at least one network **114**.”).) Claim 12 continues by reciting that “*a given one of the servers compris*[es] *the apparatus of claim 1*.” It would have been obvious that “*a given one of the servers*” would have corresponded to proxy server **110** in Cheng along with origin server **102**, as noted, because the ’348 patent makes clear that a given server can comprise multiple servers. (EX-1001, 9:21-24.) But to the extent the claim were interpreted to require a single server, as explained previously, it would have been obvious to combine proxy server **110** with origin server **102** to form a combined server for performing the functions of claim 9. (EX-1002, ¶¶146-47.)

I. Independent Claim 13

1. Preamble [13P]

To the extent the preamble is limiting, the Neibauer-Cheng-Ausems combination renders obvious a “*method*” with steps that are substantially identical to the functions recited in of apparatus claim 1.

2. Limitations [13A]-[13B]

Limitations [13A] (“*receiving first device-captured data from a first mobile device over at least one network*”) and [13B] (“*receiving second device-captured data from a second mobile device over said at least one network*”) are substantially similar to the functions recited in [1D]-[1E], except that these limitations do not require receipt via a “*network interface*.” They are obvious for the same reasons as

stated for claim 1. The "*at least one network*" comprises the Internet. (EX-1002, ¶149; Cheng, 3:67-4:2; Neibauer, p.4 (explaining that Yahoo! members need access to an Internet connection).)

3. Limitation [13C]

Limitation [13C] ("*integrating the first and second device-captured data into a web-based shared information channel controllably accessible to first and second users of the respective first and second mobile devices via respective personalized content applications of the first and second mobile devices*") is identical to the function recited in [1F], and is rendered obvious for the same reasons. (EX-1002, ¶150.)

J. Claim 14

Claim 14 ("*The method of claim 13 further comprising: receiving in the web-based shared information channel a message…*") is substantially similar to claim 8, except that it depends from claim 13 instead of claim 1. As explained for claim 8, the club photo sharing feature allows the first and second users to enter "*a message*" using the web browsers in their mobile devices, which would have been received and delivered to other users (for example, by viewing the photo album with accompanying textual messages as shown in Neibauer Figure 21-10) via their mobile devices. Each message is thus integrated with its respective photo, as recited in the claim and fully described for claim 8. (EX-1002, ¶¶126-27, 151.)

K. Independent claim 17

Independent claim 17 is substantially similar to claim 1 except that it recites "[*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 causes said processing element*," to perform the same functions as claim 1. As explained for limitation [1A], the proposed combination discloses and renders obvious "*a processing element*" as claimed. (EX-1002, ¶¶101-02, 152-154.)

It would also have been obvious that the functionalities from Neibauer, Cheng, and Ausems relied upon for claim 1 would have been carried out and implemented by software comprising code that is executed by the processing element and stored in the at least one "*non-transitory computer-readable storage medium*," such as a hard disk drive. (EX-1002, ¶153; Cheng, *e.g.*, 23:64-24:4 (explaining that instructions may be stored in random access memory or hard disk storage until required by the computer system).)

L. Claim 18

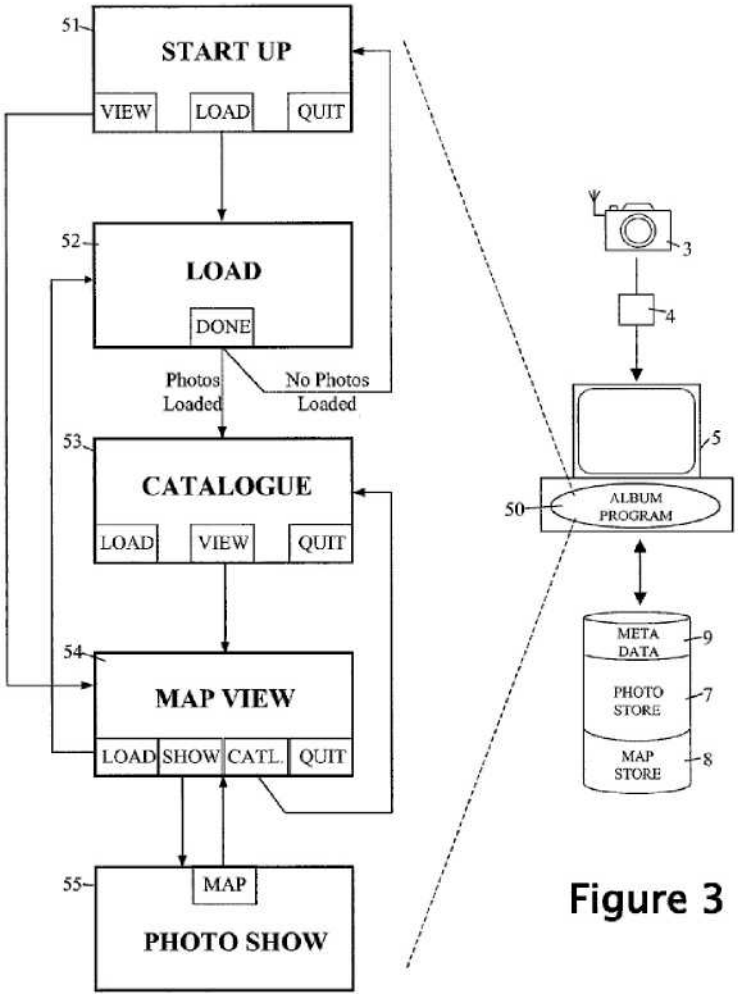
Claim 18 is substantially similar to claim 8, and identical claim 14. Claim 18 is obvious for the reasons previously presented.

VII. Ground 2: Claims 4-5 Are Obvious Over Neibauer In View Of Ausems and Cheng, in Further View of Squibbs.

These dependent claims, which generally relate to obtaining and using location information, would have been obvious over the prior art for Ground 1, in further view of Squibbs (EX-1011).

Squibbs describes a technique of recording and displaying data (such as photos) along with the location where the photo was taken. (Squibbs, Abstract.) Squibbs explains that digital cameras that included Global Positioning System (GPS) receivers were known in the art, as were systems that could display the location where the photo was taken on an electronic map. (Squibbs, ¶¶0003-0004.)

Squibbs discloses a photo album system that allows a user to capture and record digital images, which can be associated with the physical location where they were taken. An overview of the system is shown in Figure 3:



Squibbs, Fig. 3

As further explained in Squibbs, with reference to Figure 3:

FIG. 3 depicts a photo system in which a digital camera **3** provided with location determining means (such as a GPS receiver) is used to generate digital photos **4**, each photo (also referred to as 'image data') **4** being stamped with location data indicating where the photo was taken… The photos and their meta data are downloaded by any suitable means (USB connection, removable storage device, etc) into a PC **5** where an album program **50** serves to store the photos in a photo store **7** and the photo meta data in a meta-data database **9**… The album program also has

> access to a map store **8**. The stores **7** and **8** and the meta-data database can be on the PC or external.

(Squibbs, ¶0031.)

Album program **50** allows the user to "catalogue, manage, and view their photos through a map-based interface, the photos being represented on a displayed may by a marked indicating the location where they were taken." (Squibbs, ¶0032.) It comprises "five main operating modes **51** to **55**," as shown. (Squibbs, ¶0033.) For example, Load Mode **52** allows the user to download data from camera **3**, and Catalog Mode **53** allows the user to manage newly loaded photos using a map-based display, and Map View Mode **54** allows the user to browse the photo album and select photos for viewing. (Squibbs, ¶¶0033, 0035-0036.) Figure 6 shows a display generated by the album program in Catalog Mode **53** (Squibbs, ¶0064):

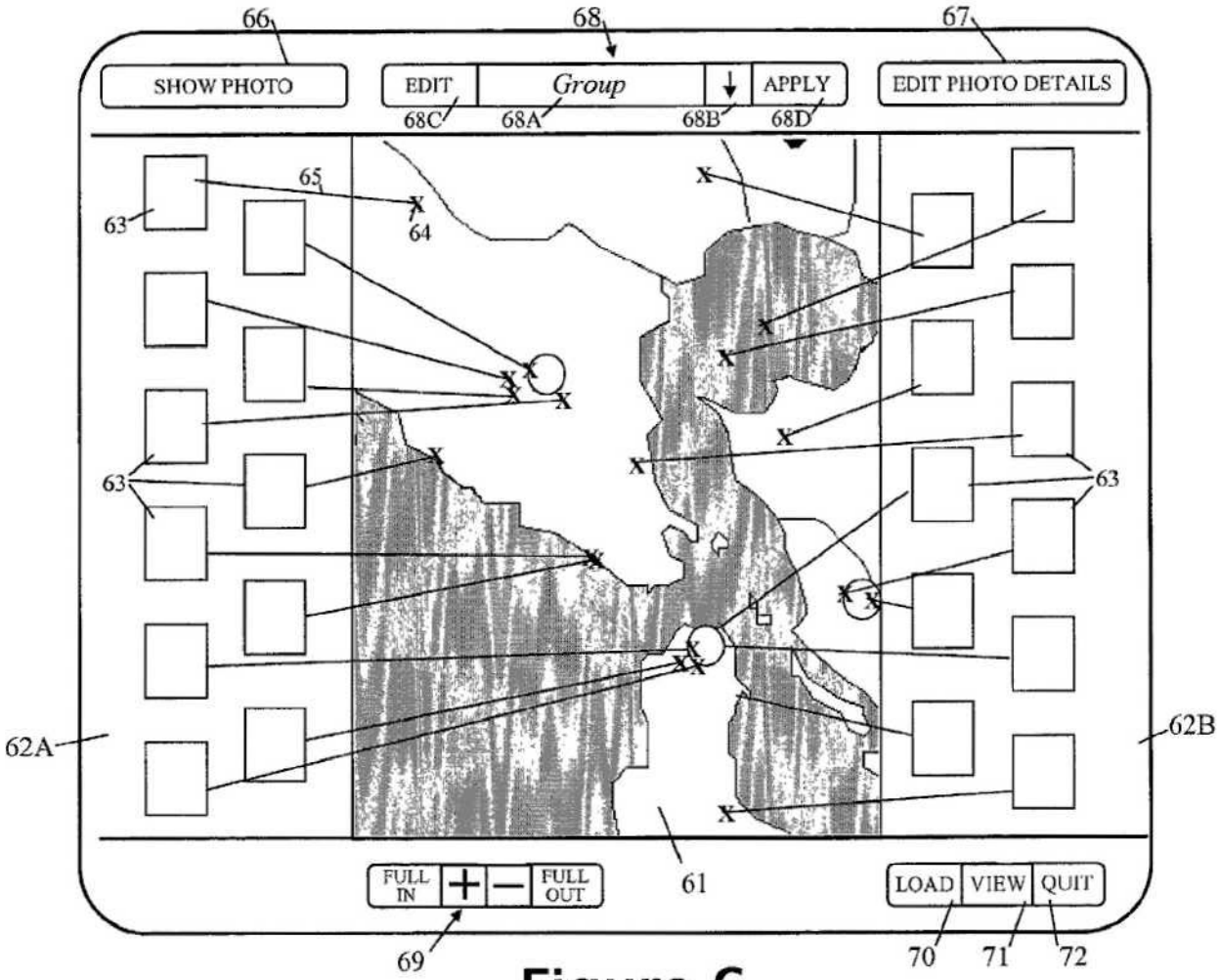


Figure 6

(Squibbs, Fig. 6.)

Figure 6 shows a central map area **61** which "is sufficient to encompass the locations registered for the newly loaded batch of photos." (Squibbs, ¶0064.) "A thumbnail **63** of each new photo is shown in one or other of the margin areas **62**A, B and a lead line **65** connects each thumbnail **63** to a corresponding marker 64 showing on the map the location where the photo was taken." (Squibbs, ¶0064.) Figure 6 also shows an upper control bar with, from left-to-right, Show Photo

Control 66 for displaying the photo corresponding to a selected thumbnail 63, Group Control **68** for creating groups and assigning a photo to one or more groups, and Edit Photo Details Control **67** for displaying and editing the details of a selected thumbnail. (Squibbs, ¶¶0065-0068.)

Figure 7 shows a display generated by the album program in Map View **54** (Squibbs, ¶0074):

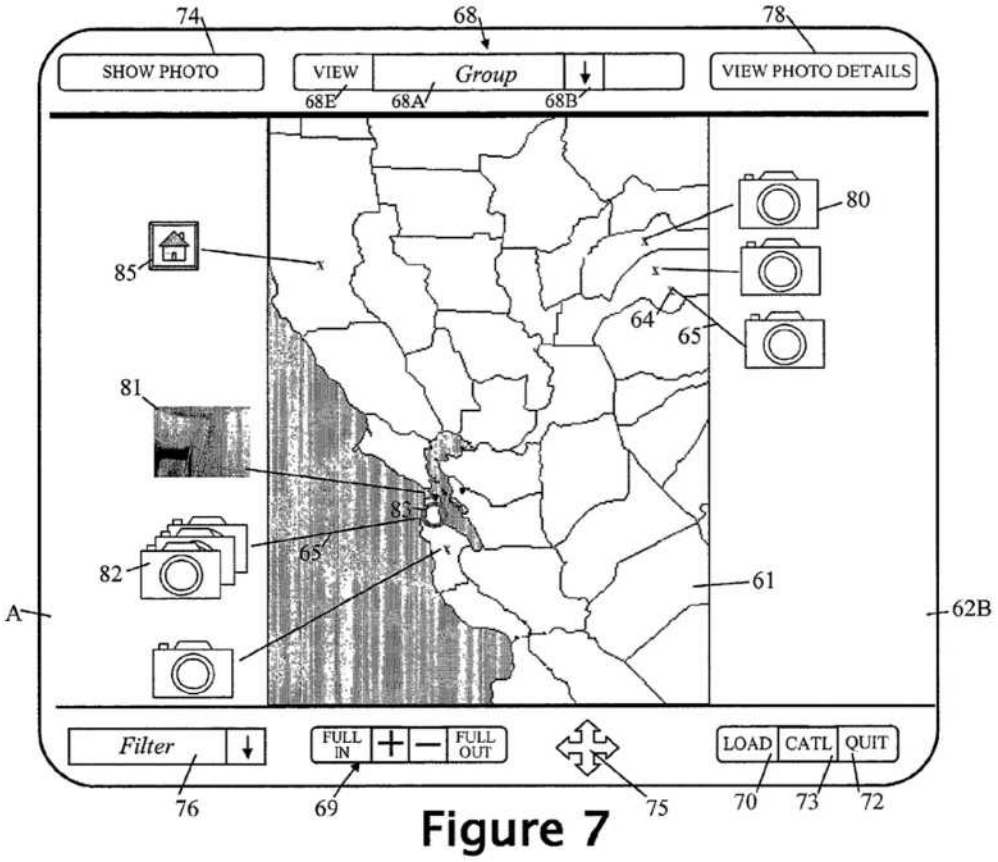


Figure 7

Squibbs, Fig. 7

The Map View mode in Figure 7 allows a user to browse the album. (Squibbs, ¶0074.) Squibbs explains that "[t]he starting map displayed in the Map

View Mode is, for example, a world map or a map encompassing the locations of all the photos recorded in the album; alternatively, the map displayed could be the same map as being used in the Catalogue Mode before transiting to the Map View Mode." (Squibbs, ¶0075.) Figure 7 shows photos represented "either as thumbnails **81**, individual photo icons **80**, group icons (see current-abode group icon **85**), or concentration icons (see icon **82**)." (Squibbs, ¶0075.) Squibbs also discloses (in Figure 8) the ability to display a full-size image of a photo selected from the Map View Mode. (Squibbs, ¶0091, Fig. 8.)

Squibbs discloses a number of ways in which a photo can be associated with location data. In the example in Figure 3, the digital camera itself has a built-in GPS receiver. In another embodiment of Figure 11, a digital camera **90** transmits the photo image data to a cell phone **20**, which in turn uploads the image data over a cellular connection to service system **40** for storage on network store **43**. (Squibbs, ¶0101, Fig. 11 (showing transfer **105**); *see also id.*, ¶0031 (noting that the photo store can be "external").) The cell phone, when uploading photo image data, also transmits location information. (Squibbs, ¶0101.) Squibbs explains that the cell phone can determine location information in a number of ways, including from "a location server of the mobile radio infrastructure," or using "a GPS system built into the cell phone." (Squibbs, ¶0098; *see also id.*, ¶0101.)

Motivation to Combine Ground 1 Prior Art with Squibbs: It would have been obvious to combine the prior art for Ground 1 with Squibbs, predictably resulting in the club photo sharing feature further adapted such that the mobile device transmits not just the photo being uploaded, but also geographic location information where the photo was captured. (EX-1002, ¶167.)

For claim 4, therefore, the device-captured data of claim 1 would also have included "*device-captured location coordinates*" of the photo. (Squibbs, Fig. 4 (showing "LOCATION COORD" field for photo), ¶0049 (referring to "the coordinates provided by the location data").)[6] For claim 5, the device-captured data would for the same reasons have included "*at least one of device-captured image data… associated with a capture location-identifying information*." Although not required by claims 4-5, it would also have been obvious to adapt the club photo sharing feature to display location information associated with photos uploaded by club members, for example, via a map-based user interface similar to the one described in Figures 6-7 of Squibbs discussed above. (EX-1002, ¶168.) Under the

[6] Squibbs discloses an embodiment of a digital camera that is separate from the cellular phone used to upload photo image and location data. (Squibbs, Fig. 11, ¶0101.) The ability to incorporate digital cameras into mobile devices with GPS capabilities was known and described in Ausems. (EX-1002, ¶167 n.5.)

proposed combination, therefore, the club photo sharing feature would have been further adapted to display location information (for example on an electronic map), in association with the photos. This would also have been seen as a natural extension of map features already disclosed in Neibauer, as discussed below. (EX-1002, ¶172.) Squibbs is an analogous reference in the same field as the ’348 patent and would have been reasonably pertinent to problems facing the patent inventors, including how to obtain location information and incorporate it into a mobile information channel. (EX-1002, ¶169.)

A POSITA would have been motivated to combine in order to improve the user experience of club members who use the photo sharing feature. (EX-1002, ¶170.) The ability to associate a location with a digital photo would have provided a clear benefit by improving the classification and enjoyment of uploaded photos. Squibbs explains that classification of photos “has long been a problem due to the effort involved in maintaining any organisation of the photos.” (Squibbs, ¶0002.) Geographic location would have provided a clear way to classify digital photos, allowing club members to better understand the context behind the photo and identify objects in it. (EX-1002, ¶171.)

Neibauer provides a further suggestion to combine with Squibbs by disclosing a Yahoo! Maps feature that allows users to request and view electronic maps. (Neibauer, pp.222-224.) Neibauer further describes how a user can annotate

a map to identify objects of interest on the map, such as the user's house and the location of an upcoming event. (Neibauer, pp.226-228, Fig. 10-5 (showing "My House" and "The picnic is here").) The annotation described in Neibauer is similar to the functionality in Squibbs, and in any case, the fact that Neibauer already discloses the ability to display electronic maps – and suggests annotating those maps to show location of objects and events within the map – confirms that Neibauer and Squibbs are naturally combinable and that a POSITA would have been motivated to do so. (EX-1002, ¶172.) A POSITA would also have had a reasonable expectation of success, as Squibbs relies on existing technologies and could have been implemented using conventional techniques. (EX-1002, ¶172.)

VIII. Ground 3: Claims 10-11, 15-16, 19-20 Are Obvious Over Neibauer In View Of Ausems and Cheng, in Further View of McElfresh.

Dependent claims 10-11, 15-16, and 19-20 are substantially similar. Claims 10, 15, and 19 recite the ability to identify and periodically obtain data from "*at least one data feed*," which is integrated into "*a given set of shared information content of the web-based shared information channel*," accessible to the first sand second users via their respective mobile devices and personalized content applications. Dependent claims 11, 16, and 20 further state that the "*data obtained from the given identified data feed comprises at least one advertisement*." These claims are obvious over the prior art for Ground 1 in view of McElfresh (EX-1014).

McElfresh describes a technique for integrating advertisements into a webpage. Figure 1, below, shows "a generalized block diagram layout of a prior art webpage **10**. This page contains a web page title block **12**, and a web page content block **14**. A sequence of ad sites **16-20** are shown which receive and display ads configured to fit in these spots." (McElfresh, 5:19-31.) McElfresh explains that ads in the prior art were typically placed on the page based on advertisers' preferred page location, or randomly. (McElfresh, 5:33-38.)

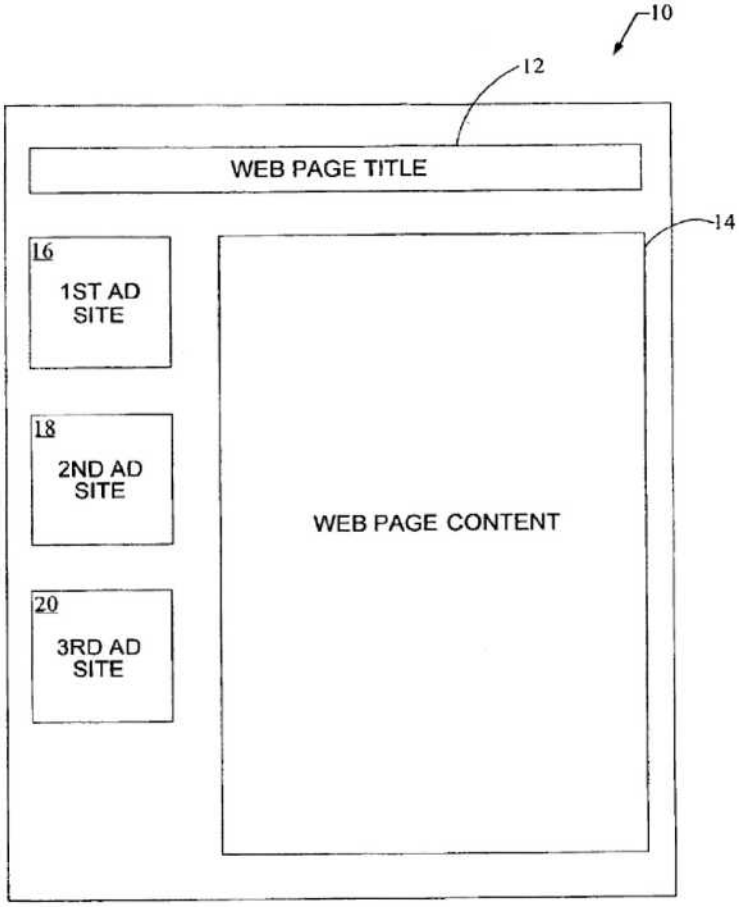


Fig. 1
(Prior Art)

McElfresh, Fig. 1

McElfresh purports to disclose an improved technique in which a website can issue a request for ads for inclusion on a webpage, and the ads provided will be selected and ranked in a way that increases the likelihood of click-throughs and maximizes advertising revenue. (McElfresh, 5:20-28.) Figure 3A shows a block diagram of the system or network **100** for optimizing ad placement:

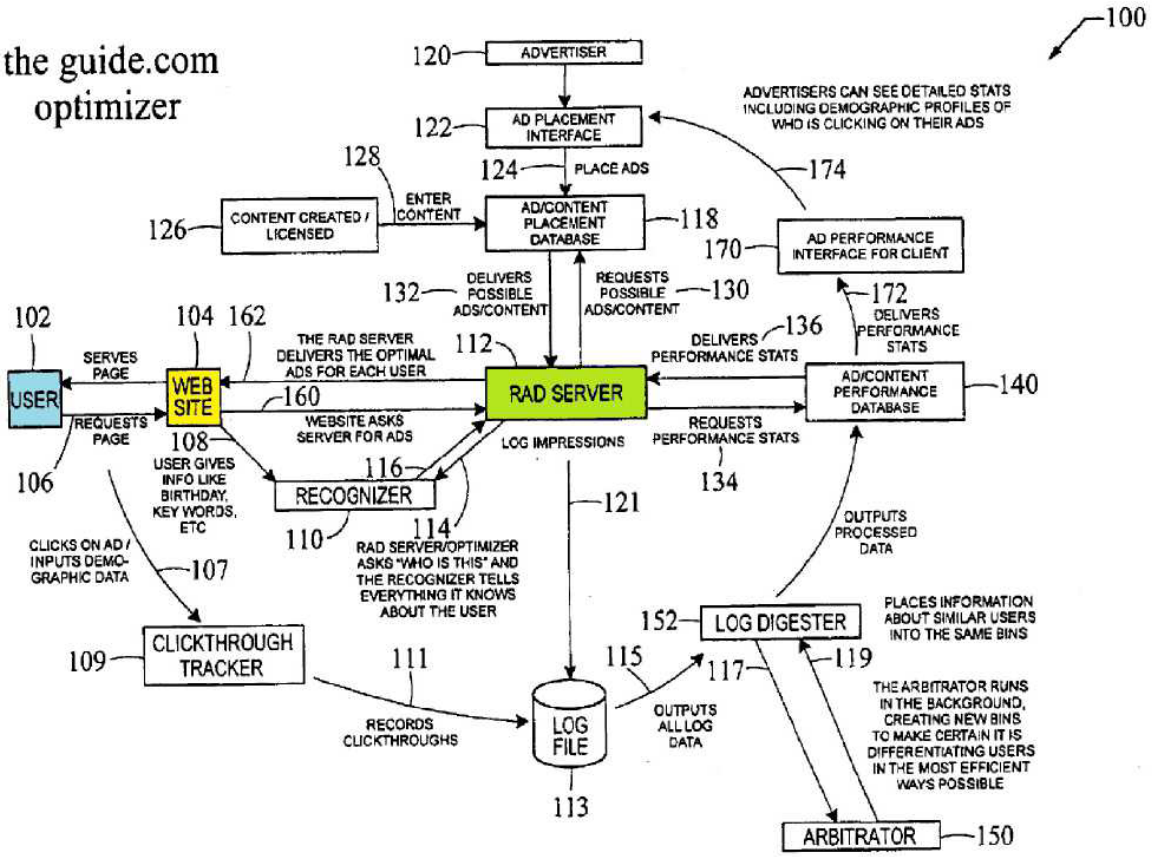


Fig. 3A

(McElfresh, Fig. 3(a), 6:15-18.) Although Figure 3A above shows a number of components, the most relevant aspects for our purposes are Rad Server **112**, website **104**, and user **102**.

McElfresh explains that "when a site wants to show a page, it contacts an ad server component **112**, shown at the center of the network **100** in FIG.3(a). This device might also be referred to as a relational server component, and is hence referred to as the Rad Server." (McElfresh, 6:36-40.) Figure 3(a) also discloses "an ad/content placement database **118**… for storing a plurality of ads, which might be used for possible display." (McElfresh, 6:57-60.) The ad server or Rad Server **112** "performs the overall function of gathering the necessary information regarding a particular ad (or set of ads) and the particular user and generating a set of ads which have been optimized for placement on a webpage," based on (among other things) calculated click-through-percentage rates. (McElfresh, 6:42-48.)

After the ads have been selected, "the Rad Server **112** delivers a set of ads for display to the user which have been optimized for increased click-throughs, and/or increased revenue generation for the webpage provider." (McElfresh, 8:10-14.) In another embodiment, "[i]f an advertiser wishes to purchase the right to an entire section of the website or webpage, the ads can simply be placed there without having to compete their way into that position on the page." (McElfresh, 12:50-54.)

Motivation to Combine Ground 1 Prior Art with McElfresh: It would have been obvious to combine the prior art for Ground 1 with McElfresh,

predictably resulting in the further ability to integrate a number of ads onto the webpage of the club photo sharing feature. (EX-1002, ¶183.)

For example, claims 10, 15 and 19 recite the steps or functions of identifying "*at least one data feed*," and periodically obtaining data "*from a given such identified data feed*." Under the combination with McElfresh, the "*data feed*" would have corresponded to a feed containing a plurality of advertisements that would have been available for display on the club photo sharing feature, obtained by from Rad Server **112** as described in McElfresh. More specifically, the web server providing the club photo sharing feature described in Neibauer ("*web-based shared information channel*") would have periodically obtained ad data from this feed, for example, when webpages of the club sharing photo sharing feature are being prepared for delivery to a user. (McElfresh, 6:36-48, 8:9-10 ("Referring again to FIG. 3(a), the website **104** requests ads from the Rad Server **112** as shown by dataflow **160**.").)

The '348 patent does not define "*data feed*," and the term does not appear in the written description. The term "*feed*" appears only in one sentence referring to RSS and XML feeds. (EX-1001, 9:52-55.) In the pending litigation, Patent Owner argues that "*data feed*" is not limited to XML or RSS feeds and simply means a "*provision of information*," to the extent a construction is required. (EX-1025, at 3.) McElfresh satisfies this construction by providing advertising information.

Petitioners, for their part, has argued in the pending litigation that "*data feed*" should be limited to the two examples in the written description, *i.e.*, an XML or RSS feed. (*Id.*) The claimed data feed would be obvious even if it were limited in this fashion, because it would have been obvious to provide the advertisements from Rad Server **112** of McElfresh to the website in XML format, which was a well- known industry standard for exchange of information between computers in web-based systems. (EX-1002, ¶¶186.) A POSITA would have been motivated to use XML to take advantage of a growing and popular XML industry standard which was specifically designed for electronic data interchange between various systems. (EX-1002, ¶187.)

Claims 10, 15, and 19 further state that the information obtained from the data feed is integrated "*with the first and second device-captured data into a persistent version of a given set of shared information content of the web-based shared information channel so as to be accessible with the first and second device-captured data to the first and second users of the respective first and second mobile devices via the respective personalized content applications of the first and second mobile devices*." This would have occurred, under the proposed combination, by integrating the received advertisements into the webpages for the club photo sharing feature, for example, by showing the ads on the photo album

webpages in Neibauer, which would have been accessible to club members via their mobile devices. (EX-1002, ¶188.)

For example, as explained for claim 1, the first and second device-captured data is integrated into a photo album as shown in the photo album view shown in Figure 21-10 of Neibauer:

The James Bond Movie Series
The James Bond place to talk about the movies.

Category: James Bond Serie
Club Type: Liste

Blueraja's BOND GIRL Album

Back To: Album List

Created by blueraja3 on 22-Nov-1999

Add Photo

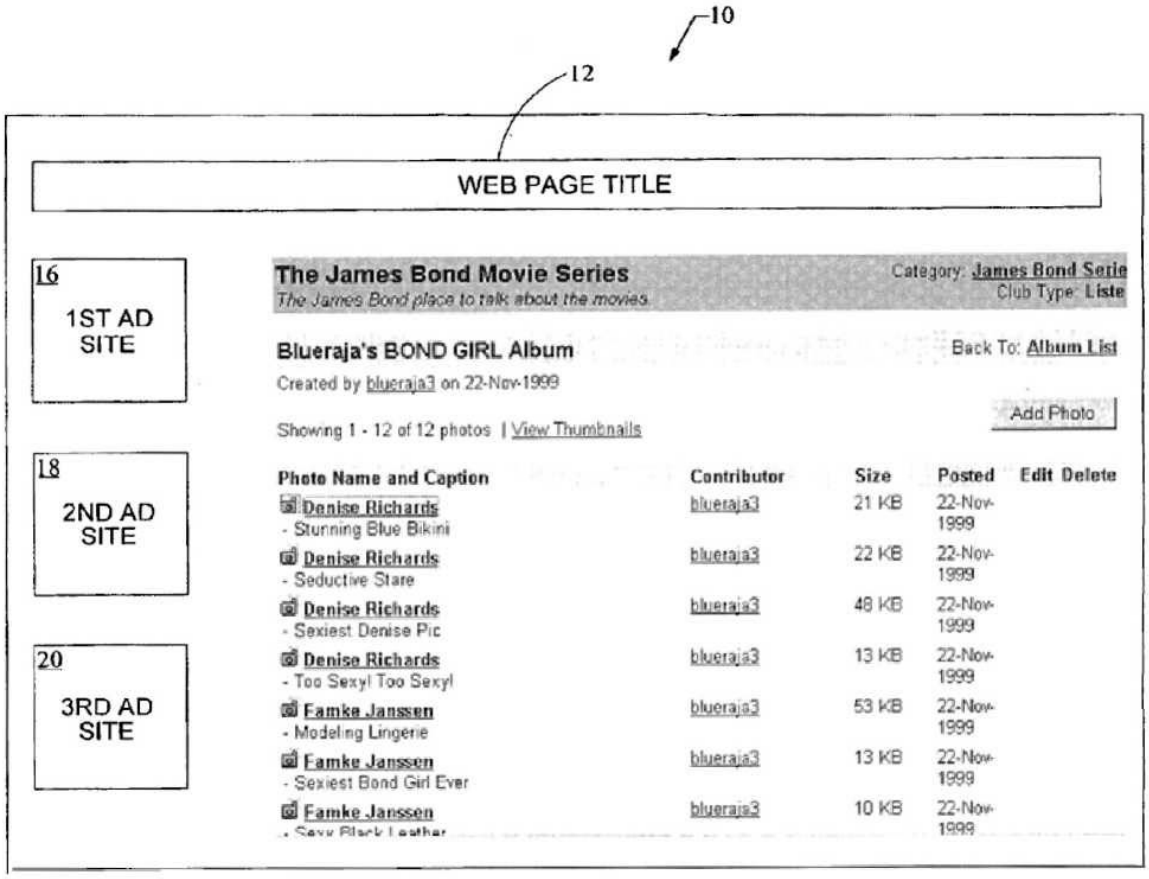
Showing 1 - 12 of 12 photos | View Thumbnails

Photo Name and Caption	Contributor	Size	Posted	Edit	Delete
Denise Richards - Stunning Blue Bikini	blueraja3	21 KB	22-Nov-1999		
Denise Richards - Seductive Stare	blueraja3	22 KB	22-Nov-1999		
Denise Richards - Sexiest Denise Pic	blueraja3	48 KB	22-Nov-1999		
Denise Richards - Too Sexy! Too Sexy!	blueraja3	13 KB	22-Nov-1999		
Famke Janssen - Modeling Lingerie	blueraja3	53 KB	22-Nov-1999		
Famke Janssen - Sexiest Bond Girl Ever	blueraja3	13 KB	22-Nov-1999		
Famke Janssen - Sexy Black Leather	blueraja3	10 KB	22-Nov-1999		

FIGURE 21-10 Club photo album

(Neibauer, p.478, Fig. 21-10.) Figure 21-10 as noted above shows a partial list of photographs stored in an album. Under the proposed combination, the information on this webpage would have been integrated with advertisements obtained from the claimed "*data feed*" under the combination with McElfresh. Below is a mock-up, based on the combination of Figure 1 of McElfresh and Figure 21-10 of Neibauer

to illustrate one exemplary and obvious user interface in which this combination would have been implemented:



(EX-1002, ¶¶189-90.) This hypothetical is entirely consistent with Neibauer, which for its part shows an exemplary club page with an advertisement placed on it:

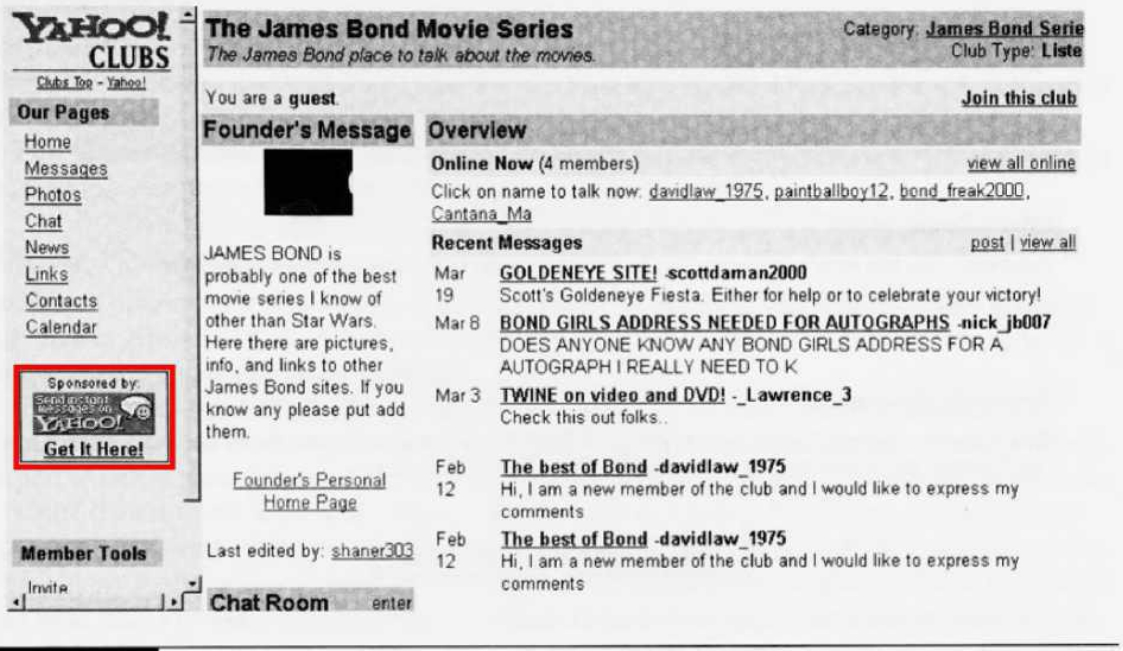


FIGURE 21-8 Club page

(Neibauer, p.475, Fig. 21-8 (red box added).)

Under the proposed combination, therefore, advertisement information obtained from the "*data feed*" would have been integrated "*with the first and second device-captured data*," *i.e.*, the photo data provided by the first and second users as explained in claim 1, "*into a persistent version of a given set of shared information content of the web-based shared information channel*," *i.e.*, a persistent set of data that includes the photo data for the photo album provided by the users and the obtained advertisements, which would have been accessible to and shared with club members. (EX-1002, ¶191.) It would also have been obvious for this set of shared information to be "*persistent*," as McElfresh discloses that its dynamic advertising algorithms can be overridden such that an advertiser can

simply "purchase the right to an entire section of the website or webpage," such that "the ads can simply be placed there without having to compete their way into that position on the page." (McElfresh, 12:50-54.) This would have allowed, for example, a set of advertisements to be placed consistently on a particular page, such as the photo sharing page in Neibauer. It therefore would have been obvious that the ads, along with the photo data for the photo album, would have been persistent and accessible to both the first and second users through their respective mobile devices and personalized content applications, under the proposed combination. And finally, claims 11, 16, and 20 recite that "*the data obtained from the given identified data feed comprises at least one advertisement*," which would have been the case as described above. (EX-1002, ¶191.)

McElfresh is an analogous reference in the same field as the '348 patent of network-based communication systems, that discloses similar functionality for managing information content accessible through the Internet. (EX-1002, ¶192.) McElfresh would also have been reasonably pertinent to problems facing the inventors including how to incorporate advertisements. (*Id.*)

A POSITA would have been motivated to combine in order to earn increased revenue. (EX-1002, ¶193.) As noted above, Neibauer itself discloses the ability to place advertisements on club pages. (Neibauer, p.475, Fig. 21-8.) The techniques of McElfresh would have provided a clear improvement to Neibauer by

allowing the photo sharing webpage to display multiple advertisements on a single page, from multiple advertisers, further increasing the potential revenue obtainable by the displaying website. (EX-1002, ¶193.) As McElfresh explains, "the generation of revenue from a website is proving to be increasingly important, as there are costs inherent in creating, providing, and maintaining a website." (McElfresh, 1:30-34.) "Moreover, as Internet traffic continues to increase, the opportunities for the generation of revenue in association with those contacted sites tends to increase." (McElfresh, 1:34-36.) Under the combination with McElfresh, the proposed combination would have beneficially been enabled to deliver more advertisements per page, thus resulting in greater revenue generation for the website operator. (EX-1002, ¶193.) A POSITA would also have had a reasonable expectation of success, as the techniques of McElfresh involved nothing more than basic web and network communications techniques. (EX-1002, ¶194.)

IX. Grounds 4-6: Obviousness in Further View of Harvey.

Grounds 4-6 are substantially the same as Grounds 1-3, respectively, except that they add Harvey (EX-1010) to account for a construction of "*web-based shared information channel*" proposed by Meta in the MDT-Meta-Litigation.

As explained for Ground 1, limitation [1F], Meta argued in the MDT-Meta-Litigation that this term should be construed as "a virtual location at the content management site at which user-authored content may be added for transmission to

the mobile web site." (EX-1025, 1-2.) The relevant feature of this construction is the ability of user-authored content to be added "*at a content management site*," which Meta has defined as "a web site that allows a user without programming to create and manage content on a mobile web site, or a portion thereof." (EX-1025, at 3.)

The "*content management site*" corresponds to a website for creating a new club. (EX-1002, ¶201.) With respect to the requirement that the "*content management site*" permit the user to add "*user-authored content*," to the extent not already obvious over Neibauer, this would have been obvious in further view of Harvey. For all other claim limitations, the Ground 1 analysis applies.

Harvey discloses techniques for creating on-line communities, which are similar to the web-based clubs disclosed in Neibauer. (Harvey, 4:24-43; EX-1002, ¶198.) Harvey teaches the ability of a community creator to author content for a community <u>before</u> the community is created. (EX-1002, ¶199.) Harvey explains that "[t]he community creating module permits the creator to create a community, and <u>designate applications and content presented</u> in the community by a user interface." (Harvey, 4:28-30.) A user can access creating module 165 in order to create a new community. (Harvey, 7:49-56, 8:49-50.) "At step 202, a creator provides community identification information," such as a community name. (Harvey, 7:58-61.) "At step 210," Harvey explains, "a configuration editor is

presented to a creator. A configuration editor may allow a user to build a community, designate content and application objects, subscribe to subscription objects, and add other information associated with the community." (Harvey, 8:63-67; *see also id.*, 9:41-47.) Later, "[a]t step 230, a creator may launch a community." (Harvey, 12:67-13:1.) Harvey therefore discloses adding content before the community is created. (EX-1002, ¶199.) Users access the community "through browser access to an appropriate website." (Harvey, 29:59-62.)

Motivation to Combine with Harvey: It would have been obvious to combine the prior art cited for Grounds 1-3 with Harvey, predictably resulting in the *further* ability to allow the club founder to add content to one or more mobile information channels, before the club is created and launched. (EX-1002, ¶200.) This would have satisfied Petitioner's proposed construction of "*web-based shared information channel*" as "a virtual location at the content management site at which user-authored content may be added for transmission to the mobile web site." Under the proposed combination, the "*content management site*" would have included a web-based interface for allowing the founder to create and manage a club disclosed in Neibauer, which would have further permitted the club founder to add content for the club via the mobile information channels, such as initial club messages, initial photos with textual descriptions, and so forth. This information would have been made available for transmission to "*the mobile website*," i.e., the

club site as delivered to mobile users. (EX-1002, ¶¶201.) Harvey is an analogous reference and would have been reasonably pertinent to problems facing the inventors. (EX-1002, ¶202.)

A POSITA would have been motivated to combine in order to provide club founders with better customizability allowing them to use the club-creation interface to populate mobile information channels with initial content, *before* the club is launched. (EX-1002, ¶203.) This would have avoided "blank" clubs devoid of content, because the club would be populated with some initial content before launch, which creates a more engaging club experience. (*Id.*) A POSITA also would have had a reasonable expectation of success and could have implemented the combination using conventional techniques. (EX-1002, ¶204.)

X. Discretionary Denial Is Not Appropriate

A. 35 U.S.C. §314(a)

The Board should reach the merits because the Petition presents a compelling unpatentability challenge. (*See* Interim Procedure for Discretionary Denials, 4-5.) The evidence presented in this Petition, "if unrebutted in trial, would plainly lead to a conclusion that one or more claims are unpatentable by a preponderance of the evidence." (Interim Procedure, 4.)

The median time to trial in the Eastern District of Texas is 21.9 months and the case is scheduled for trial on April 20, 2026. Nonetheless, the district court case

is in its early stages and little fact discovery has taken place. For example, the parties have produced few documents and no depositions have taken place. In addition, because a claim construction hearing is not scheduled until October 30, 2025, no claim construction order will issue prior to a decision on institution. And any trial will involve fewer claims than challenged here.

B. 35 U.S.C. §325(d)

Advanced Bionics does not apply to Ausems (EX-1006), Harvey (EX-1010), and McElfresh (EX-1014) as these references were not considered during prosecution.

Neibauer (EX-1003), Cheng (EX-1005), and Squibbs (EX-1011) were cited in an Information Disclosure Statements and were considered by the Examiner. (EX-1022, 195, 212 (excerpts of Neibauer), 174 (Cheng), 177 (Squibbs).) These references were among hundreds of prior art references cited during prosecution.

Petitioners respectfully submit that the Examiner's consideration of Neibauer, Cheng, and Squibbs does not raise § 325(d) issues in light of the uneventful prosecution history. As noted above, the Examiner rejected all initial claims based only on obviousness-type double patenting. (EX-1022, 156-58.) After the applicants canceled all claims and added new ones to overcome double patenting, the Examiner issued a Notice of Allowance. (EX-1022, 225, 256-58.)

Petitioners respectfully submit that the Examiner materially erred in failing to rely on Neibauer, Cheng, and Squibbs to reject the challenged claims. These references confirm that all limitations of the claims were obvious in view of the prior art—including the limitations that the Examiner found missing from McGarry. In fact, the PTO cited and relied on both Neibauer and Cheng in the successful reexamination of the earlier 8,135,801 patent (to which the present '348 patent claims priority) which resulted in cancellation of all claims. (EX-1024, 4 (PTAB decision affirming prior art rejections and listing Cheng and Neibauer), 18-19 (Federal Circuit affirmance).)

The art in the present grounds is presently before the Board in IPR2024-00250. To the extent the Board issues a Final Written Decision in IPR2024-00250, discretionary denial under *Advanced Bionics* may be warranted.

C. *General Plastics*

The petition should not be denied as an improper serial petition because there is no relationship, such as a joint defense arrangement, much less a "significant relationship" between Petitions here and Meta. Moreover, the functionality of the accused products in the Meta and Samsung district court cases differ. *See Videndum Production Solutions, Inc. v. Rotolight Ltd.*, IPR2023-01218 (Paper 12).

XI. Mandatory Notices

A. Real Party In Interest

The real parties-in-interest are Samsung Electronics Co. Ltd. and Samsung Electronics America, Inc.

B. Related Matters

To the best of Samsung's knowledge, the following is a list of judicial or administrative matter that would affect, or be affected by, a decision in the proceeding:

- *Mobile Data Technologies LLC v. Samsung Electronics Co. Ltd. et al.*, 2:24-cv-00435-JRG-RSP (E.D. Tex.)
- *Mobile Data Technologies LLC v. Meta Platforms, Inc.*, Case No. 3:24-cv-00896-WHA (N.D. Cal.)
- *Meta Platforms, Inc. v. Mobile Data Technologies, Inc.*, IPR2024-00250 (PTAB)
- *Samsung Electronics Co., Ltd. v. Mobile Data Technologies*, IPR2025-00535 (PTAB)
- *Samsung Electronics Co., Ltd. v. Mobile Data Technologies*, IPR2025-00536 (PTAB)
- *Samsung Electronics Co. Ltd. v. Mobile Data Technologies*, IPR2025-00537 (PTAB)
- *Samsung Electronics Co., Ltd. v. Mobile Data Technologies*, IPR2025-00538 (PTAB)
- *Samsung Electronics Co., Ltd. v. Mobile Data Technologies*, IPR2025-00542 (PTAB)

- *Samsung Electronics Co., Ltd. v. Mobile Data Technologies*, IPR2025-00543 (PTAB)
- *Samsung Electronics Co., Ltd. v. Mobile Data Technologies*, IPR2025-00544 (PTAB)

C. Notice of Counsel and Service Information

Pursuant to 37 C.F.R. §§ 42.8(b)(3), 42.8, Petitioner designates the following lead and backup counsel:

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XII. Conclusion

Inter partes review of the challenged claims is respectfully requested.

Date: February 6, 2025

Respectfully submitted,

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APPENDIX A – LIST OF CLAIMS

[1P] An apparatus comprising

[1A] a processing element comprising a processor coupled to a memory; and

[1B] a network interface coupled to the processing element and configured to communicate with a plurality of mobile devices over at least one network;

[1C] the processing element being configured:

[1D] to receive first device-captured data from a first one of the mobile devices via the network interface;

[1E] to receive second device-captured data from a second one of the mobile devices via the network interface; and

[1F] to integrate the first and second device-captured data into a web-based shared information channel controllably accessible to first and second users of the respective first and second mobile devices via respective personalized content applications of the first and second mobile devices.

[2] The apparatus of claim 1 wherein at least one of the first device-captured data and the second device-captured data comprises image data.

[3] The apparatus of claim 1 wherein at least one of the first device-captured data and the second device-captured data comprises video data.

[4] The apparatus of claim 1 wherein at least one of the first device-captured data and the second device-captured data comprises device-captured location coordinates.

[5] The apparatus of claim 1 wherein at least one of the first device-captured data and the second device-captured data comprises: location-identifying information of the corresponding mobile device; and at least one of device-captured image data and device-captured video data associated with a capture location identified by the location-identifying information.

[6] The apparatus of claim 1 wherein a given one of the first and second mobile devices comprises one of a mobile telephone, a tablet computer, a GPS-based navigational device, a watch and a portable game player.

[7] The apparatus of claim 1 further comprising a web server that includes the network interface and the processing element and wherein the web server is accessible to the first and second mobile devices over the Internet via the network interface.

[8] The apparatus of claim 1 wherein the web-based shared information channel is configured to allow a given one of the first and second users to enter a message via the personalized content application of its corresponding mobile device and wherein the message is integrated with the first and second device-captured data into a persistent version of a given set of shared information content of the web-based shared information channel so as to be accessible with the first and second device-captured data to the first and second users of the respective first and second mobile devices via the respective personalized content applications of the first and second mobile devices.

[9] The apparatus of claim 8 wherein the message is delivered to one or more of the mobile devices over a wireless network.

[10] The apparatus of claim 1 wherein the web-based shared information channel is configured to identify at least one data feed and wherein data is periodically obtained from a given such identified data feed and integrated with the first and second device-captured data into a persistent version of a given set of shared information content of the web-based shared information channel so as to be accessible with the first and second device-captured data to the first and second users of the respective first and second mobile devices via the respective personalized content applications of the first and second mobile devices.

[11] The apparatus of claim 10 wherein the data obtained from the given identified data feed comprises at least one advertisement.

[12] A network-based communication system comprising a plurality of servers configured to communicate over said at least one network, a given one of the servers comprising the apparatus of claim 1.

[13P] A method comprising:

[13A] receiving first device-captured data from a first mobile device over at least one network;

[13B] receiving second device-captured data from a second mobile device over said at least one network; and

[13C] integrating the first and second device-captured data into a web-based shared information channel controllably accessible to first and second users of the respective first and second mobile devices via respective personalized content applications of the first and second mobile devices.

[14] The method of claim 13 further comprising: receiving in the web-based shared information channel a message from one of the first and second users via the personalized content application of its corresponding mobile device; and delivering the message over said at least one network to another one of the first and second users via the personalized content application of its corresponding mobile device; wherein the message is integrated with the first and second device-captured data into a persistent version of a given set of shared information content of the web-based shared information channel so as to be accessible with the first and second device-captured data to the first and second users of the respective first and second mobile devices via the respective personalized content applications of the first and second mobile devices.

[15] The method of claim 13 further comprising: identifying in the web-based shared information channel at least one data feed; periodically obtaining data from a given such identified data feed; and integrating the obtained data with the first and second device-captured data into a persistent version of a given set of shared information content of the web-based shared information channel so as to be accessible with the first and second device-captured data to the first and second users of the respective first and second mobile devices via the respective personalized content applications of the first and second mobile devices.

[16] The method of claim 15 wherein the data obtained from the given identified data feed comprises at least one advertisement.

[17P] 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 causes said processing element:

[17A] to receive first device-captured data from a first mobile device over at least one network;

[17B] to receive second device-captured data from a second mobile device over said at least one network; and

[17C] to integrate the first and second device-captured data into a web-based shared information channel controllably accessible to first and second users of the respective first and second mobile devices via respective personalized content applications of the first and second mobile devices.

[18P] The non-transitory computer-readable storage medium of claim 17 wherein said executable program code when executed by said processing element further causes said processing element:

[18A] to receive in the web-based shared information channel a message from one of the first and second users via the personalized content application of its corresponding mobile device; and

[18B] to deliver the message over said at least one network to another one of the first and second users via the personalized content application of its corresponding mobile device;

[18C] wherein the message is integrated with the first and second device-captured data into a persistent version of a given set of shared information content of the web-based shared information channel so as to be accessible with the first and second device-captured data to the first and second users of the respective first and

second mobile devices via the respective personalized content applications of the first and second mobile devices.

[19] The non-transitory computer-readable storage medium of claim 17 wherein said executable program code when executed by said processing element further causes said processing element: to identify in the web-based shared information channel at least one data feed; to periodically obtain data from a given such identified data feed; and to integrate the obtained data with the first and second device-captured data into a persistent version of a given set of shared information content of the web-based shared information channel so as to be accessible with the first and second device-captured data to the first and second users of the respective first and second mobile devices via the respective personalized content applications of the first and second mobile devices.

[20] The non-transitory computer-readable storage medium of claim 19 wherein the data obtained from the given identified data feed comprises at least one advertisement.

CERTIFICATE OF WORD COUNT UNDER 37 CFR §42.24(d)

Pursuant to 37 C.F.R. §42.24(a), Samsung hereby certifies that portions of the above-captioned Petition for *Inter Partes* Review of U.S. Patent No. 9,922,348, in accordance with and reliance on the word count provided by the word-processing system used to prepare this Petition, that the number of words in this paper is 12,533. Pursuant to 37 C.F.R. §42.24(a), this word count is in compliance and excludes the table of contents, table of authorities, mandatory notices under §42.8, certificate of service, certificate of word count, appendix of exhibits, and any claim listing. This word count was prepared using Microsoft Word.

Date: February 6, 2025

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CERTIFICATE OF SERVICE

The undersigned certifies that a true copy of the Petition for *Inter Partes* Review of U.S. Patent No. 9,922,348 together with all exhibits identified in the above Table of Exhibits and Petitioners' Power of Attorney, have been served on the Patent Owner via Federal Express Next Business Day Delivery on the below date, at the correspondence address of record as listed on the Patent Center:

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