UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

META PLATFORMS, INC.,
Petitioner

v.

MOBILE DATA TECHNOLOGIES LLC,
Patent Owner

IPR2024-00249
Patent 9,619,578 B2

PATENT OWNER'S RESPONSE TO PETITION
35 U.S.C. § 316(a)(8), and 37 C.F.R. § 42.120

TABLE OF CONTENTS

I. INTRODUCTION 1

A. Overview of Technology in 2002 2

B. The '578 Patent 2

C. Asserted Grounds and Cited References 5

1. Neibauer 5

2. Ausems 10

3. Cheng 11

4. Squibbs 13

5. Combination of Neibauer and Cheng 13

6. Combination of Neibauer and Squibbs 17

II. POSITA 20

III. CLAIM CONSTRUCTION 21

A. "Application-Based Information Channel" 21

B. "Mobile Device" 24

C. "Wireless Network Functionality of the Mobile Device" 30

IV. APPLICABLE LEGAL STANDARDS 32

V. ARGUMENT 33

A. Ground 1: The Challenged Claims are Not Obvious Over Neibauer In View Of Ausems, Cheng, and Squibbs. 33

1. Neibauer Does Not Teach or Suggest an "Application-Based Information Channel" 33

2. Limitation 1[a] is Not Taught By Neibauer Alone, Nor in Combination With Ausems, Cheng, and/or Squibbs 39

3. Limitation 1[b] is Not Taught By Neibauer Alone, Nor in Combination With Ausems, Cheng, and/or Squibbs 41

4. Limitation 1[c] is Not Taught By Neibauer Alone, Nor in Combination With Ausems, Cheng, and/or Squibbs 42

5. Other Challenged Claims 44

a. The Petition Fails as to Claims 9 and 11 44

b. The Petition Fails as to Claims 12 and 16 44

c. The Petition Fails as to Claim 17 45

d. The Petition Fails as to Claim 21 45

e. The Petition Fails as to Claim 22 45

B. Ground 2: The Challenged Claims Are Not Obvious Over Ground 1 In View Of Harvey. 46

C. Grounds 1-2 Additionally Fail Because Neibauer is Nonanalogous Art. 47

VI. CONCLUSION 56

TABLE OF AUTHORITIES

Cases **Page(s)**

Corephotonics, Ltd. v. Apple Inc.,
84 F.4th 990 (Fed. Cir. 2023) 47

Dig.-Vending Servs. Int'l, LLC v. Univ. of Phx., Inc.,
672 F.3d 1270 (Fed. Cir. 2012) 28

Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.,
800 F. 3d 1375 (Fed Cir. 2015) 33

Ex Parte Chris Brough,
No. 2022-001819, 2022 WL 16861406 (P.T.A.B. Nov. 10, 2022).....51

Ex Parte Ellis,
No. 2017-003864, 2018 WL 2059617 (P.T.A.B. Apr. 24, 2018).....52

Ex Parte Kulkarni,
No. 2011-013039, 2014 WL 262117 (P.T.A.B. Jan. 22, 2014) 52, 53

Ex Parte Lee,
No. 2017-005938, 2018 WL 1621804 (P.T.A.B. Mar. 28, 2018).....52

Ex Parte Malloy,
No. 2018-008189, 2019 WL 2369854 (P.T.A.B. May 28, 2019) 52

Ex Parte Van Herpen,
No. 2014-009097, 2016 WL 7097661 (P.T.A.B. Nov. 29, 2016).....55

Graham v. John Deere Co.,
383 U.S. 1 (1966).....32

In re Baxter Int'l, Inc.,
678 F.3d 1357 (Fed. Cir. 2012) 32

In re Bigio,
381 F.3d 1320 (Fed. Cir. 2004) 48, 53

In re Clay,
966 F.2d 656 (Fed. Cir. 1992) 51, 55

In re Grasselli,
713 F.2d 731 (Fed. Cir. 1983) 33

In re Magnum Oil Tools Int'l, Ltd.,
829 F.3d 1364 (Fed. Cir. 2016) 32

In re NuVasive, Inc.,
842 F.3d 1376 (Fed. Cir. 2016) 32

In re Oetiker,
977 F.2d 1443 (Fed. Cir. 1992) 49

KSR Int'l Co. v. Teleflex Inc.,
550 U.S. 398 (2007).....32

Phillips v. AWH Corp.,
415 F.3d 1303 (Fed. Cir. 2005) 21

Vitronics Corp. v. Conceptronic, Inc.,
90 F.3d 1576 (Fed. Cir. 1996) 21

Statutes

35 U.S.C. § 103.....5

Other Authorities

Manual of Patent Examining Procedures § 2145.....32

Regulations

37 C.F.R. § 1.75 28

37 C.F.R. § 42.100 21

EXHIBIT LIST

Ex.	Description
2001	Declaration of Kevin C. Almeroth, Ph.D. ("Almeroth") [WITHDRAWN]
2002	*Curriculum Vitae* of Kevin C. Almeroth, Ph.D. [WITHDRAWN]
2003	U.S. Patent No. 7,277,927 to Rensin et al. ("Rensin")
2004	Declaration of Erik Dykema (PHV Application)
2005	Reserved
2006	Reserved
2007	Declaration of Dr. Nenad Medvidović
2008	CV of Dr. Nenad Medvidović
2009	Alia Paavola, *Smartphone History: A Complete Timeline* (Dec. 19, 2022), available at https://www.textline.com/blog/smartphone-history
2010	Brian L. Clark, *2002 Laptop Guide*, CNN Money (Apr. 5, 2002), available at https://money.cnn.com/2002/04/11/pf/features/laptop/mag_laptop_picks/hs~index.htm
2011	National Institute of Standards and Technology, Glossary, available at https://csrc.nist.gov/glossary/term/mobile_device
2012	https ://www.ruckusnetworks.com/insights/wireless-networks-understanding-your-wireless-connection/
2013	Paul Brannen, BBC News, SCI/TECH, *Wap - wireless window on the world*, available at news.bbc.co.uk (Dec. 8, 1999) last viewed Sept. 8, 2024
2014	Gottried Vossen & Stephan Hagemann, *From Version 1.0 to Version 2.0: A Brief History Of the Web*, in Working Papers, European Research Center for Information Systems No. 4. (eds. Becker, J., *et al.*, Münster 2007), available at https://www.econstor.eu/bitstream/10419/58411/1/717284069.pdf last viewed Sept. 29, 2024
2015	Steffen Zellfelder, *Is it bad to leave your laptop always plugged in?*, PC World (Aug. 29, 2023) https://www.pcworld.com/article/2038685/laptop-macbook-always-plugged-in-is-that-bad.html last viewed Sept. 29, 2024
2016	https://wirelesslogic.com/iot-glossary/what-is-hsdpa/#:~:text=Introduced%20with%20Release%205%20of,a%20higher%20data%20transfer%20rate

2017	Keitaro, *Marketing Mattters: History of Mobile Browsers* (Oct. 9, 2023), available at https://blog.keitaro.io/en/marketing-matters-history-of-mobile-browsers/ last viewed Sept. 30, 2024
2018	*i-Mode – Using CHTML*, available at https://www.tutorialspoint.com/i-mode/imode_using_chtml.htm last viewed Sept. 30, 2024
2019	Robin Osborne, *A Brief History of HTML Part 1* (July 17, 2025), available at https://www.robinosborne.co.uk/tag/chtml/ last viewed Sept. 30, 2024
2020	Brooke Crothers, *IBM Joins the Windows CE-based Race* (Jan. 2, 2002), available at https://www.cnet.com/culture/ibm-joins-the-windows-ce-based-race/, last viewed Sept. 30, 2024
2021	Chris Tilley, *IBM Workpad z50 Review* (Mar. 3, 2005), available at https://www.hpcfactor.com/reviews/hardware/ibm/workpad-z50/, last viewed Sept. 30, 2024
2022	*Jornada 820 palmtop PC, 1998*, available at https://www.hp.com/hpinfo/abouthp/histnfacts/museum/personalsystems/0038/index.html, last viewed Sept. 30, 2024
2023	Pen Computing Magazine, *LG Electronics Phenom II* (Dec. 1997), available at https://www.pencomputing.com/WinCE/phenom2.html, last viewed Sept. 30, 2024

I. INTRODUCTION

Meta Platforms, Inc. ("Petitioner") filed a Petition for *Inter Partes* Review ("IPR"), challenging Claims 1-19, 21, and 22 (the "Challenged Claims") of U.S. Patent No. 9,619,578 B2 (the "'578 Patent"). Paper 2 ("Petition"; Pet.). The Board instituted IPR. Paper 11 ("Decision").

The Petition fails because it improperly ignores the mobile-centric nature of the '578 Patent's technology as claimed. As explained below, the Challenged Claims are directed to technology that enables content sharing across a "wide range" of *mobile devices*. Petitioner's references – at best – show some of these functions implemented on conventional *personal computers*. But even when combined as proposed, they fail to show that the claimed functionality – including the ability to receive *and send* content via a mobile device with limited processing and display capabilities – would have been obvious.

The Petition also fails because it principally relies on a reference (Neibauer) that is non-analogous art. The reference – a "how to" guide providing simplified guidance to laypeople as to how to perform basic computing tasks – would not have been considered relevant to a POSITA interested in addressing the problems of the '578 Patent.

For these reasons, and others presented below, the Board should issue a Final Written Decision affirming the patentability of all the Challenged Claims.

A. Overview of Technology in 2002

At the time of the priority date of the '578 Patent (2002) the state of the art of mobile devices was markedly different from today. Medvidović Decl. (Ex. 2007) ¶¶34-43. Mobile devices could access the internet, but their capabilities (screen, processing, user input, and navigational) were greatly limited. *Id*. ¶41.

In addition, internet usage over mobile devices was essentially one-way. *Id*. ¶42. That is, the internet pages that were accessible by mobile devices in 2002 were specially-modified mobile versions of the full webpage. *Id*. These mobile versions were significantly pared down, including limited graphics and were generally designed to push information to the user. *Id*. These webpage versions were essentially one-way communications; they had limited, if any, bi-directional interaction capabilities. *Id*.

B. The '578 Patent

The '578 Patent begins by explaining that the focus of the disclosed technology is to expand content access via *mobile* devices:

> One of the most rapidly expanding aspects of wireless networking involves the accessing of information content over wireless networks via *web-enabled mobile devices*. Examples of such devices include *mobile telephones, personal digital assistants (PDAs), palmtop computers*, etc.

'578 Patent 1:30-35 (emphasis added). More specifically,

> An important challenge in this context relates to facilitating the process of creating, publishing, distributing or otherwise managing information content so as to provide optimal presentation *consistent with the limited display space and navigational capabilities of* ***typical mobile devices***.

Id. 1:40-45 (emphasis added).

That is, the crux of the disclosure of the ’578 Patent and its claims are technologies that enable content sharing on *mobile* devices with limited technical capabilities, which were previously incapable of enabling such functionality.

Likewise, the ’578 Patent emphasizes that one advantage provided by its disclosed technology is the ability to “operate independently of the user device operating system or other user device configuration parameters, such that a given user may author, create, publish, send, convey, share, receive, respond to, subscribe to, collaborate with, track, transact, maintain and manage personalized messaging content *from any type of user device* running any operating system.” ’578 Patent 18:39-45 (emphasis added).

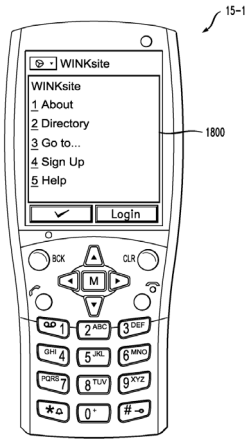
The ’578 Patent exemplifies use of the claimed technology through a “web-enabled mobile telephone”:

> FIG. 18 shows an example mobile device 15-1 suitable for use in the system of FIG. 1A. *The mobile device 15-1 in this example is in the form of a web-enabled mobile telephone*, but as indicated previously herein, the invention does not require the use of any

particular type or configuration of mobile device.

’578 Patent 14:54-60 (emphasis added). *See also* ’578 Patent FIG. 18:

FIG. 18



As the ’578 Patent describes, implementing the disclosed technology can enable the “typical mobile device” (like FIG. 18’s “mobile telephone”) to share and interact with content, notwithstanding its apparent “limited display space and navigational capabilities.”

Independent Claim 1 of the ’578 Patent is representative and recites:

1. A method comprising:

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

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

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

As explained below, the Petition fails to show how the cited references teach or suggest various features of Claim 1, including its "application-based information channel."

C. Asserted Grounds and Cited References

Petitioner asserts the challenged claims are unpatentable based on the following grounds under 35 U.S.C. § 103.

Ground	Challenged Claims	References
1	1-19, 21-22	Neibauer (EX1003), Ausems (EX1006), Cheng (EX1005), and Squibbs (EX1011)
2	1-19, 21-22	Ground 1 + Harvey (EX1010)

1. Neibauer

"How to Do Everything with Yahoo!" by Alan Neibauer describes aspects of Yahoo! services available in 2000. Considering Neibauer's "how-to" format, it does not teach modifications to the Yahoo! services, but instead merely describes what existed at the time of publication.

a. Chapter 21: Yahoo! Clubs

The Petition principally relies on Neibauer's Chapter 21 ("Communicating with Clubs, Message Boards, Personals, and More;" pp. 467-491). That chapter discusses explains how to use the Yahoo! Clubs feature to collaborate with other Yahoo! users. Pet. at 10.

The Yahoo! Clubs feature is described and depicted in Neibauer as being accessed by a personal computer with a "full size" display:

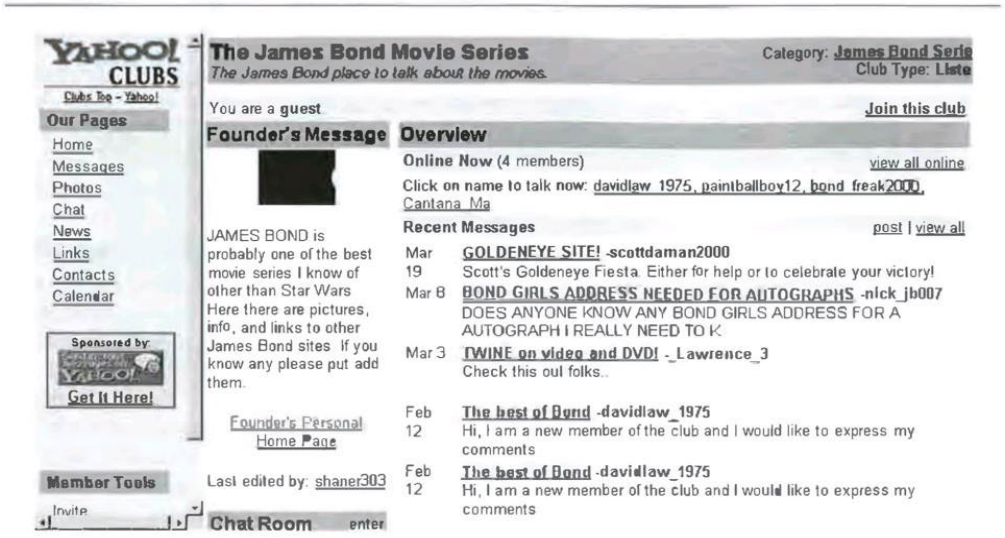


FIGURE 21-8 Club page

Neibauer at 475 ("Club page").

Neibauer also describes and depicts the Yahoo! Clubs photo album feature, which allows a user to browse and view existing photos and upload new photos:

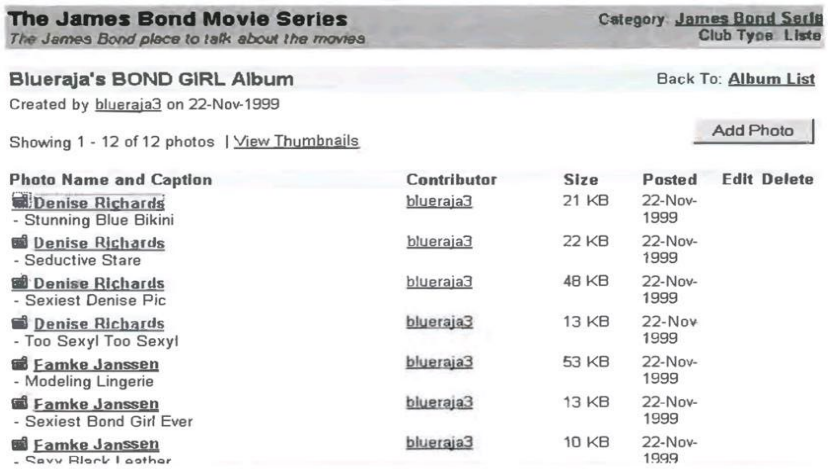


FIGURE 21-10 Club photo album

Neibauer at 478 ("Club photo album").

b. Chapter 7: Yahoo! Mobile

Petitioner also cites another section of Neibauer: Chapter 7 ("Your Yahoo! Home Away from Home;" pp. 155-180). Neibauer Chapter 7 describes how to use "Yahoo! Mobile" to access certain Yahoo! services via mobile devices. Pet. at 10.

Considering the state of mobile technology in 2000, when Neibauer was published, the capabilities of "Yahoo! Mobile" described in Neibauer are extremely limited. Ex. 2007 ¶¶101-104. Notably, the only Yahoo! service that Neibauer describes as being available on mobile phones is "Mobile Alerts," through which short alphanumeric messages (e.g., stock prices, weather reports) can be sent to a cell phone or pager. *Id.*; Neibauer at 167-168.

Neibauer also describes a "Yahoo! To Go" features used to configure PDAs to access simplified versions of certain Yahoo! web pages. *Id.* at 171-172.

Specifically, Neibauer shows a user selecting from an option of ten checkboxes ("Address Book," "Calendar," "Mail," etc.) to personalize the content available on their PDA:

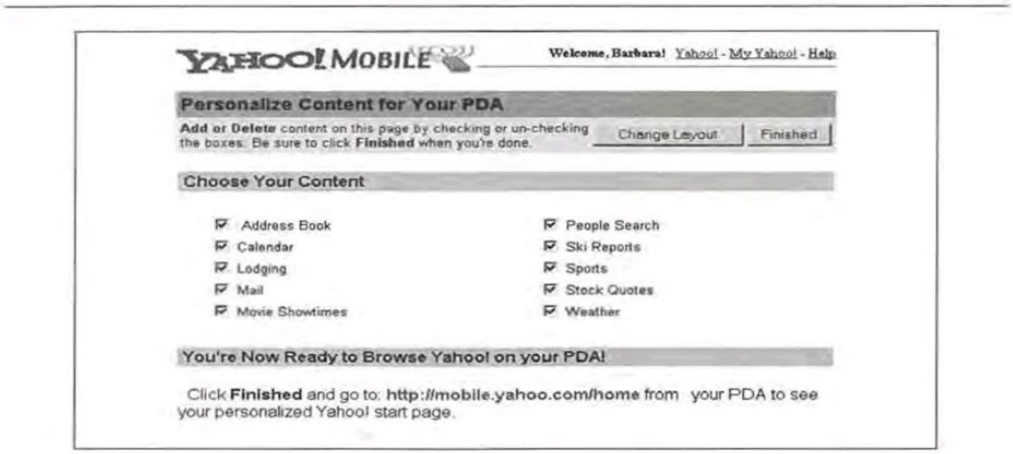


FIGURE 7-15 Adding content to your PDA Yahoo! menu

Id. at 173-174.

Neibauer describes that the referenced "Yahoo! To Go" features were available only on a limited number of PDAs. Neibauer at 171. Notably, even on those compatible devices, the mobile services shown in Neibauer utilized text-only interfaces, with no images at all:

Id.

But Nothing in Neibauer suggests that Yahoo! Clubs – which is depicted as involving 'full featured' webpages including those enabling the browsing and uploading of photos – was (or even could have been) accessed via Yahoo! Mobile. Ex. 2007 ¶¶107-111. Neibauer explains that Yahoo! services – including Yahoo! Clubs – are accessible using a personal computer equipped with a dial-up internet connection. Ex. 1003, 21-22.

Nothing in Neibauer suggests that the features described in Chapter 21 (Yahoo! Clubs) could be performed via mobile devices. Ex. 2007 ¶¶107-111. On the contrary: the limited nature of Yahoo! Mobile (in view of the technical limitations of mobile devices in 2000) reinforces why Yahoo! Clubs (as described in Neibauer's Chapter 7) was not – and could not have been – accessed via Yahoo! Mobile. Ex. 2007 ¶¶107-111. In addition, nothing in Neibauer suggests that Yahoo! Clubs could send content via a wireless network *separate from the internet*. Ex. 2007 ¶100.

Moreover, even assuming (incorrectly) that Yahoo! Clubs was accessible in 2000 via Yahoo! Mobile, that would, at best provide a mobile user the ability to *view* information received from the internet. But nothing in Neibauer suggests that a user could *provide* content to Yahoo! Clubs *via Yahoo! Mobile*. Ex. 2007 ¶¶97-100. As shown above, the limited nature of the Yahoo! Mobile functionality described in Neibauer reinforces that such a function was *not* possible. Ex. 2007 ¶¶97-111.

2. Ausems

Ausems describes a combination Personal Digital Assistant ("PDA") and mobile phone with a digital camera. However, Ausems does not teach any method for uploading digital images to a web-based shared information channel from a digital camera of a mobile device. Ex. 2007 ¶¶129-142. Instead, Ausems states that "PDA/wireless telephone combinations" of that time "are unable to run application software packages or transmit and receive video data." Ex. 1006 1:35-37. Ausems does not explain how to remedy this deficiency because it is mainly concerned with the physical design of a PDA telephone device, not the specific operation of the asserted features. *See, e.g.*, Ex. 1006, Figs. 1a-1p.

But nothing in Ausems teaches *how* to transmit images from the PDA. Ex. 2007 ¶¶192-193. Indeed, Ausems acknowledges that "PDA/wireless telephone combinations *are unable to* run application software packages or *transmit and receive video data*." Ex. 1006 1:35-37 (emphasis added). This explains why Petitioner cites to Ausems only for the proposition that a mobile device may be combined with a camera, not how a mobile device like a PDA could upload digital images to a website (because Ausems provides no disclosure as to how such a feat would be accomplished).

Therefore, Ausems does not disclose how to transmit digital photographs from a mobile device to an application-based information channel.

3. Cheng

Cheng describes reformatting a web site and transmitting the transformed webpage to a mobile device:

> A user generates a user request for a web page from a mobile device to a proxy server. The proxy server forwards the user request to an origin web server, which returns the requested web page to the proxy server. A conversion engine within the proxy server extracts the desired content from the web page, and reformats the content in accordance with one or more predefined transform methods associated with the one or more mobile devices before *transmitting the transformed web page with the desired content to the one or more mobile devices*.

Cheng, Abstract (emphasis added).

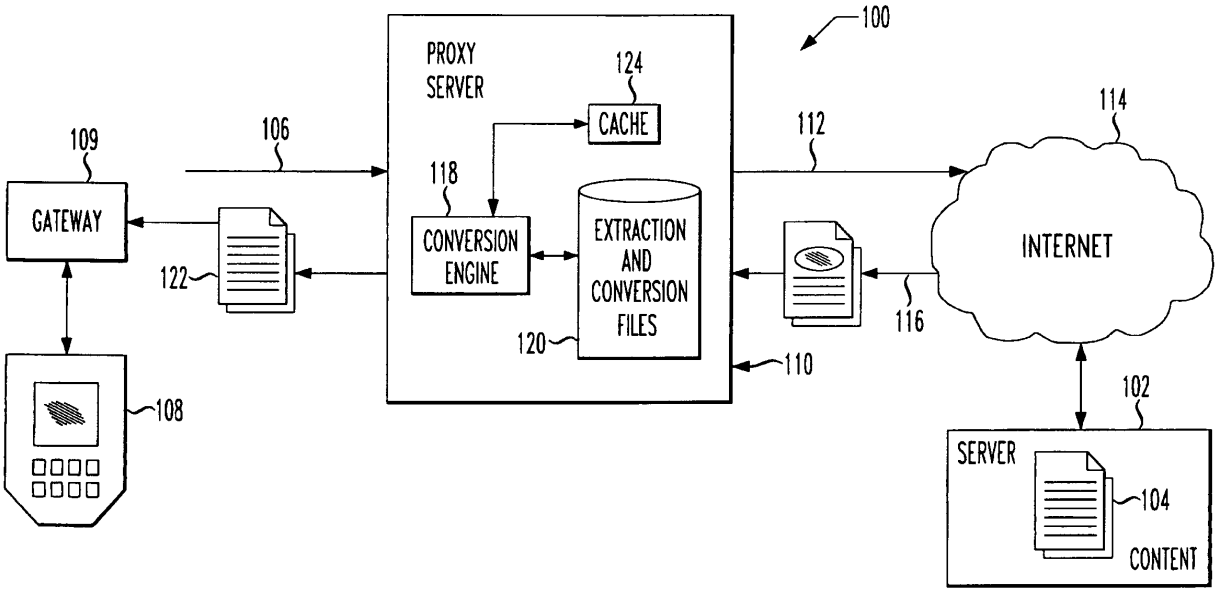
Cheng contemplates a type of universal website translation service that operates in the form of a go-between proxy server for one-way conversion of conventional websites into a format viewable on mobile devices at the time. Ex. 2007 ¶¶119-128.

Cheng's proxy server purports to operate by receiving (or retrieving a cached copy of) a website, and then applying a series of transformations to the website content ("SW-Transforms") which could be specified on a global basis (for all recipients) or on a device-specific basis (based on a recipient's specific mobile

device). Ex. 1005 4:56-5:10; and col. 17-22 (exemplary SW-Transforms); Ex. 2007 ¶¶122-125. Cheng's SW-Transforms include the capability of adding, replacing, or removing HTML tags and/or text from the source web page in order to attempt to format it for the destination mobile device. *Id*.

As shown below, Cheng is limited to the transfer of data one-way, from the conventional website (web page **104**), through the proxy server (**110**), into a reformatted web page (**122**) that is *transmitted to* the mobile device (**108**):

FIG. 1



Cheng, FIG. 1; Ex. 2007 ¶¶127-128.

But nowhere does Cheng suggest transmission of content *from the mobile device*. *Id*. Instead, Cheng's disclosure is limited to "dynamically extracting a portion of content from a web page and reformatting the extracted content for *viewing* on a mobile device." Cheng, 1:14-16. Cheng only describes its mobile

device as receiving information for viewing, not sending such content. Ex. 2007 ¶¶127-128.

4. Squibbs

Squibbs describes recording and displaying data (such as photos) along with the location where the photo was taken. Squibbs, Abstract. In a particular embodiment, Squibbs describes a digital camera 90 that transmits photo image data to a cell phone 20, which in turn uploads the image data over a cellular connection to service system 40 for storage on network store 43. Squibbs, ¶0101, Fig. 11 (showing transfer 105). Squibbs explains that the cell phone can determine location information of the image data in a number of ways, including by using "a location server of the mobile radio infrastructure," or using "a GPS system built into the cell phone." Squibbs, ¶0098. After determining the location information, the cell phone may upload the photo image data and transmit the location information to a network store 43. Squibbs, ¶0101.

5. Combination of Neibauer and Cheng

The challenged claims recite some variation on "providing a first interface permitting designation of at least one content item, via a mobile device, for insertion into an application-based information channel, the at least one content item comprising media data captured by the mobile device." Petitioner maps one or more of the referenced features onto the upstream transfer of pictures from the mobile

device through the Cheng proxy server to the Neibauer web server. Pet. at 12-25; Ex. 2007 ¶354. As explained below, Neibauer and Cheng do not satisfy the limitations of the Challenged Claims (including Claim 1), even if combined in the manner proposed.

First, Petitioner asserts "it was well-known that conventional laptop computers provided the same functionality as desktop computers and could run web browser software and visit web pages on the Internet." Pet. at 16. Petitioner then asserts that the Yahoo! Clubs feature "would have been accessible to a user of a mobile device such as a laptop computer." *Id.* But, as explained below, the term "mobile device" should not be construed as full-capability computer (e.g., laptop) that uses conventional web pages. Thus, accessibility of full-capability laptops to the Yahoo! Clubs functionality is irrelevant as to whether *mobile devices* could provide content, which is received and integrated into such Yahoo! Clubs functionality. Instead, the relevant inquiry is whether the cited art teaches that mobile devices (as properly construed) provide device-captured content for integration into a mobile version of Yahoo! Clubs site. This is something the cited art, alone or in combination, does *not* suggest.

After asserting that the Clubs feature would be accessible to a user of a mobile device, Petitioner admits (in the next paragraph) that "Neibauer does not expressly disclose that Yahoo! Clubs was one of the Yahoo! features that could be made

accessible via mobile device." Pet. at 17. Petitioner understates Neibauer's disclosure. Neibauer is a "how-to" guide for Yahoo! functionality. It explicitly indicates the *limited* subset of Yahoo! features available to mobile devices. But none of these features provide any sort of mobile device-supplied device-captured data to be integrated into a mobile information channel, let alone into the Yahoo! Clubs functionality. Nothing in Neibauer suggests any such extension of Yahoo! Clubs functionality to mobile devices. And such an extension would *not* have been obvious, especially in light of the state of the art at the time of the '578 Patent. Ex. 2007 ¶356.

Adding Cheng's down-converting mobile site generation to Neibauer would not render the Challenged Claims obvious. Cheng is designed for *one-way* data transfer in response to a request from a mobile client. Ex. 2007 ¶357. In other words, the only mobile device-supplied data in Cheng is a website request (106) provided to a proxy server (110). Like Neibauer, there is no suggestion of any mobile device-supplied captured data to be integrated into an information channel, as in the claims. *Id.*

A POSITA would not find such two-way communication obvious in light of the teachings of Cheng, even when combined with the (computer-based) Yahoo! Clubs functionality *Id*. Such an undertaking would require a new up-conversion functionality that is simply not taught or suggested by *any* of the references, alone

or in combination. *Id*. Given the state of the art, developing such functionality would have required significant work and would not have been obvious to a POSITA. *Id.* Indeed, Cheng's down-converting of a full webpage does not instruct or even make obvious that one would subsequently *up-convert* data from a mobile device and provide it back to the webserver (let alone how to perform such a feature). *Id.*

Additionally, unlike downloading data to a client, uploading data to a server often implies a persistent connection between the two, which among other things requires the server to keep track of the client's state. Ex. 2007 ¶358. An intermediary such a proxy server (which, again, presents itself to the content server as and plays the role of the client) would have to account for issues like persistent connections with and state tracking of the actual client using the proxy server. *Id.* But Cheng is devoid of any such teaching. *Id*. In fact, Cheng's disclosure of a cache (which saves previously-requested web pages locally in the proxy server so that the proxy server can return that local copy rather than querying the origin web server every time) would directly interfere with the sort of two-way communication scheme Petitioner advances. *Id*.

Thus, contrary to Petitioner's assertion (Pet. at 20), Cheng could *not* simply be a "bolt-on" functionality that affords mobile device upload capabilities. *Id.* And even if Cheng was a "bolt-on" to the Yahoo! Club functionality of Neibauer, it would merely afford an ability to *view* Yahoo! Clubs on a mobile device, without affording

any ability to *upload* content. Extensive modifications to Cheng would be required, none of which are not taught by Neibauer or Cheng (alone or in combination). Further, because no guidance as to these modifications is provided by the cited art, such modifications would require undue experimentation and would also not provide a reasonable likelihood of success. Ex. 2007 ¶359.

Again, there is no record evidence of how the upload functionality disclosed in Neibauer worked and what accommodations would have been required for Cheng to support it. In any event, Petitioner's proposed combination involves only an unmodified Cheng that does not disclose or suggest that it is configured for supporting client-to-server uploads.

As a result, even were the Board to find sufficient motivation to combine and reasonable expectation of success for Petitioner's Neibauer-Cheng combination, such combination *still* would not disclose all the limitations of the challenged claims.

6. Combination of Neibauer and Squibbs

Likewise, Neibauer in combination with Squibbs does not teach or suggest content sharing using a mobile device, as in the claims (including limitations [1b] and [1c]). Petitioner asserts it would be obvious to combine the geographic location of a photo determined according to Squibbs with the photo sharing feature provided in Yahoo! Clubs in Neibauer. Pet. at 37. Indeed, Petitioner asserts that the Yahoo! Clubs photo sharing feature would be adapted to display location information

associated with uploaded photos via map-based user interfaces similar to the maps depicted in FIGS. 6-7 of Squibbs and a Yahoo! Maps feature detailed in Neibauer. *See id*., 33-38. As shown below, both Squibbs and the Yahoo! Clubs of Neibauer require a personal computer, not a mobile device. Ex. 2007 ¶¶145-147. But there is no teaching in any of the references of sharing information from a mobile device with other users. *Id.*

Referring first to Squibbs, the map-based user interfaces depicted in FIGS. 6-7 of Squibbs are generated by an album program 50, which resides on a personal computer (e.g., PC 5). Squibbs ¶¶31-32, 64. After cell phone 20 of Squibbs transmits the location information to the network store 43, the album program 50 stored in the PC 5 receives the location data (e.g., location log 100) from network store 45 to generate the respective maps. Squibbs ¶¶113-114; FIG. 12. As such, the map-based user interfaces generated by the album program 50 and depicted in FIGS. 6-7 of Squibbs are clearly designed for presentation via a display that is ***part of a PC*** and not a previously established application-based information channel permitting interaction with a mobile device (e.g., with limited display space and limited navigational capabilities). Ex. 2007 ¶146.

Moreover, as shown above, the Yahoo! Clubs feature of Neibauer is a web-enabled feature that is designed for use via a computing device that is unencumbered by the limited display space and navigational capabilities of a mobile device. Indeed,

the Yahoo! Map page includes a Zoom Out and Zoom In bar positioned above the displayed map to allow the user to navigate to different scales of view in the depicted map, as shown in the reproduced image below.

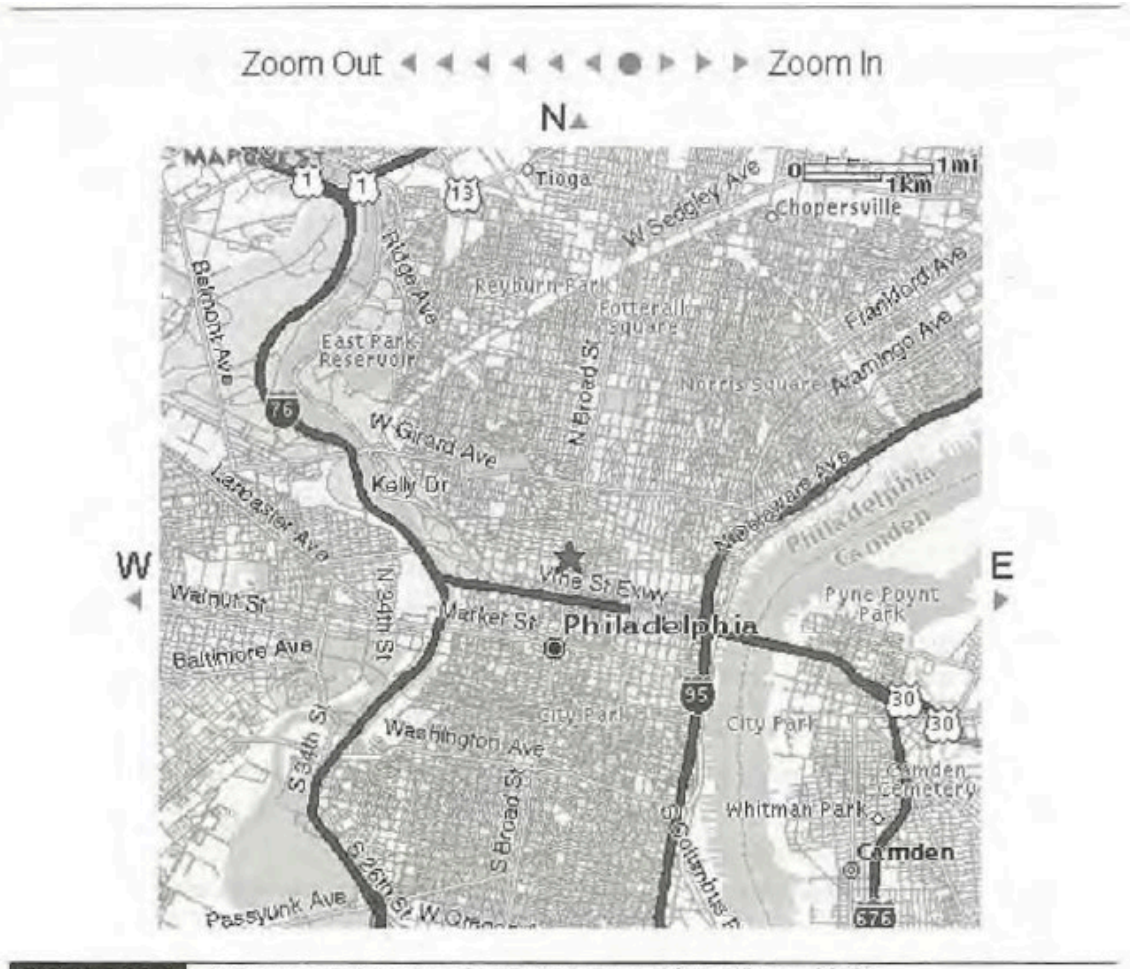


FIGURE 10-3 Map zoomed out two levels (compare this to Figure 10-2)

Neibauer, p.225.

The zoom in/out navigation tools provided on the Yahoo! Map feature cannot be provided on an information channel permitting interaction between mobile device users due to the limited display space and navigational capabilities of the mobile devices. Ex. 2007 ¶147. Moreover, Neibauer never describes that the Yahoo!

Mobile feature is capable of presenting complex graphics and interactive features (e.g., zoom) via a mobile device. *Id*. Instead, Neibauer (like Squibbs) clearly contemplates accessing the Yahoo! Map via desktop computers because the map is depicted as a separate object in the browser window that can be saved and annotated in the Windows Paint program. Neibauer, p.225. Indeed, it would be impossible to perform the functions provided in Neibauer to save the map image via a mobile device as detailed in the instructions for doing so in Neibauer. *See id., e.g.*, p.227 (Instructional Navigational Graphic).

In this way, and as will be discussed in detail below, the proposed combination of Neibauer, Cheng, and Squibbs fails to integrate content and information associated with a wireless networking functionality (e.g., location data) provided by a mobile device into an information channel permitting interaction between a user of the mobile device and other users, as in the claims. Indeed, none of the cited references provides for the transmission of any information associated with a wireless networking functionality for integration into an application-based information channel permitting interactions from a mobile device with a limited display space and limited navigational capabilities. Ex. 2007 ¶149.

II. POSITA

For purposes of this proceeding, Patent Owner does not dispute the Petition's characterization of the person of ordinary skill ("POSITA"). Pet. at 5-6.

Patent Owner hereby affirmatively withdraws the expert declaration and C.V. submitted with Patent Owner's preliminary response (Ex. 2001, 2002). *PTAB Consolidated Trial Practice Guide,* §II(c), p. 51.

III. CLAIM CONSTRUCTION

In an IPR, claims are construed according to *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-17 (Fed. Cir. 2005). *See* 37 C.F.R. § 42.100(b). In construing claims, courts look first to the intrinsic evidence. *See Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). Courts may consider extrinsic evidence to resolve ambiguities that cannot be resolved through intrinsic evidence alone. *Id*. at 1583.

A. "Application-Based Information Channel"

The term "application-based information channel," in independent claims 1, 9, 12, 17, 21, 22, and associated dependent claims should be construed consistently with its plain and ordinary meaning, as well as the intrinsic and extrinsic record, to mean "a component of a mobile site configured to permit a wide variety of mobile devices to send and receive content over a wireless network."

The intrinsic evidence supports this construction. First, the '578 Patent explains that the invention improves on the existing technology, in part, due to its ability to

> operate independently of the user device operating system or

> other user device configuration parameters, such that a given user may author, create, publish, send, convey, share, receive, respond to, subscribe to, collaborate with, track, transact, maintain and manage personalized messaging content from ***any type of user device*** running any operating system.

'578 Patent 18:39-45 (emphasis added).

The specification explains that a "wide variety" of devices can use the technology:

> The mobile devices 15 can collectively comprise *a* ***wide variety of different devices*** *configurable for communication over the network* 12. 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. Examples of mobile devices 15 utilizable in system 10 of FIG. 1A include 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, a portable game player, etc.

'578 Patent 4:28-40 (emphasis added).

According to Claim 1 of the '578 Patent, "content item[(s)] comprising media data captured by the mobile device" can be inserted into an "application-based

information channel" and "the application-based information channel" enables "two or more users [to] share access to a plurality of content items…."

As noted above, the "application-based information channel" must enable messaging between the "wide variety" of mobile devices disclosed. Such "mobile devices" include not only "a laptop computer" but also "a mobile telephone" and "a personal digital assistant (PDA)" (among other devices). '578 Patent 4:28-40.

This construction is reinforced throughout the '578 Patent. For example, the specification provides the example of using the invention through a "web-enabled mobile telephone":

> FIG. 18 shows an example mobile device 15-1 suitable for use in the system of FIG. 1A. The mobile device 15-1 in this example is in the form of a *web-enabled mobile telephone*, but as indicated previously herein, the invention does not require the use of any particular type or configuration of mobile device.

'578 Patent 14:54-60 (emphasis added); *see also* '578 Patent FIG. 18

Petitioner argues that because a "conventional laptop" could "run web browser software and visit web pages" like the "the Yahoo! website, including the clubs feature" discussed in Neibauer Chapter 21, this disclosure teaches Claim 1's "application-based information channel." Pet. at 21.

Petitioner's proposed construction is incorrect. Ex. 2007 ¶¶311-322. As explained above, a "conventional laptop" accessing "the Yahoo! website" does *not*

teach the claimed "application-based information channel," which enables content sharing between a "wide variety" of mobile devices, including laptops and other, less-sophisticated devices. Ex. 2007 ¶¶311-322.

B. "Mobile Device"

The term "mobile device," in independent claims 1, 9, 12, 17, 21, 22, and associated dependent claims should be construed consistently with its plain and ordinary meaning, as well as the intrinsic and extrinsic record, to mean "a portable device with limited display space and limited navigational capabilities that connects to a mobile site and/or application-based information channel via a wireless network."

The intrinsic evidence supports this construction. First, the "Background of the Invention" section of the '578 Patent explains specific challenges faced by mobile devices for generating and sharing content as opposed to computer (e.g., PC and/or a fully-capable laptop) web experience: "conventional techniques such as web site authoring tools and web logging ("blogging") are not optimized for using in the generation of information content for shared access via mobile devices. because they fail to facilitate the process of "creating, publishing, distributing, or otherwise managing information content so as to provide optimal presentation consistent with the limited display space and navigational capabilities of typical mobile devices." EX1001, 1:45-58. This section continues:

> These and other conventional techniques suffer from a number of significant drawbacks, including a failure to provide suitable integration of messaging, collaboration, location-based services or other wireless networking functionality with the generation of shared information content. As a result, it is generally not possible for different mobile device users to link to and take further action on a persistent version of a given set of shared information content.

Id. 1:59-66. The challenges aimed to be solved by the ’578 Patent include facilitating the process of managing information content to provide optimal presentation consistent with the limited display space and navigational capabilities of typical mobile devices. *Id*. 1:45-58.

Second, the ’578 Patent is clearly directed to wireless communications via these mobile devices, noting that the mobile device is a “portable information processing device capable of being configured for communication over a network.” *See, e.g.,* Ex. 1001 4:46-48. The specification also characterizes the invention of the ‘578 Patent with respect to integrating information content of multiple mobile devices over wireless networks. *Id*. 2:18-33.

Third, the ’578 Patent specifies that the “mobile devices 15 can collectively comprise a wide variety of different devices configurable for communication over the network 12.” *Id.* 4:43-45. This “communication over the network 12” includes communication for the generation and management of mobile sites, in contrast to

conventional web sites. The first sentence of the "Summary of the Invention" section of the '578 Patent establishes that the '578 Patent is directed to "generation and management of mobile sites." *Id.* 2:14-15. For example, the '578 Patent discloses "users can create one or more personal or business *mobile sites* with various sets of features, and then share such sites via the mobile Internet or *other wireless network* with friends, family, colleagues, or other groups of any type." *Id.* 10:48-52 (emphases added).

Further, the '578 patent is replete with examples of mobile site generation and/or use of information channels to overcome the lack of mobile device functionality of "conventional techniques" used for non-mobile devices. *Id.* 1:45-2:5; *see also id.* 2:6-9 ("a need exists for improved techniques for managing information content in a manner that overcomes one or more of the drawbacks of the conventional techniques described above."). Thus, mobile devices must include the capability to read a mobile site to access network content. Ex. 2007 ¶61.

In the context of the '578 Patent, web experiences of mobile devices clearly diverge from conventional techniques provided by computers, such as fully-capable PCs and/or laptops. Ex. 2007 ¶86. While the specification lists "laptop computer" in a laundry list of items that may be included as "mobile devices," a POSITA would understand these laptops to be a subset of laptops having limited capabilities, such as a laptop running a mobile operating system (e.g., Windows CE) like IBM's

WorkPad z50, HP's Jornada 820, or LG Electronics Phenom. *Id*.

As such, to the extent that laptops are included as mobile devices, a POSITA would understand these laptops to be a subset of laptops having limited capabilities, as described throughout the specification, thus using mobile sites to facilitate network information sharing. *Id.* A POSITA would not understand a mobile device to include the full capabilities of laptops that simply use conventional sites for information sharing. *Id.* This is especially true in the context of the '578 Patent, which repeatedly demonstrates mobile device connectivity through mobile sites, not conventional sites. *Id.*

Because the term "mobile device" is described throughout the '578 Patent in the context of its display space limitations and navigational limitations, a POSITA would reasonably interpret a "mobile device" as consistent with the construction provided above *and* excluding a traditional laptop computer[1], which does not suffer from the limitations of a mobile device.

Moreover, claim terms must be construed "in light of the surrounding claim

[1] Moreover, a POSITA at the time of the invention would have understood the specification's (single) mention of a laptop computer to refer specifically to laptop computers configured to interact with mobile content through mobile networks (such as those running Windows CE), *not* traditional laptops.

language, such that words in a claim are not rendered superfluous." *Dig.-Vending Servs. Int'l, LLC v. Univ. of Phx., Inc.*, 672 F.3d 1270, 1275 (Fed. Cir. 2012). Construing "mobile device" to include a traditional laptop computer would render the reason for the entire patent moot, as well as the rest of the claims superfluous. In 2002, at the time of filing, the inventive aspect of the '578 Patent was the ability to activate information channels on a mobile device and interact with those channels bi-directionally on a mobile device, where a mobile device is understood as a portable handheld device, which were fairly new and novel technology at the time. As the Petition acknowledges, there was a "growing popularity of mobile computing and mobile devices" at the time of filing. Pet. at 21. This clearly refers to portable handheld devices, *not* traditional laptop computers, which were not new in 2002. Ex. 2007 ¶62. Petitioner's construction of mobile device (to include "conventional laptop computers;" Pet. at 16) would render moot the main reason for the invention: creating a system to allow known technology (such as a desktop interface) to be accessible and interactable on a mobile, portable, handheld device. *Id.*

Moreover, claims "conform[ing] to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims" must find "clear support … in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description." 37 C.F.R. § 1.75(d)(1). In other words, reading a traditional (i.e., full-capability) laptop computer as a mobile device

is an inaccurate representation of the term "mobile device" in light of the specification because performing the claimed methods on a traditional laptop computer would not solve the "important challenge" of "provid[ing] optimal presentation consistent with the limited display space and navigational capabilities of typical mobile devices." Ex. 1001 1:45-50.

This construction is consistent with the general understanding of the term "mobile device" at the time of invention, as shown by the prior art references relied upon by Petitioner. *See, e.g.,* Neibauer at 111 (characterizing mobile devices as "Pagers, Cell phones, Web phones, Personal digital assistants (PDAs)" and cautioning users of the Yahoo! Mobile feature that to perform functions using Yahoo! Mobile, the user will need a PDA that uses a mobile operating system (e.g., Palm OS Windows CE); Cheng 5:11-35 (characterizing mobile devices as handheld/portable devices, such as Palm operating system devices, smart phones that typically have a small screen and limited memory); Squibbs ¶108 (describing a mobile device as "a cellular-radio-based mobile device (phone or e.g., a PDA with mobile radio capability).").

The extrinsic record also supports this construction. The definition of "mobile device" according to the National Institute of Standards and Technology is "[a] portable computing device that: (i) has a small form factor such that it can easily be carried by a single individual; (ii) is designed to operate without a physical

connection (e.g., wirelessly transmit or receive information); (iii) possesses local, non-removable data storage; and (iv) is powered-on for extended periods of time with a self-contained power source." *See, e.g.,* https://csrc.nist.gov/glossary/term/mobile_device.

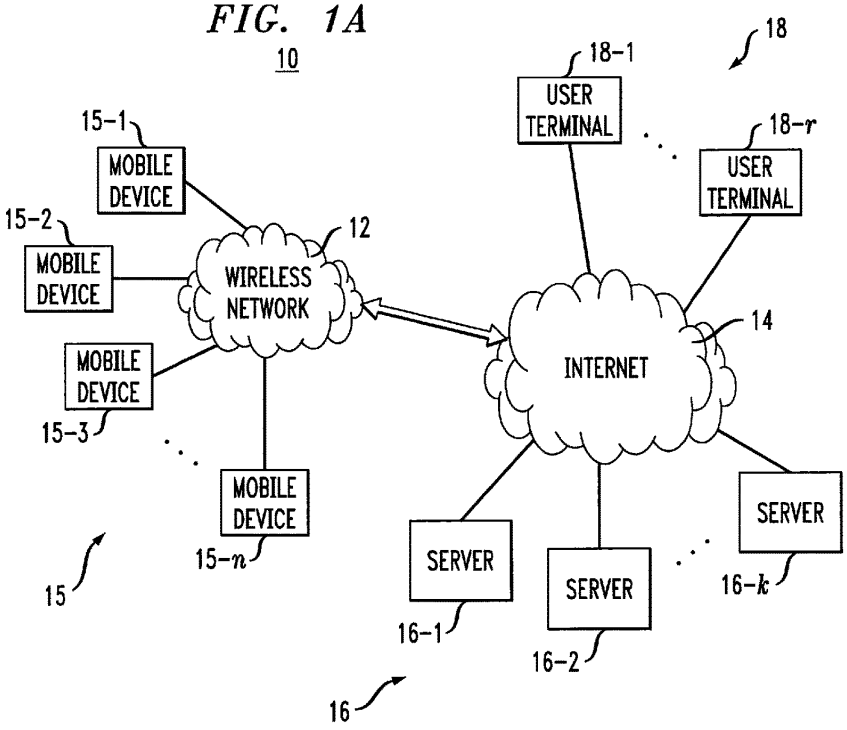
In view of the prior art references cited by the Petitioner and the intrinsic evidence provided by the specification, a POSITA would agree with the construction of "mobile device" provided above and also understand this term to *exclude* traditional laptop computers.

C. "Wireless Network Functionality of the Mobile Device"

The term "wireless networking functionality of the mobile device," in independent claims 1, 9, 12, 17, 21, 22, and associated dependent claims should be construed consistently with its plain and ordinary meaning, as well as the intrinsic record, to mean "functionality implementable by the mobile device via the wireless network independent of the Internet." Ex. 2007 ¶¶77-78.

The intrinsic evidence supports this construction. First, the specification explains that the term "wireless network" refers to a network that is "coupled to the Internet 14, a set of mobile devices 15, a set of servers 16 and a set of user terminals 18." '578 Patent 3:42-46. FIG. 1A of the '578 Patent also supports this construction:

FIG. 1A



As the above figure reflects, mobile devices 15 connect to wireless network 12, which is separate from Internet 14.

Likewise, the specification explains that the term "wireless networking functionalities" include actions implementable over a wireless network, independent of Internet. *Id.*, 5:51-65. In other words, actions that are capable of being performed over the wireless network, independent of the Internet. The specification describes example actions as "information specifying at least one messaging action implementable over the wireless network, information specifying at least one collaboration action implementable over the wireless network, and information specifying at least one location-based service action implementable over the wireless

network." *Id*; Ex. 2007 ¶¶77-78.

IV. APPLICABLE LEGAL STANDARDS

The ultimate determination of obviousness under 35 U.S.C. §103 is a question of law based on underlying factual findings. *In re Baxter Int'l, Inc.*, 678 F.3d 1357, 1362 (Fed. Cir. 2012) (citing *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966)). "To satisfy its burden of proving obviousness, a petitioner cannot employ merely conclusory statements. The petitioner must instead articulate specific reasoning, based on evidence of record, to support the legal conclusion of obviousness." *In re Magnum Oil Tools Int'l, Ltd*., 829 F.3d 1364, 1380-81 (Fed. Cir. 2016).

The "factual inquiry" into the reasons for "combin[ing] references must be thorough and searching, and the need for specificity pervades." *In re NuVasive, Inc.*, 842 F.3d 1376, 1381-82 (Fed. Cir. 2016) (internal quotations and citations omitted). The specific reasoning must include some rational underpinning to combine the prior art elements as claimed to support the conclusion of obviousness. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007).

It is Petitioner's burden to demonstrate a motivation to combine, and a reasonable expectation of success. *See In re Magnum Oil Tools*, 829 F.3d at 1381. Mere conclusory statements are insufficient. *Id.* at 1380.

"It is improper to combine references where the references teach away from their combination." MPEP §2145 (subheading X.D.2., entitled "References Cannot

Be Combined Where Reference Teaches Away from Their Combination" and citing *In re Grasselli*, 713 F.2d 731, 743 (Fed. Cir. 1983)).

Petitioner bears the burden to demonstrate unpatentability, and that burden never shifts to Patent Owner. *Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.,* 800 F. 3d 1375, 1378 (Fed Cir. 2015).

V. ARGUMENT

A. Ground 1: The Challenged Claims are Not Obvious Over Neibauer In View Of Ausems, Cheng, and Squibbs.

Ground 1 principally relies on Niebauer to allegedly teach claim 1's "application-based information channel." Pet. at 12-27. But as explained below, the Petition misconstrues the term and, in doing so, mischaracterizes the claimed invention. When properly construed, Claim 1's "application-based information channel" – and the claimed technology, more generally – is neither taught nor suggested by Neibauer (whether alone or in combination with the other cited references).

1. Neibauer Does Not Teach or Suggest an "Application-Based Information Channel"

Claim 1's "application-based information channel" supports content sharing between a wide variety of devices with significant technical limitations (e.g., early 2000's era "mobile telephones") over a wireless network. Neibauer (at best) suggests using a "conventional laptop computer[]" to "visit web pages on the Internet[]" such

as "the Yahoo! website[.]" Pet. at 21. This does not (and cannot) disclose or suggest Claim 1's "application-based information channel."

a. The "Application-Based Information Channel" Enables Content Sharing Across Numerous Device Types

The '578 Patent emphasizes that one advantage of the disclosed technology is its ability to "operate independently of the user device operating system or other user device configuration parameters, such that a given user may author, create, publish, send, convey, share, receive, respond to, subscribe to, collaborate with, track, transact, maintain and manage personalized messaging content *from any type of user device* running any operating system." '578 Patent 18:44-50 (emphasis added).

By definition, the '578 Patent includes a "wide variety" of devices that can utilize the technology:

> The mobile devices 15 can collectively comprise a ***wide variety of different devices*** *configurable for communication over the network* 12. 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. Examples of mobile devices 15 utilizable in system 10 of FIG. 1A include 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, a portable game player, etc.

'578 Patent 4:28-40 (emphasis added).

Claim 1 of the '578 Patent recites that a "user can share access to content with a plurality of additional users[]" through its "application-based information channel." The claim also recites "inserting content…into the application-based information channel[,]" "receiving additional content relating to the application-based information channel… via one or more respective mobile devices[,]" and "inserting at least a portion of the additional content into the application-based information channel[.]"

As noted above, the claimed "application-based information channel," by definition, must enable shared access by users using the "wide variety" of mobile devices disclosed. Such "mobile devices" include not only "a laptop computer" but also "a mobile telephone" and "a personal digital assistant (PDA)" (among other devices). '578 Patent 4:28-40.

*b. The '578 Patent is Directed to Challenges Arising in the Context of "Typical" **Mobile** Devices With Technical Limitations*

The '578 Patent begins by explaining that the focus of the disclosed technology is to expand content access via *mobile* devices:

> One of the most rapidly expanding aspects of wireless networking involves the accessing of information content over

> wireless networks via *web-enabled mobile devices*. Examples of such devices include *mobile telephones, personal digital assistants (PDAs), palmtop computers*, etc.

'578 Patent 1:30-35 (emphasis added). More specifically,

> An important challenge in this context relates to facilitating the process of creating, publishing, distributing or otherwise managing information content so as to provide optimal presentation *consistent with the limited display space and navigational capabilities of typical mobile devices*.

Id. 1:40-45 (emphasis added).

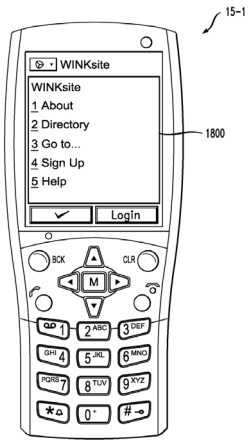
That is, the crux of the disclosure of the '578 Patent (and its claims) are technologies that enable content sharing on *mobile* devices with limited technical capabilities, which were previously incapable of enabling such functionality. Ex. 2007 ¶¶316-317.

This construction is reinforced throughout the '578 Patent. For example, the patent exemplifies use of the claimed technology through a "web-enabled mobile telephone":

> FIG. 18 shows an example mobile device 15-1 suitable for use in the system of FIG. 1A. *The mobile device 15-1 in this example is in the form of a web-enabled mobile telephone*, but as indicated previously herein, the invention does not require the use of any particular type or configuration of mobile device.

'578 Patent 14:54-60 (emphasis added). *See also* '578 Patent FIG. 18:

FIG. 18



It can be readily appreciated that implementing the technology encompassed by Claim 1 can enable the "typical mobile device" (like FIG. 18's "mobile telephone") to share and interact with content, notwithstanding its apparent "limited display space and navigational capabilities." Ex. 2007 ¶¶318-319.

c. The Petition Misconstrues "Application-Based Information Channel"

Ignoring the mobile-centric nature of the claimed technology, Petitioner argues that because a "conventional laptop" could "run web browser software and visit web pages" like the "the Yahoo! website, including the clubs feature" discussed in Neibauer Chapter 21, this disclosure teaches Claim 1's "application-based information channel." Pet. at 16. Not so.

As outlined above, the crux of the claimed invention is to enable content sharing by "typical mobile devices" with "limited display space and navigational capabilities." '578 Patent 1:44-45. Use of a "conventional laptop" (as suggested in Neibauer) could not be further afield. Even in the early 2000's, the "conventional

laptop" referenced in the Petition had "display space" and "navigational capabilities" comparable to a desktop computer. Ex. 2007 ¶¶321-322. Contrary to the Petition's suggestion, merely accessing the internet with a laptop cannot teach or suggest Claim 1's "application-based information channel." *Id*.

As quoted in the preceding section, the '578 Patent mentions a "laptop" *once*, within a laundry list of "mobile devices." '578 Patent 4:28-40. Petitioner seizes on this (Petition at 20) and much of the Petition ultimately hinges on it. That said, there is no 'there' there. The '578 Patent's inclusion of a "laptop" among many other devices (mobile telephone, PDA, etc.) merely reflects that a laptop is among the "wide variety" of devices capable of utilizing the claimed technology to communicate with *one another* (i.e., across devices). Ex. 2007 ¶¶321-322.

The Petition's fallacy is in arguing that access to the internet via a conventional laptop somehow suggests the claimed "mobile information channel." In doing so, the Petition ignores that the crux of the claimed technology is to enable early 2000's mobile phones and other "typical mobile devices" to *also* access functionality that was previously unattainable in view of the technical and physical limitations of such devices. *Id*.

In any event, a "conventional laptop" accessing "the Yahoo! website" does not teach or suggest the claimed "application-based information channel" which enable messaging between a "wide variety" of mobile devices, including laptops *and*

other, less-sophisticated devices. *Id*.

d. Incorporating Cheng Does Not Remedy Neibauer's Deficiencies; The Proposed Combination Does Not Teach the Claimed "Application-based information channel"

The Petition also proposes combining Cheng with Neibauer, arguing the combination renders Claim 1's "application-based information channel" obvious. Pet. at 17-22. Not so.

As explained above, though Cheng does disclose *transmitting* content *to* a mobile device, it does not teach anything with respect to *receiving* content *from* a mobile device. Ex. 2007 ¶¶210-212.

As such, the proposed combination of Neibauer and Cheng would, at best, teach one-way transmission of content *to* a mobile device. *Id*. But this falls far short of "insertion [of at least one content item] into an application-based information channel [,]" and "the application-based information channel providing a second interface wherein two or more users share access to a plurality of content items including the at least one integrated content item[]" as in Claim 1. As noted, Cheng (which is limited to transmitting reformatted web pages to mobile device) does not – and cannot – teach these feature(s). *Id*.

2. Limitation 1[a] is Not Taught By Neibauer Alone, Nor in Combination With Ausems, Cheng, and/or Squibbs

In view of the above, Neibauer does not teach or suggest limitation 1[a]:

"providing a first interface permitting designation of at least one content item, via a mobile device, for insertion into an application-based information channel, the at least one content item comprising media data captured by the mobile device." Pet. at 12-27; Ex. 2007 ¶¶326-328.

Claim 1's application-based information channel supports content sharing between a "wide variety" of mobile devices. *Id*. This necessarily includes "typical mobile devices" with "limited display space and navigational capabilities." *Id*.; '578 Patent 1:44-45.

Contrary to the Petition's argument, Neibauer does not teach or suggest this feature. At best, Neibauer describes content sharing using a "conventional laptop." Ex. 2007 ¶¶326-328. As explained above, this does not suggest anything with respect to Claim 1's application-based information channel which supports content sharing between a "wide variety" of devices, including those with technical capabilities far more limited than a laptop. *Id*.

To the extent the Petition proposes combining Cheng with Neibauer to teach the referenced limitation (1[a]; *see* Pet. at 17-22), that argument also fails. As explained above, Cheng only discloses *transmitting* content *to* a mobile device. But it teaches nothing with respect to *receiving* content *from* a mobile device (which, by definition, is a necessary aspect of content sharing). Ex. 2007 ¶¶333-336.

As such, the Petition fails to show that Neibauer (both alone and in

combination with Cheng) teaches or suggests Claim 1's "providing a first interface permitting designation of at least one content item, via a mobile device, for insertion into an application-based information channel, the at least one content item comprising media data captured by the mobile device[.]" *Id*.

For this reason alone, Ground 1 of the Petition fails as to Claim 1 (as well as to each of its challenged dependent claims).

3. Limitation 1[b] is Not Taught By Neibauer Alone, Nor in Combination With Ausems, Cheng, and/or Squibbs

Neibauer also does not teach or suggest limitation 1[b]: "integrating the at least one content item and information associated with at least one wireless networking functionality of the mobile device to generate at least one integrated content item." Pet. at 28-39.

Claim 1's application-based information channel supports content sharing between a "wide variety" of mobile devices. Ex. 2007 ¶¶333-336. This necessarily includes "typical mobile devices" with "limited display space and navigational capabilities." *Id*.; '578 Patent 1:44-45.

Neibauer does not teach or suggest this feature. At best, Neibauer describes content sharing using a "conventional laptop." Ex. 2007 ¶¶333-336. But, as explained above, this does not suggest anything with respect to Claim 1's application-based information channel which supports content sharing between a

"wide variety" of devices, including those with technical capabilities far more limited than a laptop. *Id*.

To the extent the Petition relies on a proposed combination of Cheng with Neibauer to teach the referenced limitation, that argument also fails. As explained above, Cheng only discloses *transmitting* content *to* a mobile device. Ex. 2007 ¶¶333-336. But it teaches nothing with respect to *receiving* content *from* a mobile device (which, by definition, is a necessary aspect of content sharing). *Id*.

As such, the Petition fails to show that Neibauer (both alone and in combination with Cheng) teaches or suggests Claim 1's "integrating the at least one content item and information associated with at least one wireless networking functionality of the mobile device to generate at least one integrated content item[.]" *Id*.

For this reason as well, Ground 1 of the Petition fails as to Claim 1 (as well as to each of its challenged dependent claims).

4. Limitation 1[c] is Not Taught By Neibauer Alone, Nor in Combination With Ausems, Cheng, and/or Squibbs

Neibauer also does not teach or suggest limitation 1[c]: "inserting the at least one integrated content item into the application-based information channel, the application-based information channel providing a second interface wherein two or more users share access to a plurality of content items including the at least one

integrated content item." Pet. at 30-33. Ex. 2007 ¶¶337-342.

Claim 1's application-based information channel supports content sharing between a "wide variety" of mobile devices. *Id*. This necessarily includes "typical mobile devices" with "limited display space and navigational capabilities." '578 Patent 1:44-45.

Neibauer does not teach or suggest this feature. At best, Neibauer describes content sharing using a "conventional laptop." Pet. at 16, 39-42 (citing Neibauer's Chapter 21). But, as explained above, this does not suggest Claim 1's application-based information channel which supports content sharing between a "wide variety" of devices, including those with technical capabilities far more limited than a laptop. Ex. 2007 ¶¶337-342.

To the extent the Petition relies on a proposed combination of Cheng with Neibauer to teach the referenced limitation, that argument also fails. As explained above, Cheng only discloses *transmitting* content *to* a mobile device. Ex. 2007 ¶¶337-342. But it teaches nothing with respect to inserting content into an application-based information channel that provides an interface where users can share content items (which necessarily entails *receiving* content *from* a mobile device). *Id*.

As such, the Petition fails to show that Neibauer (both alone and in combination with Cheng) teaches or suggests Claim 1's "inserting the at least one

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

For this reason as well, Ground 1 of the Petition fails as to Claim 1 (as well as to each of its challenged dependent claims).

5. Other Challenged Claims

a. The Petition Fails as to Claims 9 and 11

For the same reasons outlined above with respect to Claim 1, the Petition (p. 53-54) fails to show that Claim 9 is obvious in view of the proposed combination of Neibauer, Ausems, Cheng, and Squibbs. Specifically, the proposed combination does not teach at least limitations 9[b]-9[e] as identified in the Petition (p. 54). Ex. 2007 ¶¶344-345.

Ground 1 of the Petition therefore fails as to Claim 9 (as well as to each of its challenged dependent claims). The same holds for Claim 11 (which recites "the apparatus of claim 9.").

b. The Petition Fails as to Claims 12 and 16

For the same reasons outlined above with respect to Claim 1, the Petition (p. 56) fails to show that Claim 12 is obvious in view of the proposed combination of Neibauer, Ausems, Cheng, and Squibbs. Specifically, the proposed combination

does not teach at least limitations 12[a]-12[d] as identified in the Petition (p. 56). Ex. 2007 ¶¶346-347.

Ground 1 of the Petition therefore fails as to Claim 12 (as well as to each of its challenged dependent claims). The same holds for Claim 16 (which recites "a processing element [that] implements the steps of the method of claim 12.").

c. The Petition Fails as to Claim 17

For the same reasons outlined above with respect to Claim 1, the Petition (p. 60-63) fails to show that Claim 17 is obvious in view of the proposed combination of Neibauer, Ausems, Cheng, and Squibbs. Specifically, the proposed combination does not teach at least limitations 17[c]-17[g] as identified in the Petition (p. 62). Ex. 2007 ¶¶348-349.

Ground 1 of the Petition therefore fails as to Claim 17 (as well as to each of its challenged dependent claims).

d. The Petition Fails as to Claim 21

For the same reasons outlined above with respect to Claim 1, the Petition (p. 63-64) fails to show that Claim 21 is obvious in view of the proposed combination of Neibauer, Ausems, Cheng, and Squibbs. Specifically, the proposed combination does not teach at least limitations 21[a]-21[c] as identified in the Petition (p. 63).

Ground 1 of the Petition therefore fails as to Claim 21.

e. The Petition Fails as to Claim 22

For the same reasons outlined above with respect to Claim 1, the Petition (p. 64-65) fails to show that Claim 22 is obvious in view of the proposed combination of Neibauer, Ausems, Cheng, and Squibbs. Specifically, the proposed combination does not teach at least limitations 22[a]-22[e] as identified in the Petition (p. 64-65).

Ground 1 of the Petition therefore fails as to Claim 22.

B. Ground 2: The Challenged Claims Are Not Obvious Over Ground 1 In View Of Harvey.

Ground 2 is the same as Ground 1 but adds Harvey (Ex. 1010) to account for a proposed construction of "application-based information channel." Specifically, in Ground 2 Petitioner relies on Harvey to teach "the ability to add content to a community using the community-creation tool, before the community is created." Pet. at 65-66.

This proposed combination fails for the same reasons detailed above with respect to Ground 1: Neibauer in view of Ausems, Cheng, and/or Squibbs does not render obvious the Challenged Claims. Specifically, the proposed combination of these references does not teach *any* of limitations 1[a]-1[c], as outlined above.

Further incorporating Harvey's (alleged) "key feature" of "the ability of a community creator to author content for a community before the community is created and launched" (Pet. at 65-66; emphasis in original) does not cure any of the

deficiencies in the proposed combination of Neibauer, Ausems, Cheng, and/or Squibbs outlined above with respect to Ground 1.

Accordingly, for substantially the same reasons detailed above with respect to Ground 1 (none of which are remedied by Harvey), Ground 2 fails.

C. Grounds 1-2 Additionally Fail Because Neibauer is Nonanalogous Art.

Grounds 1-2 each fail for another, independent reason: Petitioner's improper reliance on Neibauer. As explained below, the reference is nonanalogous art. It would not have reasonably been considered by a POSITA when attempting to solve the problem to which the technology of the '578 Patent is directed.

"Art that is 'too remote' from the patents being attacked cannot be treated as prior art." *Corephotonics, Ltd. v. Apple Inc.*, 84 F.4th 990, 1004 (Fed. Cir. 2023). As shown above, the Petition relies heavily on Neibauer. But, as demonstrated below, as a basic "how to" guide for early internet users, Neibauer would have no relevance to a POSITA and would not have been reasonably combined with the other cited references (Miller, Ausems, and Squibbs).

Petitioner argues, in a single sentence, that "Neibauer is an analogous reference in the same field as the '578 patent of network-based communication systems for managing information content and would have been reasonably pertinent

to problems facing the inventors." Pet. at 21.[2]

Petitioner's argument fails because (a) a POSITA would not have looked to Neibauer to solve *any* problem and (b) Neibauer is not properly within the field of endeavor of the '578 patent. As shown below, Neibauer would *not* have been reasonably pertinent to problems facing the inventors of the '578 Patent. It therefore would *not* have been obvious to a POSITA to combine it as suggested in the Petition.

a. A POSITA Would Not Have Looked to Neibauer to Solve Any Problem

"This test for analogous art requires the PTO to determine the appropriate field of endeavor by reference to explanations of the invention's subject matter in the patent application, including the embodiments, function, and structure of the claimed invention." *In re Bigio*, 381 F.3d 1320, 1325 (Fed. Cir. 2004). Regarding the Field of Endeavor, "it is necessary to consider 'the reality of the circumstances'…—in other words, common sense—in deciding in which fields a person of ordinary skill would reasonably be expected to look for a solution to the

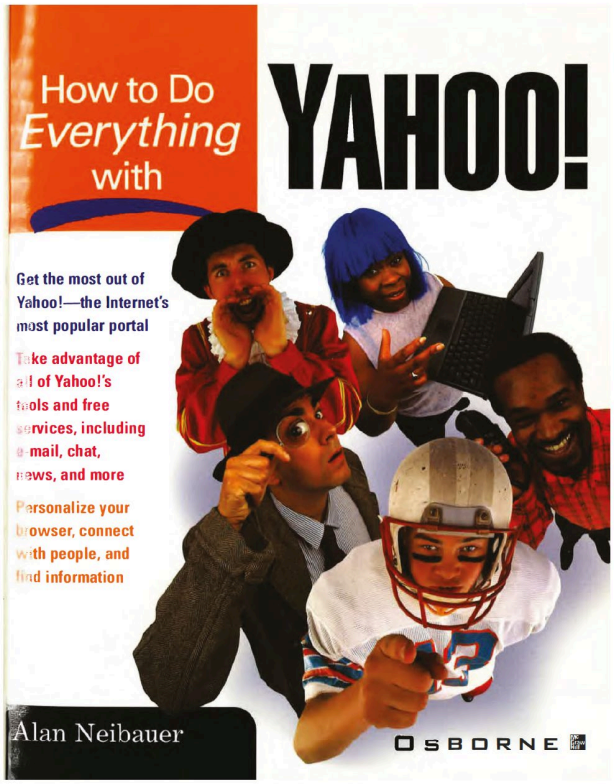
[2] Petitioner's expert parrots this sentiment without elaboration: "Neibauer and Miller are analogous references in the same field as the '578 patent, each disclosing similar functionality for managing information content accessible through the Internet, through a series of web-based information channels that provide the ability to exchange messages and collaborate among multiple users." Ex. 1002 ¶104.

problem facing the inventor." *In re Oetiker*, 977 F.2d 1443, 1447 (Fed. Cir. 1992).

The Challenged Claims show the '578 Patent to be a technically sophisticated disclosure of an invention at the cutting edge of technology at the time. For example, Claim 1 encompasses providing interfaces that enable users to share content and facilitate interactions across an application-based information channel. *See* '578 Patent, Claim 1. This is no mere incremental development to a well-known system.

Notably, Petitioner concedes that a "a person of ordinary skill in the art would have possessed 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." Pet. at 5-6.

It would lack common sense for an experienced electrical engineer or computer scientist to consult a work like Neibauer ("How to do everything with Yahoo!"). Neibauer is targeted to laypeople with little or no prior computing experience. The work's cover reflects that it is intended to assist laypeople learning to use Yahoo in the early days of the Internet:



Ex. 1003 at 2. Likewise, Neibauer explains, *inter alia*, how to "[g]et free e-mail" (chapter 2); "[m]anage your calendar" (chapter 4); and "[s]earch the Internet" (chapter 8). **EX1003** at 3. The book was not written for – and would have been of no use to – engineers or computer scientists developing technologies like those disclosed in the '578 Patent. Ex. 2007 ¶¶155-157.

Notably, Mr. Neibauer himself is no engineer or scientist. He is a "corporate trainer" and former "high school and college teacher" focused, apparently, on helping non-users "achieve their presence on the Internet." EX1003 at 5 ("About the Author"). Nor does Neibauer discuss software development at all. *Id.* at 3.

Neibauer was not written for – and would not have been consulted by – an

electrical engineer or computer scientist developing software like that disclosed in the ’578 Patent. Far from it. Neibauer is intended to teach laypeople in the early 2000’s how to perform basic computer tasks like signing up for email. *Id.* No computer scientist or electrical engineer (i.e., the relevant POSITA) would consult such a reference when developing technologies to solve the issues addressed by the ’578 Patent’s disclosures. Ex. 2007 ¶¶155-157.

The field of endeavor test “is the narrower of the tests” for analogous art, *Ex Parte Chris Brough*, No. 2022-001819, 2022 WL 16861406, at *3 (P.T.A.B. Nov. 10, 2022). So it is improper to construe the field of endeavor relevant to the ’578 Patent so broadly as to encompass all software- or internet-related publications. And that is precisely Petitioner’s error in suggesting (incorrectly) that Neibauer is an “analogous” reference “in the same field” as the ’578 patent. Pet. at 21.

*b. Neibauer is **Not** From the Same “Field of Endeavor” as the ’578 Patent*

In addition to Neibauer being directed to a layperson (and having no relevance the POSITA), the Petition also fails to establish that Neibauer is in the same field of endeavor as the ’578 Patent. The mere fact that the ’578 Patent and Neibauer both generally relate to computers and web browsing carries little weight and has been rejected by the Federal Circuit. *See In re Clay*, 966 F.2d 656, 659 (Fed. Cir. 1992) (finding that a reference cannot be considered to be within the disputed patent’s field of endeavor merely because both generally relate to the same industry).

This principle has been applied uniformly by other panels. *See, e.g., Ex Parte Malloy,* No. 2018-008189, 2019 WL 2369854, at *2 (P.T.A.B. May 28, 2019) (finding that a reference disclosing a sanitary napkin wrapper with an impervious barrier and an adhesive fastener was not in the same field of endeavor as an invention concerning wrappable protective sleeves having a separate fastener, despite both generally pertaining to wrappers with protective barriers).[3]

Ex Parte Kulkarni, No. 2011-013039, 2014 WL 262117 (P.T.A.B. Jan. 22, 2014) is particularly instructive. There, both the cited reference and Appellant's claimed invention were "broadly directed to computer programming." *Id*. at *7. Yet the Board found the art at issue (Subramanian) was nonanalogous. *Id*. As the Board

[3] *See also Ex Parte Lee*, No. 2017-005938, 2018 WL 1621804, at *3 (P.T.A.B. Mar. 28, 2018) (reference disclosing an imaging process using a phase changing ink not within the same field of endeavor as a method for manufacturing an aluminum electrode using a solution product, despite both pertaining to a process to provide for precise pattern coatings"); *Ex Parte Ellis*, No. 2017-003864, 2018 WL 2059617, at *3 (P.T.A.B. Apr. 24, 2018) (reference disclosing a tow cable with a high strength to diameter ratio is not within the field of endeavor as invention directed to a system for approximating tissue comprising a flexible and resiliency biased cable, despite both generally pertaining to cables).

explained, the fact that both references generally related to computer programming was insufficient. Subramanian concerned "combining media types" while the claimed invention related to "locating websites on the Internet." *Id*. Despite Subramanian and the claimed invention both relating to computer science and programming, the Board nevertheless found that the reference was not in the same field of endeavor as the claimed invention.

Here, Neibauer is even less analogous to the '578 Patent than the reference at issue in *Kulkarni*. In *Kulkarni*, both the claimed invention and the prior art were at least "directed to computer programming." *Id*. Here, the only similarity between the field of Neibauer and the claimed invention is that both generally relate to the Internet.

For at least the above reasons, Neibauer is not in the same field of endeavor as the claimed invention. Each of the Petition's Grounds 1-2 (which rely on Neibauer) thus fail because a POSITA seeking a solution to the problem faced by the inventor of the '578 Patent would not have reasonably been expected to look to a reference (Neibauer) well outside the relevant field of endeavor.

c. Neibauer is Not Reasonably Pertinent to the Problem Addressed by the '578 Patent

This Board must "determine the appropriate field of endeavor by reference to explanations of the invention's subject matter." *Bigio*, 381 F.3d at 1325. As

discussed above, doing so reveals that Neibauer is *not* reasonably pertinent to the problem addressed by the '578 Patent which explains that:

> An important challenge in this context relates to facilitating the process of creating, publishing, distributing or otherwise managing information content so as to provide optimal presentation consistent with the limited display space and navigational capabilities of typical mobile devices. Many users, for example, may wish to make specific personalized information content available via mobile devices to their friends, colleagues, subscribers or other entities. However, conventional techniques have been unable to meet this need in a satisfactory manner. By way of example, conventional techniques such as web site authoring tools and web logging ("blogging) are not optimized for use in the generation of information content for shared access via mobile devices.
>
> These and other conventional techniques suffer from a number of significant drawbacks, including a failure to provide Suitable integration of messaging, collaboration, location-based services or other wireless networking functionality with the generation of shared information content. As a result, *it is generally not possible for different mobile device users to link to and take further action on a persistent version of a given set of shared information content*. The conventional techniques thus *fail to provide a mechanism that facilitates uniform, action-driven content access and associated user interaction via wireless networks*.

'578 Patent 1:42-2:2 (emphasis added).

Petitioner never explains how Neibauer solves these problems. And despite stating that Neibauer "would have been reasonably pertinent to problems facing the inventors[]" (Pet. at 21), the Petition *never* identifies any such "problems." The

assertion of Petitioner's expert is likewise conclusory (claiming that Neibauer "would have been reasonably pertinent to problems facing the inventors including how to implement a web-based system for managing information content and making that content available to users over the Internet."). Ex. 1002 ¶104; Ex. 2007 ¶¶158-160.

First, as explained above, that is not the problem solved by the '578 Patent (i.e., "it is generally not possible for different mobile device users to link to and take further action on a persistent version of a given set of shared information content[;]" '578 Patent 1:61-63). Neibauer, however, is not an invention and is not attempting to solve *any* problem. At best, Neibauer's "problem" could be said to be laypeople's general ignorance of basic Internet functions such as sending emails and web searching.

Additionally, a reference is only considered reasonably pertinent to the problem addressed by the patent "if a reference disclosure and the claimed invention have a same purpose…." *Ex Parte Van Herpen*, No. 2014-009097, 2016 WL 7097661, at *3 (P.T.A.B. Nov. 29, 2016) (*citing Clay*, 966 F.2d at 658-59). Neibauer's purpose is to act as a simplistic reference guide to help laypeople perform basic computing functions (e.g., accessing web-based email). This is a far different purpose than that of the '578 Patent, which is distinctly directed to allowing bidirectional information sharing from mobile device users on a persistent version

of a given set of shared information content. ’578 Patent 1:61-63. Neibauer and the ’578 Patent therefore do not have the same purpose, confirming the reference is not reasonably pertinent to the problem addressed by the ’578 Patent.

For the above reasons, Neibauer is not reasonably pertinent to the problem addressed by the ’578 Patent. The reference is therefore nonanalogous art and cannot be used to render obvious any claims of the ’578 Patent. Because each of Grounds 1-2 rely on Neibauer, they fail for this reason as well.

VI. CONCLUSION

For the foregoing reasons, the Board should issue a Final Written Decision affirming the patentability of all the Challenged Claims.

Date: October 1, 2024

Respectfully submitted,

/ Erick Robinson /
Erick Robinson, Esq. (Reg. No. 51,354)
Jayme Partridge (Reg. No. 39,011)
Patrick M. Dunn (Reg. No. 70,474)
Homayoon Rafatijo (Reg. No. 80,870)
BOCHNER PLLC
24 Greenway Plaza, Suite 1800
Houston, TX 77046
Tel: (646) 971-0685
Fax: (646) 343-9672

Ariel Reinitz (Reg. No. 65,220)
Serge Krimnus (Reg. No. 66,392)
Erik Dykema (*pro hac vice*)
BOCHNER PLLC

1040 Avenue of the Americas,
15th Floor
New York, NY 10018
Tel: (646) 971-0685
Fax: (646) 343-9672
Attorneys for Mobile Data Technologies LLC

CERTIFICATE OF WORD COUNT

Pursuant to 37 C.F.R. §42.24(d), the undersigned hereby certifies that the foregoing Patent Owner's Response contains 11,190 words using the word count feature of Microsoft Word.

Date: October 1, 2024

/Erick Robinson/
Erick Robinson, Esq. (Reg. No. 51,354)
Attorneys for Mobile Data Technologies LLC

CERTIFICATE OF SERVICE

I hereby certify that on October 1, 2024, I caused a true and correct copy of the foregoing Patent Owner's Response to Petition for *Inter Partes* Review to be served via electronic mail upon the following attorneys of record for the Petitioner:

Heidi L. Keefe (Reg. No. 40,673)
hkeefe@cooley.com
COOLEY LLP
ATTN: Patent Group
1299 Pennsylvania Ave. NW,
Suite 700
Washington, DC 20004
Tel: (650) 843-5501
Fax: (650) 849-7400

Andrew C. Mace (Reg. No. 63,342)
amace@cooley.com
COOLEY LLP
ATTN: Patent Group
1299 Pennsylvania Ave. NW,
Suite 700
Washington, DC 20004
Tel: (650) 843-5808
Fax: (650) 849-7400

Phillip Morton (Reg. No. 57,835)
pmorton@cooley.com
COOLEY LLP
ATTN: Patent Group
1299 Pennsylvania Ave. NW,
Suite 700
Washington, DC 20004
Tel: (202) 728-7055
Fax: (202) 842-7899

Mark R. Weinstein (admitted *pro hac vice*)
mweinstein@cooley.com
COOLEY LLP
ATTN: Patent Group
1299 Pennsylvania Ave. NW,
Suite 700
Washington, DC 20004
Tel: (650) 843-5007
Fax: (650) 849-7400

Date: October 1, 2024

Respectfully submitted,

/Erick Robinson/

Erick Robinson, Esq. (Reg. No. 51,354)
BOCHNER PLLC
24 Greenway Plaza, Suite 1800
Houston, TX 77046
Tel: (646) 971-0685
Fax: (646) 343-9672
Attorneys for Mobile Data Technologies LLC