UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

META PLATFORMS, INC.,
Petitioner

v.

MOBILE DATA TECHNOLOGIES LLC,
Patent Owner

IPR2024-00250
Patent 9,922,348 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.....1

B. The '348 Patent.....2

II. PERSON OF ORDINARY SKILL IN THE ART 8

III. CLAIM CONSTRUCTION 8

A. "Mobile Device".....9

B. "Web-Based Shared Information Channel" 16

IV. THE ASSERTED GROUNDS AND LEGAL PRECEDENT.....17

V. GROUND 1 - THE HYPOTHETICAL COMBINATION DOES NOT ESTABLISH A *PRIMA FACIE* CASE OF OBVIOUSNESS 18

A. The Cited References 18

1. Neibauer 18

2. Ausems 24

3. Cheng.....26

B. Petitioner's Combination of Neibauer and Cheng Does Not Disclose the Claimed Invention 29

C. Petitioner's Motivation to Combine Neibauer and Cheng is Deficient 33

1. Petitioner's motivations to combine are conclusory, internally inconsistent, and contradicted by record evidence.....35

2. Petitioner does not show a reasonable expectation of success 41

D. Independent Claim 1.....43

1. Limitations 1[c][1] and 1[c][2] 43

2. Limitation 1[c][3] 45

E. Independent Claim 12 47

F. Independent Claim 13 47

G. Independent Claim 17 48

H. Dependent Claims 2-3 49

1. Claim 2 51

2. Claim 3 51

I. Dependent Claim 6 52

J. Dependent Claim 7 54

K. Dependent Claims 8, 9, 14, and 18 55

VI. GROUND 2 - THE HYPOTHETICAL COMBINATION DOES NOT ESTABLISH A PRIMA FACIE CASE OF OBVIOUSNESS 56

A. The Additional Cited References 56

1. Squibbs 56

B. Dependent Claims 4 and 5 57

VII. GROUND 3 - THE HYPOTHETICAL COMBINATION DOES NOT ESTABLISH A PRIMA FACIE CASE OF OBVIOUSNESS 59

A. The Additional Cited References 59

1. McElfresh 59

2. The McElfresh Modification Does Not Provide a Reasonable Expectation of Success and, Thus, Does Not Support a *Prima Facie* Case of Obviousness 61

B. Dependent Claims 10-11, 15-16, and 19-20 61

VIII. GROUNDS 4-6 – THE CONSTRUCTION OF WEB-BASED SHARED INFORMATION CHANNEL HAS BEEN AGREED UPON, RENDERING GROUNDS 4-6 MOOT.....63

IX. CONCLUSION.....64

TABLE OF AUTHORITIES

Cases **Page(s)**

Dig.-Vending Servs. Int'l, LLC v. Univ. of Phx., Inc.,
672 F.3d 1270 (Fed. Cir. 2012) 13

Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.,
800 F. 3d 1375 (Fed Cir. 2015) 18

Ex Parte Van Herpen,
No. 2014-009097, 2016 WL 7097661 (P.T.A.B. Nov. 29, 2016).....24

Graham v. John Deere Co.,
383 U.S. 1 (1966).....17

In re Baxter Int'l, Inc.,
678 F.3d 1357 (Fed. Cir. 2012) 17

In re Bigio,
381 F.3d 1320 (Fed. Cir. 2004) 22

In re Clay,
966 F.2d 656 (Fed. Cir. 1992) 24

In re Magnum Oil Tools Int'l, Ltd.,
829 F.3d 1364 (Fed. Cir. 2016) 17, 18

In re NuVasive, Inc.,
842 F.3d 1376 (Fed. Cir. 2016) 18

In re Stepan Co.,
868 F.3d 1342 (Fed. Cir. 2017) 18

KSR Int'l Co. v. Teleflex Inc.,
550 U.S. 398 (2007).....18

Medichem, S.A. v. Rolabo, SL,
437 F.3d 1157 (Fed. Cir. 2006) 42

Phillips v. AWH Corp.,
415 F.3d 1303 (Fed. Cir. 2005) 8

Reactive Surfaces Ltd., LLP v. Toyota Motor Corp.,
IPR2019-00867 (PTAB Sep. 18, 2019) 18, 38

Vitronics Corp. v. Conceptronic, Inc.,
90 F.3d 1576 (Fed. Cir. 1996) 9

Statutes

35 U.S.C. § 103 17

Regulations

37 C.F.R. § 1.75 14

37 C.F.R. § 42.100 8

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	U.S. Patent Application Publication No. 2005/0171645 to Dowling et al. ("Dowling")
2005	Declaration of Erik Dykema (PHV Application)
2006	Reserved
2007	Declaration of Dr. Nenad Medvidovic in Support of Patent Owner's Responses to Petitions
2008	CV of Dr. Nenad Medvidovic
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

Patent Owner Mobile Data Technologies, LLC ("MDT") submits to this Patent Owner's Response ("POR") to the Petition (Paper 2, "Pet.") for *inter partes review* ("IPR") of claims 1-20 ("Challenged Claims") of U.S. Patent No. 9,922,348 ("'348 Patent", EX1001) filed by Meta Platforms, Inc. ("Petitioner"). The Board instituted IPR. Paper 11 ("Decision").

I. INTRODUCTION

Petitioner's obviousness analysis is fundamentally flawed, as explained below. Further, the record provides clear evidence that the Challenged Claims are patentably distinct from the prior art, rendering Petitioner's arguments ineffective. Patent Owner requests that the Board issue a Final Written Decision affirming the patentability of the Challenged Claims.

A. Overview of Technology in 2002

The state of the art of mobile devices in 2002 was remarkably different than what people are used to today. Medvidovic (EX2007), ¶¶37-45. Mobile devices were able to access the internet, but their capabilities (screen, processing, user input, and navigational) were greatly limited. *Id.* ¶43. In addition, internet usage over mobile devices was essentially one-way. *Id.* ¶44. That is, the internet pages that were accessible by mobile devices in 2002 were specially-modified mobile versions of the full webpage. These mobile versions were significantly pared down, including limited graphics and were generally designed to push information to the user. These

webpage versions were essentially one-way communications; they had limited, if any, bi-directional interaction capabilities. *Id.*

B. The '348 Patent

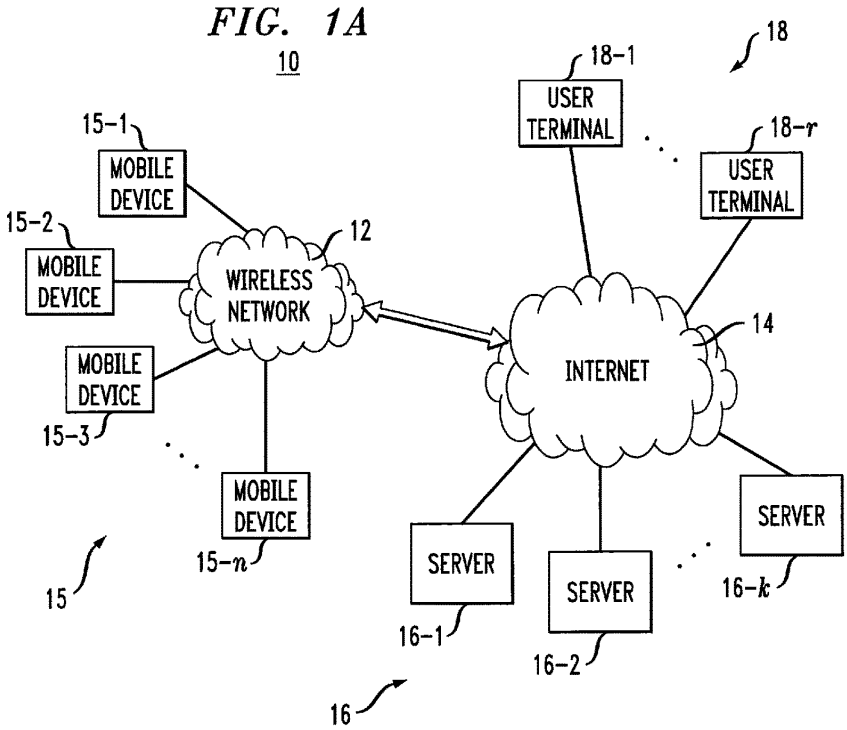
The '348 Patent is titled "Method, Apparatus and System for Management of Information Content for Enhanced Accessibility Over Wireless Communication Networks," and was issued by the U.S. Patent & Trademark Office on March 30, 2018. EX1001 (face). The '348 Patent is generally directed to facilitating provision of content for sharing on the web via web-enabled mobile devices, such as mobile telephones, personal digital assistants (PDAs), palm computers, and the like. *See* EX1001, 1:35-50. At the time of the claimed invention of the '348 Patent, the limited display space and navigational capabilities of these mobile devices presented a challenge with regard to creating, publishing, distributing, or otherwise managing information content via the mobile devices. *Id*. Indeed, the '348 Patent clarifies that users may wish to make content available via mobile devices, but the conventional techniques of that time have been "unable to meet this need in a satisfactory manner." *Id*., 1:50-54. These "conventional techniques," per the '348 Patent, include web site authoring tools and web logging ("blogging") tools that are not optimized for use when generating content for shared access via mobile devices because they fail to provide suitable integration of messaging, collaboration, location-based services, and other wireless networking functionalities with the

generation of content. *Id*., 1:55-63. Moreover, the conventional techniques fail to provide a mechanism that facilitates user interaction of such content using mobile devices via wireless networks. *Id*., 1:66-2:2. Accordingly, the '348 Patent describes various techniques that assist mobile device users with managing information content in a manner that overcomes the drawbacks of these conventional techniques. *Id*., 2:6-9.

"Mobile devices" of the '348 Patent are generally described as any type of portable information processing device capable of communicating over a network, such as a mobile phone, a hand-held computing, a laptop computer, a watch, and a portable game player, among others. *See id*., 4:43-55. In the context of the drawbacks of the conventional techniques described above, the mobile devices are also characterized as having limited display space and navigational capabilities. *Id*., 1:35-50; Medvidovic, ¶¶60-62.

Regardless of the type of mobile device being employed, the '348 Patent details that the mobile devices (e.g., mobile devices 15) are coupled to a wireless network 12, which then provides a connection to the Internet 14 as show in FIG. 1A reproduced below:

FIG. 1A



As shown in FIG. 1A, the mobile devices 15 connect to the wireless network 12. At the time of the invention (circa 2002), mobile devices with limited display space and navigational capabilities, such as mobile phones and PDAs, would connect to the Internet via wireless networks, such as a Wireless Application Protocol ("WAP"), a 3G network, or the like, as depicted in FIG. 1A. Medvidovic, ¶¶39-41. The '348 Patent provides techniques for efficient generation and management of mobile sites (e.g., information content accessible via the mobile device 15 over the wireless network 15) where two mobile devices may provide content that is received and integrated into a web-based shared information channel. *See id.*, 2:36-52; 6:57-59. In this way, the '348 Patent aims to solve the issues

mentioned above to facilitate the process of managing information content to provide optimal presentation consistent with the limited display space and navigational capabilities of mobile devices by enabling mobile device provided content to be integrated and shared via a web-based shared information channel. *See id.,* 2:36-52; claims 1, 12, 13, 17.

The claims at issue in the '348 Patent should be read in the context of the described challenges for mobile devices with respect to providing content from mobile devices to channels that that can be accessible by other mobile users. In other words, the term, "mobile device" should read in the context of the problem identified by the '348 Patent 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*." As such, "mobile device," as claimed in the '348 Patent, is distinct from devices employing conventional techniques, such as web site authoring tools (e.g., via the Internet), that are unable to meet the needs of managing information content presentation for mobile devices. *Id*., 1:45-58. The term "mobile device" in the context of the '348 Patent is 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. *Id*.

The independent claims of the '348 Patent require 1) receiving device-captured data from two mobile devices, 2) integration of the device-captured data of both mobile devices into a web-based shared information channel, and controllable access of the web-based shared information channel via the mobile devices, via respective personalized content applications of these mobile devices.

As will be established below, the Petitioner failed to carry its burden of establishing that the independent claims are invalid over the prior art in Ground 1. Indeed, the cited references alone or in hypothetical combination do not teach or suggest these recitations of current claims. Further, the art cited in Grounds 2-6 (Squibbs (EX1011) in Ground 2; McElfresh (EX1014) in Ground 3; and (Harvey (EX1010) in Grounds 4-6) alone or in hypothetical combination with the Ground 1 combination does not obviate the deficiencies of the combination cited in Ground 1 and, thus, do not establish obviousness of these claims.

In particular, Ground 1 presented by the Petitioner relies on three primary prior art references, Neibauer (EX1003), Cheng (EX1005), and Squibbs (EX1011), which alone and in combination fail to teach or suggest all of the recitations of the independent claims. First, although Neibauer provides the ability for users to create web-based communities for sharing information through a feature called Yahoo! Clubs, this feature is only described as being a web-based feature implementable via the Internet. Neibauer, pp.477-480. Contrary to the Petitioner's assertion in the

Petition, Neibauer never mentions that the Yahoo! Clubs feature is accessible to mobile devices (e.g., with limited display and navigational capabilities). Indeed, Neibauer merely describes a Yahoo! Mobile feature that enables mobile devices to receive text messaging, emails, and event data but never teaches or even suggests mobile-device provision of content to be inserted a web-based feature such as Yahoo! Clubs. *See* Neibauer, pp.166-180. Further, neither Cheng nor Squibbs cures this deficiency.

Moreover, none of the cited references, alone or in combination, teach or suggest (1) receiving such content from a plurality of mobile devices; (2) integrating the content from the plurality of mobile devices into a web-based shared information channel, where (3) the web-based shared information channel is controllably accessible via personalized content applications of the first and second mobile devices. In stark contrast, Neibauer merely pushes data to mobile devices, never once teaching or suggesting receiving information from a mobile device to be integrated into the Yahoo! Clubs (or any other Yahoo! Service). Instead, Neibauer merely suggests that mobile devices may use the Yahoo Mobile! Service to *receive* data. There is no teaching or even suggestion in Neibauer that a mobile device could, would, or should send content for insertion into a web-based shared information channel. *See id*. Further, none of the other references cited, alone or in hypothetical combination with Neibauer suggest such a feature.

Indeed, as will be described in detail below, Cheng merely teaches down-formatting a full web-site into a mobile website based upon a request from a mobile device that specifies the full web-site. Similar to Neibauer, Cheng provides a mechanism for providing information to be *received* at a mobile device, but does not once teach or even suggest that a mobile device could, should, or would somehow provide content to be integrated in a web-based shared information channel, let alone with content from an additional mobile device. Thus, Petitioner failed to carry its burden of establishing that claims 1-3, 6-9, 12-14, and 17-18 are invalid over the prior art cited in Ground 1.

In addition, Ground 2 fails for the same reasons as Ground 1.

II. PERSON OF ORDINARY SKILL IN THE ART

For purposes of the POR, MDT applies Petitioner's characterization of a person of ordinary skill in the art ("POSITA"). Patent Owner hereby affirmatively withdraws the expert declaration and C.V. submitted with Patent Owner's preliminary response (EX2001, EX2002). *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) (2020). 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. "Mobile Device"

The term "mobile device, in independent claims 1, 12, 13, and 17 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 mobile channel via a wireless network."

The intrinsic evidence supports this construction. First, the Background of the Invention 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 '348 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; Medvidovic, ¶¶60-62.

Second, the '348 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.,* EX1001, 4:46-48. The specification also characterizes the invention of the '348 Patent with respect to integrating information content of multiple mobile devices over wireless networks. *Id*., 2:18-33.

Third, the '348 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 very first sentence of the "SUMMARY OF THE INVENTION" section of the '348 Patent clearly establishes that the '348 Patent is directed to "generation and management of mobile sites." *Id.*, 2:14-15. For example, the '348 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 '348 patent is replete with examples of mobile site generation and/or use of mobile 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. Medvidovic, ¶¶61, 82-85, 270.

In the context of the '348 Patent, web experiences of mobile devices clearly diverge from conventional techniques provided by computers, such as fully-capable PCs and/or laptops. *Id.* ¶84. 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) such as 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 '348 Patent, which repeatedly demonstrates mobile device connectivity through mobile sites, not conventional sites. *Id.; see also* ¶¶44, 61.

Because the term "mobile device" is described throughout the '348 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. Medvidovic, ¶¶45, 60-64.

Moreover, claim terms must be construed "in light of the surrounding claim 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 '348 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. p.21. This clearly refers to portable handheld devices, *not* traditional laptop computers, which were not new in 2002.

[1] Patent Owner further asserts that a POSITA at the time of the invention would have understood the single reference in the specification to laptop computers to refer specifically to laptop computers existing that were configured to interact with mobile content through mobile networks (such as those running Windows CE), and not refer to traditional laptop computers. Medvidovic, ¶45.

Medvidovic, ¶62. Petitioner's construction of mobile device as including a traditional laptop computer 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.*

In its decision, the Board concluded that the term "mobile device" includes a laptop computer. Decision (Paper 11), p.23. Respectfully, Patent Owner submits that the Board does not account for claims "conform[ing] to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims" to find "clear support … in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description." *See* 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." EX1001, 1:45-50; Medvidovic, ¶¶45, 60-64.

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. Medvidovic, ¶63; *see, e.g.,* Neibauer p.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.,* EX2011.

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. Medvidovic, ¶61.

B. "Web-Based Shared Information Channel"

The term "web-based shared information channel," used in the claims, does not require an express construction and should be given its plain and ordinary meaning which comports with the proposed construction of a "medium for transferring information accessible to more than one user via the web," consistent with Patent Owner's proposed construction in the pending litigation. EX1025. Petitioner adopts Patent Owner's proposed construction from the litigation, which is identical to the construction above except the last word is "internet" instead of "web" for the purposes of the present IPR. Pet. 33. Patent Owner submits that this minor change from "internet" to "web" is supported by the record and does not materially change the definition. Medvidovic, ¶73.

Petitioner provides Grounds 4-6 based upon ***Petitioner's*** proposed construction of this term in litigation. Pet. 62. Petitioner notes that "[i]n the event the Board finds it unnecessary to construe this term, these grounds need not be further considered." *Id.* Here, because there is mutual agreement that the term "web-based information channel" means a "medium for transferring information accessible to more than one user via the web," the alternative construction applicable to Grounds 4-6 is not used and, thus, as Petitioner suggests, these grounds (Grounds 4-6) are moot and "need not be further considered." *Id*. Even if considered, Petitioner's arguments fail as shown in Section VIII below.

IV. THE ASSERTED GROUNDS AND LEGAL PRECEDENT

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

Ground	Challenged Claims	References
1	1-3, 6-9, 12-14, 17-18	Neibauer (EX1003), Ausems (EX1006), Cheng (EX1005)
2	4-5	Ground 1 + Squibbs (EX1011)
3	10-11, 15-16, 19-20	Ground 1 + McElfresh (EX1014)
4	1-3, 6-9, 12-14, 17-18	Ground 1 + Harvey (EX1010)
5	4-5	Ground 2 + Harvey (EX1010)
6	10-11, 15-16, 19-20	Ground 3 + Harvey (EX1010)

Pet. 3.

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. "When an obviousness argument relies on 'combining multiple embodiments from a single reference, … there must be a motivation to make the combination and a reasonable expectation that such a combination would be successful, otherwise a skilled artisan would not arrive at the claimed combination.'" *Reactive Surfaces Ltd., LLP v. Toyota Motor Corp.*, IPR2019-00867, Paper 6 at 8 (PTAB Sep. 18, 2019) (*quoting In re Stepan Co*., 868 F.3d 1342, 1345-46 n.1 (Fed. Cir. 2017)).

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. GROUND 1 - THE HYPOTHETICAL COMBINATION DOES NOT ESTABLISH A *PRIMA FACIE* CASE OF OBVIOUSNESS

A. The Cited References

1. Neibauer

The 2000 book titled How to Do Everything with Yahoo!, by Alan Neibauer, explains how the Internet portal called Yahoo! is a place on the Internet that offers

users services, such as access to the Internet, and as a repository of and a conduit of user content and Yahoo! services for registered users. Neibauer, pp.xv, 4; Medvidovic, ¶93. Petitioner acknowledges this content from Neibauer was considered by the Examiner and made of record in granting the claims of the ’348 Patent. Pet. p.4. Nevertheless, Petitioner attempts to relitigate the prosecution history of the ’348 Patent in view Neibauer.

a. Chapter 21: Yahoo! Clubs

In particular, Petitioner submits that Neibauer discloses a feature called Yahoo! Clubs that allows users to create web-based communities for users to share information through photo sharing and other features. Pet. p.10. Neibauer describes accessing the Yahoo! Clubs feature by accessing a website (e.g., http://clubs.yahoo.com/) to open a webpage that includes a list of clubs, and a user can navigate (e.g., through clicks of a mouse) the list of clubs. The Yahoo! Clubs feature is described and depicted in Neibauer as being accessed by a personal computer with a “full size” display. Neibauer p.475 (“Club page”); Medvidovic, ¶95-108.

Neibauer also describes the Yahoo! Clubs photo album feature, a website that allows users of PCs (but not mobile devices) to add photos and descriptions of the photos via the website as depicted in FIG. 21-10. Neibauer, p.473-478; Medvidovic, ¶¶108-109.

b. Chapter 7: Yahoo! Mobile

Keeping the Yahoo! Clubs *website-enabled* feature in mind, Petitioner then points to a separate section of Neibauer to illustrate that Neibauer provides the ability to access Yahoo! Services via mobile devices, such as cell phones. Pet. p.9. Neibauer describes a Yahoo! Mobile feature that allows users to check their mail and calendar and be notified about meetings, stock quotes, sports scores, the weather, and auctions. Neibauer, p.166. But to perform any operations via Yahoo! Mobile, Neibauer cautions the user that the mobile device needs to be a "PDA that uses Palm OS Windows CE, a modem, and a Web browser." *Id.*; Medvidovic, ¶¶96-97. In this way, Neibauer recognizes that a "mobile device" is consistent with the Patent Owner's claim construction provided above. Medvidovic, ¶63.

Further, it is clear that the Yahoo! Mobile feature relies on the mobile device's connection to the Internet to enable its capability of presenting notifications (e.g., alerts, mail, meetings) provided from web-based sources. *See id.* (requirement of Web browser). In other words, Yahoo! Mobile only provides the user with the ability to view information that has been received via the Internet, as opposed to being received from a mobile device. Medvidovic, ¶¶97-98.

Nothing in Neibauer suggests that the features described in Chapter 21 (Yahoo! Clubs Uploads) could be performed via mobile devices. Medvidovic, ¶98. 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. Medvidovic, ¶95-100. 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. Medvidovic, ¶98-100. Accordingly, when considering the Yahoo! Clubs feature in view of the limitations of the Yahoo! Mobile feature, it is clear that Yahoo! Mobile, at best, provides mobile device users the ability to ***receive data*** from the Yahoo! Clubs website but does not provide mobile device users the ability to ***provide content*** to the Yahoo! Clubs website. *Id.* Neibauer *never* mentions providing a user the ability to add content, much less photos and descriptions of photos, *to* the Yahoo! Clubs website *from* a mobile device. *Id.* Indeed, given the limited display space and navigational capabilities of typical mobile devices, it is unreasonable to believe that the website depicted in FIG. 21-10 would be presentable on a mobile device or capable of performing the functions related to inserting content into the Yahoo! Clubs website. Medvidovic, ¶98.

Additionally, Yahoo! Clubs as described in Neibauer is depicted as involving "full featured" webpages that allow users to perform various operations (e.g., add photo) via the Internet and a desktop browser. Medvidovic, ¶¶99, 101-109. That is, the photos and descriptions of the photos added to the Yahoo! Clubs website are

provided via an Internet-based platform designed for access by personal computers (PCs)—not mobile devices. *Id.* Indeed, neither Yahoo! Clubs nor Yahoo! Mobile permit or contemplate uploading content from a mobile device for integration into a channel facilitating interaction between the mobile device user and other users. *Id.*

Further, since Yahoo! Clubs is only implementable via the Internet as a website, the ability afforded to Yahoo! Clubs users to add photos and descriptions corresponds to a functionality implementable via the Internet, ***not*** implementable via a wireless network separate from the Internet. Medvidovic, ¶¶99-109. Indeed, as will be discussed in more detail below, Neibauer never provides the ability to send content and information associated with a *wireless networking functionality* of the mobile device for insertion into an information channel permitting interaction between a user of a mobile device and other users.

The Petition fails to provide evidence and analysis that overcome these deficiencies. Medvidovic, ¶111.

c. Neibauer is Nonanalogous Art

The appropriate field of endeavor is determined "by reference to explanations of the invention's subject matter." *In re Bigio*, 381 F.3d 1320, 1325 (Fed. Cir. 2004). As discussed above, doing so reveals that Neibauer is *not* reasonably pertinent to the problem addressed by the '348 Patent which explains that "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." EX1001, 1:59-63 (emphasis added); Medvidovic, ¶¶158-160.

Petitioner never explains how Neibauer solves these problems. And despite stating that Neibauer "would have been reasonably pertinent to problems facing the inventors[]" (Pet. p.18), 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."). EX1002 ¶104.

First, as explained above, that is not the problem solved by the '348 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[;]" EX1001, 1:64-66). Medvidovic, ¶159. Neibauer, however, is not an invention and is not attempting to solve *any* problem. Medvidovic, ¶93-94; 156-157. 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. *Id.*

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 In re Clay*, 966 F.2d 656, 658-59 (Fed. Cir. 1992)). Neibauer's purpose is to act as a simplistic reference guide to help laypeople perform basic computing functions (e.g., accessing web-based email). *Id.* This is a far different purpose than that of the '348 Patent, which is distinctly directed to allowing bidirectional information sharing from mobile device via a web-based shared information channel. EX1001, 19:34-44. Therefore, Neibauer and the '348 Patent do not have the same purpose, confirming that Neibauer is not reasonably pertinent to the problem addressed by the '348 Patent.

Thus, Neibauer is nonanalogous art and cannot be used to render obvious any claims of the '348 Patent. Because each of Grounds 1-6 rely on Neibauer, they fail for this reason as well.

2. Ausems

Ausems describes a combination Personal Digital Assistant ("PDA") and mobile phone with a digital camera. Medvidovic, ¶129; Pet. p.24. Petitioner cites Ausems "to show an example of a mobile communications device that, among other things, incorporated a digital camera for recording, storing, and transmitting digital images." *Id.* However, Ausems does not teach "transmitting digital images", and, more specifically, 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, as Petitioner alleges. Medvidovic, ¶¶130-141; Pet. pp.24-25. Instead, Ausems states

that "PDA/wireless telephone combinations" of that time "are unable to run application software packages or transmit and receive video data." (EX1006, 1:35-37). Ausems does not explain how to remedy this deficiency because it is mainly concerned with the physical appearance of how to design a PDA telephone combination, not actually describing how any of the asserted features would work. See, e.g., EX1006, Figs. 1a-1p; Medvidovic, ¶¶130-141.

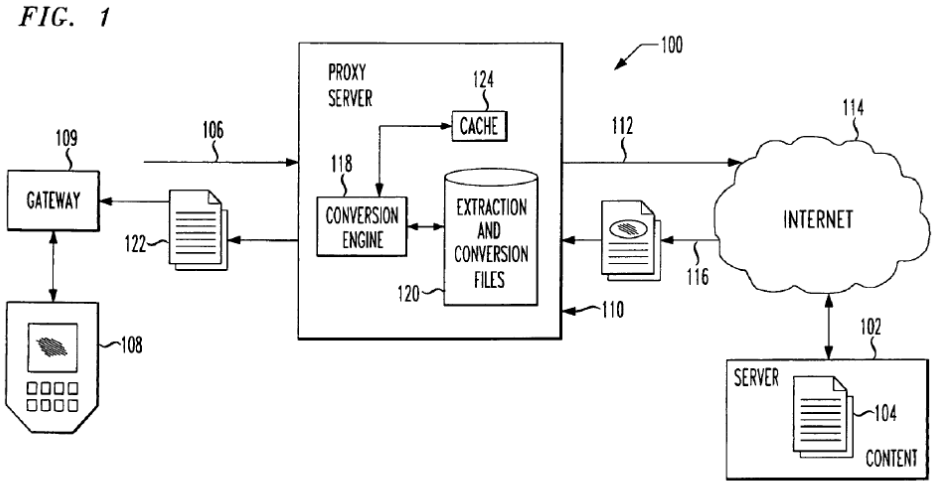
Further, Petitioner cites Ausems as claiming that "Camera 190 records video images and stores them within. Additionally, video images recorded by camera 190 may also be transmitted from PDA telephone 100 in real time during a telephone call (thus allowing for video conferencing).". Pet. p.25; *see also id.*, 2:5-6 ("[T]he device also includes [a] digital camera for recording images…."). But, nothing in Ausems teaches ***how*** to transmit images from the PDA. Indeed, Ausems acknowledges that "PDA/wireless telephone combinations ***are unable to*** run application software packages or ***transmit and receive video data***." Medvidovic, ¶140; Ausems 1:35-37. 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 does not provide any disclosure how such a feat would be accomplished. Therefore, Ausems does not disclose how to transmit digital photographs from a mobile device to a web-based shared information channel. Medvidovic, ¶¶130-141.

3. Cheng

Cheng describes a method by which a proxy server can access a website and reformat its visual elements so they can be viewed by a mobile device. Medvidovic, ¶121; Cheng, Abstract. Cheng discloses that when the proxy server receives a request from a mobile device to view a particular web page, the proxy server subsequently extracts images and text data from the requested web page and re-formats the data so that it can be viewed properly by the mobile device that made the initial request. *Id.*; Medvidovic, ¶122.

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. Medvidovic, ¶¶121, 127, 276, 284. Cheng's proxy server purports to operate by receiving (or retrieving a cached copy of) a website, and then applying an operator-specified series of transformations to the website content that Cheng calls "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). EX1005, 4:56-5:10; and col. 17-22 (exemplary SW-Transforms); Medvidovic, ¶¶122-128. 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.*

This one-way translation of Cheng is clearly illustrated in FIG. 1 of Cheng (reproduced below). As illustrated, the only data supplied by the mobile device 108 is a request 106 for a given web page 104. EX1005, 3:58-59. The conversion engine 118 receives the web page 104 and converts it for consumption by the mobile device 108, for example by removing tags that are not supported by the mobile device's browser. *Id.,* 12:55-64. Cheng does not teach or suggest functionality that enables subsequent mobile-device provided device-captured content to be integrated back into the web page 104. Medvidovic, ¶¶126-127. Thus, even when used on particular web pages 104 that would allow uploaded data, Cheng simply does not teach, suggest, or otherwise support such functionality. Medvidovic, ¶128.



But nowhere does Cheng suggest transmission of content *from the mobile device*. Medvidovic, ¶126. 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.

Petitioner relies on Cheng to show that a mobile device could have accomplished the claimed interactive features missing from Neibauer. However, Cheng is deficient in this regard because it only provides for transmission of data from a website to be displayed on a mobile device, but does not provide for transmission in the other direction (i.e., sending data from the mobile device to the server hosting the website). Medvidovic, ¶¶120, 126-128. Like Neibauer, Cheng does not disclose any form of interaction or sharing between mobile users. Thus, like Neibauer, Cheng discloses that mobile devices are able to only "receive" information, not send it. *Id.* Accordingly, there is no disclosure of a "shared information channel" nor is there disclosure of integrating the first and second mobile device captured data into a shared information channel. There is no sharing of information between mobile devices (or even from a mobile device to a computer), as Cheng provides no support for sending information from a mobile device, only receiving it.

Contrary to Petitioner's assertions (Pet. p.23), Cheng does not teach or suggest "upload[ing] a photo over the Internet using its mobile device." Medvidovic, ¶¶126-128. Indeed, Cheng does not provide any indication that such an action could be performed let alone how to configure or modify the mobile device and/or proxy

server to transmit digital photographs from the mobile device to a web-based shared information channel because Cheng was trying to solve a completely different problem—how to display feature-rich internet content on a mobile device with limited capabilities. The Cheng proxy server would have had to have been designed to support such upstream data transfer. *Id.* ¶86. This is neither taught nor even suggested by Cheng or the hypothetical combination of Ground 1. The Petition fails to present evidence and analysis that overcomes this deficiency.

B. Petitioner's Combination of Neibauer and Cheng Does Not Disclose the Claimed Invention

The claims all recite some variation on "receiving [first/second] device-captured data from a [first/second] mobile device over at least one network" which Petitioner maps onto the upstream transfer of pictures from the mobile device through the Cheng proxy server to the Neibauer web server. Pet. p.23; Medvidovic, ¶354. Again, Petitioner relies on Ausems only for the allegedly "unremarkable proposition that a mobile device can obtain image data from a digital camera." Pet. p.10. *Id.* Petitioner does not contend that Ausems adds anything to Neibauer and/or Cheng related to Petitioner's theory of a mobile device transmitting image data through Cheng's proxy server to Neibauer's web server. Pet. p.25. For the reasons discussed below regarding motivation to combine and reasonable expectation of success, Neibauer and Cheng do not satisfy the "receiving . . . from a mobile device" claim limitations even if combined. *Id.*

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. p.14. Petitioner then asserts, thus, the Yahoo! Clubs feature "would have been accessible to a user of a mobile device such as a laptop computer." *Id.* As established above, the term "mobile device" should not be construed as full-capability computer (e.g., laptop) that uses conventional web pages. POR§III.A. 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 or discloses that mobile devices as the term is properly construed in light of the specification provide first and second device-captured content for integration into a mobile version of Yahoo! Clubs site. This is something that the cited art, alone or in hypothetical combination, simply does not suggest.

After asserting that the Clubs feature would be accessible to a user of a mobile device, in the next paragraph Petitioner admits "Neibauer does not expressly disclose that Yahoo! Clubs was one of the Yahoo! features that could be made accessible via mobile device." *Id.* Petitioner understates Neibauer's disclosure. As mentioned above, Neibauer is a "how-to" guide for Yahoo! functionality, providing a state of the functionality at the time of publication. POR§V.A.1. As established, Neibauer

does explicitly indicate the limited subset of Yahoo! features available to mobile devices. None of these features provide any sort of mobile device-supplied device-captured data to be integrated into a web-based information channel, let alone into the Yahoo! Clubs functionality. Neibauer does not teach or suggest any such future 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 '348 Patent. Medvidovic, ¶356.

Further, adding in Cheng's down-converting mobile site generation would still not render the current claims obvious. Cheng is explicitly designed for one-way data transfer in response to a request from a mobile client. Medvidovic, ¶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 teaching or suggestion of any mobile device-supplied device captured data to be integrated into a web-based shared information channel, as required by 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 completely new up-conversion functionality that is simply not taught or suggested by any of the references, alone or in hypothetical combination. *Id*. Given the state of the art, development of 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, which a server does in response to a specific request, 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. Medvidovic, ¶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.* 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, Cheng could not simply be a "bolt-on" functionality that affords mobile device upload capabilities. *Id.* Indeed, even if Cheng was a "bolt-on" to the Yahoo! Club functionality of Neibauer, it would merely afford an ability to *view* Yahoo! Club functionality on a mobile device, without affording any ability to upload content. Extensive modifications to the Cheng techniques would be required, which are not

taught by Neibauer or Cheng, alone or in hypothetical 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. Medvidovic, ¶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, and in any event, Petitioner proposes only an unmodified Cheng that does not disclose or even suggest it is configured for supporting client-to-server uploads. As a result, even if the Board were to find sufficient motivation to combine and reasonable expectation of success for Petitioner's Neibauer-Cheng combination, it still would not disclose all the limitations of the challenged claims, whether or not combined with Ausems.

C. Petitioner's Motivation to Combine Neibauer and Cheng is Deficient

All of Petitioner's grounds rest on the combination of Neibauer's disclosure of Yahoo! Clubs ("Clubs") with Cheng's proxy server. Pet. p.9. Petitioner argues that a POSITA would have been motivated to make this combination[2] in order to

[2] Petitioner also adds Ausems to this combination for "the unremarkable proposition that a mobile device can obtain image data from a digital camera" (Pet. p.10), but

allow a user to make use of the relied-on functionality in Clubs on a mobile device. Pet. 20-21. But an unspoken, basic fallacy pervades Petitioner's entire argument: that mobile devices available at the time of the invention were capable of receiving and displaying complex websites such as those shown in Neibauer at all, much less capable of supporting the internal functionality needed for the interactive features of Clubs Petitioner relies on. Medvidovic, ¶¶161-169. Indeed, Cheng involves down-converting websites to afford an ability to display the website via the limited capabilities and/or support afforded to the mobile devices. POR§V.A.3. With the exception of providing a mechanism to enable link clicks, there is no teaching or suggestion that interactive features, such as photo uploads to a Club site, could somehow be supported by these down-converted sites. Absent any such evidence that a POSITA actually ***could*** have achieved such a combination, Petitioner's arguments that a POSITA ***would*** have sought to do so amount to nothing more than anachronistic, impermissible hindsight.

For these reasons and others explained in detail below, Petitioner's theories are conclusory, aspirational, and not tethered to record evidence, and thus do not

---

for the functionality of the purported combined system discussed here Petitioner relies only on the combination of Neibauer and Cheng.

satisfy Petitioner's burden to show a motivation to combine and a reasonable expectation of success.

1. Petitioner's motivations to combine are conclusory, internally inconsistent, and contradicted by record evidence

Petitioner first argues that it would have been obvious to make Clubs available for use on a mobile device because Yahoo! itself made certain other services available for use on personal digital assistants ("PDAs") through its Yahoo! Mobile and Yahoo! To Go services. Pet. 20-21. But the primitive Yahoo! services available on a PDA via Yahoo! Mobile and Yahoo! To Go reflected the "limited memory, slow data transmission, and small screens" the experts agree were available on mobile devices at the time. Medvidovic, ¶¶161-172, 363; EX1002 ¶63 (citing EX1012 p.320); see also EX1003, 171:

All these examples are designed to only fill the width of the PDA screen and are text only, with no images at all. Medvidovic, ¶364. Again, this is not surprising: memory, bandwidth, and screen space at the time were at a premium. *Id*. Compare these minimalist renditions to desktop browser views of some of the Clubs functionality

Petitioner relies on and it becomes clear that mobile sites are tailored for different types of devices, supporting different functionality. EX1003, p.483 (Figure 21-13, club home page), p.478 (Figure 21-10, club photo album (reproduced below).

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

Category: James Bond Serie
Club Type: Liste

Blueraja's BOND GIRL Album

Back To: Album List

Created by blueraja3 on 22-Nov-1999

Showing 1 - 12 of 12 photos | View Thumbnails

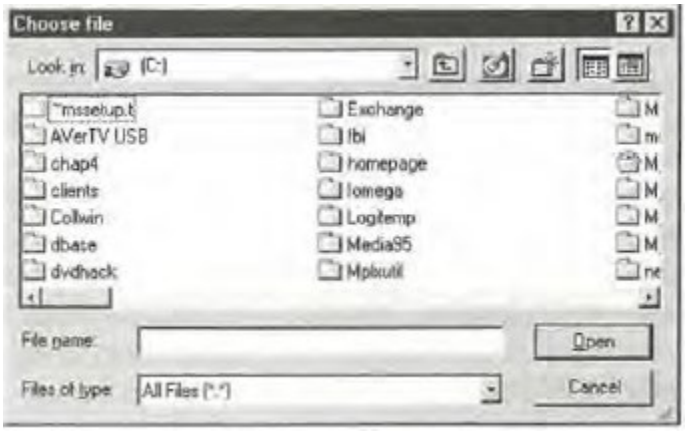
Add Photo

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

FIGURE 21-10 **Club photo album**

Of particular note is that Petitioner relies on the two-way sharing of photos with mobile devices: both mobile devices being able to receive and view the main club picture uploaded by the founder (first image, below "Founder's Message" in Figure 21-13), and uploading of additional pictures to club photo albums by mobile device users (second image, "Add Photo" button in Figure 21-10). Pet. 11-12. Neibauer's Yahoo! Mobile and Yahoo! To Go examples do not show any comparable functionality, and Petitioner does not allege otherwise.

Further, in describing document upload (from a computer), Neibauer explicitly indicates to "use standard Windows techniques to locate and select the file," illustrating a Windows Operating System "Choose File" dialog box (reproduced below) used to select files to upload. EX1003:00103. As may be appreciated, such standard Windows techniques were oftentimes not supported by mobile devices. Medvidovic, ¶365.



With that in mind, Petitioner's bare assertion that it would have been obvious to provide Clubs through Yahoo! Mobile and/or Yahoo! To Go (Pet. 20-21) is purely conclusory and unsupported by record evidence. Medvidovic, ¶367. Petitioner argues that a POSITA would have been motivated by market forces, but this too is conclusory and unsupported, and does not even attempt to explain what these supposed market forces would be that Yahoo!, one of the leading Internet portals at the time, was not already subject to. Indeed, the story told by the record evidence is that Yahoo! did not already provide Clubs functionality through Yahoo! Mobile and Yahoo! To Go was because contemporaneous mobile devices were incapable of

supporting it. *Id*. ¶¶58, 61-66; *cf. Reactive Surfaces Ltd.*, IPR2019-00867, Paper 6 at 8 (requiring motivation to combine multiple embodiments from a single reference).

Undeterred by these warning signs, Petitioner pivots to a fallback obviousness combination by adding Cheng's translation proxy server. Pet. 15, 17-18. But Petitioner already argued it would have been obvious to adapt Neibauer to provide Clubs through Yahoo! Mobile and/or Yahoo! To Go based on Neibauer alone, and does not articulate any purported differences in capability between Yahoo! Mobile or Yahoo! To Go and Cheng's translation proxy server that would have caused a POSITA to find Yahoo! Mobile or Yahoo! To Go deficient in a way that Cheng would solve. Medvidovic, ¶173-177; 368.

Petitioner presents Cheng as a universal solution "capable of converting and reformatting any existing HTML-based web page into a format suitable for display on a mobile device" (Pet. 72), but that careful language elides the fact that Cheng's conversion process applied not only to the ***format*** of a web page, but also to its ***content*** and ***capabilities***. Medvidovic, ¶¶173-177, 369. Indeed, Cheng freely acknowledges that its aspirational goal of a universal website translator for mobile devices was practically and perhaps significantly limited by the capabilities of those devices. *Id*. To this end, Cheng provides six columns of exemplary "SW-Transforms" that might be used to convert, downscale, and/or completely delete

content from an original website such that the remainder might be successfully displayed on a mobile device (*id.*), but again Petitioner offers no evidence of the capabilities required by the Clubs webpages shown in Neibauer beyond conclusory, unsupported statements cut-and-pasted by its expert. Thus there is no record evidence if and how Cheng's translation tool could have been successfully applied to the Clubs webpages for any mobile devices available at the time, and, if so, whether the functionalities Petitioner relies on still would have worked. *Id*.

Petitioner argues as an additional motivation to combine Neibauer and Cheng that transcoding proxy servers for mobile devices were known and in commercial use (Pet. 15, 21-22), but again this both cuts against Petitioner's motivation to combine and amplifies its lack of supporting evidence. If such transcoding proxy servers were already in commercial use, there would have been no need and thus no motivation for a POSITA to start over with Cheng rather than just using an already-available proxy—if indeed a POSITA would have seen a transcoding proxy server as a viable solution at all. Furthermore, if transcoding proxy servers at the time actually were capable of converting the Clubs websites into a form usable by contemporaneous mobile devices, certainly some fraction of Yahoo!'s millions of users actually would have done so and Petitioner could have dramatically simplified its petitions by simply bringing forth such evidence.

In addition, Petitioner's theory is expressly based on applying Cheng in its entirety as "bolt-on" functionality to a likewise unmodified Neibauer, and even argues a single entity could operate both the Neibauer web server and Cheng proxy. Pet. 20. Again, this theory appears to be results-oriented and conclusory, ignoring the real-world ramifications of such a choice and why they would actually steer a POSITA away from it. Medvidovic, ¶¶174-177, 371. A proxy server such as Cheng's is designed to be transparent to the web server: to the web server, the proxy server appears to be the client. Medvidovic, ¶372. But the converse is not true: the proxy server is not at all transparent to the ***client***. *Id*. Indeed, Cheng acknowledges only two ways for a mobile device to route requests through its proxy server: either through a permanent connection between the client and proxy server via a device configuration (which would route any and all traffic through that proxy), or a "decorated URL" (e.g., www.proxyserver.com/?url=http://www.originalwebserver.com). Medvidovic, ¶¶171-173, 372. Either possibility would be awkward for a mobile device user wanting to view a website of an enterprise that employed Petitioner's Neibauer-Cheng combination: either the user would have to manually reconfigure the proxy server in their mobile device to point to the Neibauer-Cheng proxy server every time they wanted to view the enterprise's web pages (and then remove or change their proxy connection for other web pages), or the user would have to enter a "decorated

URL" in the ponderous form shown above every time they wanted to view the enterprise's web pages. Medvidovic, ¶¶172-177. These unnecessary contortions would be unacceptable to a user, and would discourage a POSITA from designing a mobile-capable website by crudely "bolting on" a Neibauer web server and Cheng proxy server as Petitioner suggests. *Id.*

2. Petitioner does not show a reasonable expectation of success

Petitioner's "bolt-on" approach to Cheng's proxy server glosses over the level of experimentation that would be required to program that proxy server to translate a specific website such as Yahoo! Clubs to work on a specific mobile device available at the time. Medvidovic, ¶174-177, 374. Petitioner treats Cheng like a mythical "babel fish" that automatically and magically converts any website for use on any device, when in reality Cheng merely discloses a ***framework*** for ***attempting*** to do so: an exemplary set of "SW-Transforms" that attempt to alter the content of an original website to make the remainder viewable on a given mobile device. Medvidovic, ¶374. Cheng discloses SW-Transforms that can be applied on a device-specific basis (to conform all web pages to some specific constraint of a certain mobile device) and a site-specific basis (to adapt the contents of a certain web page or group of pages on a web site for all mobile devices). *See, e.g.*, EX1004, 11:45-62; 12:25-31; Medvidovic, ¶176, 374. Cheng states: "The number of possible conversions is virtually infinite." EX1005, 12:29-31.

Cheng thus discloses a methodology for conversion and a decidedly finite number of exemplary SW-Transforms (EX1004, cols. 17-22), but beyond that leaves a POSITA on their own to determine what might be required to make a specific website work on a specific device. Medvidovic, ¶176-177, 375. Thus, a POSITA examining Cheng would have no idea whether its disclosed system would work at all to translate the Clubs web pages to form viewable on a mobile device available at the time—much less with all of the functionality usable that Petitioner relies on—and would have to engage in undue experimentation to determine which of Cheng's SW-Transforms might work, or whether the POSITA would have to develop new ones from Cheng's "virtually infinite" set of possibilities. Medvidovic, ¶¶174-177, 375. This sort of blue-sky exploration does not rise to a reasonable expectation of success. *See Medichem, S.A. v. Rolabo, SL*, 437 F.3d 1157, 1165 (Fed. Cir. 2006) ("to have a reasonable expectation of success, one must be motivated to do more than merely to vary all parameters or try each of numerous possible choices until one possibly arrived at a successful result").

And in any event, regardless of the level of experimentation required to make Cheng's translation work on Neibauer's web pages, a POSITA still would not have a reasonable expectation of success because, as discussed above, Cheng's proxy server is only designed for downstream content delivery and Yahoo! Clubs requires

two-way interaction and transfer of content, and modifying Cheng to do so would be outside the capabilities of a POSITA. Medvidovic, ¶¶174-177, 376.

D. Independent Claim 1

Independent claim 1 is directed to integrating first device-captured data received from a first mobile device and second device-captured data received from a second mobile device into a web-based shared information channel controllably accessible to the users of these mobile devices via respective personalized content applications of the first and second mobile devices.

1. Limitations 1[c][1] and 1[c][2]

Limitation 1[c][1] recites that an apparatus' processing element is configured "to receive first device-captured data from a first one of the mobile devices via the network interface." Limitation 1[c][2] recites that the apparatus' processing element is configured "to receive second device-captured data from a second one of the mobile devices via the network interface." The cited references, alone or in hypothetical combination do not teach or even suggest such features. Medvidovic, ¶¶355-402.

As established above, Neibauer's PC-based Yahoo! Clubs service does not render the current claim limitation obvious. POR§V.A.1. The current claim limitation requires that the device-captured data is received "from a first one of the mobile devices" and "from a second one of the mobile devices," respectively, which,

as established, does not include a full-capability computer, such as a full-capability laptop. *Id*. Accordingly, photo uploads from Neibauer's Yahoo! Clubs functionality by a PC does not disclose or render obvious the current limitations. Medvidovic, ¶¶96-99, 356-357, 380-381. Further, the mere mention of the set of Yahoo! Mobile services implementable by a mobile device does not teach or suggest these features. Indeed, as established above, none of the Yahoo! Mobile features provides device-captured data to be integrated into a web-based shared information channel amongst mobile devices. Instead, all of the mobile functionality provided is merely functionality that results in data being *received* by the mobile device for presentation on the mobile device. *Id.* As established, mobile devices use mobile sites for web-based communication. POR§III.A There is no teaching, suggestion, or enablement of device-captured data that is provided by (and thus received from) a mobile device, let alone photos uploaded from such a mobile device and posted in the Yahoo! Clubs website.

Further, Cheng combined with Neibauer's Yahoo Clubs! functionality does not teach or suggest these limitations. As established, Cheng does not contemplate uploads from mobile devices, even when "bolted-on" to the Yahoo! Clubs functionality described in Neibauer. POR§V.B. As established, Cheng does not provide any teaching or suggestion of mobile-device provided data other than a web page request 106 provided to the proxy server 110. Medvidovic, ¶¶124-128, 358.

Cheng does not teach or suggest mobile-device supplied data that is integrated back into the web page 104. *Id.*; POR§V.A.3. In fact, Cheng does not disclose *any* mobile device-supplied data being provided to the web page 104. Therefore, even if Neibauer's Yahoo! Clubs site were the web page 104, there would still be no device-captured data received from the mobile device 108 at the Yahoo! Clubs web page 104. Instead, at best, Cheng would allow a view of the Yahoo! Clubs web page 104 to be *received and presented by* the mobile device 108, which is simply not analogous to the recited claim limitations. Medvidovic, ¶¶127-128, 358. Further, neither Neibauer nor Cheng contemplates nor provides guidance regarding additional modifications that could be used to provide such forward provision of device-captured data from mobile devices. *Id.* Thus, any such combination attempting to establish these features is impermissible hindsight. POR§V.C. Further, the lack of guidance regarding the complex modifications that would have been required, clearly demonstrates that undue experimentation would be required and a lack of reasonable likelihood of success. *Id*.

2. Limitation 1[c][3]

Limitation 1[c][3] recites that the apparatus' processing element is configured "to integrate the first and second device-captured data into a web-based shared information channel controllably accessible to first and second users of the respective first and second mobile devices via respective personalized content

applications of the first and second mobile devices." The cited references, alone or in hypothetical combination do not teach or even suggest such features. Medvidovic, ¶¶382-385.

Indeed, because the cited references do not teach or suggest receiving first device-captured data from a first mobile device and receiving second device-captured data from a second mobile device, the cited references clearly do not disclose integrating such data into a web-based shared information channel. Indeed, as explained above, at best, Neibauer merely enables PCs to upload photos via the Yahoo! Clubs site. There is no teaching or suggestion of mobile devices performing such functionality. POR§V.A.1.

Further, as established, Cheng does not contemplate uploads from mobile devices, even when "bolted-on" to the Yahoo! Clubs functionality described in Neibauer. Medvidovic, ¶¶163-174, 359-360; POR§V.C. Indeed, the complex modifications that would have been required, clearly demonstrates that undue experimentation would be required and a lack of reasonable likelihood of success. Medvidovic, ¶¶174-177, 359-360; POR§V.C.2. Because the Ground 1 combination does not teach or even suggest receiving first device-captured data and second device-captured data from respective mobile devices, this combination clearly does not teach or suggest integration of such device-captured data into a web-based shared information channel controllably accessibly by the respective mobile devices.

As illustrated, the Ground 1 combination is erroneous, suffering from a lack of motivation to combine and hindsight bias, requiring significant modifications to teach the recited limitations. Medvidovic, ¶¶360-378. These modifications are neither taught nor suggested by the cited art, alone or in hypothetical combination. Further, these modifications would require significant undue experimentation with a lack of reasonable likelihood of success. For the foregoing reasons, Petitioner fails to carry its burden of establishing claim 1 obvious over the cited art.

E. Independent Claim 12

Independent Claim 12 recites "[a] network-based communication system comprising a plurality of servers configured to communicate over said at least one network, a given one of the servers comprising the apparatus of claim 1." Thus, claim 12 requires a server that comprises the apparatus of claim 1 and all of the recited limitations provided therein. As shown above, limitations 1[c][1-3] are not taught or even suggested by the prior art references cited in Ground 1. POR§V.D. Thus, because claim 12 includes all recitations of claim 1 and the cited prior art does not render claim 1 obvious, the cited art clearly does not render claim 12 obvious. Medvidovic, ¶386.

F. Independent Claim 13

Independent claim 13 recites a method that comprises limitations that are substantially similar to limitations 1[c][1-3] discussed above. For example,

limitations 13[a] and 13[b] recite: "receiving first device-captured data from a first mobile device over at least one network" and "receiving second device-captured data from a second mobile device over said at least one network," respectively. Limitation 13[c] recites: "integrating the first and second device-captured data into a web-based shared information channel controllably accessible to first and second users of the respective first and second mobile devices via respective personalized content applications of the first and second mobile devices."

As shown above, limitations 1[c][1-3] are not taught or even suggested by the prior art references cited in Ground 1. POR§V.D. Thus, because claim 13 includes these recitations of claim 1 and the cited prior art does not render claim 1 obvious, the cited art clearly does not render claim 13 obvious. Medvidovic, ¶387.

G. Independent Claim 17

Independent claim 17 recites a computer-readable storage medium with code that causes a processing element to perform limitations that are substantially similar to limitations 1[c][1-3] discussed above. For example, limitations 17[a] and 17[b] recite: "to receive first device-captured data from a first mobile device over at least one network" and "to receive second device-captured data from a second mobile device over said at least one network," respectively. Limitation 17[c] recites: "to integrate the first and second device-captured data into a web-based shared information channel controllably accessible to first and second users of the

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

As shown above, limitations 1[c][1-3] are not taught or even suggested by the prior art references cited in Ground 1. POR§V.D. Thus, because claim 17 includes these recitations of claim 1 and the cited prior art does not render claim 1 obvious, the cited art clearly does not render claim 17 obvious. Medvidovic, ¶¶389-390.

H. Dependent Claims 2-3

Claims 2 and 3 recite specific types of device-captured data that are provided by the first mobile device and/or the second mobile device. Claim 2 requires that the device-captured data received from the first mobile device and/or the second mobile device comprises image data. Claim 3 requires that the device-captured data received from the first mobile device and/or the second mobile device comprises video data.

As shown above, the cited references do not teach or even suggest receiving device-captured data from mobile devices. POR§V.D. Instead, Neibauer, at best, teaches *receiving* Yahoo! Mobile content at a mobile device without ever teaching or suggesting mobile provision of content. POR§V.B. Further, Cheng does not obviate this deficiency of Neibauer, as Cheng merely provides down-conversion of a website requested by a mobile device without providing any teaching or suggestion that subsequent content could be received from the mobile device and presented back

to the webserver/website. Medvidovic, ¶177. Thus, even if Cheng was "bolted on" to Neibauer's Yahoo! Clubs functionality, as suggested by Petitioner, this combination would merely result in the ability of mobile devices to *view* the Yahoo! Groups website. It does not provide any teaching or suggestion, let alone enablement of a mobile device somehow providing content back to the webserver/website to be integrated into the Yahoo! Clubs website. Medvidovic, ¶177. As established, such a feat would not have been obvious to a POSITA, as it would likely not be as simple as merely reversing Cheng's down-conversion, instead potentially requiring significant additional changes to provide mobile device to proxy server to web server functionality. Medvidovic, ¶¶176, 391. Further, the addition of Ausems does not obviate these deficiencies and Petitioner has not established that it does. Instead, at best, Petitioner cites Ausems "[i]n the event Patent Owner argues that incorporation of digital cameras into mobile devices was not known as of June 2002." Pet. 24. Ausems does not teach or suggest, and Petitioner has not alleged or established that Ausems teaches or suggests, mobile device provided device captured data that is integrated into a web-based shared information channel, let alone two mobile devices providing such device captured data for integration into the web-based shared information channel.

Because the cited art does not disclose provision of (and thus receiving) "first device-captured data from a first one of the mobile devices via the network interface"

or "second device-captured data from a second one of the mobile devices via the network interface," the cited references clearly do not teach or suggest that such device-captured data comprises "image data" (claim 2) or "video data" (claim 3). Medvidovic, ¶¶391-396.

1. Claim 2

In rejecting claim 2, Petitioner merely relies on the rationale used in claim 1. Pet. 34. As shown above, the cited references do not teach or even suggest photo sharing from a mobile device. Instead, at best, the cited references may teach *viewing* shared photos on a mobile device (using Cheng's down-conversion applied to Yahoo! Clubs) without ever once teaching or suggesting mobile device provision of image data. Medvidovic, ¶¶98, 393. Thus, for similar reasons as discussed above with respect to claim 1, Petitioner has not established that claim 2 is obvious over the cited references, either alone or in hypothetical combination.

2. Claim 3

Regarding claim 3, Petitioner provides two theories, both of which are flawed. Under a first theory, Petitioner suggests that GIF image file "was the *de facto* image standard for images on the Web" and "could contain a number of image frames… to create videos." Petitioner further notes that "Cheng expressly discloses the ability to provide, to mobile devices, GIF images on web pages." Pet. 35. However, this express disclosure of Cheng does nothing to establish a teaching or suggestion of

receiving the video data *from* the mobile device, as required by the current claims. As discussed above, there is simply no disclosure of device captured data being provided by and, thus, received from, a mobile device. Thus, there is simply no teaching or suggestion of such device captured data comprising video data.

Under Petitioner's second theory, Ausems is relied upon for this feature, based upon disclosure of a PDA that provides video conferencing/video capture capabilities. Pet. 36. While Ausems does disclose such functionality, such video capture is not analogous to the device captured data that is integrated "into a web-based shared information channel." Indeed, as with the other art cited, Ausems, alone or in combination with the other art, does not teach or suggest mobile device provided content that is integrated into a web-based shared information channel accessible to two mobile devices. Instead, at best, Ausems indicates that "text and images" are transmitted via the wireless phone engine 210 without any teaching or suggestion that such transfer may be integrated into "web-based" channel. EX1006, 5:55-58. To the extent that Ausems provides disclosure regarding Internet, Ausems merely indicates that a separate modem 220 is provided to "have Internet access." *Id.*, 5:66-6:1. Thus, even with the addition of Ausems, the cited combination does not teach or suggest that the device-captured data, which is integrated into a web-based shared information channel, comprises video data.

I. Dependent Claim 6

Claim 6 recites that "a given one of the first and second mobile devices comprises one of a mobile telephone, a tablet computer, a GPS-based navigational device, a watch and a portable game player." The cited references do not render this claim obvious. As shown above, mobile devices should not be construed to include conventional laptops that act similar to desktops, but instead the subset of laptops that utilize mobile sites, as is clear throughout the current specification and would have been understood by a POSITA. Medvidovic, ¶397. Claim 6 expressly limits away from at least one of the mobile devices being any type of laptop, by reciting a list of mobile devices comprising: "one of a mobile telephone, a tablet computer, a GPS-based navigational device, a watch and a portable game player." Each of the recited mobile device types did not use a typical webpage to access the web. *Id.* Instead, web-enabled versions of these types of devices typically used a mobile site (e.g., specifically tailored to support the browsing limitations (limited feature support) of that device. *Id.* Thus, the mere disclosure of the Yahoo! Clubs website for desktop computers clearly does not teach or suggest such a website where one of the recited mobile device types provides device-captured data. Indeed, as shown above, none of the cited references provide such teaching or suggestion, either alone or in hypothetical combination.

Petitioner asserts that Cheng an Ausems both include "at least 'a mobile telephone'" and that Ausems discloses "a GPS-based navigational device."

However, as explained above, neither of these references, alone or when combined with Neibauer or each other, teach or even suggest a mobile telephone that provides "device-captured data" that is integrated "into a web-based shared information channel." POR§V.D. Thus, the cited references do not render claim 6 obvious.

J. Dependent Claim 7

Dependent claim 7 recites "a web server that includes the network interface and the processing element and wherein the web server is accessible to the first and second mobile devices over the Internet via the network interface." Thus, a web server provides the receiving and integration features described in Limitations 1[c][1-3]. The cited references do not teach or suggest this feature. Medvidovic, ¶¶399-400.

Petitioner asserts that the origin server 102 "which provides the functions of Neibauer" combined with the proxy server 110 "which makes those functions available to mobile devices" teaches the web server recited by the current claims. Pet. 37. However, as shown above, the proxy server 110 does not provide any teaching or suggestion of receiving anything at the proxy server 110 from the mobile device, except for a web page request and/or subsequent web page requests. POR§V.A.3. There is absolutely no teaching or suggestion in Cheng, alone or combined with Neibauer, that the proxy server 110 could, should, or would "receive first device-captured data from a first one of the mobile devices via the network

interface" or "receive second device-captured data from a second one of the mobile devices via the network interface" let alone how such content, received from a down-converted mobile website would be up-converted and provided back to the origin server 102. *Id.* Thus, in contrast to Petitioner's assertion, the origin server 102 and proxy server 110, even when combined, do not "make[] those functions available to mobile devices." Thus, the cited references clearly do not render claim 7 obvious.

K. Dependent Claims 8, 9, 14, and 18

Dependent claim 8 recites "wherein the web-based shared information channel is configured to allow a given one of the first and second users to *enter a message via the personalized content application of its corresponding mobile device* and *wherein the message is integrated with the first and second device-captured data into a persistent version of a given set of shared information content* of the web-based shared information channel so as to be accessible with the first and second device-captured data to the first and second users of the respective first and second mobile devices via the respective personalized content applications of the first and second mobile devices." (Emphasis added.) Claims 14 and 18 recite similar recitations, as indicated by Petitioner. Pet. 42-43; 44. Claim 9 further limits claim 8, indicating that "the message is delivered to one or more of the mobile devices over a wireless network." The cited art does not teach or even suggest these features. Medvidovic, ¶¶401-402.

The cited references do not teach or suggest a web-based shared information channel configured to allow users to enter a message "via the personalized content application of its corresponding mobile device." Petitioner once again relies on the Yahoo! Clubs features of Neibauer, which are exclusive to non-mobile devices. Medvidovic, ¶¶99-100, 109. As shown above, there is simply no teaching or suggestion in the cited art, alone or in hypothetical combination, of providing device captured data from a mobile device, which is integrated into a web-based shared information channel accessible by the mobile devices. Thus, the cited references clearly do not render claim 8 or claim 9, depending therefrom, obvious. Further, for similar reasons, the cited references do not render claims 14 and 18 obvious.

VI. GROUND 2 - THE HYPOTHETICAL COMBINATION DOES NOT ESTABLISH A PRIMA FACIE CASE OF OBVIOUSNESS

A. The Additional Cited References

1. Squibbs

Squibbs describes a technique of 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 (e.g., wireless networking functionality) 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 photo image data and location information may be provided to a network store 43. Squibbs, ¶0101. In each embodiment provided in Squibbs, the target destination for the location information is personal computer (PC 5) executing a complex multi-mode album program 50 that may provide a map-based interface for organizing photos downloaded to the PC 5. Squibbs, ¶¶0031-0032. Thus, similar to the other art, Squibbs does not teach or suggest, alone or in combination, mobile device provision of its location information to a web-based shared information channel, but instead provides location information to the user's personal computer (PC 5), which does not afford access to a plurality of mobile devices, let alone via personalized content applications of the mobile devices. Medvidovic, ¶¶146-149, 404.

B. Dependent Claims 4 and 5

Claim 4 recites that "at least one of the first device-captured data and the second device-captured data [integrated into the web-based shared information channel controllably accessible… via respective personalized content applications of the first and second mobile devices] comprises device-captured location coordinates." Claim 5 recites that "at least one of the first device-captured data and the second device-captured data comprises: location-identifying information of the

corresponding mobile device; and at least one of device-captured image data and device-captured video data associated with a capture location identified by the location-identifying information." The Ground 2 combination of cited art does not establish a *prima facie* case of obviousness with respect to the claimed subject matter of claims 4 and 5. Medvidovic, ¶¶405-407.

Dependent claim 4 recites that "at least one of the first device-captured data and the second device-captured data [integrated into the web-based shared information channel controllably accessible… via respective personalized content applications of the first and second mobile devices] comprises device-captured location coordinates." Claim 5 recites that "at least one of the first device-captured data and the second device-captured data comprises: location-identifying information of the corresponding mobile device; and at least one of device-captured image data and device-captured video data associated with a capture location identified by the location-identifying information." The cited references, alone or in hypothetical combination, do not disclose these features.

As discussed above with respect to Ground 1, none of the Ground 1 art, alone or in hypothetical combination, teaches or suggests receiving provision of first and second device-captured data from respective mobile devices and integrating the first and second device-device captured data into a web-based shared information channel. Medvidovic, ¶405. The addition of Squibbs does not obviate this

deficiency. Instead, at best, Squibbs provides location information to a PC 5 of a user that takes a picture, with the aim of providing a geographically organized view of the user's photos. Squibbs:0031-0032. Once again, there is no teaching or suggestion that first and second device-captured data is received from respective mobile devices and integrated into a web-based shared information channel controllably accessible by respective personalized content applications of the first and second mobile devices. Even if Squibbs was properly combinable with Neibauer, it would merely result in the ability to download photos from the Yahoo! Clubs page to a user's PC and also receive location information at the user's PC for location timestamping. *Id.* There is no teaching or suggestion that Squibbs' album program 50 could or would be applied to a web-based service. *Id.* Indeed, a POSITA in 2002, given the then state of the technology, would have no reasonable expectation of success of first adding more complex functionality to the Yahoo! Clubs service, down-converting the service for mobile access, and then somehow adding new mobile upload capabilities back to the Yahoo! Clubs service. *Id.*

For at least these reasons, Ground 2 does not support a *prima facie* case of obviousness of claims 4 and 5.

VII. GROUND 3 - THE HYPOTHETICAL COMBINATION DOES NOT ESTABLISH A PRIMA FACIE CASE OF OBVIOUSNESS

A. The Additional Cited References

1. McElfresh

McElfresh describes a technique for placement of advertisements on a webpage. EX1014,Abstract. As Petitioner acknowledges, "a website can issue a request for ads for inclusion on a webpage, and the ads provided will be selected and ranked in a in a way that increases the likelihood of click-throughs and maximizes advertising revenue. (McElfresh, 5:20-28)." Pet. 53-54. In McElfresh's system, "the website 104 requests ads from the Rad Server 112 as shown by dataflow 160. After the steps described above are performed, the Rad Server 112 delivers a set of ads for display to the user which have been optimized for increased click-throughs, and/or increased revenue generation for the webpage provider." EX1014, 8:9-14. Thus, McElfresh describes an ad-request and response system that provides on-the-fly ad selection. Medvidovic, ¶149, 408-410. Such ad-request and response is not analogous to a data feed where data is periodically obtained from a given such identified data feed. *Id.* Indeed, nowhere does McElfresh teach or suggest "at least one data feed and wherein data is periodically obtained from a given such identified data feed and integrated with the first and second device-captured data into a persistent version of a given set of shared information content of the web-based shared information channel so as to be accessible with the first and second device-captured data to the first and second users of the respective first and second mobile devices via the respective personalized content applications of the first and second mobile devices," as recited by claim 10 and similarly recited by claims 15 and 19,

let alone where the such data from the identified data feed comprises at least one advertisement, as recited by claims 11, 16, and 20. Medvidovic, ¶150.

2. The McElfresh Modification Does Not Provide a Reasonable Expectation of Success and, Thus, Does Not Support a *Prima Facie* Case of Obviousness

The Petitioner's McElfresh Modification with the hypothetical combination of art provide in Ground 1 does not provide a reasonable expectation of success because the ad selection in McElfresh is based up tracked user information that was typically available via mobile devices in 2002 and is not taught, suggested, or enabled by any of the art, alone or in hypothetical combination. Medvidovic, ¶404-407. Indeed, as explained above, the down-conversion used by Cheng to enable viewing of a web page on a mobile device is not backwards compatible and does not teach or suggest an affordance for provision of data from the down-converted mobile site back to the web server. Thus, McElfresh's ad selection and provision would not work, as user demographic data would not be available. *Id.*

B. Dependent Claims 10-11, 15-16, and 19-20

In the Petition, Petitioner cites McElfresh's ad-request and response technique as teaching or suggesting "wherein the web-based shared information channel is configured to identify at least one data feed and wherein data is periodically obtained from a given such identified data feed and integrated with the first and second device-captured data into a persistent version of a given set of shared information

content of the web-based shared information channel so as to be accessible with the first and second device-captured data to the first and second users of the respective first and second mobile devices via the respective personalized content applications of the first and second mobile devices." However, as discussed above, such an ad-request and response technique is not analogous to integrating periodically obtained data of a data feed into a persistent version of a given set of shared information content of the web-based shared information channel. To the contrary, in contrast to integrating data that is periodically obtained from a data feed, the ad-request and response scheme is no data feed at all, but instead merely a near-real-time response.

Petitioner suggests the "data feed" "would have corresponded to a feed containing a plurality of advertisements that would have been available for display on the club photo sharing feature." Pet. 56. Thus, it appears that Petitioner is suggesting a library of available advertisements is a "data feed," which is clearly erroneous, as a library of "available" advertisements need not ever be provided to a user and is, thus, clearly not a "feed." Petitioner continues, suggesting that the Neibauer webserver "would have *periodically obtained* ad data from this feed [the "available" advertisements], for example when webpages for the club sharing photo sharing feature are being prepared for delivery to a user." Thus Petitioner's position is that ad responses to ad requests provided during rendering of a website are analogous to data from data feeds that is periodically updated. Such a position is

erroneous, as data is neither fed nor periodically updated under the McElfresh technique. Medvidovic, ¶409. Accordingly, McElfresh does not disclose the features of claims 10, 15, or 19, let alone the features of claims 11, 16, and 20 depending from claims 10, 15, and 19, respectively.

VIII. GROUNDS 4-6 – THE CONSTRUCTION OF WEB-BASED SHARED INFORMATION CHANNEL HAS BEEN AGREED UPON, RENDERING GROUNDS 4-6 MOOT

The term "web-based shared information channel," used in the claims, does not require an express construction and should be given its plain and ordinary meaning which comports with the proposed construction of a "medium for transferring information accessible to more than one user via the web." EX1025. Even if considered, Petitioner's arguments fail. Because the combination of Neibauer, Cheng, and Squibbs does not render obvious independent claim 19, it cannot render obvious claims 19-23 in view of Harvey because Harvey does not cure the deficiencies of the art relied upon in Ground 1, Ground 2, or Ground 3. That is, Harvey, like the other prior art references, fails to at least disclose integrating first and second device captured content received from first and second mobile devices, respectively, into a web-based shared information channel that is controllably accessible via respective personalized content applications of the first and second mobile devices. In contrast, Harvey merely provides a community creating module for creating a web-based community. Harvey, 7:49-46; Medvidovic ¶¶151, 411.

The web-based community of Harvey does not integrate any device-captured received from mobile devices into a web-based shared information channel controllably accessible via these mobile devices. Harvey never mentions a mobile device anywhere in its disclosure. Accordingly, Petitioner has not met its burden with regard to Grounds 4-6.

IX. CONCLUSION

For the reasons above, Petitioner's proposed grounds of unpatentability fail. Thus, Patent Owner asks the Board to find all Challenged Claims patentable.

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* admission pending)
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 14,000 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