

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

IPR2025-00543
U.S. Patent No. 9,619,578

**PETITION FOR *INTER PARTES* REVIEW OF
U.S. PATENT NO. 9,619,578**

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EXHIBIT LIST

Exhibit	Reference
1001	U.S. Patent 9,619,578 to Harper (“the ’578 patent”)
1002	Declaration of Henry Houh, Ph.D. in Support of Petition for <i>Inter Partes</i> Review of U.S. Patent 9,619,578
1003	Excerpts from Alan Neibauer, <i>How to Do Everything With Yahoo!</i> (2000) (“Neibauer”)
1004	<i>RESERVED</i>
1005	U.S. Patent No. 7,574,486 B1 to Yin Cheng et al. (“Cheng”)
1006	U.S. Patent No. 6,434,403 B1 to Michiel R. Ausems et al. (“Ausems”)
1007-1009	<i>RESERVED</i>
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., <i>Pervasive Computing Handbook</i> (2001) (“Hansmann”)
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1021	Excerpts from <i>Microsoft Computer Dictionary</i> (5th ed 2002)
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1024	Excerpts of file history of Inter Partes Reexamination of U.S. Patent No. 8,135,801 B2
1025	Joint Claim Construction Statement, Dkt. 51, Mobile Data Technologies LLC v. Meta Platforms, Inc., Case No. 7:22-cv-00244- ADA-DTG (W.D. Tex. filed September 13, 2023)

Exhibit	Reference
1026	Declaration of Sylvia D. Hall-Ellis, Ph.D. (“Hall-Ellis”) from IPR-2024-00249
1027	RESERVED
1028	U.S. Patent 8,135,801 to Harper et al.
1029	Order Granting <i>Inter Partes</i> Reexamination of U.S. Patent 8,135,801
1030	<i>Meta Platforms, Inc. v Mobile Data Techs. LLC</i> , IPR2024-00249, Paper 26 (PTAB Oct. 2, 2024)
1031	Declaration of June Munford
1032	Excerpt from Webster’s Dictionary of Computer Terms (page 98)
1033	<i>Meta Platforms, Inc. v Mobile Data Techs. LLC</i> , IPR2024-00249, Paper 33 (PTAB Jan. 10, 2025).
1034-1035	RESERVED
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1037	RESERVED

I. Introduction

Samsung Electronics Co. Ltd. and Samsung Electronics America, Inc. (“Petitioners”) petition for *inter partes* review (“IPR”) of claims 1-19 and 21-22 of U.S. Patent No. 9,619,578 (“the ’578 patent,” EX-1001).

II. Grounds for Standing

Petitioners certify the ’578 patent is available for IPR and Petitioners are not barred or estopped.

III. Identification of Challenge

A. Prior Art

The ’578 patent, filed July 7, 2014, claims priority through 5 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 ’578 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 6,487,583 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	103	1-19, 21-22	Neibauer, Cheng, Ausems, Squibbs
2	103	1-19, 21-22	Neibauer, Cheng, Ausems, Squibbs, Harvey

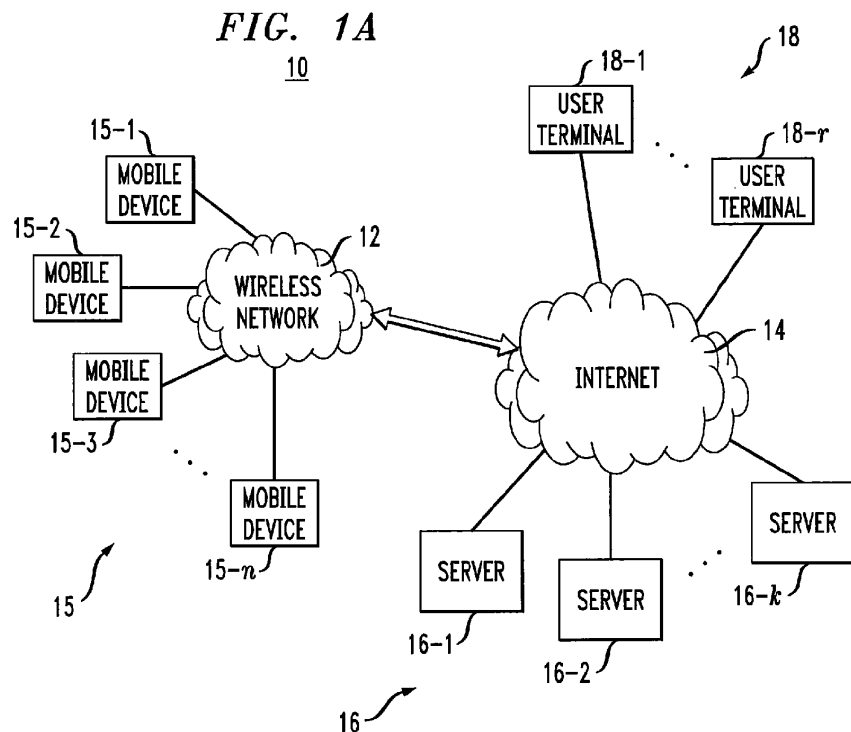
Submitted with this Petition is the Declaration of Henry Houh (EX-1002) (“Houh”), a qualified technical expert. (EX-1002, ¶¶8-18, Ex. A.)

¹ PO did not dispute Neibauer’s public availability in *Meta Platforms, Inc. v. Mobile Data Techs.*, IPR2024-00249 (“the Meta-MDT-IPR”).

IV. The '578 Patent

The '578 patent “relates generally to network-based communications systems, and more particularly to techniques for information content management in such systems.” (EX-1001, 1:26-28.)

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, 3:59-64.)



'578 Patent, Figure 1A²

² Unless otherwise noted all Figure annotations and emphasis added.

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, 8:30-35.) Such mobile sites may be associated with “a group comprising multiple members having 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, 6:25-8:25.)

A. 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.)

B. Prosecution History

The '578 patent issued from U.S. Pat. Appl. No. 14/324,698, filed July 7, 2014. During prosecution, the Examiner rejected all pending claims as anticipated by U.S. Pat. Pub. No. 2001/0027422 to Brandrud ("Brandrud"). (EX-1022, 245-52.) The Examiner also rejected claims 21 and 22 for double patenting over claims 1-25 of U.S. Pat. No. 8,825,801. (EX-1022, 252-54.) Applicants filed a response on September 14, 2016, amending the claims, claim 21 below is representative, where the added limitations are underlined, and deleted limitations are struck through.

21. (Currently amended) A method comprising:

providing a[[n]] first interface permitting designation of at least one content item, via a mobile device, for insertion into an application-based information channel ~~via a mobile device~~, the at least one content item comprising media data captured by the mobile device; and

integrating the at least one content item and information associated with at least one wireless networking functionality of the mobile device to generate at least one integrated content item; and

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

inserting the at least one integrated content item into the application-based information channel, the application-based information channel providing a second interface wherein two or more users share access to a plurality of content items including the at least one integrated content item.

(EX-1022, 340.) The Examiner thereafter issued a Notice of Allowance on December 6, 2016, allowing all pending claims. (EX-1022, 349.) In the Notice, the Examiner identified Brandrud as the closest prior art of record and stated that Brandrud does not disclose the “*integrating*” and “*inserting*” limitations of the independent claims. (EX-1022, 354.)

C. Claim Construction

In the Meta-MDT-IPR and *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.)) (“the MDT-Meta-Litigation”), the parties identified the following terms for construction (*See* EX-1025, 2-3; EX-1030, 21-31; EX-1033, 2-10.) 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, ¶¶38-39.)

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, 24)
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, 3)

2. “Application-Based Information Channel”

Meta agreed to PO’s construction in the MDT-Meta-Litigation of “a computer program-based medium for transferring information” for the purpose of

the Meta-MDT-IPR. (EX-1030, 6.) PO however proposed a different construction for the term in the Meta-MDT-IPR. (“a component of a mobile site configured to permit a wide variety of mobile devices to send and receive content over a wireless network.”) Notably, PO’s Meta-MDT-IPR construction differs from the construction it proposed for the same term in the *Meta Platforms, Inc. v. Mobile Data Techs. LLC*, IPR2024-00248. (EX-1036, 17.) PO did not explain or justify why it is advocating for two different constructions of the identical phrase. (EX-1002, ¶¶40-42.)

MDT-Meta-Litigation	
PO	plain and ordinary meaning; alternatively, “a computer program-based medium for transferring information” (EX-1025, 2)
Meta	“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, 2)
Meta-MDT-IPR	
PO	“a component of a mobile site configured to permit a wide variety of mobile devices to send and receive content over a wireless network” (EX-1030, 21)
Meta	“a computer program-based medium for transferring information” (EX-1033, 6)

3. “Wireless Networking Functionality of the Mobile Device”

In the Meta-MDT-IPR, the parties dispute whether the wireless network is “independent” or “separate” from the Internet. (EX-1030, 30-32; EX-1033, 7-9.)

While Petitioners dispute PO’s construction, construction of the term is not needed because the prior art discloses this term under both constructions. (EX-1002, ¶¶43-44.)

Meta-MDT-IPR	
PO	“functionality implementable by the mobile device via the wireless network independent of the Internet”
Meta	to the extent the phrase requires express construction, “functionality implementable over a wireless network”

While the term “*wireless network*” was not explicitly identified in the Meta-MDT-IPR for construction, the parties nevertheless appear to dispute its meaning. (*Compare* EX-1030, 31, *with* EX-1033, 9.) Meta contends PO applies the construction, “wireless network separate from the Internet,” in its arguments. (EX-1033, 9.) Meta further contends the term should be construed as “a network that allows a device to communicate wirelessly over a network.” (EX-1033, 9.) Regardless, Petitioners’ grounds disclose the term under both interpretations.

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 ’578 patent.

All grounds rely on Neibauer (EX-1003), which describes features of Yahoo!. (EX-1002, ¶49.) 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, ¶50; Neibauer, pp.477-480.) Neibauer also discloses the ability to access Yahoo! services via mobile devices. (EX-1002, ¶61; 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 '578 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, ¶¶89-90.) Cheng describes a proxy server that can convert any existing (non-mobile) webpage for use on a mobile device. (EX-1002, ¶¶67-68.) Cheng was also cited in the earlier reexamination mentioned above. (EX-1024, 04.) All grounds also cite to Squibbs (EX-1011) for location-based features of the challenged claims. Squibbs discloses a technique for displaying a photo album by showing, on an electronic map, the location of where the photo was taken based on location information provided with the photo. (EX-1002, ¶¶80-87; Squibbs, Figs. 6-7.)

Ausems (EX-1006) is cited for the unremarkable proposition that a mobile device can obtain image data from a digital camera. (EX-1002, ¶¶76-77.)

Ground 2 is substantially similar to Ground 1, but adds Harvey (EX-1010), solely to account for a potential construction of “*application-based information channel*” proposed by Meta in the MDT-Meta-Litigation. If the Board chooses not to adopt that construction here, it need not consider this ground.

VI. Ground 1: Claims 1-19, 21-22 Are Obvious Over Neibauer in View of Cheng, Ausems, and Squibbs.

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:

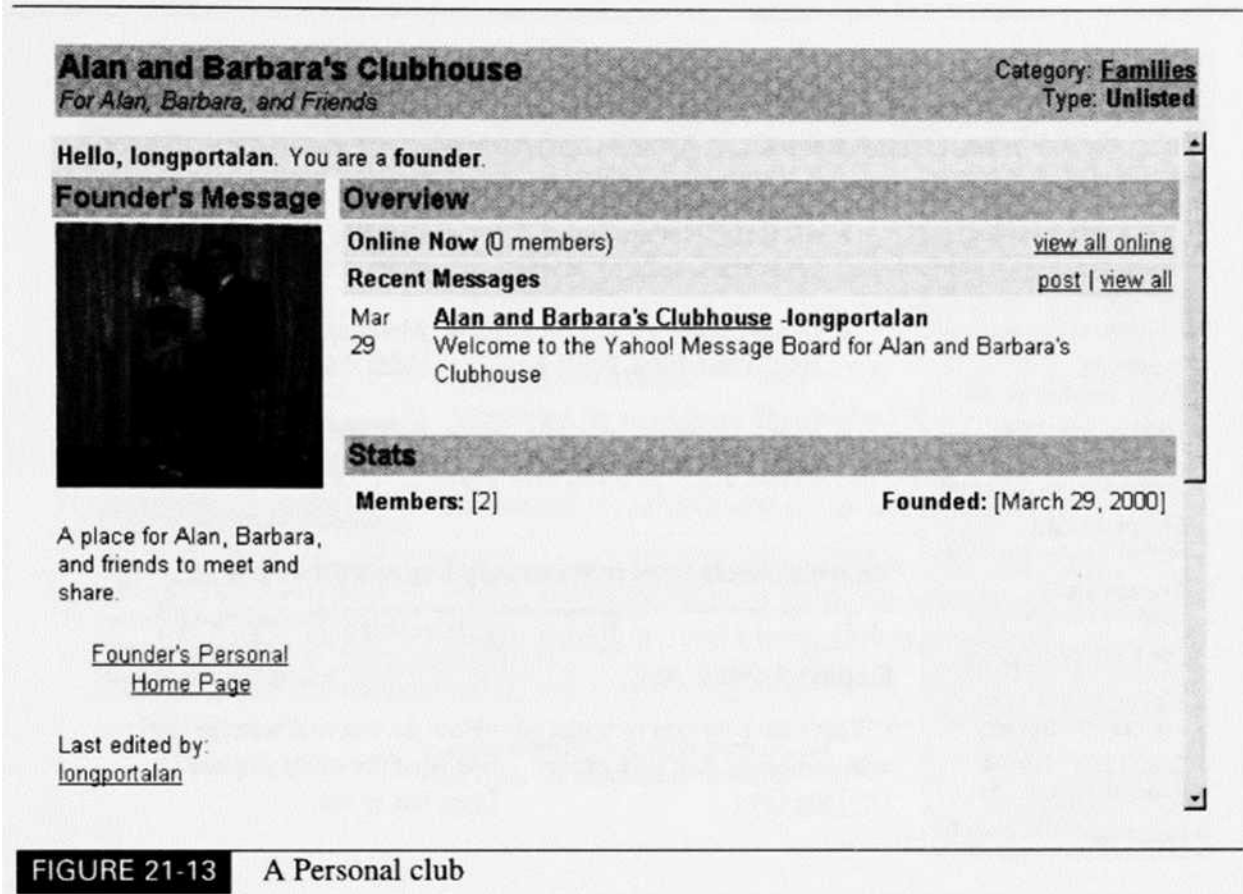


FIGURE 21-13 A Personal club

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

1. Preamble [1P]

To the extent the preamble is limiting, Neibauer discloses a “*method*.” As described in detail below, Neibauer discloses a method for managing information content because a club founder can manage the information on a club. (Neibauer, pp.478-480; EX-1002, ¶¶120-22.)

2. Limitation [1A]

The Neibauer-Cheng-Ausems-Squibbs combination renders obvious “*providing a first interface permitting designation of at least one content item, via*

a mobile device, for insertion into an application-based information channel, the at least one content item comprising media data captured by the mobile device” [1A].

Neibauer explains that clubs can have various features including a club message board, chat room, photo sharing feature, among others. (Neibauer, p.473.) For purposes of claim 1, Petitioners will focus on the club photo sharing feature described in Neibauer.

The step of “*providing a first interface*” takes place in Neibauer when a web-based interface is provided to a club member to select a photo to upload and share with other club members. (Neibauer, p.477; EX-1002, ¶125.) To add a photograph to an album, the user identifies the location of the photo and enters a name and description of the photo that will be uploaded. (Neibauer, p.478, ¶¶2-3.)

More specifically, the “*first interface*” corresponds to the web-based user interface that allows a club member to select a photo file to upload and share with other club members. 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: 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.

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

Neibauer thus discloses "*providing a first interface permitting designation of at least one content item... for insertion into an application-based information channel.*" (EX-1002, ¶126). The "*content item*" for purposes of limitation [1A] is the photo selected by the club member for the album. (*Id.*)

The content item is also inserted "*into an application-based information channel.*" The term "application" is generally understood by a POSITA as referring to a computer software program for performing a particular function. (EX-1002, ¶127; *see also* *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).) This is also consistent with how “application” is used in the patent. (EX-1001, 18:60-64 (“Also, the system provides a platform for the development of a wide variety of personalized content applications for users of mobile devices....”).) The ’578 patent also discloses use of a browser on the mobile device to access shared content. (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**.”).) Accordingly, the club photo sharing information channel in Neibauer is “*application-based*” because it is provided using software programs running on at least the server that provides the club functionality in Neibauer, and using at least a web browser application running on the mobile device of the club member, which allows the club member to interact with and use that feature. (EX-1002, ¶127.)

“*Via a Mobile Device*”: Limitation [1A] further requires that designation of the content item occur “*via a mobile device*.” It would have been obvious to adapt Neibauer’s club photo sharing feature to allow a club member to designate a photo via a mobile device. The ’578 patent 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, ¶128.) 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: As noted above, Meta argued in the MDT-Meta-Litigation that “*application-based 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, ¶138; Neibauer, 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, 480-482 (describing how to create clubs and add content such as club name and photo); EX-1002, ¶138) 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, ¶138.) Petitioners have also provided separate Ground 2 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.

In the Meta-MDT-IPR, Patent Owner proposes that the term “*application-based information channel*” should mean “a component of a mobile site configured to permit a wide variety of mobile devices to send and receive content over a wireless network.” (EX-1030, 21.) Patent Owner further argues that a “*mobile device*” should mean “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, 24.) Based on these constructions, Patent Owner argues that there is no “*application-based information channel*” in the prior art because, according to Patent Owner, Neibauer teaches only the use of a “conventional laptop,” which is not a “*mobile device*.” (EX-1030, 40.)

Patent Owner’s argument is wrong for at least two different reasons. *First*, Patent Owner’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 ’578 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, ¶141.)

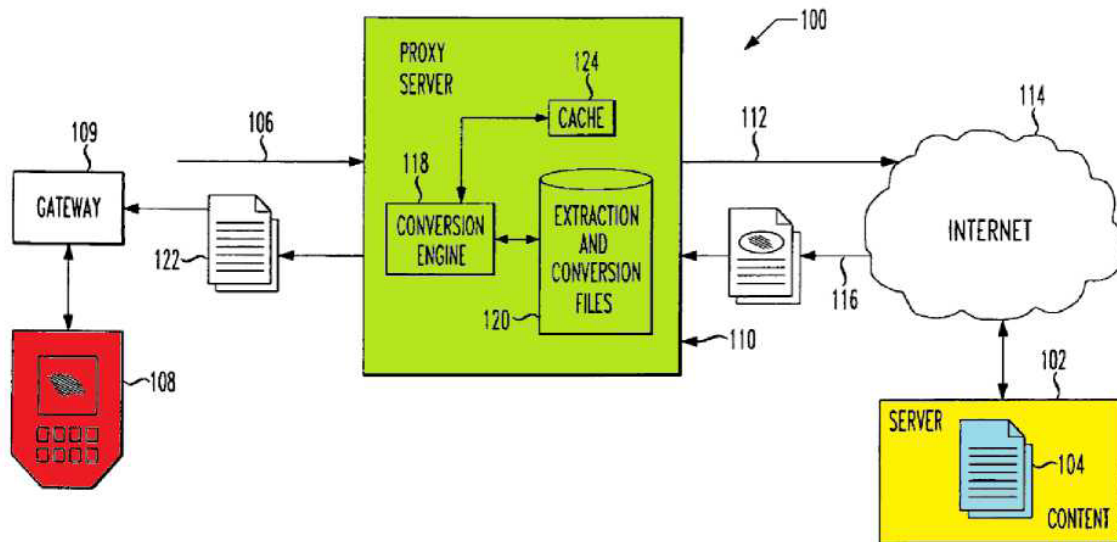
Second, even if Patent Owner’s improper constructions of “*application-based information channel*” and “*mobile device*” were accepted, the combination of Neibauer and Cheng still renders obvious limitation [1A].⁴ Neibauer itself discloses services such as “Yahoo! Mobile” and “Yahoo! To Go” that enable 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-

⁴ In the Meta-MDT-IPR, Patent Owner argues that each and every limitation of claim 1 is not satisfied for the same reasons as set forth for limitation [1A]. (EX-1030, 41-44.) The arguments here apply equally to the other limitations of claim 1.

created clubs to be accessed by handheld devices disclosed elsewhere in Neibauer. This would have been viewed as a logical (and obvious) extension to the existing features described in Neibauer. (EX-1002, ¶¶96, 142.)

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, ¶71.) Cheng relies on this proxy server concept to convert non-mobile webpages into a format accessible by mobile devices. Figure 1 illustrates one embodiment:

FIG. 1



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, ¶¶131.)

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, ¶73.) “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.)

Patent Owner also argues in Meta-MDT-IPR that, “though Cheng does disclose *transmitting* content *to* a mobile device, it does not teach anything with respect to *receiving* content *from* a mobile device, as required by the claims.” (EX-1030, 39 (emphasis in original).) 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

Minimi

AETHER

Create Device Profile

Back Next Undo Help

Your Device Label

Enter the specific values for each header the device sends.

402 ~ User-Agent: Your User Agent

404 ~ UA-color: N/A

406 ~ UA-connection:

408 ~ UA-CPU:

410 ~ UA-display:

412 ~ UA-HTML

414 ~ UA-input:

416 ~ UA-Language:

Create Device Profile Page

400

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, ¶90.)

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, ¶91; 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, or for all web sites.”).) 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, ¶91.) 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, ¶93.)

Neibauer is in the same field as the ’578 patent—network-based communication systems for managing information content—and would have been

reasonably pertinent to problems facing the inventors. (EX-1002, ¶94.) 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, ¶¶61, 95-97; 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 ’578 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, 1:32-36.) 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, ¶¶98-100.)

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, ¶102.) 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, ¶¶71, 103.) A POSITA would also have had a reasonable expectation of success as Cheng relies on known and industry-standard technologies. (EX-1002, ¶¶71, 105-06.)

“Captured by the Mobile Device”: Limitation [1A] concludes by reciting that the at least one content item “*compris[es] media data captured by the mobile device.*” It would have been obvious for the photo designated by a club member, under the combination of Neibauer and Cheng, to have included media data captured by the mobile device, as portable communications devices prior to June 2002 included digital cameras that allowed the devices to capture, store, and transmit digital images. (EX-1002, ¶136.)

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, ¶¶77, 136.)

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 “*media data captured by the mobile device*,” i.e., a photo captured by a digital camera incorporated into the mobile device. (EX-1002, ¶107.)

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, ¶109; Neibauer, 477-478.)

Ausems is in the same field as the ’578 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, ¶110.)

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, ¶111.) 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, ¶112.) As Ausems confirms, mobile devices with digital cameras and the ability to transmit images captured by digital cameras were already known. (*Id.*)

3. Limitation [1B]

The Neibauer-Cheng-Ausems-Squibbs combination renders obvious “*integrating the at least one content item and information associated with at least one wireless networking functionality of the mobile device to generate at least one integrated content item*” [1B]. The ’578 patent does not define “*information associated with at least one wireless networking functionality of the mobile device,*” but provides examples. Dependent claim 6 states that the claimed information associated at least one wireless networking functionality of claim 1 can comprise, among other things, “*one or more messaging actions*” and “*one or more collaboration actions*” implementable over a wireless network, and “*location-based service information.*” These same examples are also mentioned in the specification. (EX-1001, 6:5-17.) The proposed combination discloses multiple examples of information associated with at least one wireless networking functionality that track the examples in the patent and satisfy limitation [1B]. (EX-1002, ¶149.)

Messaging or Collaboration Action: The patent places few if any restrictions on messaging or collaboration actions, and makes clear they include members posting and sharing information to facilitate collaboration. (EX-1001, *e.g.*, 6:47-52 (“For example, the site can be used to generate messages, using instant messaging (IM), SMS, MMS, pages, emails, voice-over-IP (VoIP) calls, cellular telephone calls, or any other suitable messaging format, that are sent to organization members over the wireless network.”), 6:56-59 (“Organization members can easily and efficiently post information and generate messages to other members so as to facilitate collaboration and other types of interaction.”).)

As explained, new photos posted by club members are integrated into the club photo sharing feature, and as noted, each photo also includes a textual name and description of the photo. (Neibauer, pp.477-478.) This additional textual information is associated with a “messaging action” because it provides a textual message that would also have been made available to club members through the photo sharing feature. This messaging information is also similarly associated with a “collaboration action” because, for the same reason, the textual message would have allowed club members to identify the photo and collaborate on topics of interest relating to the photo in the album. (EX-1002, ¶151.) The proposed combination thus renders obvious “*information associated with at least one wireless networking functionality of said at least one wireless network,*” i.e., a

messaging or collaboration action by which another one or more club members (through their mobile device and over a wireless network) provide messaging content to other club members via the club. (*Id.*)

This information would have been used to “*generate at least one integrated content item*” in the form of the photo and associated textual message content placed together in integrated fashion in the album. This is shown in Figure 21-10 of Neibauer depicting a user interface displaying the integrated into a particular album:

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 an album. Although this shows photo messages posted by only one contributor (blueraja3), Neibauer confirms that any member of a group album can post a photo. (Neibauer,

p.477 (“Any member can place a photo in a group album....”).) Under the proposed combination, therefore, when the club member posts a new photo to a selected photo album, the photo, along with its textual name and description, would have been integrated and incorporated into the photo album to which they were assigned. Neibauer therefore discloses “*integrating the at least one content item and information associated with at least one wireless networking functionality of the mobile device to generate at least one integrated content item,*” because the new photo (“*content item*”) and textual message content (“*information associated with at least one wireless networking functionality of the mobile device*”) would have been integrated together in the album. (EX-1002, ¶¶152-53.)

Mobile Device Location Information: The ’578 patent claims and specification also cover information specifying location information of a mobile device from which content was provided, which is obvious in view of Squibbs.

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:

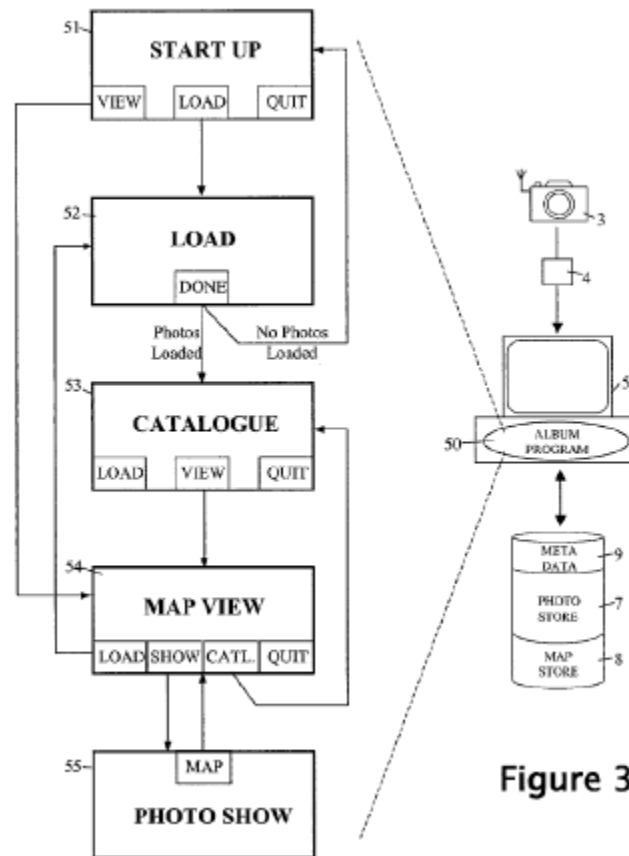


Figure 3

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 map by a marker 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):

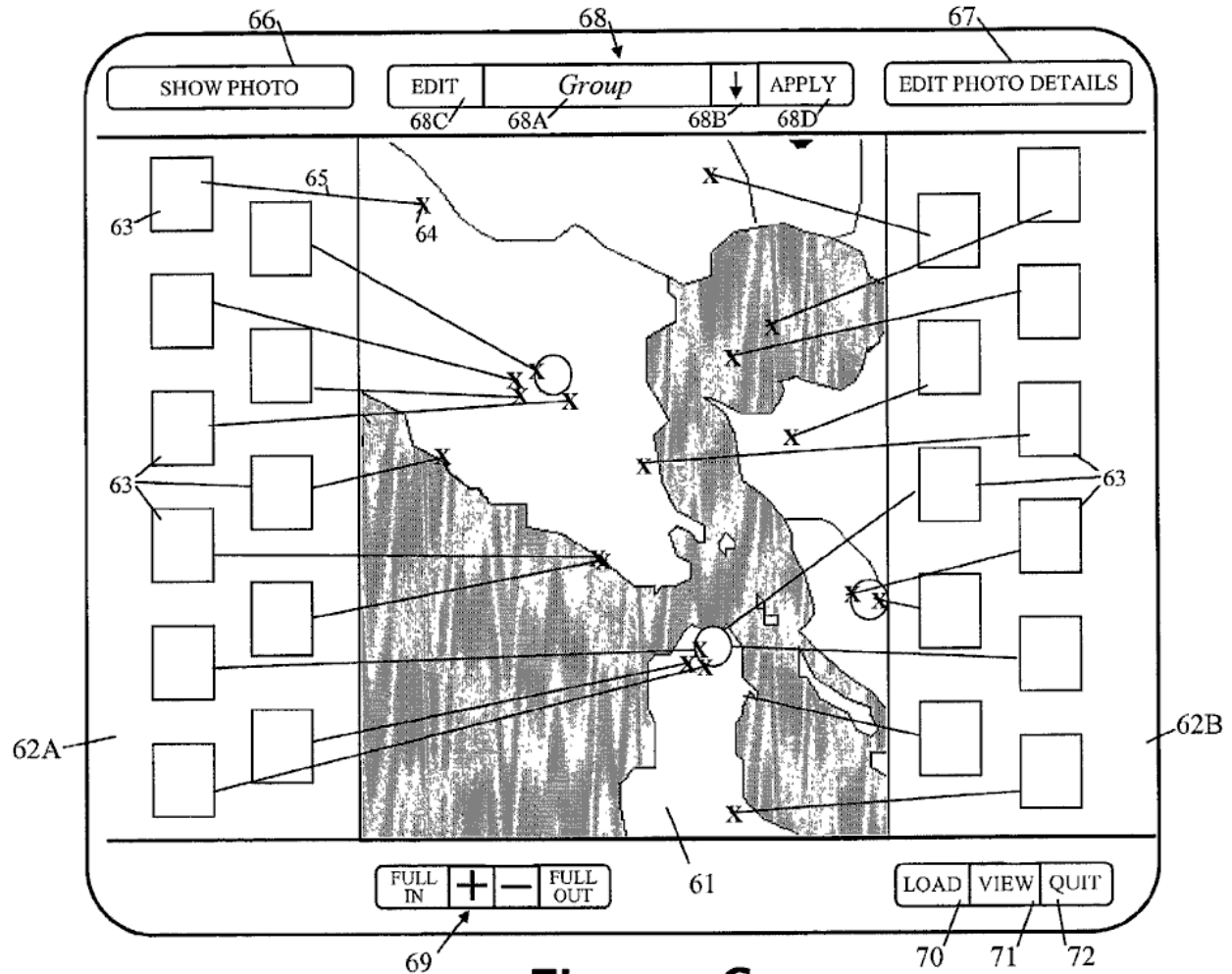


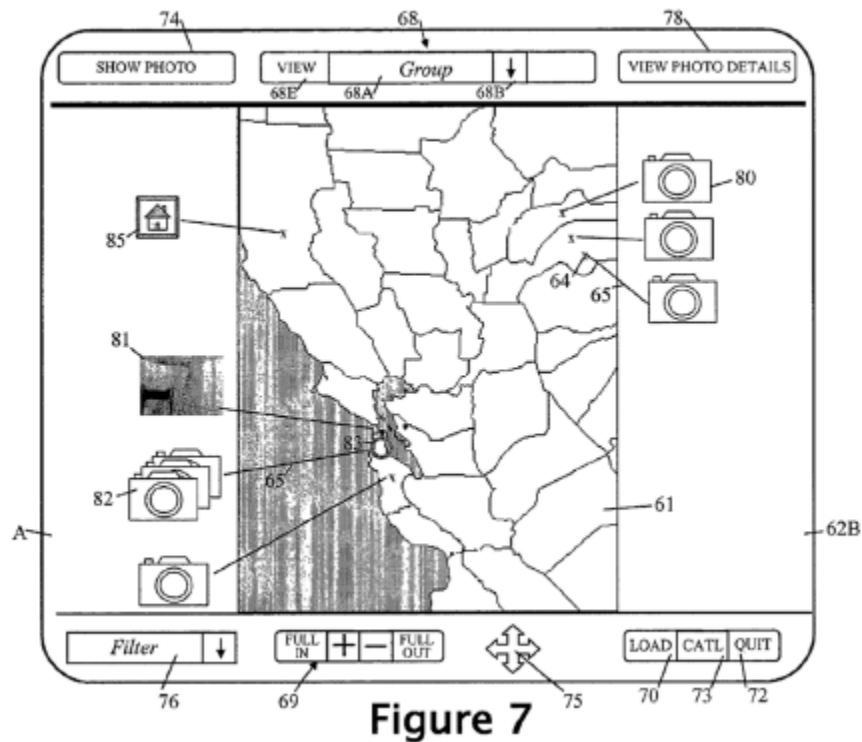
Figure 6

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 **62A**, **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):



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* Squibbs, ¶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 Neibauer, Cheng, Ausems, and Squibbs: It

would have been obvious to combine Neibauer, Cheng, Ausems, and Squibbs, predictably resulting in the system and method for accessing clubs using the club photo sharing feature, but further integrating the photo (“*at least one content item*”) with “*information associated with at least one wireless networking functionality of the mobile device to generate at least one integrated content item,*” i.e., the location information associated with a photo taken and uploaded by a club member. (EX-1002, ¶114.)

For example, under the proposed combination, when a club member uploads a photo using the club photo sharing feature, the mobile device would not only upload the photo image data (for example, obtained from a digital camera), but also transmit geographic location associated with the photo.⁵ (EX-1002, ¶114.) The photo sharing feature would have been further adapted to also 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.

⁵ 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.) As noted previously, the proposed combination relies on Ausems, which incorporates a digital camera into the mobile device. (EX-1002, ¶114 n.4.)

(EX-1002, ¶115.) Under the 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 photo, resulting in “*at least one integrated content item*” that contains both the uploaded photo as well as location information as discussed above. This would also have been seen as a natural extension of map features already disclosed in Neibauer, as discussed below. (*Id.*) Squibbs is an analogous reference in the same field as the ’578 patent and would have been reasonably pertinent to problems facing the patent inventors, including how to obtain location information and integrate that information into a display for the user. (EX-1002, ¶116.)

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, ¶117.) 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, ¶118.)

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, ¶119.) 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, ¶114 n.4.)

Addressing Proposed Constructions in Co-Pending Proceedings: The parties in the Meta-MDT-IPR dispute the meaning of "*wireless networking functionality of the mobile device.*"⁶ PO argues this term should be construed as "functionality implementable by the mobile device via the wireless network

⁶ In the Meta-MDT-IPR, PO does not rely upon its proposed construction of this term to distinguish the prior art, but Petitioners nevertheless address it here.

independent of the Internet” while relatedly arguing that the term “*wireless network*” means “a network separate from the internet that facilitates connection to the internet by mobile device.” (EX-1030, 15-16.) This dispute is not related to the type of data that qualifies as “*wireless networking functionality*” data, such as the messaging disclosed by Neibauer and the geotracking disclosed by Squibbs.

PO interprets the scope of its patent too narrowly. (EX-1002, ¶168.) The ’578 patent explains the “*wireless network*” need not be separate and distinct from the Internet. The patent states,

The network configuration of system 10 illustratively comprises wireless network 12 and Internet 14. However, the invention does not require this particular network arrangement. A network suitable for use with the invention may include any type of data communication network, including the Internet, an intranet, an extranet, a wide area network (WAN), a metropolitan area network (MAN), a wired local area network (LAN), an IEEE 802.11 or Wi-Fi wireless LAN, a satellite communications network, a virtual private network (VPN), a public switched telephone network (PSTN), a cellular network based on third generation (3G) wideband code division multiple access (CDMA) or other standard, as well as portions of combination of these and other networks.

(EX-1001, 4:19-32.) This interpretation of network is consistent with the plain meaning and consistent with how it is disclosed in the combination of Neibauer and Cheng. (EX-1002, ¶168.)

The Neibauer-Cheng-Ausems-Squibbs combination renders this limitation obvious even if the claims are interpreted such that the “*wireless networking functionality of the mobile device*” requires functionality that is implementable via a wireless network that is independent of the Internet. (EX-1002, ¶169.)

Cheng, for example, discloses a “local area network,” which is a well-known network that can be established independent of the internet (*e.g.*, Cheng, 24:4-9), and such a local area network could be used to implement all functionalities of Neibauer. (EX-1002, ¶170.)

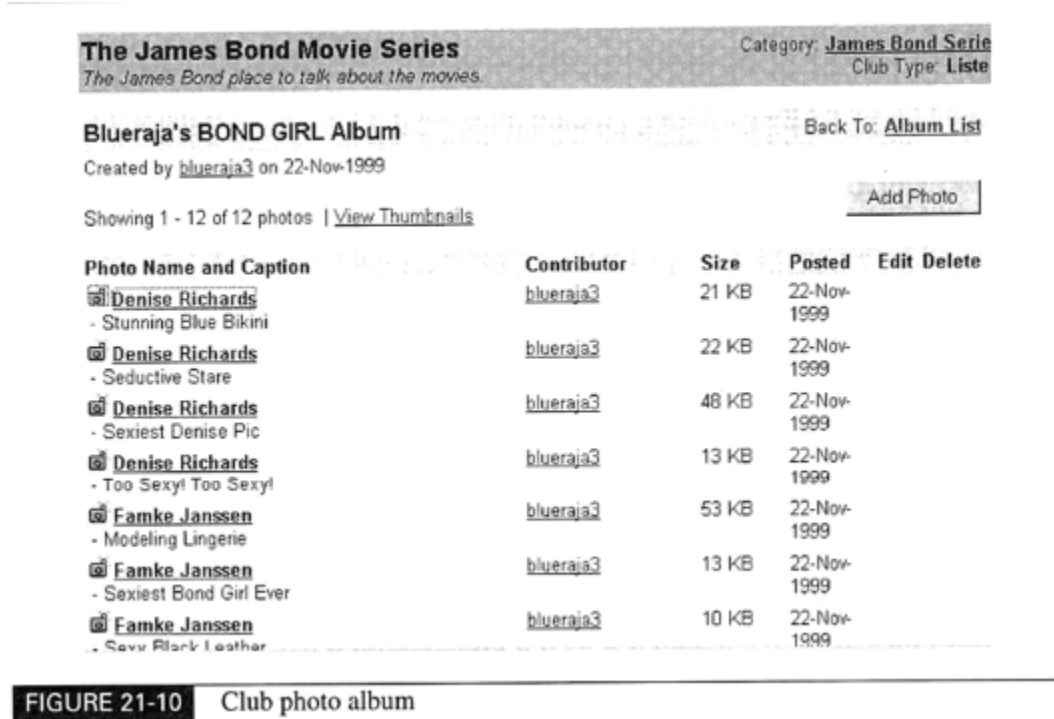
Furthermore, geotracking data is well-known to be used via satellite channels, not the internet. (EX-1002, ¶171.) Squibbs discloses location information of the mobile device and a way for said mobile device to obtain its location information using a built-in GPS receiver. (Squibbs, ¶¶0004 (“digital camera 3 equipped with a GPS receiver for determining camera location using signals from satellites 2”).) It would have been obvious to a POSITA that obtaining location information of the mobile device through GPS was a wireless networking functionality **independent** of the Internet, as the location information was obtained by using GPS signals, wirelessly received by the device from satellites, to calculate the device’s current location. (EX-1002, ¶171.) Receiving and processing GPS signals from satellites to determine a device’s location is a “*wireless networking functionality*” that is independent of the Internet. (*Id.*)

4. Limitation [1C]

The Neibauer-Cheng-Ausems-Squibbs combination renders obvious “inserting the at least one integrated content item into the application-based information channel, the application-based information channel providing a second interface wherein two or more users share access to a plurality of content items including the at least one integrated content item” [1C]. This limitation was largely covered in the discussion of limitation [1B] above. Under the proposed combination, the integrated content item would have been inserted into and thus viewable through the club photo sharing feature. (EX-1002, ¶172.) It would also have been obvious that the club photo sharing feature (“the application-based information channel”) would have provided a second interface allowing two or more club members to share access to a plurality of uploaded photos, including the “integrated content item.” (EX-1002, ¶173.) 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 user interface shown 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.)



(Neibauer, p.478, Fig. 21-10.) Figure 21-10 as noted above shows a list of photographs stored in an album. This user interface also has “Add Photo” button to allow a member to add a new photo to the 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 title to see the photo on your screen. Click View Thumbnails to see miniatures of all of the photographs.” (Neibauer, p.477.) Neibauer thus discloses a “*second interface wherein two or more users share access to a plurality of content items,*”

because it discloses a user interface allowing multiple club members to share access to the photos posted to a photo album.

Under the proposed combination, the “*second interface*” would also have provided access to “*the at least one integrated content item.*” In the case where the integrated content item comprises a photo with its accompanying textual message content (based on a “messaging action” or “collaboration action”), as explained for limitation [1B] above, the interface described and shown above in Figure 21-10 allows club members to access both the photo and its accompanying textual name and description.

In the case where “*the integrated content item*” is a photo that integrates location information, under the proposed combination with Squibbs, the user interface in Neibauer would have been adapted to display the photo (or a thumbnail of the photo) with accompanying location information. This could have been implemented in a number of ways, presenting a trivial design choice to a POSITA. In one example, the photo album listing and photo display user interface in Neibauer discussed above have been further adapted such that, upon selecting a photo from Figure 21-10 that had associated location information (the “*integrated content item*”), the photo could have been displayed in connection with an electronic map showing where the photo was taken, as disclosed in Squibbs. (EX-1002, ¶177.) As another example, the interface in Figure 21-10 could itself have

been adapted based on Figures 6 and 7 of Squibbs, such that multiple photos in the album are displayed in thumbnail view on a map. Many other implementations would have been apparent and obvious to a POSITA. (*Id.*)

It also would have been obvious that the “*second interface*” would have been different from the “*first interface*” of limitation [1A]. As explained, the “*first interface*” of limitation [1A] includes the user interface for adding a new photo to a selected album; as explained, this interface is reachable by clicking “Add Photo” on the “*second interface*” described above – confirming that they are different user interfaces providing distinct functionality. (EX-1002, ¶178.)

B. Claim 2

The Neibauer-Cheng-Ausems-Squibbs combination renders obvious “*the information associated with said at least one wireless networking functionality of the mobile device comprises location information of the mobile device*” [2]. Under the combination in view of Squibbs, the claimed wireless networking functionality information would have included location information of the mobile device. (EX-1002, ¶¶179.)

C. Claim 3

The Neibauer-Cheng-Ausems-Squibbs combination renders obvious “*integrating the at least one content item and the information associated with said at least one wireless networking functionality of the mobile device comprises:*

obtaining location information of the mobile device; identifying additional content based on the obtained location information; and generating the at least one integrated content item by combining the at least one content item with the additional content” [3]. As discussed for limitation [1B], under the proposed combination in view of Squibbs, when a club member uploads a photo via their mobile device to the club photo sharing feature, the mobile device would have “obtain[ed] location information” (e.g., via GPS or mobile radio infrastructure) of the mobile device used to upload the photo. (Squibbs, ¶¶0101, 0098.) The combination, moreover, would have “identif[ied] additional content based on the obtained location information,” because the club photo sharing feature would have identified an electronic map or other location information (“additional content”) based on the location information, and used it to “generat[e] the at least one integrated content item by combining the at least one content item with the additional content,” by generating a display of the uploaded photo (or a thumbnail of it) alongside the electronic map showing the location. (EX-1002, ¶180.)

D. Claim 4

The Neibauer-Cheng-Ausems-Squibbs combination renders obvious “*integrating the at least one content item and the information associated with said at least one wireless networking functionality of the mobile device comprises: obtaining product-identifying information over at least one wireless network; and*

identifying additional content based on the obtained product-identifying information; and generating the at least one integrated content item by combining the at least one content item with the additional content” [4]. As noted, the ’578 patent makes clear that information associated with at least one wireless networking functionality can comprise a “messaging action” or “collaboration action” implemented over a wireless network. (EX-1001, 6:5-17, Claim 6.) Claim 4 is obvious in view of the Yahoo! Classifieds feature in Neibauer. Yahoo! Classifieds, described in the same chapter of Neibauer as Yahoo! Clubs, provides a feature for allowing users to post messages about items they wish to sell or purchase. (Neibauer, p.491.) This is shown in Figure 21-20:

The screenshot shows a web form titled "Computers and Software Classifieds" with a "Submit Your Free Listing" button. The form is divided into two main steps. Step 2, "Determine where to list your ad," includes a "ZIP CODE" field with the value "08403" and a note "(e.g., 99999)". Step 3, "Tell us about the item for sale," includes a "CATEGORY" dropdown set to "Hardware - PC", an "AD TITLE" text field, and several required fields marked with an asterisk: "CONDITION" (dropdown), "FOR SALE BY" (dropdown), "PRICE \$" (text field) and/or "Best Offer" (checkbox), "WARRANTY" (dropdown), and "DESCRIPTION" (text area). A mouse cursor is visible over the "Best Offer" checkbox.

FIGURE 21-20 Posting a classified ad

(Neibauer, p.491, Fig. 21-20.) As shown, a user posts an advertisement by entering product-identifying information such as in the ad title or description. (Neibauer, p.491, Fig. 21-20.)

It would have been obvious to apply the Yahoo! Classifieds teachings to the club photo sharing feature, predictably resulting in the photo sharing feature being used by club members to post messages and photos relating to items they are offering for sale. (EX-1002, ¶182.) *See also Boston Scientific Scimed, Inc. v. Cordis Corp.*, 554 F.3d 982, 991 (Fed. Cir. 2009) (“Combining two embodiments disclosed adjacent to each other in a prior art [reference] does not require a leap of inventiveness.”). For example, it would have been obvious for a member to provide product-identifying information about a product associated with an uploaded photo, such as “For sale: 2002 Volkswagen Jetta!” (EX-1002, ¶¶181-82.) This would have provided a advantage of not only specifically targeting club members (who are likely to have had similar interests), but the accompanying photos would have provided a more compelling advertisement when compared to a text-only advertisement. (EX-1002, ¶182.)

It would also have been obvious to obtain product-identifying information “over at least one wireless network,” because under the proposed combination, the information would have been sent to the photo sharing service over the Internet a wireless network. 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 Global System for Mobile Communication, was a dominant wireless (cellular) mobile network in widespread use in the United States the early 2000s. (EX-1002, ¶183.) Cheng similarly discloses wireless network device connectivity. (Cheng, *e.g.*, 2:4-7, 5:33 (“a cellular telephone”); *see also* 23:44-51.) It would have been obvious that the content by club members, under the proposed combination, would have been provided via mobile devices associated with a wireless network. (EX-1002, ¶183.) A POSITA would have been motivated to allow handheld devices to provide content over a wireless network to take advantage of the growing popularity of mobile computing. (*Id.*)

Claim 4 continues by reciting, “*identifying additional content based on the obtained product-identifying information.*” Neibauer discloses that, in connection with a classified ad, additional content such as the price, condition, and warranty information would have been identified. (Neibauer, p.491. Fig. 21-20 (showing classified ad form showing required fields for price, condition, warranty).) Under the proposed combination, therefore, a photo-enabled classified ad posted to the photo sharing feature would have included this additional content, which would have been based on the product identifying information (*e.g.*, the price, condition, and warranty information for a 2002 Volkswagen Jetta). (EX-1002, ¶184.)

Claim 4 concludes by “*generating the at least one integrated content item by combining the at least one content item with the additional content,*” which would have occurred under the proposed combination because, as discussed for limitation [1B], the photo uploaded by the club member (“*the at least one content item*”) is integrated with textual content provided by the user. Under the further combination with Neibauer’s Yahoo! Classifieds disclosures, the generated integrated content item would have included the additional content such as the price, condition, and warranty information for the product. (EX-1002, ¶185.)

E. Claim 5

The Neibauer-Cheng-Ausems-Squibbs combination renders obvious “*the additional content comprises information relating to at least one of product ordering and product purchase support*” [5]. As explained for claim 4, the additional content would also have comprised pricing and sales conditions information (“*product ordering*”) and warranty information from the seller (“*product purchase support*”). (Neibauer, p.491 (“Complete the form by describing the item and your sales conditions, and then click Submit Entry.”), Fig. 21-20.) It would have been apparent and obvious that many other well-known types of product ordering or purchase support information could have been provided, including whether the seller accepted returns or all sales were final, who payment and delivery/shipping were to be effectuated, among others. (EX-1002, ¶186.)

F. Claim 6

The Neibauer-Cheng-Ausems-Squibbs combination renders obvious “*the information associated with said at least one wireless networking functionality of the mobile device comprises one of: location-based service information; one or more messaging actions implementable over a wireless network; and one or more collaboration actions implementable over the wireless network*” [6]. As explained for limitation [1B], the information associated with at least one wireless networking functionality can comprise either “*one or more messaging actions*” or “*one or more collaboration actions*,” both of which would have been implemented over the wireless network. As also explained for [1B], the information associated with at least one wireless networking functionality would have comprised location-based service information, *e.g.*, the location of the user as obtained either through the mobile radio infrastructure or via GPS. (Squibbs, ¶¶0098, 0101.)

G. Claim 7

The Neibauer-Cheng-Ausems-Squibbs combination renders obvious “*providing, via the first interface, one or more content integration options to the user*” [7]. Neibauer explains that, in connection with uploading a photo using the photo sharing feature, the member has the option of resizing the photo. (Neibauer, p.478, ¶4 (“Select an option from the Resize Photo section. Resizing allows Yahoo! to adjust the photograph to make better use of the club’s Web space and

make photos easier to view.”.) Cheng similarly discloses that images can undergo a number of user-selected conversions:

FIG. 8

AETHER

Define Conversions for the Group

Your Group Label

Enter the parameters for each conversion you want to include in this group

802 Replace images with text link:

Scale images and image maps: %

Reduce colors to:

Reduce resolution to decrease file size: %

Use interpolation to improve image quality:

Encode images as:

Quality of JPEG conversion:

Remove converted images larger than: KB

Define Conversions for the Group Page

Cheng, Fig. 8

As shown, the user can define a number of conversions to reduce the size of an image including, among other things, scaling, color reduction, resolution reduction, and reducing the quality of the JPEG image conversion, among other things. (Cheng, 10:63-11:19.) The user can also specify a maximum file size for a converted image. (Cheng, 11:17-19, 12:47-50.)

It would have been obvious to also include these conversion options from Cheng with the photo sharing feature of Neibauer (along with its existing resizing capability), to provide the club member further control (via the first interface) over

the conversion of images for display on mobile devices. (EX-1002, ¶189.) Any one of the conversion options disclosed in Neibauer alone or in combination with Cheng qualifies as a “*content integration option*,” because each option allows club members to specify how uploaded photos will be transformed before being integrated into the photo sharing feature. (*Id.*)

H. Independent Claim 8

The Neibauer-Cheng-Ausems-Squibbs *combination renders obvious* “[a] *non-transitory computer-executable storage medium...[that] implements the steps of the method of claim 1*” [8]. Claim 8 adds nothing of patentable significance, as it would have been obvious that the steps of claim 1 would have been carried out by software code executed by a processing element of the communication system, such as a server that includes a processor and memory. (EX-1002, ¶190; Cheng, *e.g.*, 23:16-20.) It would also have been obvious that the software used to carry out the functions of claim 1 would have been stored on at least one non-transitory computer-readable storage medium, such as a hard drive or random-access memory (RAM). (Cheng, *e.g.*, 23:64-24:4; EX-1002, ¶190.) Under the combination with Cheng, therefore, 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** and proxy server **110** is consistent with the ’578 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.”).)

And 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, ¶192.) Cheng explains that the computer system implementing the proxy server can “be replaced by, or combined with, 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, ¶192.) 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.*)

I. Independent Claim 9

Claim 9 is little more than an apparatus counterpart to method claim 1.

1. Preamble [9P]

To the extent the preamble is limiting, the Neibauer-Cheng-Ausems-Squibbs combination renders obvious an “*apparatus*” [9P]. The claimed “*apparatus*” includes the web server providing the functionality of Neibauer (which also corresponds to the origin web server **102** in Cheng) and based on the combination with Cheng, proxy server **110** that reformats and translates the web pages from Neibauer for delivery to mobile device. (Cheng, 3:31-33.) As explained for claim 1, the origin web server and the proxy server in Cheng work together to carry out each of the claimed steps. (EX-1002, ¶194.)

2. Limitation [9A]

The Neibauer-Cheng-Ausems-Squibbs combination renders obvious “*a processing element comprising a processor coupled to a memory*” [9A]. It would have been obvious that the claimed apparatus includes at least one “*processing element*,” such as at least one server that includes a processor coupled to a memory as explained for claim 10. (EX-1002, ¶195; Cheng, 23:16-20.) Claim 10, which depends from claim 9, expressly recites that “*the processing element comprises at least one server*,” confirming that the claimed processing element can comprise servers.

It would have apparent and obvious that origin web server **102** in Cheng (which would have provided the features described in Neibauer), and proxy server

110, under the proposed combination, would have comprised “*a processing element comprising a processor coupled to a memory.*” (EX-1002, ¶196.)

Petitioners note that mapping the claimed “*processing element*” as including a web server and proxy server **110** is consistent with the ’578 patent, as explained for claim 8. And as explained for claim 8 above, it would also have been obvious to combine origin server **102** and proxy server **110**, to the extent the claim were construed to impose such a requirement. (EX-1002, ¶¶192, 196.)

3. Limitations [9B]-[9E]

The Neibauer-Cheng-Ausems-Squibbs combination renders obvious “*the processing element providing at least a portion of a first interface permitting designation of at least one content item, via a mobile device, for insertion into an application-based information channel, the at least one content item comprising media data captured by the mobile device;*” [9B], “*the processing element being configured*” [9C], “*to integrate the at least one content item and information associated with at least one wireless networking functionality of the mobile device to generate at least one integrated content item*” [9D], and “*to insert the at least one integrated content item into the application-based information channel, the application-based information channel providing a second interface wherein two or more users share access to a plurality of content items including the at least one integrated content item*” [9E]. Limitations [9B]-[9E] are substantially identical to

limitations [1A]-[1C] and are therefore obvious for the same reasons. Each of these functions would have been carried out by “*the processing element*,” identified in [9A]. (EX-1002, ¶¶197-98.)

J. Claim 10

The Neibauer-Cheng-Ausems-Squibbs combination renders obvious “*the processing element comprises at least one server accessible over the Internet via a network interface*” [10]. As noted, the processing element comprises at least one server, accessible 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.”).) It would have been obvious that these servers would have been accessible over the Internet “*via a network interface*,” as a network interface such as a communications port is a basic component for allowing a computer (such as a server) to communicate with other devices over a network such as the Internet. (EX-1002, ¶200; 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).)

K. Independent Claim 11

The Neibauer-Cheng-Ausems-Squibbs combination renders obvious “[*a network-based communication system comprising a plurality of servers configured to communicate over a network, a given one of the servers comprising the*

apparatus of claim 9” [11]. This claim is obvious for the same reasons as claim 9.

First, the proposed combination renders obvious “[a] *network-based communication system comprising a plurality of servers configured to communicate over a network*,” which would have included one or more origin servers **102** on the Internet that contain web page content, along with at least proxy server **110**. (Cheng, 3:49-53.) Claim 11 continues by reciting that “*a given one of the servers compris[es] the apparatus of claim 9*.” For purposes of claim 11, it would have been obvious that “*a given one of the servers*” would have corresponded to proxy server **110** in Cheng with origin server **102**, as noted, because the ’578 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 noted, 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, ¶¶192, 202.)

L. Independent Claim 12

Claim 12 recites method limitations that are substantially similar to limitations recited in claim 1, and are obvious for the same reasons.

1. Preamble [12P]

To the extent the preamble is limiting, the Neibauer-Cheng-Ausems-Squibbs combination renders obvious a “*method*” as discussed below.

2. Limitations [12A]-[12D]

The Neibauer-Cheng-Ausems-Squibbs combination renders obvious “*designating at least one content item...*” [12A], “*providing information associated with at least one wireless networking functionality...*” [12B], “*wherein the at least one content item...*” [12C], and “*wherein the at least one integrated content item...*” [12D]. [12A]-[12B] are substantially similar to the limitations in [1A]-[1B], and present no material differences here. Limitation [12A] is substantially similar to but arguably broader than [1A] as it does not recite the “*first interface*” limitation of [1A]. Limitation [12B] (“*providing information ... for integration with the at least one content item,*”) is substantially similar to [1B] (“*integrating the at least one content item and information,*”), an immaterial difference. The “*wherein*” limitations of [12C]-[12D] are already captured in [1B]-[1C]. There are slight differences in wording, for example [12C]-[12D] are written as “*wherein*” clauses in passive voice, whereas [1B]-[1C] are written as active voice method steps, but they recite the same features. Claim 12 is rendered obvious for the reasons stated for claim 1. (EX-1002, ¶204.)

M. Claim 13

The Neibauer-Cheng-Ausems-Squibbs combination renders obvious “[*t*]he method of [claim] 12 wherein the information associated with said at least one

wireless networking functionality of the mobile device comprises location information of the mobile device” [13] for the same reasons as claim 2.

N. Claim 14

The Neibauer-Cheng-Ausems-Squibbs combination renders obvious *“providing the information associated with said at least one wireless networking functionality of the mobile device comprises: providing one or more content integration options to a user; receiving user input selecting at least one of the content integration options; and determining the information associated with said at least one wireless network functionality of the mobile device in accordance with the selected content integration options.”*

As explained for claim 1, *“information associated with at least one wireless networking functionality”* can include information related to “messaging actions” or “collaboration actions.” (EX-1001, 6:5-17 & claim 6.) Neibauer discloses a *“content integration option”* with its photo album. The user interface allows the user to add a photo to an album:

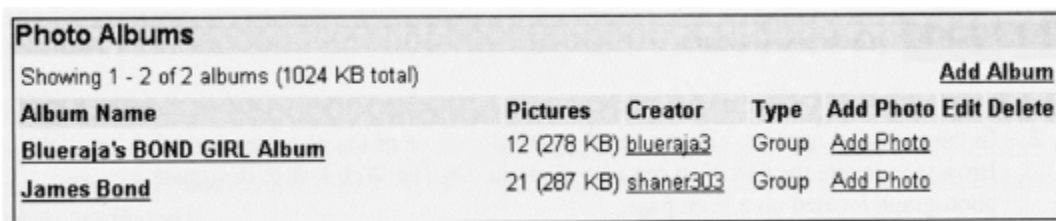
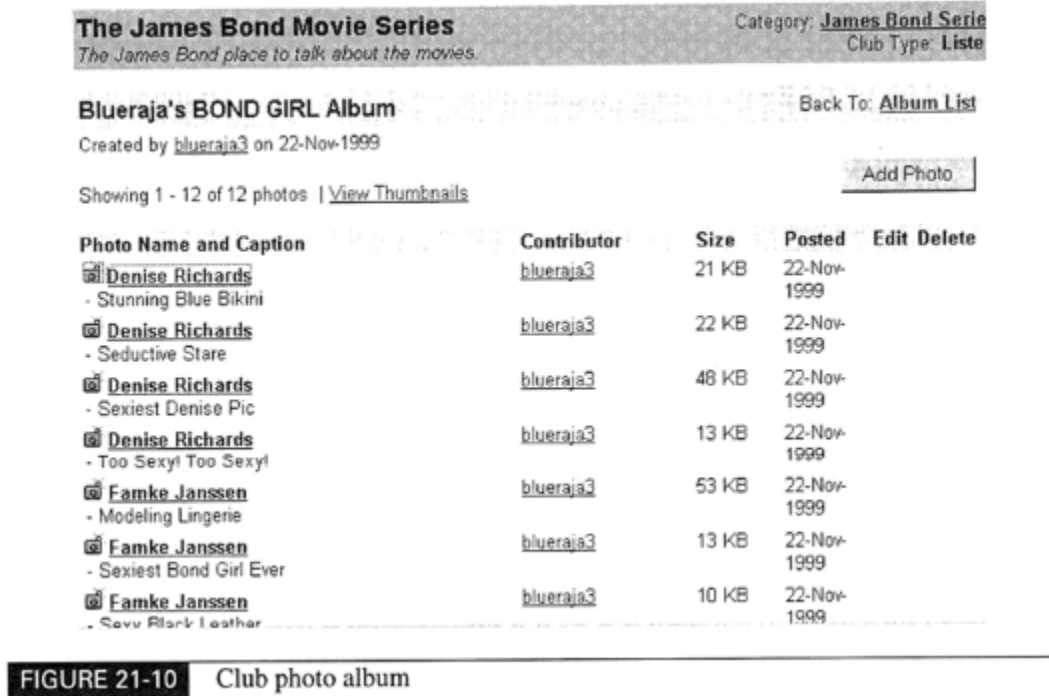


Photo Albums				
Showing 1 - 2 of 2 albums (1024 KB total)				
Album Name	Pictures	Creator	Type	Add Photo Edit Delete
<u>Blueraja's BOND GIRL Album</u>	12 (278 KB)	<u>blueraja3</u>	Group	<u>Add Photo</u>
<u>James Bond</u>	21 (287 KB)	<u>shaner303</u>	Group	<u>Add Photo</u>

(Neubauer, p.477.) Each album has an “Add Photo” link. (Neibauer, p.477, ¶1.)

Figure 21-10 shows a different interface:



(Neibauer, p.478, Fig. 21-10.)

In either scenario, Neibauer discloses “*providing one or more content integration options to a user,*” i.e., providing albums where the photo will be integrated, and “*receiving user input selecting at least one of the content integration options,*” i.e., selecting add photo to integrate the photo in an album.

Finally, the proposed combination renders obvious “*determining the information associated with said at least one wireless network functionality of the mobile device in accordance with the selected content integration options.*” Under the proposed combination as explained for limitation [1B], when the wireless networking functionality information is associated with a messaging or collaboration action, this information would have included textual message

information provided by the club member when uploading the photo, such as the textual name and description. This information would have been determined “*in accordance with the selected content integration options,*” as claimed, because that textual message would have been obtained, stored, and later displayed in connection with the album. For example, the top entry in the exemplary club photo album of Figure 21-10 is for a photo named “Denise Richards” described as “Stunning blue bikini,” and this information is shown as being part of “Blueraja’s BOND GIRL Album,” the album selected by that club member for that photo. (EX-1002, ¶¶208-09.)

O. Claim 15

The Neibauer-Cheng-Ausems-Squibbs combination renders obvious “*the at least one content item comprises at least one of device-captured video data, device-captured audio data and device-captured image data*” [15] As explained for limitation [1A], the content item comprises at least device-captured image data.

P. Independent Claim 16

The combination renders obvious “[*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 implements the steps of the method of claim 12*” [16]. This claim is

identical to claim 8 except that claim 16 refers to claim 12, whereas claim 8 refers to claim 1. Claim 16 is thus obvious for the same reasons.

Q. Independent Claim 17

Claim 17 is substantially similar to claim 9 except that it recites and is written from the standpoint of “*a mobile device*,” as opposed to a server.

1. Preamble [17P]

Claim 17 is obvious for the same reasons as claim 9, as the same club functionalities provided by the servers under the proposed combination are accessed by and used by the mobile devices used by club members. Under the proposed combination, the “*mobile device*” corresponds to the mobile device used by a club member to access the photo sharing feature. (EX-1002, ¶¶212-13.)

2. Limitations [17A]-[17B]

The mobile device under the combination would have included “*a processing element comprising a processor coupled to a memory*” [17A], which are basic components of any computing device. (EX-1002, ¶214; *see* Ausems, 7:53-56 (“Referring now to FIG. 3, PDA engine **290**... includes central processing unit (CPU) 305, random access memory (RAM) 310, read only memory (ROM) 315...”); *see also* 5:49-54; 7:60-63.) The mobile device would also have included “*a network interface*” [17B] in order to allow wireless communication over a network. (EX-1002, ¶215.) Ausems discloses, for example, a network interface that

includes “[w]ireless phone engine **210** [that] transmits and receives audio data via antenna **110**, as well as text and images,” as well as modem **220** that “enables PDA telephone to...have Internet access.” (Ausems, 5:56-58, 5:66-6:1.)

3. Limitations [17C]-[17E]

With respect to limitation [17D] (“*designate at least one content item for insertion ...*”), as explained for limitation [1A], the club member via her mobile device designates at least one content item (e.g., photo) for insertion into the club photo sharing feature by selecting a photo to upload using the user interface presented in the web browser in the device. With respect to limitation [17E] (“*provide information associated with at least one wireless networking functionality of the mobile device for integration ...*”), as explained for limitations [1B]-[1C], based on Neibauer in view of Squibbs, the mobile device provides the “*information associated with at least one wireless networking functionality.*” A POSITA would have known that these functions are carried out by “*the processing element*” (limitation [17C]), as the mobile device processor would have been responsible for carrying out the relevant software. (EX-1002, ¶216.)

4. Limitations [17F]-[17G]

Limitations [17F] (“*wherein the at least one content item ...*”) and [17G] (“*wherein the at least one integrated content item is inserted ...*”) are identical to limitations [12C]-[12D], respectively, and are obvious for the same reasons.

R. Claims 18 and 19

The combination renders obvious “*wherein the mobile device comprises one of a mobile telephone, a tablet computer and a camera*” [18] and “*wherein the mobile device comprises a global positioning system (GPS)-based navigational device*”[19]. The mobile device comprises at least a mobile telephone, camera and GPS-based navigational device. (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....”) *see also* 2:5-6; 5:38-47.)

S. Independent Claim 21

Claim 21 recites a method with steps that are substantially similar to claim 1.

1. Preamble [21P]

To the extent the preamble is limiting, the Neibauer-Cheng-Ausems-Squibbs combination renders obvious a “*method*.”

2. Limitations [21A]-[21C]

Limitations [21A] (“*providing a first interface on a mobile device ...*”), [21B] (“*wherein information associated with at least one wireless networking functionality of the mobile device is integrated ...*”), and [21C] (“*wherein the at least one integrated content item is inserted ...*”) are substantially similar to limitations [1A]-[1C], respectively, and are obvious for the same reasons.

T. Independent Claim 22

Claim 22 also recites a method with steps similar to claim 1.

1. Preamble [22P]

To the extent the preamble is limiting, claim 22 recites a “*method*” for the same reasons as in claim 1.

2. Limitations [22A]-[22B]

Limitations [22A] (“*accessing a first interface ...*”) and [22B] (“*providing at least one content item to at least one server for insertion ...*”) are substantially similar to limitation [1A], except that limitations [22A]-[22B] break the same functions into two limitations. Limitation [22B] adds that the content item is provided “*to at least one server*”; under the proposed combination, the content item would have been sent to at least origin server **102** (providing the features of Neibauer) and under the combination with Cheng, proxy server **110** (which sits between the mobile device and origin server **102** and translates Neibauer’s features for the mobile device). (EX-1002, ¶225.)

3. Limitation [22C]

The combination renders obvious “*providing information associated with at least one wireless networking functionality of the mobile device to said at least one server responsive to user input*” [22C].

As explained for limitation [1B], information associated with at least one wireless functionality is sent by the mobile device. Further, as explained for limitation [22B], this information is sent “*to said at least one server.*” This information would have been provided “*responsive to user input,*” because it would have occurred in response to input by the club member in providing a photo for inclusion in an album using the photo sharing feature. (EX-1002, ¶226.)

4. Limitations [22D]-[22E]

Limitations [22D] (“*wherein the at least one content item ...*”) and [22E] (“*wherein the at least one integrated content item is inserted ...*”) are substantially identical to limitations [12C]-[12D], respectively, and are obvious for the same reasons. (EX-1002, ¶227.)

VII. Ground 2: Obviousness in Further View of Harvey.

Ground 2 is substantially the same as Ground 1 except that it adds Harvey (EX-1010) to account for a construction of “*application-based information channel*” proposed by Meta in the MDT-Meta-Litigation.

As explained for limitation [1A] in Ground 1, 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 key 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, 3.)

The “*content management site*” corresponds to a website for creating a new club. (EX-1002, ¶229.) 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.) Harvey teaches the ability of a community creator to author content for a community before the community is created. (EX-1002, ¶231.) Harvey explains that “[t]he community creating module permits the creator to create a community, and designate applications and content presented in the community by a user interface.” (Harvey, 4:28-30.) A user can access a 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, ¶231.) 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 Ground 1 with Harvey, predictably resulting in the club creation user interface in Neibauer with 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, ¶232.) This would have satisfied Meta’s proposed construction of “*application-based 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.” (EX-1002, ¶233.) Under the proposed combination, the “*content management site*” would have included the web-based interface for allowing the founder to create a Neibauer club and to add content for the club via the application-based information channels, such as initial club messages, initial photos with textual descriptions, etc. (*Id.*) This information would have been made available for transmission to “*the mobile website*,” i.e., the club site as delivered to mobile users. (*Id.*) Harvey is an analogous reference and

would have been reasonably pertinent to problems facing the inventors. (EX-1002, ¶234.)

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, ¶235.) 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 would also have had a reasonable expectation of success and could have implemented the combination using conventional techniques. (EX-1002, ¶236.)

VIII. 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 Squibbs (EX-1011) and Harvey (EX-1010), as these references were not considered during prosecution.

Neibauer (EX-1003) and Cheng (EX-1005) were cited in an Information Disclosure Statements and were considered by the Examiner. (EX-1022, 1 (Cheng), 21, 28 (excerpts of Neibauer).) These references were among hundreds of prior art references cited during prosecution.

Petitioners respectfully submit that the Examiner's consideration of Neibauer and Cheng does not raise § 325(d) issues in light of the uneventful prosecution history. As noted above, the '578 patent issued after the applicants traversed a single office action rejecting the claims for anticipation and obviousness-type double patenting. (EX-1022, 252-54.)

Petitioners respectfully submit that the Examiner materially erred in failing to rely on Neibauer and Cheng 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 Brandrud. 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 '578 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 IPR2024-00249. To the extent the Board issues a Final Written Decision in IPR2024-00249, 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).

IX. 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 matters 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.*, IPR2024-00247 (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*, IPR2025-00544 (PTAB)

C. Notice of Counsel and Service Information

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

Lead Counsel	Back Up Counsel
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X. Conclusion

Inter partes review of the challenged claims is respectfully requested.

Date: February 5, 2025

Respectfully submitted,

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APPENDIX A – LIST OF CLAIMS

[1P] A method comprising:

[1A] providing a first interface permitting designation of at least one content item, via a mobile device, for insertion into an application-based information channel, the at least one content item comprising media data captured by the mobile device; and

[1B] integrating the at least one content item and information associated with at least one wireless networking functionality of the mobile device to generate at least one integrated content item; and

[1C] inserting the at least one integrated content item into the application-based information channel, the application-based information channel providing a second interface wherein two or more users share access to a plurality of content items including the at least one integrated content item.

[2] The method of claim 1 wherein the information associated with said at least one wireless networking functionality of the mobile device comprises location information of the mobile device.

[3] The method of claim 1 wherein integrating the at least one content item and the information associated with said at least one wireless networking functionality of the mobile device comprises: obtaining location information of the mobile device; identifying additional content based on the obtained location information; and generating the at least one integrated content item by combining the at least one content item with the additional content.

[4] The method of claim 1 wherein integrating the at least one content item and the information associated with said at least one wireless networking functionality of the mobile device comprises: obtaining product-identifying information over at least one wireless network; and identifying additional content based on the obtained product-identifying information; and generating the at least one integrated content item by combining the at least one content item with the additional content.

[5] The method of claim 4 wherein the additional content comprises information relating to at least one of product ordering and product purchase support.

[6] The method of claim 1 wherein the information associated with said at least one wireless networking functionality of the mobile device comprises one of: location-based service information; one or more messaging actions implementable over a wireless network; and one or more collaboration actions implementable over the wireless network.

[7] The method of claim 1 further comprising providing, via the first interface, one or more content integration options to the user.

[8] 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 implements the steps of the method of claim 1.

[9P] An apparatus comprising:

[9A] a processing element comprising a processor coupled to a memory;

[9B] the processing element providing at least a portion of a first interface permitting designation of at least one content item, via a mobile device, for insertion into an application-based information channel, the at least one content item comprising media data captured by the mobile device; and

[9C] the processing element being configured:

[9D] to integrate the at least one content item and information associated with at least one wireless networking functionality of the mobile device to generate at least one integrated content item; and

[9E] to insert the at least one integrated content item into the application-based information channel, the application-based information channel providing a second interface wherein two or more users share access to a plurality of content items including the at least one integrated content item.

[10] The apparatus of claim 9 wherein the processing element comprises at least one server accessible over the Internet via a network interface.

[11] A network-based communication system comprising a plurality of servers configured to communicate over a network, a given one of the servers comprising the apparatus of claim 9.

[12P] A method comprising:

[12A] designating at least one content item, via a mobile device, for insertion into an application-based information channel, the at least one content item comprising media data captured by the mobile device; and

[12B] providing information associated with at least one wireless networking functionality of the mobile device for integration with the at least one content item;

[12C] wherein the at least one content item and the information associated with said at least one wireless networking functionality of the mobile device are integrated to generate at least one integrated content item; and

[12D] wherein the at least one integrated content item is inserted into the application-based information channel, the application based information channel providing an interface wherein two or more users share access to a plurality of content items including the at least one integrated content item.

[13] The method of 12 wherein the information associated with said at least one wireless networking functionality of the mobile device comprises location information of the mobile device.

[14] The method of claim 12 wherein providing the information associated with said at least one wireless networking functionality of the mobile device comprises: providing one or more content integration options to a user; receiving user input selecting at least one of the content integration options; and determining the information associated with said at least one wireless network functionality of the mobile device in accordance with the selected content integration options.

[15] The method of claim 12, wherein the at least one content item comprises at least one of device-captured video data, device captured audio data and device-captured image data.

[16] 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 implements the steps of the method of claim 12.

[17P] A mobile device comprising:

[17A] a processing element comprising a processor coupled to a memory; and

[17B] a network interface;

[17C] the processing element being configured to:

[17D] designate at least one content item for insertion into an application-based information channel, the at least one content item comprising media data captured by the mobile device; and

[17E] provide information associated with at least one wireless networking functionality of the mobile device for integration with the at least one content item;

[17F] wherein the at least one content item and the information associated with said at least one wireless networking functionality of the mobile device are integrated to generate at least one integrated content item; and

[17G] wherein the at least one integrated content item is inserted into the application-based information channel, the application-based information channel providing an interface wherein two or more users share access to a plurality of content items including the at least one integrated content item.

[18] The mobile device of claim 17 wherein the mobile device comprises one of a mobile telephone, a tablet computer and a camera.

[19] The mobile device of claim 17 wherein the mobile device comprises a global positioning system (GPS)-based navigational device.

[21P] A method comprising:

[21A] providing a first interface on a mobile device permitting a user to designate at least one content item for insertion into an application-based information channel, the at least one content item comprising media data captured by the mobile device;

[21B] wherein information associated with at least one wireless networking functionality of the mobile device is integrated with the at least one content item to generate at least one integrated content item; and

[21C] wherein the at least one integrated content item is inserted into the application-based information channel, the application-based information channel providing a second interface wherein two or more users share access to a plurality of content items including the at least one integrated content item.

[22P] A method comprising:

[22A] accessing a first interface using a mobile device;

[22B] providing at least one content item to at least one server for insertion into an application-based information channel using the first interface, the at least one content item comprising media data captured by the mobile device; and

[22C] providing information associated with at least one wireless networking functionality of the mobile device to said at least one server responsive to user input;

[22D] wherein the at least one content item and the information associated with said at least one wireless networking functionality of the mobile device are integrated to generate at least one integrated content item; and

[22E] wherein the at least one integrated content item is inserted into the application-based information channel, the application-based information channel providing a second interface wherein two or more users share access to a plurality of content items including the at least one integrated content item.

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. 9,619,578, 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 13,822. 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 5, 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. 9,619,578 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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