

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

IPR2025-00535
U.S. Patent No. 9,032,039

**PETITION FOR *INTER PARTES* REVIEW OF
U.S. PATENT NO. 9,032,039**

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1001	U.S. Patent 9,032,039 to Harper et al. (“the ’039 patent”)
1002	Declaration of Henry Houh in Support of Petition for <i>Inter Partes</i> Review of U.S. Patent 9,032,039
1003	Excerpts from Alan Neibauer, <i>How to Do Everything With Yahoo!</i> (2000) (“Neibauer”)
1004	<i>RESERVED</i>
1005	U.S. Patent 7,574,486 to Yin Cheng et al. (“Cheng”)
1006	U.S. Patent 6,434,403 to Michiel R. Ausems et al. (“Ausems”)
1007-1009	<i>RESERVED</i>
1010	U.S. Patent 6,487,583 to Jamey Harvey et al. (“Harvey”)
1011	U.S. Patent Publication 2001/0015759 A1 to Squibbs (“Squibbs”)
1012	Excerpts from Uwe Hansmann et al., <i>Pervasive Computing Handbook</i> (2001) (“Hansmann”)
1013	Excerpts from David Fox & Troy Downing, <i>HTML Web Publisher’s Construction Kit</i> (1995) (“Fox”)
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1031	Declaration of June Munford
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1033	<i>Meta Platforms, Inc. v Mobile Data Techs. LLC</i> , IPR2024-00248, Paper 33 (PTAB Jan. 10, 2025).

I. Introduction

Samsung Electronics Co. Ltd. and Samsung Electronics America, Inc. (“Petitioners”) petition for IPR of claims 1-4, 8-9, 13-15, 17-25 and 28-30 of U.S. Patent 9,032,039 (“the ’039 patent”; EX-1001).

II. Grounds for Standing

Petitioners certify the ’039 patent is available for IPR and Petitioners is not barred or estopped.

III. Identification of Challenge

A. Prior Art

The ’039 patent, filed September 11, 2014, claims priority through 5 continuations to U.S. Patent 7,599,983, filed June 18, 2003, which claims priority to Provisional 60/389,430 filed June 18, 2002. Petitioners do not acquiesce the ’039 patent is entitled to priority of the provisional or any priority patent. 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 Congress¹. (EX-1031, ¶¶6-9; EX-1026, ¶¶40-46.)

¹ PO did not dispute Neibauer’s public availability in *Meta Platforms, Inc. v. Mobile Data Techs.* (Meta-MDT-IPR), IPR2024-00248.

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

3. **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).

4. **U.S. Patent 6,332,127 to Bandera, et al** (“Bandera”; EX-1017), filed January 28, 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

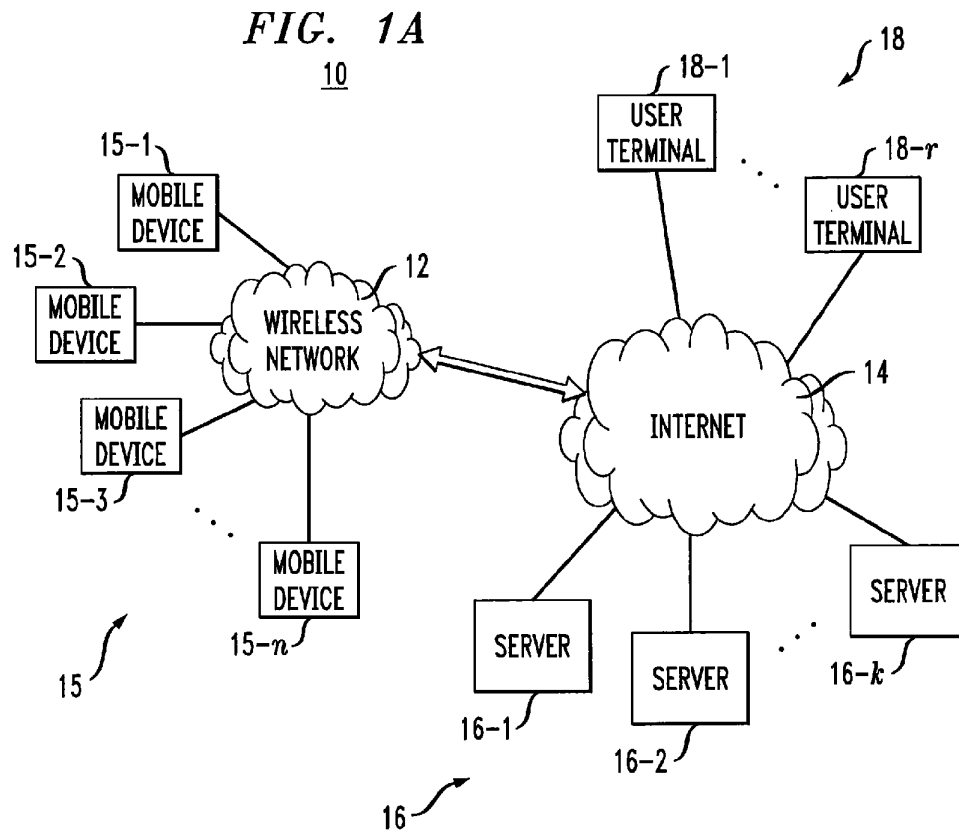
Ground		Claims	Prior Art
1	103	1-4, 8, 9, 13-15, 17-20, 22-25, 28-30	Neibauer, Cheng, Squibbs, Ausems
2	103	21	Neibauer, Cheng, Squibbs, Ausems, Bandera
3	103	1-4, 8, 9, 13-15, 17-20, 22-25, 28-30	Neibauer, Cheng, Squibbs, Ausems, Harvey
4	103	21	Neibauer, Cheng, Squibbs, Ausems, Bandera, Harvey

IV. The '039 Patent

A. Patent Overview

The '039 patent “relates generally to network-based communications systems, and more particularly to techniques for information content management in such systems.” (EX-1001, 1:28-30.) Figure 1A (below) shows an example network-based

communication system 10 including wireless network 12 coupled to Internet 14, mobile devices 15, servers 16 and user terminals 18. (EX-1001, 3:42-46.)



'039 Patent, Figure 1A

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, 5:6-8, 8:5-10.) Such mobile sites may be associated with “a group comprising multiple members having a

common interest” (EX-1001, 6:18-20), “an event” (EX-1001, 6: 38-43), “a game,” (EX-1001, 7:18-19), or “user of IM, SMS, MMS, email or other type of messaging service” (EX-1001, 7:30-32), among other associations. (EX-1001, 6:18-7:67.)

B. Level of Ordinary Skill in the Art

A person of ordinary skill in the art (“POSITA”) would have had a bachelor’s degree in electrical engineering, computer science, or similar field, with two years of experience in developing and implementing network-based computer systems that interact with mobile devices, such as systems for storing and retrieving information over the Internet or communicating using the Web using wireless mobile devices. Additional education might compensate for less experience and vice versa.² (EX-1002, ¶32.)

C. Prosecution History

The ’039 patent issued after a short prosecution involving one Office Action (“OA”). In response, Applicant amended the claims to overcome the rejection, adding the “*identifying*” [1B]/[18D], “*receiving*” and “*inserting ... other content*” [1E]/[18G]/[19D]/[23F] limitations and amending the “*providing*” limitation [1D]/[18F] to recite “*the captured content*” is for insertion “*in association with the determined information.*” (EX-1022, 227-32.) The Examiner allowed the claims,

² PO did not dispute this definition in Meta-MDT-IPR.

stating the prior art “does not teach nor suggest” claim 1’s “*identifying*” and “*determining*” limitations.

D. Claim Construction

In *Mobile Data Techs. LLC v. Meta Platforms, Inc.*, No. 3:24-CV-00896-WHA (N.D. Cal.) (“MDT-Meta-Litigation”) and Meta-MDT-IPR, the parties identified the following terms for construction. (EX-1009, 1-4; EX-1010, 8-17; EX-1011, 2-8.) 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 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 Meta-MDT-IPR construction which is contrary to the specification’s express definition. (*See, e.g.*, EX-1001, 4:26-29.) Petitioners apply the plain meaning which is consistent with Meta’s Meta-MDT-IPR and MDT-Meta-Litigation constructions.

MDT-Meta District Court	
PO	plain and ordinary meaning; alternatively, “a piece of handheld equipment”

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”
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”
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”

2. “Application-Based Information Channel”

Meta and PO agreed to the construction “computer program-based medium for transferring information” for the purpose of the Meta-MDT-IPR. Petitioners do not believe this term requires construction here but demonstrate the prior art meets this limitation under the Meta-MDT-IPR construction.

3. Wireless Network Limitations

In the Meta-MDT-IPR, the parties dispute the construction of two limitations primarily over whether the wireless network is “independent” or “separate” from the Internet.” (IPR2024-00248, Paper 26, 15-16; Paper 33, 5-7.) While Petitioners

dispute PO’s construction, construction of the term is not needed because the prior art discloses this term under both constructions.

i. “Wireless Networking Functionalit[y]/[ies]”

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”

ii. “Wireless Network”

Meta-MDT-IPR	
PO	“a network separate from the internet that facilitates connection to the internet by a mobile device”
Meta	to the extent the phrase requires express construction, “a network that allows a device to communicate wirelessly over a network”

V. Overview of Grounds

All grounds rely on Neibauer (EX-1003) describing features of Yahoo!.

(EX-1002, ¶¶49-50.) 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, ¶¶51-61; Neibauer, 477-480.)

Neibauer also discloses the ability to access Yahoo! services via mobile devices. (EX-1002, ¶62; Neibauer, 166-174.) Neibauer renders obvious the majority of the

claim limitations and was relied upon by the USPTO in a reexamination rejecting all claims of a related patent. (EX-1024, 04, EX-1028.)

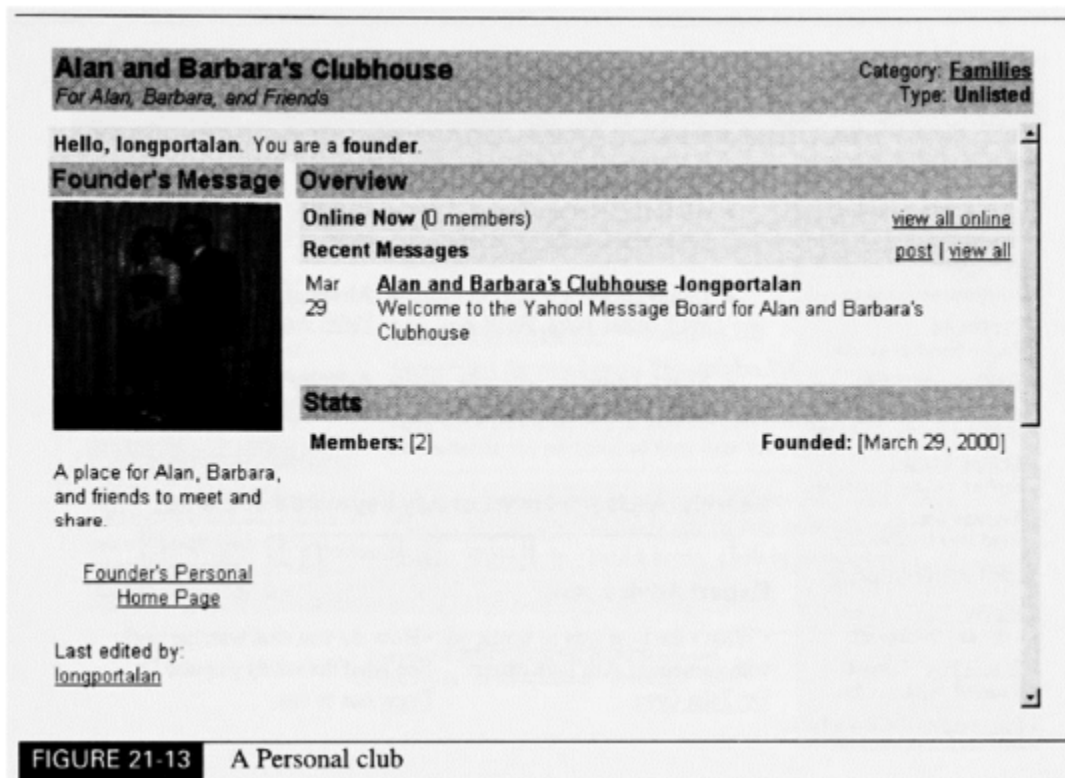
All grounds also cite to Cheng (EX-1005), which additionally demonstrates it would have been obvious to provide the Yahoo! Clubs features from Neibauer to users via mobile devices. (EX-1002, ¶¶90-93.) Cheng describes a proxy server that can convert any existing (non-mobile) webpage for use on a mobile device. (EX-1002, ¶¶68-69.) 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, ¶¶81-89; Squibbs, Figs. 6-7.)

Ground 2 cites to Bandera (EX-1017) solely for features of dependent claim 21. Grounds 3-4 are substantially similar to Grounds 1-2, but add 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 these grounds.

VI. Ground 1: Claims 1-4, 8, 9, 13-15, 17-20, 22-25, 28-30 Are Obvious Over Neibauer-Cheng-Squibbs-Ausems.

A. Independent Claim 1

Neibauer discloses features of a Yahoo! service known as Yahoo! Clubs. (Neibauer, 473-483.) Neibauer explains “[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, 473 (italics in original).) Yahoo! members could also create their own clubs. (Neibauer, 480-82.) An exemplary club is shown in Figure 21-13:



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

1. Preamble [1P]

The Neibauer-Cheng-Ausems-Squibbs combination discloses a “*method*” for managing information content because a club founder can manage information on a club such as messages and photos shared with other members of the club. (EX-1002, ¶123-25; Neibauer, 480-83.)

2. Limitation [1A]

The Neibauer-Cheng-Ausems-Squibbs combination renders obvious “*capturing content at a mobile device*” [1A]. (EX-1002, ¶126.) Neibauer discloses creating web-based communities (“clubs”) for users to share information through photo sharing and other features. (Neibauer, 480-483, Fig. 21-12.)

Neibauer discloses a photo sharing feature that allows a club member to select a photo to upload and share with club members. (Neibauer, 477.) Neibauer explains:

Sharing Photographs

The Photos option in the Our Pages section lets members share photographs and other graphics. Each club is given 5 MB of space to store photographs. The photos are organized into up to 30 albums, each with no more than 24 photos.

There are two types of albums: group and personal. Any member can place a photo in a group album and delete photos that he or she added as well. Only the creator of a personal album can add or delete photographs.

(Neibauer, 477 (bold in original).)

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:

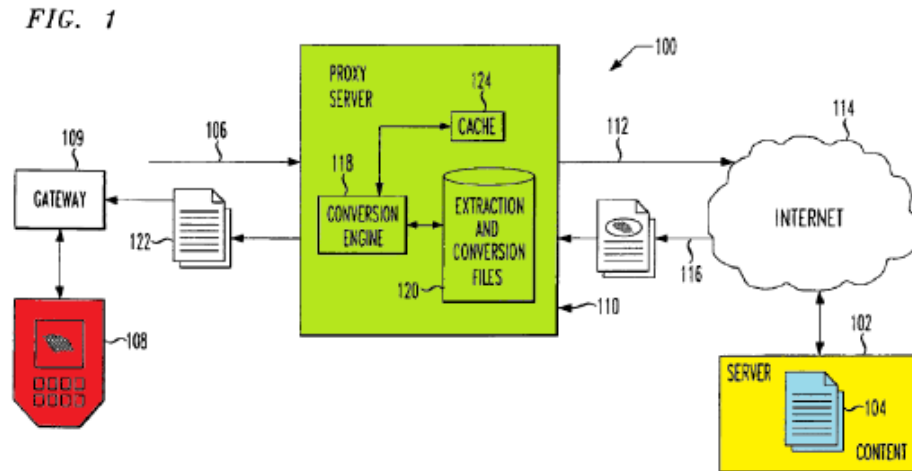
2. In the page that appears, enter either the path and name of the photo on your disk or click Browse to locate the file. You can also click the On The Web link to designate a photograph located on a Web page.
3. Enter a name and description of the photo.

(Neibauer, 478, ¶¶2-3; 477-478 (showing clickable “Add Photo” option available on album pages).) Neibauer thus discloses or renders obvious “*capturing content*” by allowing a club member to designate at least one photo (“*content*”) for insertion into an album of the club photo sharing feature. It would have been obvious to adapt Neibauer’s photo sharing feature to “*captur[e] content at a mobile device.*” (EX-1002, ¶¶128-29.) The ’039 patent itself expressly defines a “*mobile device*” as including, among other things, a laptop computer. (EX-1001, 4:26-36.) It was well known that laptop computers provided the same functionality as desktop computers and were able to 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 clubs feature discussed above, would have been accessible to a user of a mobile device such as a laptop computer. (EX-1002, ¶126-29.)

To the extent “*mobile device*” is construed as requiring a handheld device, Neibauer itself discloses services such as “Yahoo! Mobile” and “Yahoo! To Go” that enabled content from Yahoo! services to be provided to mobile devices such as pagers, cell phones, web phones, and personal digital assistants (PDAs). (Neibauer, 166-174.) “Yahoo! To Go lets you receive Yahoo! information on your mobile device.” (Neibauer, 167.) For example, one option referred to as “Yahoo! On Your PDA” allowed users of browser-enabled PDAs to select particular Yahoo! content accessible from their PDA. (Neibauer, 171-174.) Although Neibauer does not expressly disclose the Yahoo! Clubs feature was one of the Yahoo! features that could be made accessible via mobile devices, it would have been obvious to extend the mobile device functionality in Neibauer to cover that feature, in order to allow user-created clubs to be accessed by users via mobile devices. (EX-1002, ¶968.) This would have been viewed as a logical (and obvious) extension of the existing mobile features described in Neibauer. (EX-1002, ¶97-98.)

Using the photo sharing feature of Yahoo! Clubs would have also been obvious in view of the teachings of Cheng (EX-1005). Cheng teaches an established technology known as “proxy servers,” which were commonly used to provide security and interoperability between devices. (EX-1002, ¶72-73.) Cheng

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



Cheng, Figure 1³

Figure 1 above shows origin web server 102 containing original web page 104. (Cheng, 3:36-37.) 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 therefore encompasses a web page in HTML format reachable via the Internet, such as any web page from the Yahoo! website as described in Neibauer. (EX-1002, ¶¶91-93.) Thus, origin server 102, under the combination of Neibauer and Cheng, would have been the server

³ Unless otherwise noted all Figure annotations and emphasis added.

providing the club photo sharing feature and receiving photos uploaded by members. (EX-1002, ¶¶108-09.)

Figure 1 further shows 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 runs a Palm operating system including 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, ¶¶73-74.) “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; EX-1002, ¶74.) “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, 3:22-26.) The proxy server can also perform conversion on images on the web page to enable viewing on a mobile device, for example, by scaling and reducing colors and resolution. (Cheng, Fig. 7 (704, 706, 708), 10:60-11:8; EX-1002, ¶152.)

Motivation to Combine Neibauer with 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, ¶¶90-91.)

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, ¶¶69, 73-74, 92-93; Cheng, 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 origin web server 102. (EX-1002, ¶¶92.) In any case, combining Neibauer and Cheng would not have affected the underlying functionality in Neibauer, further motivating the combination as discussed below. (EX-1002, ¶¶94.)

Neibauer is in the same field as the ’039 patent—network-based communication systems for managing information content and would have been reasonably pertinent to problems facing the inventors, including making web-based information content available on mobile devices. (EX-1002, ¶¶95.)

A POSITA would have been motivated to combine Neibauer and Cheng. Neibauer expressly motivates the combination, by 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, ¶¶96-99; 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 ’039 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, 1:34-38.) 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, ¶100-01.)

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, ¶103.) 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,

¶104.) A POSITA would also have had a reasonable expectation of success as

Cheng relies on known and industry-standard technologies. (EX-1002, ¶104-106.)

It thus would have been obvious for the photo designated by a club member, under the combination of Neibauer and Cheng, to have included “*content*,” i.e., media data, captured by the mobile device. Portable communications devices prior to June 2002 included digital cameras that allowed the devices to capture, store, and transmit digital images. (EX-1002, ¶78, 81, 115.)

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 “[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 content*.” (EX-1002, ¶¶134-35)

Motivation to Combine Neibauer, Cheng, and Ausems: It would have been obvious to combine Neibauer and Cheng with Ausems, predictably resulting in a system further adapted such that the photo uploaded by the club member to the club photo sharing feature would have comprised “*capturing content at the mobile device*,” i.e., a photo captured by a digital camera incorporated into the mobile device. (EX-1002, ¶112.)

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, ¶¶112, 136; Neibauer, 477-

478.) Ausems is an analogous reference in the same field of the '039 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, ¶113.)

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, ¶114.) 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. (EX-1002, ¶114.) A POSITA would have had a reasonable expectation of success. (EX-1002, ¶115.) As Ausems confirms, mobile devices with digital cameras and the ability to transmit images captured by digital cameras were already known. (EX-1002, ¶115, 135.)

3. Limitation [1B]

The Neibauer-Cheng-Ausems-Squibbs combination renders obvious “*identifying a previously established application-based information channel into which the captured content is to be inserted, the identified application-based information channel permitting interaction between a user of the mobile device and one or more additional users*” [1B]. (EX-1002, ¶139.)

The claimed step of “*identifying a previously established application-based information channel into which the captured content is to be inserted*” takes place when Neibauer’s server receives a photo uploaded by a club member to be shared with other club members. (EX-1002, ¶¶139-44; Neibauer, 477 (describing “Sharing Photographs”).) As noted above, in order 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, 478, ¶¶2-3.) Neibauer’s club photo sharing feature is an “*application-based information channel*.” (EX-1002, ¶¶139-44.)

The club photo sharing feature is also a “*previously established*” application-based information channel because it was already established as a feature of the club before the club member chose to upload a new photo to a photo album. (EX-1002, ¶¶145.) The club photo album feature also “*permit[s] interaction between a user of the mobile device and one or more additional users*,” because the club member can upload and share photos with other club members. (Neibauer, 477 (“Any member can place a photo in a group album...”); *id.* (“For each photo you will see [in Figure 21-10] 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.”).) The club photo sharing feature thus permits interaction and information exchange between multiple club members. (EX-1002, ¶¶145.)

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, ¶154.) 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, ¶153.) 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, ¶153.) Petitioners have also provided separate Grounds 3-4 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 Grounds 1-2 is somehow found insufficient on this point.

4. Limitation [1C]

The Neibauer-Cheng-Ausems-Squibbs combination renders obvious “*determining information associated with at least one wireless networking functionality of the mobile device*” [1C]. (EX-1002, ¶156-69.) The ’039 patent does not define “*information associated with at least one wireless networking functionality of the mobile device,*” but provides examples. For example, dependent claims 8-9 state the claimed information associated at least one wireless networking functionality (of claim 1) can comprise “*at least one messaging action*” and “*at least one collaboration action*” implementable over a wireless network, respectively. Dependent claim 6 states it can comprise “*location information of the mobile device.*” (See also EX-1001, 5:51-63.) The proposed combination discloses multiple examples of information associated with at least one wireless networking functionality that track the ’039 patent examples.

Messaging or Collaboration Action: The ’039 patent teaches that messaging or collaboration actions can include members posting and sharing information to facilitate collaboration. (EX-1001, 6:26-29 (“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.”), 6:34-37 (“Organization members can easily and efficiently post information and generate messages to other members so as to facilitate collaboration and other types of interaction.”).)

In Neibauer, new photos posted by the club member are accompanied by a textual name and description of the photo provided by the uploading club member. (Neibauer, 477-478 (“3. Enter a name and description of the photo.”).) Neibauer’s Figure 21-10 shows how this textual information is incorporated into and displayed by the club photo sharing feature:

The James Bond Movie Series			
The James Bond place to talk about the movies.			
Category: James Bond Series			
Club Type: List			
Blueraja's BOND GIRL Album			
Created by blueraja3 on 22-Nov-1999			
Showing 1 - 12 of 12 photos View Thumbnails			
Add Photo			
Photo Name and Caption	Contributor	Size	Posted
 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, 478, Fig. 21-10.) Figure 21-10 shows a partial list of photographs stored in an album, listing each photo along with its accompanying name and description. Although Figure 21-10 shows photo messages posted by one contributor (blueraja3), “[a]ny member can place a photo in a group album...” (Neibauer, p.477.) Under the proposed combination, when the club member posts a new photo to a selected photo album, the photo, along with its textual name and description, would be incorporated and integrated into the photo album to which they were assigned. (EX-1002, ¶157-58.)

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, ¶158.) The proposed combination therefore renders obvious “*information associated with at least one wireless networking functionality of the mobile device,*” in the form of a messaging or collaboration action by which the club member, through their mobile device and over a wireless network, provided messaging content that would have been accessible to club members. (EX-1002, ¶¶156-58, 169.) As noted previously, the mobile device would have communicated

wirelessly. (Cheng, *e.g.*, 2:4-7, 5:33 (“cellular telephone”), 23:44-51 (“... wireless communication (e.g., radio frequency (RF), and the like)”); *see also* Neibauer, 171, ¶5 (“GSM Phone”); EX-1002, ¶158.)

Mobile Device Location Information: The ’039 patent also covers information associated with at least one wireless networking functionality in the form of location information about the mobile device. This feature would have been obvious in view of Squibbs (EX-1011).

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

Squibbs discloses a photo album system, shown in Figure 3, allowing a user to capture and record digital images, which can be associated with the physical location where they were taken.

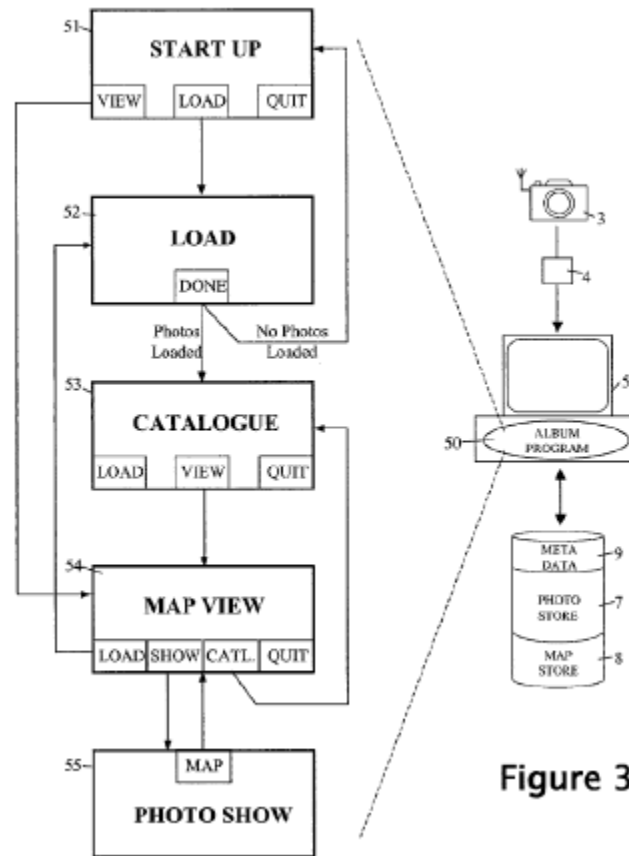


Figure 3

Squibbs, Figure 3

Squibbs further teaches:

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...

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

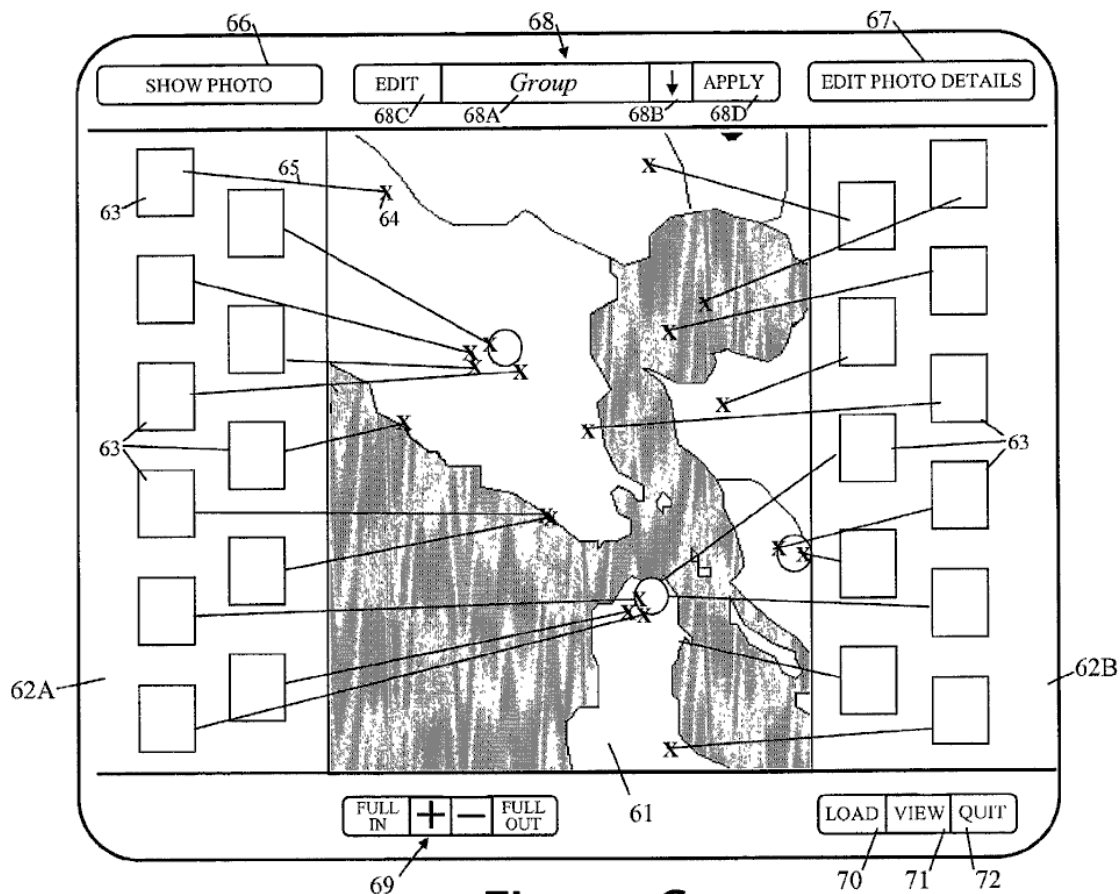


Figure 6

Squibbs, Figure 6

Central map area 61 “is sufficient to encompass the locations registered for the newly loaded batch of photos.” (Squibbs, ¶0064.) Thumbnail 63 “of each new photo is shown in one or other of the margin areas 62A, B” and “lead line 65 connects each thumbnail 63 to a corresponding marker 64 showing on the map the location where the photo was taken.” (Squibbs, ¶0064.) Figure 6 also shows an upper control bar with, from left-to-right, Show Photo Control 66 for displaying the photo corresponding to a selected thumbnail 63, Group Control 68 for creating groups and assigning a photo to one or more groups, and Edit Photo Details Control 67 for displaying and editing the details of a selected thumbnail. (Squibbs, ¶¶0065-0068.)

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

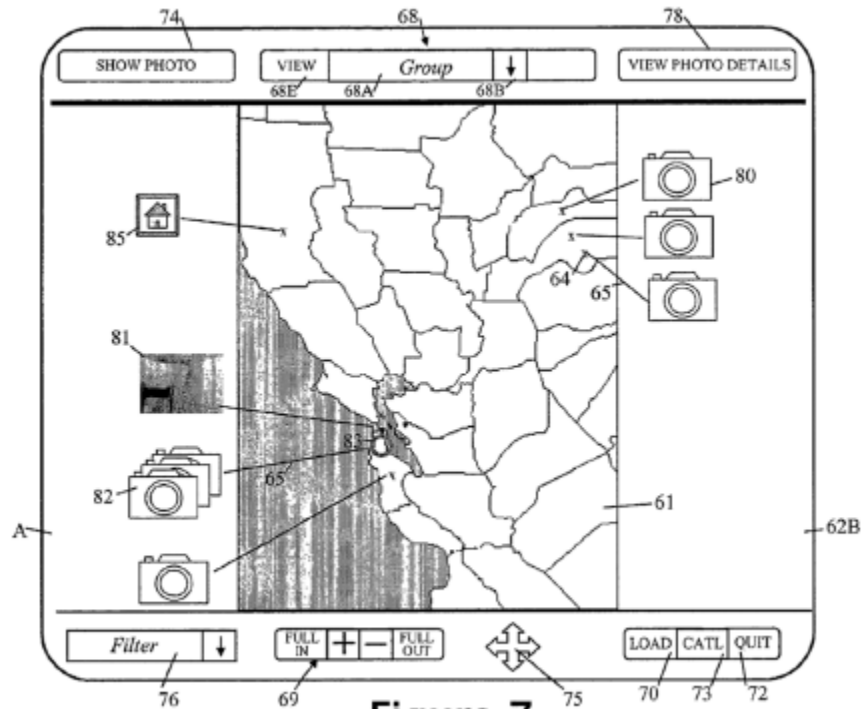


Figure 7

Squibbs, Figure 7

Figure 7's Map View mode allows a user to browse the album. (Squibbs, ¶0074.) Squibbs explains "[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 the ability to display a full-size image of a photo selected from the Map View Mode. (Squibbs, ¶0091, Fig. 8.)

Squibbs teaches 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, digital camera 90 transmits the photo image data to 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); ¶0031 (noting the photo store can be “external”).) The cell phone, when uploading photo image data, also transmits location information. (Squibbs, ¶0101.) Squibbs explains 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; ¶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, further adapted to receive “*information associated with at least one wireless networking functionality of the mobile device,*” i.e., the location information associated with a photo taken and uploaded by the club member. (EX-1002, ¶117.) 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.⁴ (*Id.*)

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 Squibbs' Figures 6-7. (EX-1002, ¶118.) Under the proposed combination, therefore, the club photo sharing feature would have displayed location information (for example on an electronic map) in association with the photo. This would also have been seen as a natural extension of map features already disclosed in Neibauer, as discussed below. (EX-1002, ¶¶122.) Squibbs is an analogous reference in the same field as the '039 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 user display. (EX-1002, ¶119.)

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,

⁴ Squibbs discloses an embodiment of a digital camera separate from the cellular phone used to upload photo image and location data, demonstrating the ability to incorporate digital cameras into mobile devices with GPS capabilities was known before the '039 patent. (Squibbs, Fig. 11, ¶0101; EX-1002, ¶113.)

¶120.) 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.

(*Id.*) 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, ¶120-21.)

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, 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, 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 Neibauer and Squibbs are naturally combinable and that a skilled artisan would have been motivated to do so. (EX-1002, ¶122.) 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. (EX1002, ¶117-22.)

As noted above, the parties in the Meta-MDT-IPR dispute the meaning of “*wireless networking functionality of the mobile device*.” PO argues this term should be construed as “functionality implementable by the mobile device via the wireless network *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.” (Meta-MDT-IPR, Paper 26, 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.

With respect to Neibauer, PO argues

Accordingly, in order to teach or suggest “information associated with at least one wireless functionality of the mobile device,” Neibauer or Cheng must disclose a functionality that is capable of being performed by a mobile device accessing the wireless network. In other words, the functionality must rely on the wireless network that *may* connect the mobile device to the Internet and cannot include functionalities that are only implementable using the Internet without the wireless network.

(EX-1030, 50-51.)

PO interprets the scope of its patent too narrowly. (EX-1002, ¶174.) The ’039 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, 4:1-13.) 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, ¶174.)

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*” “cannot include functionalities that are only implementable using the Internet without the wireless network.” (EX-1030 , 50; EX-1002, ¶175-77.)

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, ¶176.)

Furthermore, geotracking data is well-known to be used via satellite channels, not the internet. (EX-1002, ¶177.) 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, ¶177.) Receiving and processing GPS signals from satellites to determine a device’s location is a “*wireless networking functionality*” that is independent of the internet. (EX-1002, ¶177.)

5. Limitation [1D]

The Neibauer-Cheng-Ausems-Squibbs combination renders obvious “*providing the captured content from the mobile device to at least one server for insertion in association with the determined information into the identified application-based information channel*” [1D]. (EX-1002, ¶178.) This limitation was largely covered in the discussion of limitation [1B] above. The captured

content would have been inserted into and thus viewable through the club photo sharing feature.

It would have been obvious that the photo would have been received at “*at least one server*,” i.e., a server that hosts the website providing the club photo sharing feature. (EX-1002, ¶¶140, 183, 217.) It was basic knowledge and obvious to skilled artisans that a website such as the one described in Neibauer would have required at least a web server to provide web pages via the Internet. (EX-1002, ¶¶140, 217; *see also* Neibauer, 473 (“Access Yahoo! clubs by clicking Clubs on the Yahoo! home page or by going directly to <http://clubs.yahoo.com> to open the page shown in Figure 21-6.”), 64 (“**http://** This is the prefix for the standard type of Internet Web site. The letters stand for Hypertext Transfer Protocol.”) (bold in original), 22 (“Each Yahoo! member gets 3MB of mail space on the Yahoo! server to store messages.”).)⁵

The claimed server is also expressly and separately disclosed and rendered obvious under the proposed combination with Cheng, discussed further below. (EX-1002, ¶¶91, 180.) And as explained later below, it would have been obvious for the photo to have been received at a server “*from a mobile device*.”

⁵ Except as otherwise noted, all emphasis added.

Under the proposed combination, the new uploaded photo would have been “*provided*” “*from a mobile device*” to “*at least one server*,” when a club member, via the web browser on their mobile device, uploads a photo using the techniques described above. (EX-1002, ¶¶108-09, 178-83.) The claimed “*server*” for purposes of claim 1 either corresponds to origin server 102 in Cheng (which would have performed the club photo sharing functionalities of Neibauer as discussed above), or proxy server 110 (which would have made those functionalities available to mobile devices), as both would have received the HTTP request that included the photo under the proposed combination (*i.e.* first by the proxy server 110, then by origin server 102). (EX-1002, ¶¶108-09.) Alternatively, the “*server*” could have corresponded to the combination of origin server 102 and proxy server 110, which is consistent with the ’039 patent that makes clear that a particular server can comprise multiple servers. (EX-1001, 8:63-65 (“Each of the servers 33, 35, 37 and 39 [of processing elements 30] may comprise one or more of the servers 16 or other elements shown in FIG. 1A, or suitable portions or combinations thereof.”); EX-1002, ¶109.) And even if the claim were interpreted to require 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, ¶109.) This implementation is disclosed by Cheng itself, which 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.) This would have been obvious in view of Cheng, as ordinarily skilled artisans would have been familiar with well-known techniques for consolidating tasks within a single server when needed. (EX-1002, ¶109.) 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 over the Internet, before conversion and transmission to mobile device 108. (*Id.*)

6. Limitation [1E]

The Neibauer-Cheng-Ausems-Squibbs combination renders obvious “*receiving other content, at the mobile device via the identified application-based information channel, from at least one of the additional users*” [1E]. (EX-1002, ¶¶187-89.) This limitation does not add anything of significance not already covered above. The step of limitation [1E] takes place when another club member uses their own mobile device to upload another photo to the same group photo album, using the same technique described in limitation [1A]). (Neibauer, *e.g.*, 477 (“Any member can place a photo in a group album...”).) This would have resulted in this other photo (“*other content . . . from at least one of the additional users*”)

being “receiv[ed]” at “*the mobile device*” via the club photo sharing feature (i.e. “*the identified application-based information channel*”). (EX-1002, ¶188.)

As noted previously, multiple mobile devices could have been used under the proposed combination with Cheng’s proxy server conversion techniques. (Cheng, *e.g.*, 5:11-12, 5:26-29; EX-1002, ¶103, 189.) Under the proposed combination, therefore, additional content from other club members would have been inserted into and made available for display using the club photo sharing feature. (EX-1002, ¶188-89.)

B. Claim 2

The Neibauer-Cheng-Ausems-Squibbs combination renders obvious “*the identified application-based information channel comprises a personalized content application*” [2]. The web browsers on the mobile devices also comprise “*personalized content applications.*” This is consistent with the plain and ordinary meaning of “application” in this context, which simply refers to a software program for carrying out a particular task. (EX-1002, ¶190; EX-1021, 31 (“**application** *n.* A program designed to assist in the performance of a specific task, such as word processing, accounting, or inventory management.”) (bold and italics in original).) Under the proposed combination, each club member would have used Clubs to upload/download personalized content, *e.g.*, photographs, using the club photo album feature. (EX-1002, ¶191-92; Neibauer, 477-479.) For

example, each club member can create their own “personal photo album.”

(Neibauer, 477.) Neibauer discloses numerous other club features that enable a member to create and view personalized content, including personalized messages using the private message board. (Neibauer, 483, Fig. 21-13 (showing personalized “Welcome” message posted by club founder).) A club member can also engage in online chat with other club members. (Neibauer, 479.)

C. Claim 3

The Neibauer-Cheng-Ausems-Squibbs combination renders obvious “*the identified application-based information channel comprises a collaborative workspace*” [3].

As explained for limitation [1A], the application-based information channel can include, for example, a club message board, club photo sharing feature, or club chat. Each “*comprises a collaborative workspace*,” because each allows club members to communicate and collaborate on topics of interest. (EX-1002, ¶¶193.)

D. Claim 4

The Neibauer-Cheng-Ausems-Squibbs combination renders obvious “*the identified application-based information channel comprises a chat channel*” [4]. As explained for claim 1, Neibauer discloses an “*application-based information channel*” in the form of a *chat channel*. (Neibauer, 479; EX-1002, ¶194.)

E. Claims 8-9

The Neibauer-Cheng-Ausems-Squibbs combination renders obvious “*the information associated with said at least one wireless networking functionality of the mobile device comprises information specifying at least one messaging action implementable over said at least one wireless network*” [8] and “*the information associated with said at least one wireless networking functionality of the mobile device comprises information specifying at least one collaboration action implementable over said at least one wireless network*” [9]. As explained for limitation [1C], the information associated with at least one wireless networking functionality can comprise “*at least one messaging action*” or “*at least one collaboration action,*” both of which would have been implemented over the wireless network, as recited in claims 8-9. (EX-1002, ¶¶158, 195.) And the Neibauer-Cheng-Ausems-Squibbs combination likewise discloses a “wireless network” under any proposed construction for the same reasons it discloses “wireless networking functionality” under either PO’s or Meta’s proposed construction. (EX-1002, ¶¶168, 196.)

F. Claim 13

The Neibauer-Cheng-Ausems-Squibbs combination renders obvious “*the captured content is obtained from a device-captured data source of the mobile device, the device-captured data source comprising a source of at least one of*

device-captured video data, device-captured image data, device-captured audio data and device-captured location coordinates” [13]. Claim 13 was largely addressed in the discussion of limitations [1B]-[1C]. 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]*” “*device-captured location coordinates*” (e.g. via GPS or mobile radio infrastructure) of the mobile device used to upload the photo. (EX-1002, ¶¶168, 197; Squibbs, ¶¶0101, 0098.)

G. Claims 14-15

The Neibauer-Cheng-Ausems-Squibbs combination renders obvious “*the mobile device comprises at least one of a mobile telephone, a tablet computer and a camera*” [14] and “*the mobile device comprises a global positioning system (GPS)-based navigational device*” [15]. Cheng and Ausems both confirm the mobile devices would have comprised at least “*a mobile telephone*” as recited in claim 14. (EX-1002, ¶198; Cheng, 5:30-35; Ausems, e.g., 3:5-8 (“FIGS 1a-1d illustrate PDA telephone 100 that provides the combined functionality of a Personal Digital Assistant (PDA) and a wireless telephone...”).) Ausems further confirms each mobile device could have been “*a GPS-based navigational device*” as recited in claim 15. (EX-1002, ¶198; Ausems, 5:38-47.)

H. Claim 17

The Neibauer-Cheng-Ausems-Squibbs 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 of the mobile device causes the mobile device to perform the method of claim 1*” [17].

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 mobile device,*” such as at least one processor or CPU for carrying out software program instructions. (EX-1002, ¶199; Ausems, 7:53-60 (“PDA engine 290 is illustrated in further detail and includes central processing unit (CPU) 305, random access memory (RAM) 310, read only memory (ROM) 315, electrically erasable programmable read only memory (EEPROM) 320...CPU 305 processes information received at PDA engine 290.”).) It would also have been obvious 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). (EX-1002, ¶199; Ausems, 7:63-64 (“ROM 315 is coupled to CPU 305. ROM 315 stores the operating system for PDA telephone 100.”); Ausems 8:2-6 (“operating system may include a web browser in order to

facilitate Internet access for a PDA telephone 100. EEPROM 320 is also coupled to CPU 305 and may be used to store application software.”.)

I. Independent Claim 18

This claim is obvious for the same reasons as claim 1 because claim 18 is substantively identical to claim 1 except in the form of an apparatus claim. (EX-1002, ¶200.)

1. Limitation [18P]

Claim 18’s “*mobile device*” is the same mobile device identified above for limitation [1A]. (EX-1002, ¶200.)

2. Limitations [18A]-[18B]

The Neibauer-Cheng-Ausems-Squibbs combination renders obvious “*at least one processing element comprising a processor coupled to a memory*” [18A] and “*at least one network interface*” [18B]. It would have been obvious that the mobile device comprises “*at least one processing element comprising a processor coupled to a memory,*” as these are basic components the mobile device would have needed to function. (EX-1002, ¶¶201; *see* Ausems, 5:49-54 (“PDA telephone 100 includes a wireless phone engine 210...and PDA engine 290”); Ausems, 7:53-57 (“PDA engine 290... includes central processing unit (CPU) 305, random access memory (RAM) 310, read only memory (ROM) 315, electrically erasable programmable read only memory (EEPROM) 320)...); Ausems, 7:60-64 (“RAM 310 is coupled to CPU 305 and is used as a temporary storage area for data

processed by CPU 305. ROM 315 is coupled to CPU 305. ROM 315 stores the operating system for PDA telephone 100.”.)

It would also have been obvious the mobile device includes at least one “*network interface*.” The ’039 patent defines a “mobile device” as including, among other things, a laptop computer. (EX-1001, 4:26-36.) It was well-known that laptop computers provided the same functionality as desktop computers and could run web browser software and visit web pages on the Internet. (EX-1002, ¶¶202-03.) It therefore would have been obvious 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. (EX-1002. ¶202.)

Neibauer also discloses services such as “Yahoo! Mobile” and “Yahoo! To Go” that enabled content from Yahoo! services to be provided to mobile devices such as pagers, cell phones, web phones, and personal digital assistants (PDAs). (Neibauer, 166-174.) “Yahoo! To Go lets you receive Yahoo! information on your mobile device.” (Neibauer, 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, 171-174.) Although Neibauer does not expressly disclose that Yahoo! Clubs was one of the Yahoo! features that could be made accessible via mobile devices, it would have been obvious to the extend mobile device functionality in Neibauer to cover that

feature, in order to allow user-created clubs to be accessed by users via mobile devices. (EX-1002, ¶96.) This would have been viewed as a logical (and obvious) extension to the existing mobile features described in Neibauer. (EX-1002, ¶¶96-97.)

A network interface would also have been obvious over Neibauer and further in view of Cheng. As discussed in limitation [1D] above, Yahoo! Clubs was accessible over the Internet. As also discussed in limitation [1D] above, Cheng's proxy server 110 is connected to the Internet. (Cheng, 3:65-4:2 ("As shown, the proxy server 110 and the server 102 are connected via a network 114 such as the Internet."); 2:21-24.)

The '039 patent itself defines a "*mobile device*" as including, among other things, a laptop computer. (EX-1001, 4:26-36.) Conventional laptop computers provided the same functionality as desktop computers and were able to access the Internet. (EX-1002, ¶202.) Smaller mobile devices would have "*at least one network interface*" in view of the proposed combination. (EX-1002, ¶202; Ausems, 5:66-6:1 ("Modem 220 is coupled to wireless phone engine 210 and enables PDA telephone 100 to send and receive fax messages, or have Internet access."); Cheng, 12:50-51 ("The amount [of image data] can be based on at least the type of Internet connection the mobile device 108 uses.").)

It therefore would have been obvious that the mobile device of claim 18 would have included “*a network interface*,” a basic and well-known component that allows a mobile device to communicate with other devices over a network such as the Internet. (EX-1002, ¶¶202-03.)

3. Limitation [18C]

The Neibauer-Cheng-Ausems-Squibbs combination renders obvious the “*processing element*” identified in [18A] above “*being configured to*” perform each of the functions of limitation [18C] as explained below. (EX-1002, ¶204.)

4. Limitations [18D]-[18H]

Limitations [18D] (“*capture content at the mobile device*”), [18E] (“*identify a previously established application-based information channel into which the captured content is to be inserted, the identified application-based information channel permitting interaction between a user of the mobile device and one or more additional users*”), [18F] (“*determine information associated with at least one wireless networking functionality of the mobile device*”), [18G] (“*provide, via said at least one network interface, the captured content from the mobile device to at least one server for insertion in association with the determined information into the identified application-based information channel*”), and [18H] (“*receive other content, via the identified application-based information channel, from at least one of the additional users*”) are substantially identical to limitations [1A]-[1E],

respectively. These steps would also have been performed by the “*processing element*” [18C] in the “*mobile device*” described for limitation [18A]. (EX-1002, ¶¶205.)

J. Independent Claim 19

1. Preamble [19P]

The Neibauer-Cheng-Ausems-Squibbs combination renders obvious a “*method*” for the same reasons discussed for claim 1 above. (EX-1002, ¶206.)

2. Limitation [19A]

The Neibauer-Cheng-Ausems-Squibbs combination renders obvious “*receiving, at a server from a mobile device, content for insertion into a previously established application-based information channel, the previously established application-based information channel permitting interaction between a user of the mobile device and one or more additional users*” [19A]. As described above for claim 1, Neibauer’s clubs can have various features including a club message board, chat room, photo sharing feature, among others. (Neibauer, 473.) It would have been obvious that the photo would have been received “*at a server.*” (EX-1002, ¶¶142-45, 206-07.) As described above for limitation [1B], the club photo sharing feature is an “*a previously established application-based information channel.*”

3. Limitations [19B]-[19C]

Limitations [19B] (“*receiving, at the server from the mobile device, information associated with at least one wireless networking functionality of the mobile device*”) and [19C] (“*integrating the content and the information associated with said at least one wireless networking functionality of the mobile device into the previously established application-based information channel*”) are substantially similar to limitations [1C] and [1D]. (EX-1002, ¶208.) Under the proposed combination, the uploaded photo (“*the content*”) would have been inserted and integrated into, and thus would have been viewable through, the club photo sharing feature. (EX-1002, ¶183.) As also described above, under the proposed combination, the photo would have been integrated with the “*information associated with said at least one wireless networking functionality of the mobile device.*” (EX-1002, ¶183.)

As noted, the proposed combination discloses at least two examples of “*information associated with at least one wireless networking functionality.*” Under the first theory, as discussed, this information corresponds to a messaging action or collaboration action by which the club member (through their mobile device) provides a textual name or description for the photo, that will be shared with other members. This theory therefore discloses “*integrating the content and the information associated with said at least one wireless networking functionality*

of the mobile device into the previously established application-based information channel,” because as shown in Figure 21-10 above, the uploaded photo (*“the content”*) is integrated with the messaging or collaboration action (*“information associated with at least one wireless networking functionality...”*), into the club photo sharing feature (*“the previously established application-based information channel”*), both the photo and the textual name and description being presented as integrated and associated with each other. (EX-1002, ¶184.)

Under the second theory, as discussed, the *“information associated with at least one wireless networking functionality”* corresponds to location information about the mobile device used to upload the photo. As explained for limitation [1C] above, under the proposed combination, the user interface in Neibauer could have been adapted to display the photo (or a thumbnail of the photo) with accompanying location information. (EX-1002, ¶¶185.) This could have been implemented in a number of ways, presenting a simple design choice to a POSITA. (*Id.*) 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 on a webpage of the club photo sharing feature with an electronic map showing where the photo was taken, as disclosed in Squibbs. (*Id.*) As another example, the user interface shown in Figure

21-10 could itself have been adapted based on Figures 6 and 7 of Squibbs, such that multiple photos in the album would have been displayed in thumbnail view on an electronic map. (*Id.*) Many other implementations would have been apparent and obvious to an ordinarily skilled artisan. (*Id.*) In any case, the proposed combination would have rendered obvious that the uploaded photo (“*the content*”) is integrated with the location information (“*information associated with at least one wireless networking functionality...*”), into the club photo sharing feature (“*the previously established application-based information channel*”), as both the photo and the location data would be presented as integrated and associated with each other. (*Id.*)

4. Limitation [19D]

Limitation [19D] (“*inserting other content from at least one of the additional users into the previously established application-based information channel*”) is substantially identical to limitation [1E] above, and is obvious for the same reasons under the proposed combination. (EX-1002, ¶209.)

K. Claim 20

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

previously established application-based information channel based on the obtained location information” [20]. Claim 20 was largely addressed in the discussion of limitations [19B]-[19C]. 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. (EX-1002, ¶210; Squibbs, ¶¶0101, 0098.) The proposed combination, moreover, would have resulted in “inserting additional content into the previously established application-based information channel based on the obtained location information,” because the club photo sharing feature would have inserted an electronic map or other location information (“additional content”) based on the location information, for display into the album provided by club photo sharing feature (“application-based information channel”). (Id.)

L. Independent claim 22

The Neibauer-Cheng-Ausems-Squibbs 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 of the server causes the server to perform the method of claim 19” [22]. It would have been obvious the functionalities of Yahoo! Clubs would have been carried out by software code

executed by “*a processing element of the server*,” such as at least one processor or CPU for carrying out software program instructions. (EX-1002, ¶212; Cheng, *e.g.*, 23:16-20 (“Although computer system 1100 is illustrated having a single processor, a single hard disk drive and a single local memory, the system 1100 is optionally suitably equipped with any multitude or combination of processors or storage devices.”), 23:29-31 (“CPU 1204 is the central processing unit of the system, performing calculations and logic operations required to execute a program.”).) It would also have been obvious that the software used to carry out the functions of claim 19 would have been stored on at least one non-transitory computer-readable storage medium, such as a hard drive or random-access memory (RAM). (EX-1002, ¶213; Cheng, *e.g.*, 23:64-24:4 (explaining that instructions may be stored in random access memory or hard disk storage until required by the computer system).)

Under the further combination with Cheng, 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). As explained for limitation [19A], mapping a “*processing element*” to origin web server 102 and proxy server 110 is consistent with the ‘039 patent, which makes clear that a processing element or server can comprise multiple servers. (EX-1002, ¶¶214-15.) And even if the claim

required that the “*processing element*” be contained within a single physical unit (it does not), as explained, it would have been obvious to combine proxy server 110 and origin server 102 into a single device. (EX-1002, ¶215.)

M. Independent claim 23

Claim 23 is an apparatus counterpart to method claim 19 that recites “[a] *server comprising...*”

1. Preamble [23P]

The Neibauer-Cheng-Ausems-Squibbs combination renders obvious a “*server.*” The claimed “*server*” for claim 23 is the same server identified above for limitation [19A]. (EX-1002, ¶216.)

2. Limitations [23A]-[23B]

The Neibauer-Cheng-Ausems-Squibbs combination renders obvious “*at least one processing element comprising a processor coupled to a memory*” [23A] and “*a network interface*” [23B]. It would have apparent and obvious that the server would have comprised “*at least one processing element comprising a processor coupled to a memory,*” as these would have been basic components the server would have needed to function. (EX-1002, ¶217; *see* Cheng, 23:16-19 (“Although computer system 1100 is illustrated having a single processor, a single hard disk drive and a single local memory, the system 1100 is optionally suitably equipped with any multitude or combination of processors or storage devices.”).)

As noted for claim 22, under the further combination with Cheng, the “*processing*

element” would have included a web server and proxy server 110, which is consistent with the ’039 patent. And as noted, it would also have been obvious to combine origin server 102 and proxy server 110, to the extent the claim were construed to require that the claimed processing element be contained in a single server. (EX-1002, ¶109, 217.)

It would also have been obvious that the server would have included at least one “*network interface*.” As noted, the server as described in limitation [19A] is 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.”); Neibauer, 4 (explaining Yahoo! members need access to an Internet connection), 473 (“Access Yahoo! clubs by clicking Clubs on the Yahoo! home page or by going directly to <http://clubs.yahoo.com> to open the page shown in Figure 21-6.”), 64 (“<http://> This is the prefix for the standard type of Internet Web site. The letters stand for Hypertext Transfer Protocol.”) (bold in original).)

It therefore would have been obvious that the server of claim 19 would have included “*a network interface*,” a basic and well-known component that allows a computer to communicate with other devices over a network such as the Internet. (EX-1002, ¶218-19.) For example, Cheng discloses the computer system that carries out the proxy server techniques is coupled to a communication port that facilitates communication with other devices, such as through a wireless network.

(Cheng, 23:44-51 (“Communications with external devices, for example, the other components of the system described herein, occur utilizing communication port 1516. For example, optical fibers and/or electrical cables and/or conductors and/or optical communication (e.g., infrared, and the like) and/or wireless communication (e.g., radio frequency (RF), and the like) can be used as the transport medium between the external devices and communication port 1516.”).) Alternatively, the “*network interface*” can also correspond to gateway 109, which in this scenario, would have been part of the claimed “server” and would have provided an interface between mobile devices and proxy server 110. (EX-1002, ¶219; Cheng, 3:33-36 (“If necessary, a gateway 109 may optionally be provided that interfaces between, for example, the mobile device 108 and the proxy server 110.”).) Under either theory, the claimed server would have included “*a network interface.*” (EX-1002, ¶219.)

3. Limitation [23C]

The Neibauer-Ausems-Cheng-Squibbs combination renders obvious “*said at least one processing element*” identified in [23A] above, “*being configured to*” perform the functions in [23D]-[23G] below. (EX-1002, ¶220.)

4. Limitations [23D]-[23G]

Limitations [23D] (“*receive, from a mobile device, content for insertion into a previously established application-based information channel, the previously*

established application-based information channel permitting interaction between a user of the mobile device and one or more additional users”), [23E] (“receive, from the mobile device, information associated with at least one wireless networking functionality of the mobile device”), [23F] (“integrate the content and the information associated with said at least one wireless networking functionality of the mobile device into the previously established application-based information channel”), and [23G] (“insert other content from at least one of the additional users into the previously established application-based information channel”) are substantially identical to the method steps in limitations [19A]-[19D], respectively. With respect to limitation [23C], as explained, the processing element in the server would have been configured to carry out the operations in Neibauer, Cheng and Squibbs, that carry out these functions. (EX-1002, ¶220.)

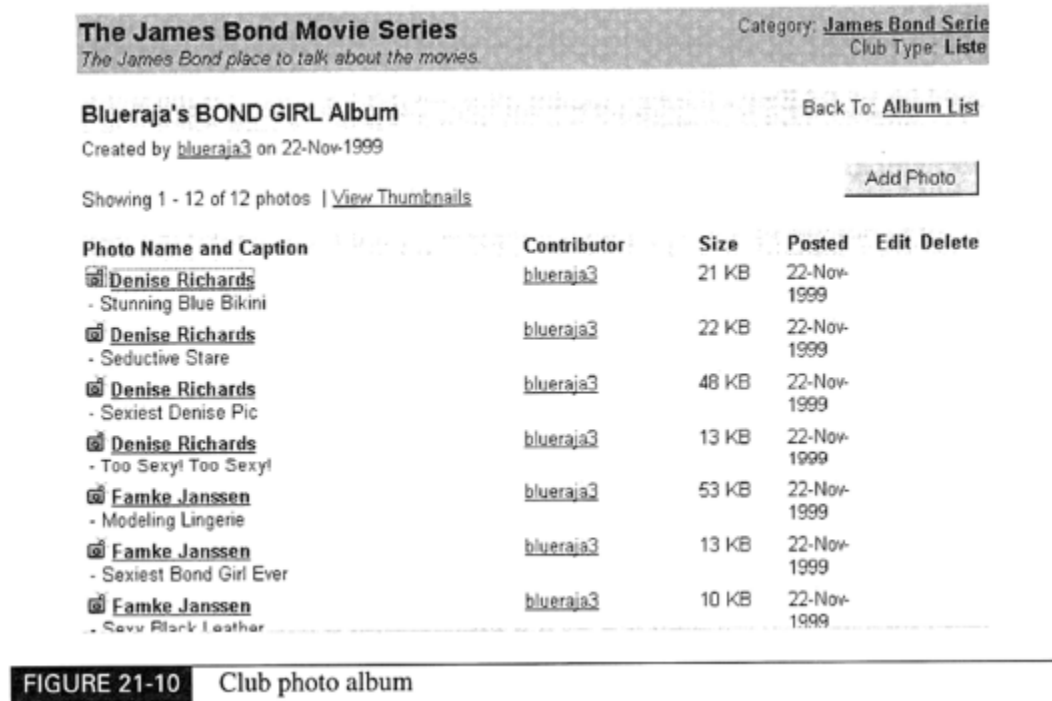
N. Claim 24

The Neibauer-Cheng-Ausems-Squibbs combination renders obvious *“accessing integrated content at the mobile device via the identified application-based information channel, the integrated content comprising a combination of at least a portion of the captured content and at least a portion of the determined information”* [24]. This claim is obvious for largely the same reasons as limitations [1C]-[1D]. As noted previously, the proposed combination would have rendered obvious that an uploaded photo (*“the captured content”*) is integrated with a

messaging action or collaboration action by which the club member (through their mobile device) provides a textual name or description for the photo that will be shared with other members, or location information (“*the determined information*”), into the club photo sharing feature (“*the identified application-based information channel*”), and is accessible at the mobile device, as both the photo and the name, description, or location data would be presented as integrated and associated with each other. (EX-1002, ¶¶183, 221-22.)

O. Claim 25

The Neibauer-Cheng-Ausems-Squibbs combination renders obvious “*integrated content is stored by the at least one server, the integrated content comprising a combination of at least a portion of the captured content and at least a portion of the determined information*” [25]. This claim is obvious for the same reasons as limitation [19C]. The captured content and the information associated with said at least one wireless networking functionality of the mobile device are integrated at the server. (EX-1002, ¶223-25.)



(Neibauer, 478, Fig. 21-10.) Figure 21-10 shows a list of photographs with textual names or descriptions (“*the integrated content*”) for each photo (“*captured content*”) in the album on Yahoo! Clubs, which is hosted on a server.

P. Claim 28

The Neibauer-Cheng-Ausems-Squibbs combination renders obvious “*the application-based information channel is accessible via a mobile website previously established for the user of the mobile device*” [28]. This claim is obvious for the same reasons as limitation [1E]. As noted previously, multiple mobile devices could have been used under the proposed combination with Cheng’s proxy server conversion techniques. (EX-1002, ¶101, 189; Cheng, *e.g.*, 5:11-12, 5:26-29.) It was basic knowledge and obvious to a POSITA that a website

such as the one described in Neibauer would have required at least a web server to provide web pages via the Internet. (EX-1002, ¶106, 223; *see also* Neibauer, 473 (“Access Yahoo! clubs by clicking Clubs on the Yahoo! home page or by going directly to <http://clubs.yahoo.com> to open the page shown in Figure 21-6.”), 64 (“**http://** This is the prefix for the standard type of Internet Web site. The letters stand for Hypertext Transfer Protocol.”) (bold in original). Under the proposed combination, therefore, the application-based information channel is accessible via a mobile website previously established for the user of the mobile device. (EX-1002, ¶226.)

Q. Claim 29

The Neibauer-Cheng-Ausems-Squibbs combination renders obvious “*the application-based information channel is accessible via a personalized content application particularly configured to run on the mobile device*” [29]. As described above for claim 2, the proposed combination discloses a “*personalized content application.*” The proposed combination further discloses that the “*personalized content application*” is “*particularly configured to run on the mobile device.*” (EX-1002, ¶227.)

R. Claim 30

The Neibauer-Cheng-Ausems-Squibbs combination renders obvious “*the other content comprises at least one message relating to the captured content that*

is received at said at least one server and inserted by said at least one server into the application-based information channel” [30]. This claim is obvious for the same reasons as limitation [1C] and claim 8. As noted previously, the information associated with at least one wireless networking functionality can comprise “at least one messaging action.” (See limitation [1C].) The textual name and description of the photo provided by the uploading club member (Neibauer, 477-478 (“3. Enter a name and description of the photo.”)) is “at least one message relating to the captured content that is received at said at least one server and inserted by said at least one server into the application-based information channel.”(EX-1002, ¶158, 228.)

VII. Ground 2: Claim 21 Is Obvious Over Neibauer, Cheng, Squibbs, Bandera.

A. Claim 21

The Neibauer-Cheng-Ausems-Squibbs-Bandera combination renders obvious “*said additional content comprises advertising content*” [21]. As explained in the discussion of claim 20 in Ground 1, when a club member uploads a photo via their mobile device and also transmits location information, “*additional content*” would have been inserted into and displayed by the photo album via the club photo sharing feature, such as an electronic map or other information identifying the location, under the proposed combination with Squibbs.

The prior art for Ground 1 does not appear to disclose the “*additional content*” would have comprised advertising content, but this would have been obvious in further view of Bandera (EX-1017).

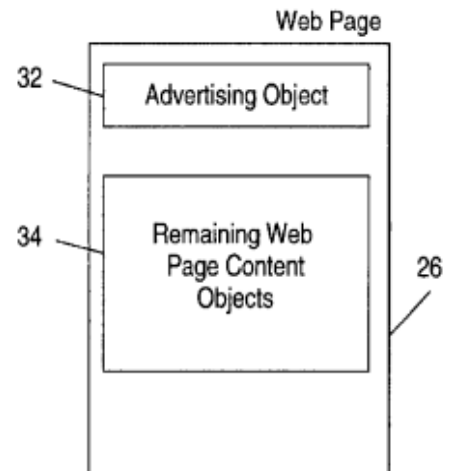
Bandera discloses a technique for selecting and delivering advertisements to an Internet user based on the physical location of their mobile device. In one embodiment, a mobile device can, in response to a request for a web page, obtain and provide to the web server the location of the mobile device (for example using GPS, a cellular base station, or other known techniques of determining geographic location). (Bandera, 2:41-47, 4:46-60, 6:46-7:8.) The web server, in response, generates a requested web page that includes an advertising object. (Bandera, 4:61-5:17, 7:17-30.) The web server selects the advertising object “based on a user location and/or on the time of day. Exemplary advertising objects may include text files, audio files, video files, image files, and the like.” (Bandera, 5:21-25.) As explained in Bandera:

As an example of this aspect of the present invention, a user requests a Web page from a Web server via a mobile Web client. The Web server utilizes user location information transmitted with the Web page request to select an advertisement object that presents information about something that is physically near the user’s present location. For example, information relating to the nearest store in a national chain of stores can be presented within an advertising object displayed within a Web page.

(Bandera, 7:32-40.) Bandera thus discloses providing additional advertising content based on the user's location.

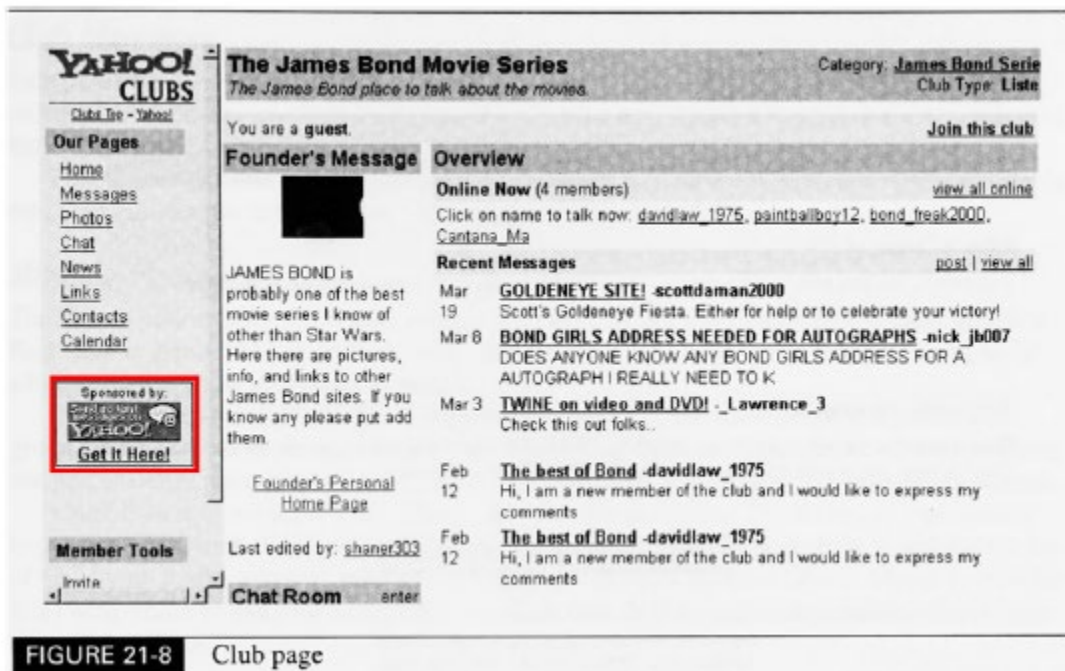
Motivation to Combine Ground 1 Prior Art and Bandera: It would have been obvious to combine the Ground 1 prior art with Bandera, predictably resulting in the method described for claim 20 in which the “*additional content*” not only comprised the electronic map or other location-identifying information as described for claim 20, but further comprised advertising based on the location of the mobile device. Under the proposed combination, therefore, the “*additional content*” that would have been inserted into and displayed by the club photo sharing feature would have also included advertising content based on the location of the mobile device. (EX-1002, ¶235.)

This would have been easy to implement, as placing advertising content on webpages was well-known long before the '039 patent. (EX-1002, ¶236.) In one exemplary implementation, after the club member uploaded a photo with location information, and then viewed the photo on a webpage of the photo sharing feature that included an electronic map or the photo sharing feature that included an electronic map or other location-identifying information, as described for claim 20, that same web page would also have included the location-based advertising content.



(*Id.*) The excerpt of Bandera's Figure 2, for example, shows display of the selected advertising object 32 on the same page along with as the remaining content objects 34 of the page, which a POSITA would have recognized as a typical implementation of a common web banner advertisement. (Bandera, 1:66-2:10.)

Thus, the photo sharing feature described in Neibauer would have been further adapted to insert "*additional content*" comprising both the location information associated with the photo uploaded by the club member (as described for claim 20), and a location-based advertisement. (EX-1002, ¶237.) This combination is entirely consistent with Neibauer, which shows an exemplary club page with an advertisement placed on it:



(Neibauer, 475, Fig. 21-8.)

Bandera is an analogous reference in the same field as the '039 patent of network-based communication systems and information content management on such systems, and would have been reasonably pertinent to problems facing the patent inventors, including how to insert advertising content based on the obtained location of the mobile device, as recited in claim 21. (EX-1002, ¶238.)

A POSITA would have been motivated to combine to increase revenue. (EX-1002, ¶239.) As noted above, Neibauer discloses the ability to place advertisements on club pages. (Neibauer, 475, Fig. 21-8.) The techniques of Bandera would have provided a clear benefit by allowing the club photo sharing webpage to display advertisements based on the current location of the user, which would have resulted in advertisements that were more relevant to the user and their current location. (EX-1002, ¶239.) Bandera provides an express motivation to combine by explaining that targeting users on the basis of location can enhance the effectiveness of advertising and targeting of users. (Bandera, 3:38-42; EX-1002, ¶239.) A POSITA would also have had a reasonable expectation of success, and could have implemented the proposed combination using conventional techniques. (EX-1002, ¶240.)

VIII. Grounds 3-4: Obviousness in Further View of Harvey

Grounds 3-4 are substantially the same as Grounds 1-2 except that they add 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 [1B] in Ground 1, Meta argued in the MDT-Meta-Litigation 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, for purposes of Grounds 3-4, 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*,” as explained for Ground 1, corresponds to the website for creating and managing a new club based on the proposed combination, and the “*mobile website*” to the club website made available to club members via mobile devices, under the proposed combination. (EX-1002, ¶242.) 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. With respect to all other claim limitations in the challenged claims, the Ground 1 analysis applies.

Harvey discloses techniques for allowing users to create on-line communities in which users can communicate and share information, which are similar to the web-based clubs disclosed in Neibauer. (Harvey, 4:24-43.) The key feature of Harvey here is the ability of a community creator to author content for a community before the community is created and launched. (EX-1002, ¶244.) As noted, 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.) More specifically, a user can access a creating module 165 in order to create a new community, which may include web-based community creation. (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 the ability to add content to a community using the community-creation tool, before the community is created. (EX-1002, ¶244.) A user can establish a connection with a community,

among other ways, “through browser access to an appropriate website.” (Harvey, 29:59-62.)

Motivation to Combine with Harvey: It would have been obvious to combine the prior art cited for Grounds 1-2 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, ¶245.) 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, ¶246.) Under the proposed combination, therefore, the “*content management site*” would have included the web-based interface for allowing the founder to create and manage a club disclosed in Neibauer, which would have further permitted the club founder to add content for the club via the mobile information channels, such as initial club messages, initial photos with textual descriptions, and so forth. (*Id.*) This information would have been made available for transmission to “*the mobile website*,” *i.e.*, the club site as delivered to mobile users. (EX-1002, ¶¶246.) Harvey is an analogous reference and would have been reasonably pertinent to problems facing the inventors. (EX-1002, ¶247.)

A POSITA would have been motivated to combine in order to provide club founders with greater customizability for clubs by allowing them to use the club-creation interface to populate mobile information channels with initial content, *before* the club is made available to other members. (EX-1002, ¶248.) This would have allowed the club founder to ensure that other club members would not experience a “blank” club devoid of content, because the club founder would have populated mobile information channels (such as the club message board) with some initial content, thus providing a more engaging club experience for other members, featuring content available from the moment of the club’s creation. (EX-1002, ¶248.) A POSITA also have had a reasonable expectation of success and could have implemented the combination using conventional techniques. (EX-1002, ¶249.)

IX. 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.

B. 35 U.S.C. §325(d)

Advanced Bionics Part 1 is not satisfied because none of the asserted references were cited or applied during prosecution and no asserted reference is substantially the same as any art previously presented. Thus, the Board need not reach Part 2. And any trial will involve fewer claims than challenged here.

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 asserted claims and 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).

X. 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 '039 Patent has been involved in the following matters:

- *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. 24-cv-00896-WHA (N.D. Cal.) (transferred from No. 7:22-cv-00244-ADA-DTG (E.D. Tex.)).
- *Meta Platforms, Inc. v. Mobile Data Technologies, Inc.*, IPR2024-00248 (PTAB)

C. Notice of Counsel and Service Information

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

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XI. Conclusion

IPR is respectfully requested.

Date: January 31, 2025

Respectfully submitted,

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APPENDIX A – LIST OF CLAIMS

[1P] A method comprising:

[1A] capturing content at a mobile device;

[1B] identifying a previously established application-based information channel into which the captured content is to be inserted, the identified application-based information channel permitting interaction between a user of the mobile device and one or more additional users;

[1C] determining information associated with at least one wireless networking functionality of the mobile device;

[1D] providing the captured content from the mobile device to at least one server for insertion in association with the determined information into the identified application-based information channel; and

[1E] receiving other content, at the mobile device via the identified application-based information channel, from at least one of the additional users.

[2] The method of claim 1 wherein the identified application-based information channel comprises a personalized content application.

[3] The method of claim 1 wherein the identified application-based information channel comprises a collaborative workspace.

[4] The method of claim 1 wherein the identified application-based information channel comprises a chat channel.

[8] The method of claim 1 wherein the information associated with said at least one wireless networking functionality of the mobile device comprises information specifying at least one messaging action implementable over said at least one wireless network.

[9] The method of claim 1 wherein the information associated with said at least one wireless networking functionality of the mobile device comprises information specifying at least one collaboration action implementable over said at least one wireless network.

[13] The method of claim 1 wherein the captured content is obtained from a device-captured data source of the mobile device, the device-captured data source

comprising a source of at least one of device-captured video data, device-captured image data, device-captured audio data and device-captured location coordinates.

[14] The method of claim 1 wherein the mobile device comprises at least one of a mobile telephone, a tablet computer and a camera.

[15] The method of claim 1 wherein the mobile device comprises a global positioning system (GPS)-based navigational device.

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

[18P] A mobile device comprising:

[18A] at least one processing element comprising a processor coupled to a memory; and

[18B] at least one network interface;

[18C] said at least one processing element being configured to:

[18D] capture content at the mobile device;

[18E] identify a previously established application-based information channel into which the captured content is to be inserted, the identified application-based information channel permitting interaction between a user of the mobile device and one or more additional users;

[18F] determine information associated with at least one wireless networking functionality of the mobile device;

[18G] provide, via said at least one network interface, the captured content from the mobile device to at least one server for insertion in association with the determined information into the identified application-based information channel; and

[18H] receive other content, via the identified application based information channel, from at least one of the additional users.

[19P] A method comprising:

[19A] receiving, at a server from a mobile device, content for insertion into a previously established application-based information channel, the previously established application-based information channel permitting interaction between a user of the mobile device and one or more additional users;

[19B] receiving, at the server from the mobile device, information associated with at least one wireless networking functionality of the mobile device:

[19C] integrating the content and the information associated with said at least one wireless networking functionality of the mobile device into the previously established application-based information channel; and

[19D] inserting other content from at least one of the additional users into the previously established application-based information channel.

[20] The method of claim 19, wherein integrating the content and the information associated with said at least one wireless networking functionality of the mobile device comprises: obtaining location information of the mobile device; and inserting additional content into the previously established application-based information channel based on the obtained location information.

[21] The method of claim 20 wherein said additional content comprises advertising content.

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

[23P] A server comprising:

[23A] at least one processing element comprising a processor coupled to a memory; and

[23B] at least one network interface;

[23C] said at least one processing element being configured to:

[23D] receive, from a mobile device, content for insertion into a previously established application-based information channel, the previously established application-based information channel permitting interaction between a user of the mobile device and one or more additional users;

[23E] receive, from the mobile device, information associated with at least one wireless networking functionality of the mobile device;

[23F] integrate the content and the information associated with said at least one wireless networking functionality of the mobile device into the previously established application-based information channel; and

[23G] insert other content from at least one of the additional users into the previously established application-based information channel.

[24] The method of claim 1 further comprising accessing integrated content at the mobile device via the identified application-based information channel, the integrated content comprising a combination of at least a portion of the captured content and at least a portion of the determined information.

[25] The method of claim 1 wherein integrated content is stored by the at least one server, the integrated content comprising a combination of at least a portion of the captured content and at least a portion of the determined information.

[28] The method of claim 1 wherein the application-based information channel is accessible via a mobile website previously established for the user of the mobile device.

[29] The method of claim 1 wherein the application-based information channel is accessible via a personalized content application particularly configured to run on the mobile device.

[30] The method of claim 1 wherein the other content comprises at least one message relating to the captured content that is received at said at least one server and inserted by said at least one server into the application-based information channel.

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. 9,032,039, 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 13,773. 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: January 31, 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. 9,032,039 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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