UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

META PLATFORMS, INC.,
Petitioner,

v.

MOBILE DATA TECHNOLOGIES LLC,
Patent Owner.

IPR2024-00246 (Patent 8,793,336 B2)
IPR2024-00247 (Patent 8,825,801 B2)
IPR2024-00248 (Patent 9,032,039 B2)
IPR2024-00249 (Patent 9,619,578 B2)
IPR2024-00250 (Patent 9,922,348 B2)

REPLY DECLARATION OF VIJAY K. MADISETTI, PH.D.

APPLE 1064
Apple v. Smith Interface
IPR2024-01089

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I, Vijay K. Madisetti, Ph.D., declare as follows:

1. I have been asked to respond to the "Declaration of Dr. Nenad Medvidović In Support of Patent Owner's Responses to Petitions," dated October 1, 2024 and submitted in the five IPRs for the '336, '801, '039, '578, and '348 patents (IPR2024-00246 through IPR2024-00250), filed as **Exhibit 2007** in these IPRs. Citations to "(¶__)" below refer to numbered paragraphs in the Medvidović declaration. Because Dr. Medvidović submitted a single declaration in response to all five IPR petitions, I have likewise submitted this common response.

2. This Reply Declaration will focus on portions of the Medvidović Declaration that affirmatively present new facts and/or new rationale or analyses to which a response is warranted. To the extent other portions of the Medvidović Declaration state general disagreements with conclusions that I reached (on which the Petition relied), or fail to provide evidence or analysis that warrants a response, I adhere to the analysis in my opening declarations, attached as **Exhibit 1002**. I also note that the Medvidović declaration is repetitive in that it repeats and paraphrases , substantially the same arguments over and over, in some cases repeating the same argument multiple times in a single section addressing a single claim. I will thus attempt to address his arguments without undue repetition, referring back to earlier analyses in this Reply Declaration when appropriate.

I. RESPONSE TO DR. MEDVIDOVIĆ'S ARGUMETNS ABOUT THE DEFINITION OF A PERSON OF ORDINARY SKILL IN THE ART

3. Dr. Medvidović contends that a person of ordinary skill in the art for purposes of the challenged claims was someone "who would have had a Bachelor's degree in computer engineering, computer science, or a similar discipline, and two years of professional experience in the fields of distributed systems, embedded systems, mobile systems, or related fields." (¶53.) He also states that a person of ordinary skill in the art "would have at least a general knowledge of web-based applications and mobile applications." (*Id.*)

4. It is not clear if Dr. Medvidović has attempted to propose a POSITA definition different from the one proposed in my opening declarations; in the very next paragraph of his declaration, he states that "I was given the Petitioner's definition of a POSTA," which was the one provided in my opening declarations, "and I agree with Petitioner's definition." (¶54.)

5. Accordingly, it is unclear if Dr. Medvidović has proposed a POSITA definition that is materially different from mine; the fact that he agrees with my definition suggests otherwise. Nevertheless, even if there were some material differences between the two formulations, and I were to adopt Dr. Medvidović's formulation at ¶53, it would not change my opinion about the obviousness of the challenged claims. His definition acknowledges that a person of ordinary skill in the art "would have at least a general knowledge of web-based applications and mobile

applications." (¶53.) This would have been sufficient, along with the other experience identified by Dr. Medvidović, to enable a person of ordinary skill in the art to recognize the pertinence of the prior art and the motivations to combine it, and to implement the proposed combinations laid out in my opening declaration.

II. RESPONSE TO DR. MEDVIDOVIĆ'S ARGUMENTS ABOUT CLAIM CONSTRUCTION

Table Summarizing Dr. Medvidović's Proposed Constructions	
Term	**Dr. Medvidović Proposed Construction**
"mobile device" (all patents)	"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"
"mobile information channel" ('336, '801 patents)	"a component of a mobile site configured to permit a wide variety of mobile devices to send and receive content over a wireless network"
"wireless network" ('336, '801, '578, '348 patents)	"a network separate from the internet that facilitates connection to the internet by a mobile device"
"wireless networking functionality of the mobile device" ('039, '578 patents)	"functionality implementable by the mobile device via the wireless network independent of the Internet"
"application-based information channel" ('578, '039 patents)	"computer program-based medium for transferring information"
"web-based shared information channel" ('348 patent)	"medium for transferring information accessible to more than one user via the web"

A. "Mobile Device"

6. Dr. Medvidović provides arguments about the construction of "**mobile**

device," which he argues that it should be understood as "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." (¶59.) Dr. Medvidović further argues that a conventional laptop would not have qualified as a "**mobile device**" because of its weight and size.

7. I note that the "**mobile device**" construction offered by Dr. Medvidović, even if adopted, would not change my opinion that the challenged claims are obvious over the prior art. I have relied on a laptop computer only as an example of a "**mobile device**" that renders the challenged claims obvious; for each of the challenged patents, I also relied on ***other*** types of mobile devices that would fit even Dr. Medvidović's narrower definition. For example, starting with Cheng, it clearly discloses a "**mobile device**" under Dr. Medvidović's construction because it discloses a technique of adapting web content for use for "one or more handheld device browsers (e.g., the Palm Web Clipping Browser from Palm, Inc., Santa Clara, Calif., Pocket Internet Explorer from Microsoft Corp, Redmond, Wash., and Wireless Access Protocol (WAP) on smart phones, etc.)." (Cheng, 2:4-15 (emphasis added).) Cheng also discloses use of well-known mobile devices such as Palm devices (Cheng, 5:11-25, 7:50-58, 9:47-59), which was a family of well-known and commercially available handheld personal digital assistant (PDA) devices that had limited display space and navigational capabilities. There appears to be no dispute

that the system of Cheng uses a mobile device even under the construction proffered by Dr. Medvidović. He explains in his declaration, in fact, that "Cheng generally describes a method wherein a proxy serves accesses a website and reformats its visual elements to allow viewing by a mobile device." (¶119 (emphasis added).) Although Dr. Medvidović makes a variety of arguments against Cheng, I could not find any argument in his declaration that tries to distinguish Cheng based on his proffered construction of "**mobile device**." Dr. Medvidović acknowledged in his deposition, in fact, that personal digital assistant (PDA) devices satisfied his definition of "**mobile device**." (**EX1033** (Medvidović Depo.), 41:10-15, 42:1-15, 44:6-16.) This would have included the Palm devices mentioned in Cheng.

8. I also have relied on Neibauer's disclosures relating to Yahoo! Mobile, which allowed certain Yahoo! features to be provided to mobile devices such as pagers, cell phone, web phones, and personal digital assistants (PDAs). (Neibauer, pp.166 (00111).) Neibauer discloses numerous examples of PDAs including Palm devices, Windows CE devices, the Apple Newton, among others. (Neibauer, p.171 (00116), ¶3.) Dr. Medvidović does not dispute that such PDA devices qualify as "**mobile devices**" under his proposed construction.

9. Nevertheless, for completeness, I have addressed Dr. Medvidović's construction, and I respectfully disagree with it. I am informed by counsel that under the patent laws, where the written description provides an explicit definition of a

term, that definition will control the interpretation of that term as used in the claims. In this case, the written description of the patents-in-suit does provide an express definition of "**mobile device**," which is broader and more inclusive than the one advanced by Dr. Medvidović. The written description explains:

> The term "mobile device" as used herein is intended to include, without limitation, any type of portable information processing device capable of being configured for communication over a network. Examples of mobile devices **15** utilizable in system **10** of FIG. 1A include a mobile telephone, a personal digital assistant (PDA), a palmtop computer, a hand-held computer, a laptop computer, a tablet computer, a global positioning system (GPS) receiver or other GPS-based navigational device, an MP3 player or other type of audio player, a pager, a watch or other timepiece, a camera, a portable game player, etc.

('336, 3:30-40.)[1]

10. A person of ordinary skill in the art would have understood the first sentence in the passage as providing an explicit definition of "**mobile device**" as including "any type of portable information processing device capable of being configured for communication over a network." ('336, 3:30-33.) A skilled artisan

[1] For convenience and consistency throughout my Reply Declaration, I have cited to the '336 patent when citing to the common specification of the challenged patents. Any citations to the '336 patent should be understood as encompassing equivalent citations to the other four challenged patents.

would have interpreted the phrase, "[t]he term 'mobile device' as used herein" ('336, 3:30), as connoting an intention by the applicants to provide an express definition of mobile device. The passage above goes on to list exemplary devices that fall within the definition including, among others, a laptop computer. In my opinion, therefore, to the extent "mobile device" needs to be construed, it should be construed based on the express definition quoted above, *i.e.*, "any type of portable information processing device capable of being configured for communication over a network."

11. And that definition merely requires that a mobile device be a ***portable*** device, but not necessarily a ***handheld*** device as Dr. Medvidović contends. A device can be portable yet not necessarily handheld, such as a conventional laptop computer. This is confirmed by the contemporaneous definition of "portable computer" provided in the *Microsoft Computer Dictionary* (5th ed. 2002):

portable computer *n.* Any computer designed to be moved easily. Portable computers can be characterized by size and weight. See the table.

Table P.2 Portable Computers.

Type	*Approximate weight*	*Power source*	*Comments*
Transportable	15–30 lb.	House current	Sometimes called luggable; usually has floppy and hard-drives; standard CRT screen.
Laptop	8–15 lb.	House current or batteries	Can be held on the lap; usually has a floppy drive;uses flat LCD or plasma screen.
Ultralight	2–8 lb.	Batteries or trans-former pack	Easy to carry in a briefcase; sometimes uses RAM drive or EPROM instead of floppy or hard drive; thinner models are known as notebook computers.
Handheld	Less than 2 lb.	Batteries or trans-former pack	Also called palmtop or palm-sized; can be held in one hand.

(*Microsoft Computer Dictionary* (5th ed 2002) (**EX1034**), pp.412-413.) As the

contemporaneous definition above shows, "portable" in the context of computing devices includes a wide range of mobile computing devices, including laptops weighing up to 15 pounds and even transportable computers with cathode ray tube (CRT) screens weighing up to 30 pounds. (*Id.*)

12. The fact that "portable" extends beyond handheld mobile devices is further supported by the fact that the passage of the common specification defining "mobile device" above, which separately identifies "hand-held computer" ('336, 3:36) as one example of a mobile device. This would have clearly indicated to a skilled artisan that the term "**mobile device**" is ***not*** limited to a handheld device is sufficiently broad to include, for example, a laptop computer.

13. Dr. Medvidović attempts to sidestep the fact that "a laptop computer" is expressly mentioned as an example of a mobile device in the passage above ('336, 3:36), by arguing that this only includes "a subset of laptops with limited display space and limited navigational capabilities" (¶61), but he cites nothing to support this argument. This argument is undermined by the fact that the same passage defining "mobile device," quoted above, separately identifies other types of smaller computers that fit his laptop subset description, such as "a palmtop computer" ('336, 3:35-36), a term understood at the time of the alleged invention to refer to a laptop-type computer with a smaller form factor and more limited capabilities. (*See Microsoft Computer Dictionary* (5th ed. 2002) (**EX1034**), p.389 ("**palmtop** *n*. A

portable personal computer whose size enables it to be held in one hand while it is operated with the other hand. A major difference between palmtop computers and laptop computers is that palmtops are usually powered by off-the-shelf batteries such as AA cells.”).) That same passage also refers to other smaller form-factor computers such as “a hand-held computer” and “a tablet computer,” among others. (’336, 3:35-37.) The inclusion of these other smaller form-factor computers undermines Dr. Medvidović’s assertion that the reference to “a laptop computer” is limited to a handheld device, as he suggests.

14. The other parts of Dr. Medvidović’s proposed construction are likewise unsupported. For example, his proposed requirement that a mobile device have “limited display space and limited navigational capabilities” (¶59), is found nowhere in the patent’s definition of a mobile device. The only mention of the phrase, “limited display space and navigational capabilities,” appears in the Background of the patent, and only as a description of ***typical*** mobile devices. (’336, 1:41-45 (“An important challenge in this context relates to facilitating the process of creating, publishing, distributing or otherwise managing information content so as to provide optimal presentation consistent with the limited display space and navigational capabilities <u>of typical mobile devices</u>.”) (emphasis added).) A skilled artisan would not have interpreted this statement as modifying the express definition of mobile device appearing later in the patent. As noted, this statement is expressly qualified

as applying only to "typical" mobile devices; it does not purport to describe universal characteristics possessed by all types of mobile devices.

15. Dr. Medvidović also argues that including a laptop computer would "ignore the problem the patent was meant to fix and would render the rest of the claim superfluous." (¶62). I disagree because, as noted, the patent itself expressly defines "**mobile device**" to include a laptop computer. Moreover, the same section of the Background cited by Dr. Medvidović identifies other alleged problems with conventional techniques that are unrelated to the display space and navigational capabilities of mobile devices, such as the failure of conventional techniques to suitably integrate messaging, collaboration and location-based services, and their unsuitability for unsophisticated users because of the allegedly significant amount of programming knowledge required. ('336, 1:54-67.) The Background concludes by stating that "a need exists for improved techniques for managing information content in a manner that overcomes <u>one or more of the drawbacks</u> of the conventional techniques described above" ('336, 2:1-4 (emphasis added)), which makes clear the alleged invention does not necessarily purport to address every one of these drawbacks. While the express definition of mobile device in the patent is broad enough to cover smaller handheld devices, I find nothing in the patent supporting a construction limited to those types of devices.

16. Nor is there any support for the proposed further requirement that a

mobile device "connects to a mobile site and/or mobile channel via a wireless network." (¶59.) The express definition of "**mobile device**" in the patent merely requires that the device be "capable of being configured for communication over a network." ('336, 4:30-33.) There is no basis to require that a mobile device communicate "via a wireless network," as the patent itself confirms that the invention does not require this. ('336, 4:5-8.) Indeed, the specification explains that "[a] network suitable for use with the invention may include any type of data communication network," including "a wired local area network (LAN)," among many other types of networks. ('336, 4:8-17.) Indeed, claim 1 of the '348 patent (challenged in IPR2024-00250) merely requires receiving data from a mobile device "**over at least one network**," and thus does not require a wireless network. Although certain other challenged claims in the patents-in-suit separately recite a "**wireless network**" or "**wireless networking functionality**," there is no basis to import a wireless network into the definition of "mobile device."

17. Dr. Medvidović also contends that Neibauer teaches away from using a laptop because it identifies Yahoo! Mobile features that are used on handheld devices such as pagers, cell phones, web phones, and PDAs. (¶63.) But Dr. Medvidović does not explain how these features would have discouraged use of other features of Neibauer via a conventional laptop, or would have discouraged a skilled artisan from adapting the Yahoo! Clubs features of Neibauer on which I rely

to operate on handheld mobile devices (to the extent required by the claim), based on Neibauer alone or in view of Cheng. I note that Dr. Medvidović at ¶64 makes an argument with respect to the ’578 patent that appears to undercut his premise, by conceding that a laptop computer would have been capable of accessing an “application-based information channel,” as recited in the claims of that patent. He also argues that “[o]ne could have accessed an ‘application-based information channel’ on a laptop at the time of filing, for example typing in m.facebook.com (the mobile interface) instead of just facebook.com (the desktop interface).” (¶64.) Aside from not supporting his argument, this assertion is factually incorrect. Dr. Medvidović contends that the effective filing date for the patents is June 18, 2002 (¶34), but the Facebook website did not launch until 2004.

B. “Mobile Information Channel” (’336, ’801 Patents)

18. Dr. Medvidović also provides a proposed construction or “**mobile information channel**,” a term that appears only in the challenged claims in the IPRs for the ’336 (IPR2024-00246) and ’801 (IPR2024-00247) patents. Dr. Medvidović contends that this term should be construed as “a component of a mobile site configured to permit a wide variety of mobile devices to send and receive content over a wireless network.” (¶59.)

19. The key aspect of this construction is a proposed requirement that a mobile information channel must permit access by “***a wide variety*** of mobile

devices." For the same reasons that I explained above, even if adopted, this proposed construction would not distinguish the prior art disclosures in Neibauer and Cheng, which can be accessed using a wide variety of mobile devices including laptop computers, PDAs, mobile telephones, and other types of devices.

20. I have nevertheless considered Dr. Medvidović's construction and found it lacking in support. The sole appearance of this "wide variety" language in the specification is a sentence stating that "[t]he mobile devices **15** **<u>can</u>** collectively comprise **<u>a wide variety</u>** of different devices configurable over the network **12**." ('336, 4:28-30 (emphasis added).) This statement does nothing more than describe "mobile devices **15**" in Figure 1, shown as a multiplicity of mobile devices **15-1** through **15-*n*** connected to wireless network **12**. The patents merely state that these devices "**can**" comprise a wide variety of different devices, but does not impose any requirement on any individual mobile device. This statement also has nothing to do with the claimed "**mobile information channel**," as it instead describes more generally an exemplary network configuration for use with the alleged invention. The statement therefore does not suggest that a mobile information channel must be capable of interacting with a "wide variety" of mobile devices.

21. Dr. Medvidović also points to a passage near the end of the written description in which the patent states that "[t]he system is configured to operate independently of the user device operating system or user device configuration

parameters, such that a given user may author, create, publish, send, convey, share, receive, respond to, subscribe to, collaborate with, track, transact, maintain and manage personalized messaging content from **<u>any type of user device</u>** running any operating system." ('336, 18:38-45 (emphasis added).) Dr. Medvidović relies on the reference to "any type of user device" (¶65), but this casual language merely describes an aspirational goal of a disclosed embodiment. A person of ordinary skill in the art would not have understood this as describing a required aspect of the alleged invention, let alone a part of the "**mobile information channel**" construction. The phrase "any type of user device," for example, on its face includes non-mobile devices such as desktop computers with large form factors.

22. Dr. Medvidović also points to a passage describing Figure 18, but in my opinion, this passage undermines his opinion:

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

('336, 14:54-60 (emphasis added).) This passage makes clear that the invention does not require "any particular type" of mobile device, which undercuts Dr. Medvidović's suggestion that the invention requires the ability to handle a "wide variety" of different types of mobile devices. The patents do not preclude every

mobile device in a particular embodiment from being of the same type.

23. I also note that it is unclear what the phrase "wide variety" even means in Dr. Medvidović's proposed construction. At his deposition, Dr. Medvidović testified that multiple devices of the same type – such as the same type of PDAs but supplied by different vendors – could satisfy his proposed requirement of a "wide variety" of mobile devices. (EX1033 (Medvidović Depo.), 54:20-56:6.) His definition thus does not appear to require that a mobile device be used with a wide variety of different ***types*** of devices. Under Dr. Medvidović's view, it would appear that if a "**mobile information channel**" can be accessed by a plurality of mobile devices that are substantially similar – but simply provided by different vendors – that would satisfy his definition. Under such a formulation, though, the "wide variety" language would provide no basis to distinguish the prior art. This is because many different vendors manufactured substantially the same types of devices, such as Windows CE PocketPC devices from Compaq, Hewlett-Packard, (HP) and other companies, that ran the same operating system and software applications, had substantially similar screen and navigational capabilities, and competed directly against each other in the market. (Hansmann, EX1035, p.40 (Table 2.1).) The same is true for conventional laptop computers, as multiple vendors including Compaq, HP, Dell, IBM, among many others, manufactured and sold Windows-based laptop computers that had substantially similar technical specifications and capabilities.

24. Dr. Medvidović also faults the ’336 patent IPR petition for stating stated that the word “mobile” in “**mobile information channel**” adds “nothing of significance,” but this is a distortion of the IPR petition (and a similar statement made in my opening declaration). (¶¶70, 188.) The actual statement from the IPR petition and my opening declaration was that the word “mobile” was not significant for purposes of the invalidity analysis because the prior art clearly rendered obvious an information channel that was “mobile.” (IPR Petition in IPR2024-00246, at 21; EX1002 in IPR2024-00246, ¶109.) The IPR petition and my opening declaration did not suggest that the word “mobile” could be disregarded, only that the word “mobile” did not provide a basis for distinguishing the relied-upon prior art.

C. “Wireless Network” (’336, ’801, ’578, ’348 Patents)[2]

25. Dr. Medvidović argues that the term “**wireless network**” should be construed as “a network separate from the internet that facilitates connection to the internet by a mobile device.” (¶74.) But this is yet another example of a construction that attempts to import details from the written description into the claims.

26. At the outset, as with his other constructions, this construction would not distinguish the prior art even if adopted. Dr. Medvidović contends that the

[2] The challenged claims of the’039 patent do not recite “wireless network” but do recite “wireless networking functionality,” which I address separately below.

Petitioner's argument "conflates" the Internet with the claimed wireless network (¶¶235, 248), but he does not explain the basis of this argument. My opening declaration identified GSM as an example of a wireless network that could be used by a mobile device. GSM, which stands for **G**lobal **S**ystem for **M**obile Communication, was a dominant wireless (cellular) mobile network in widespread use in the United States the early 2000s. (EX1002 in IPR2024-00246, ¶131.) Dr. Medvidović does not address GSM at all. GSM is a wireless (cellular) network that is separate from the Internet that wirelessly connects to a mobile device and which was used to facilitate connection of the mobile device to the Internet. (*See* Regis J. Bates, *Broadband Telecommunications Handbook* (2d ed. 2002) (**EX1037**), p.394 ("The GSM standard is the most widely accepted standard and is implemented globally, owning a market share of 69 percent of the world's digital cellular subscribers."); *see also id.*, p.471 ("Internet users are ideal target subscribers for GSM operators."); *see also Microsoft Computer Dictionary* (5th ed. 2002) (**EX1034**), p.242 ("**GSM** *n*. Acronym for **G**lobal **S**ystem for **M**obile Communications. A digital cellular phone technology first deployed in 1992… Various enhancements to the GSM system allow increased Web browsing and data transfer options.").) The fact that the GSM cellular network was "separate" from the Internet is evidenced by the fact that GSM provided features that did not depend on Internet functionality or connectivity, such as voice telephone calls and SMS text

messaging. Other well-known wireless networks including GSM/GPRS (an extension to GSM) and 3G addressed in more detail below, were also examples of wireless networks known prior to June 2002 that were connectable to the Internet, but separate from it in that they could provide additional non-Internet services. Dr. Medvidović expressly mentions 3G, acknowledges that it was available by 2001, and states that it "marked the beginning of widespread use of the internet on mobile telephones." (¶40.) 3G is also expressly mentioned as an exemplary wireless network in the patent, as explained below.

27. Even though it does not provide a basis to distinguish the prior art, Dr. Medvidović's proposed construction should be rejected as it has no support in the intrinsic evidence. As the written description explains:

> The network configuration of system **10** [in Figure 1] illustratively comprises wireless network **12** and Internet **14**. However, the invention does not require this particular network arrangement. A network suitable for use with the invention may include any type of data communication network, including the Internet, an intranet, an extranet, a wide area network (WAN), a metropolitan area network (MAN), a wired local area network (LAN), an IEEE 802.11 or Wi-Fi wireless LAN, a satellite communications network, a virtual private network (VPN), a public switched telephone network (PSTN), a cellular network based on third generation (3G) wideband code division multiple access (CDMA) or other standard, as well as portions or combinations of these and other networks.

('336, 4:5-17 (emphasis added).) The passage above makes clear that the arrangement in the specification shown in Figure 1, which shows a wireless network **12** separate from the Internet **14**, is merely a "particular network arrangement," but then immediately states that "the invention does not require this particular network arrangement." (*Id.*) The passage above goes on to explain that the network can include the Internet, as well as many different types of wireless networks, as well as "portions and combinations" of those networks. (*Id.*) This further undermines Dr. Medvidović's contention that the claimed wireless network must be separate and distinct from the Internet.

28. The written description further undermines Dr. Medvidović's proposed separation between a wireless network and the Internet by expressly referring to "the mobile Internet" as an example of a wireless network – thus treating wireless networking and the Internet connectivity as part of a wireless network. ('336, 10:24-28 ("By utilizing the content management site, system users can create one or more personal or business mobile sites with various sets of features, and then share such sites via <u>the mobile Internet or other wireless network</u> with friends, family, colleagues, or other groups of any type.") (emphasis added).) This makes sense because, once a mobile device is connected to the Internet through a wireless network, the mobile device would have had an Internet Protocol (IP) address allowing it to exchange data with other devices on the Internet. The mobile device

in this context would have been considered part of the Internet, even though it relies on a wireless network to facilitate its connection to the Internet. Accordingly, Dr. Medvidović's proposed separation between the claimed "**wireless network**" and the Internet is unsupported,

29. Another problem with Dr. Medvidović's proposed construction is that it would require that the wireless network "facilitate[] connection to the internet by a mobile device," which attempts to import an Internet connection requirement not recited in the claims. None of the challenged independent claims that recite a "**wireless network**" make any mention of the Internet. Access through the Internet, in fact, is a separate feature recited only in <u>dependent</u> claims of '336, '801, '578, and '348 patents. ('336, claim 14 ("… wherein the server is accessible over the Internet via a network interface"), '801, claim 24 ("… wherein the processing element comprises at least one server accessible over the Internet via a network interface"), '578, claim 10 ("… wherein the processing element comprises at least one server accessible over the Internet via a network interface"), '348, claim 7 ("… wherein the web server is accessible to the first and second mobile devices over the Internet via the network interface").) Although the written description discloses embodiments that use the Internet, it also makes clear this is not a requirement of the invention. ('336, 5:48-55 ("In the illustrative embodiment, the content management sites and the mobile sites may each be implemented as a corresponding web site accessible

over the Internet **14**, <u>although this is not a requirement of the invention</u>. Other embodiments may implement one or more of the content management sites or one or more of the mobile sites as <u>intranet sites, extranet sites or other information sources accessible via these or other types of networks</u>.") (emphasis added).) This is yet another reason why Dr. Medvidović's proposed construction is unsupported by the intrinsic record and should be rejected. To the extent "**wireless network**" needs construction at all, therefore, it should simply be construed as a network that allows a device to communicate wirelessly over a network.

D. "Wireless Networking Functionality" ('801, '039, '578 Patents)

30. Dr. Medvidović argues that the phrase "**wireless networking functionality**" of the mobile device should be construed to mean "functionality implementable by the mobile device via the wireless network independent of the Internet." (¶77.) The key issue with this construction is the phrase, "independent of the Internet" which, in my opinion, is unsupported (and in fact contradicted by) the intrinsic evidence. This proposed requirement appears to be based at least in part on Dr. Medvidović's flawed construction of "**wireless network**," addressed above, that attempts to require separation between wireless networks and the Internet.

31. For the reasons explained above, the written description does not support any requirement of functional separation or independence between a wireless network and the Internet. As noted above, in fact, the written description

expressly refers to "the mobile Internet" ('336, 10:24-28) as an example of a wireless network, thus making clear that wireless networking functionality need not be independent of the Internet.

32. In fact, the written description provides several examples of "**wireless networking functionality**" that are implemented utilizing the Internet. More specifically, the written description discloses examples of wireless networking functionality including messaging actions, collaboration actions, location actions, etc., but never once suggests that these functionalities must be implemented independent of the Internet. The written description instead merely requires that these actions be implemented ***over the wireless network***. ('336, 5:56-6:1 ("Advantageously, the information content of a given mobile site generated in the system **10** may be configured so as to integrate therewith information associated with at least one wireless networking functionality of the wireless network **12**… Examples of such information include information specifying at least one <u>messaging action implementable over the wireless network</u>, information specifying at least one <u>collaboration action implementable over the wireless network</u>, and information specifying at least one location-based service action <u>implementable over the wireless network</u>.") (emphasis added).) A person of ordinary skill in the art would have recognized that functionality can be "implementable <u>over the wireless network</u>" (*id.*), while also utilizing the Internet to provide that functionality. And the written

description provides several examples of this.

33. Using the written description's examples of wireless networking functionality of "collaboration," "messaging," and "location" actions, the patent explains that these functionalities can be provided through the mobile information channel (M-channels) of the invention. ('336, 8:11-21 ("More specifically, the M-channels allow unsophisticated users to easily and efficiently author message data or other types of information content to be made accessible via a collaborative workspace, a data mailbox, a collaborative community, or other type of mobile site or portion thereof generated or otherwise managed in the system **10**. Features such as task, action, event, location, delivery or collaborative enabling of specified M-channel content may be specified along with access methods, automatic generation of wirelessly accessible navigation menus, content presentation views, etc.") (emphasis added).) These M-channel features can be made available via a "mobile site," which may be accessed via the Internet. ('336, 8:1-6 ("The term "mobile site' as used herein is intended to include, without limitation, a web site, a collaborative work space, a data mailbox, a collaborative community, an Internet storefront, one or more M-channels and/or an associated dataset, or other similar element(s), as well as portions or combinations thereof."), 5:48-51 ("In the illustrative embodiment, the content management sites and the mobile sites may each be implemented as a corresponding web site accessible over the Internet **14**, although this is not a

requirement of the invention."), 10:24-28 ("By utilizing the content management site, system 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.") (emphasis added to all).) The written description thus makes clear that "**wireless networking functionality**" can be provided by a mobile device accessing a mobile site on the Internet, through a wireless network, the site providing messaging, collaboration, or location functionalities.

34. This is further supported by the fact that the written description expressly identifies to "email" and "MMS" as examples of "wireless networking functionalities." ('336, 18:25-31 ("… a mobile website integrating existing wireless networking functionalities, such as … MMS… [and] email….") (emphasis added).) Both of these functionalities utilize the Internet to function, and Dr. Medvidović correctly identifies both of them as having been being built atop the Internet. (¶89.) For example, Dr. Medvidović correctly notes that email is "primarily SMTP protocol" (¶89), which refers to the Simple Mail Transfer Protocol (SMTP), the protocol for sending and receiving email over the Internet. (*See Microsoft Computer Dictionary* (5th ed. 2002) (**EX1034**), p.482 ("**Simple Mail Transfer Protocol** *n*. A TCP/IP protocol for sending messages from one computer to another on a network. This protocol is used on the Internet to route e-mail. *Acronym*: SMTP.") (bold and

italics in original; underlining added).) For example, sending and receiving email requires an email addresses identifying the server on the Internet (*e.g.*, name@mailbox.com) where received email messages are stored. Dr. Medvidović conceded at his deposition that SMTP was commonly used to send and receive email messages over the Internet prior to June 2002. (EX1033 (Medvidović Depo.), at 67:9-16.) Similarly, MMS (which stands for Multimedia Messaging Service) is an industry standard for sending messages that include multimedia content such as images, audio, and video, between mobile devices over a wireless network. Dr. Medvidović also conceded at his deposition that MMS is "most often" used with the Internet. (EX1033 (Medvidović Depo.), at 67:9-16.) Indeed, like email discussed above, MMS relies on the Internet to relay multimedia messages between cellular networks when delivering deliver messages from the sender to the recipient. (*See Universal Mobile Telecommunications System (UMTS); Multimedia Messaging Service (MMS), Functional description; Stage 2* (3G TS 23.140 version 3.0.1 Release 1999) (**EX1040**), p.9, §4.2 ("The basis of connectivity between these different networks shall be provided by the Internet protocol and its associated set of messaging protocols."); *see also id.*, Fig. 2 (showing "Internet/IP Network" interconnecting two mobile networks through an MMS relay).) The Internet thus plays a critical role in the functioning of MMS gateways for delivering multimedia messages between wireless carriers. Because email and MMS are not functionalities

that were implemented "via the wireless network independent of the Internet" (¶77 (emphasis added)), and yet are identified as express examples of "**wireless networking functionality**" in the written description, Dr. Medvidović's proposed construction should be rejected.

35. Dr. Medvidović at ¶88 points to a statement in the Background of the written description that "web-enabled devices not only provide access to the Internet, but can also be used to support other types of wireless networking functionality, such as messaging, distributed collaboration, and location-based services." ('336, 1:34-39 (emphasis added).) Dr. Medvidović appears to argue that this supports his view that wireless networking functionality must be independent of the Internet. (¶¶88, 292-293.) But it is not clear whether this statement actually treats the ability to "provide access to the Internet" as an example of wireless networking functionality, as the rest of the sentence identifies "other types of wireless networking functionality" in more specific terms. Nevertheless, even if the statement were interpreted the way Dr. Medvidović suggests, it if anything suggests that Internet access is complementary with wireless networking functionality. This is because, as discussed above, the Internet is used in one embodiment described later in the written description to connect the mobile device to the mobile site to provide messaging, collaboration, location, and other wireless networking functionalities described in the patent, over the wireless network.

36. Finally, Dr. Medvidović points to the layered OSI model to argue that wireless functionalities reside at different layers from Internet functionalities. (¶89.) But these OSI layers are not mentioned anywhere in the written description, and there is no indication from the intrinsic evidence that the applicants ever considered OSI layers as relevant for implementing wireless networking functionalities, let alone as a way to distinguish them from functionalities provided via the Internet.

37. For all of these reasons, Dr. Medvidović's proposed construction of "**wireless networking functionality**" should be rejected. To the extent the term requires any construction, it should simply be construed as functionality implementable over a wireless network.

E. Other Terms

38. Dr. Medvidović briefly mentions "**application-based information channel**" (recited in the challenged claims of the '578, '039 patents), to which he applies the following meaning: "computer program-based medium for transferring information." (¶72.) With respect to "**web-based shared information channel**" (recited in challenged claims of the '348 patent), he applies the following meaning: "medium for transferring information accessible to more than one user via the web." (¶73.) I understand that, for purposes of these IPR proceedings, Petitioner has agreed to apply these definitions, and I did so in my opening declarations.

III. RESPONSE TO DR. MEDVIDOVIĆ ARGUMENTS ABOUT THE STATE OF THE ART OF MOBILE DEVICES, WIRELESS TECHNOLOGY, AND WEB/MOBILE TECHNOLOGIES AS OF JUNE 2002.

39. Dr. Medvidović suggests that mobile devices were in a nascent state as June 2002, handicapped by limited screens, processing power, user input capabilities, navigational capabilities, and data exchange capabilities. (¶41.) In my opinion, Dr. Medvidović has presented an inaccurate depiction of the state of the art of mobile technology as of June 2002 – which he uses to underpin many of his specific arguments against the proposed prior art combinations across the five challenged patents. But as I will explain below, while I agree that mobile devices as of June 2002 did not have the same capabilities that we enjoy today, they were far more advanced and developed than Dr. Medvidović suggests.

40. By June 2002, an entire category of more advanced handheld mobile devices, including personal digital assistants (PDAs) and handheld computers and smartphones, were well-known and commercially available. As explained in Uwe Hansmann, *Pervasive Computing Handbook* (2001) (**EX1035**), "[h]andheld computers comprise the largest group of Internet connectable pervasive devices. They are small, lightweight, and fit into your pocket." (Hansmann, p.31.) at that time, the major operating systems for handheld devices were Palm OS and Windows CE. (*Id.*)

41. Palm OS devices included, for example, the Palm V device shown at the right. (Hansmann, p.32.) I note that Palm devices (including the Palm V pictured at right from Hansmann) are expressly mentioned in Cheng as an exemplary mobile device that could be used with his proxy server web page conversion techniques. (Cheng, 5:15-25, 7:50-58, 10:47-59.) Palm devices are also mentioned in Neibauer as being compatible with the Yahoo! Mobile service. (Neibauer, p.171 (00116), ¶3.) Palm devices, such as the one shown at the right, had reasonably large screens and could support applications including email, calendaring, address book, among others. (Hansmann, pp.32-34.) "There [were] several Web browsers available." (*Id.*, p.34.)

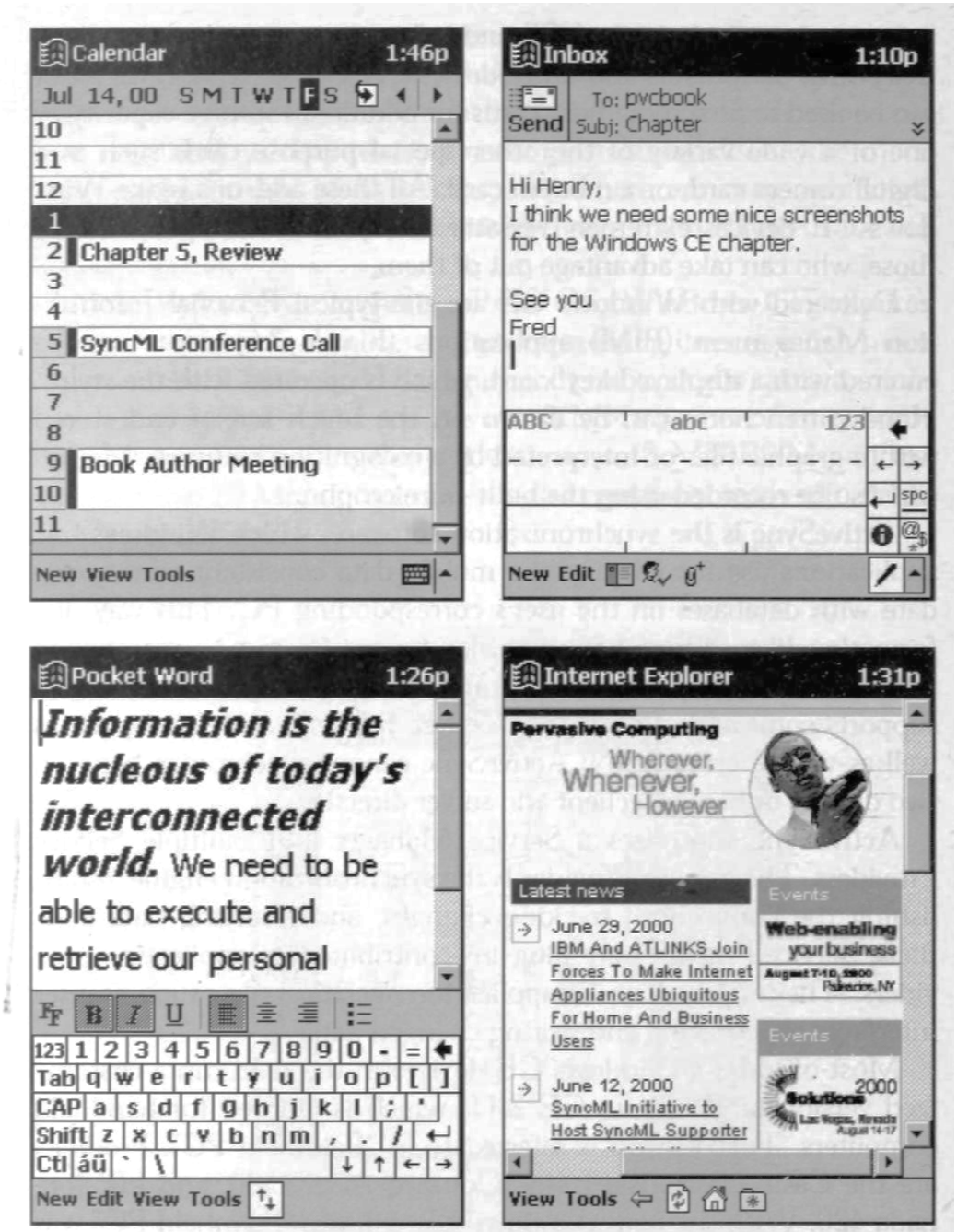
42. With respect to Windows CE mobile devices, Hansmann explains that "Windows CE provides the same consistent look and feel, both on the common PC and on the smaller handheld." (Hansmann, p.35.) For instance, Windows CE

devices can run popular Microsoft applications such as Word, Excel, and a derivative of Outlook. (*Id.*) "From the Microsoft perspective, a handheld is thing more than a miniaturized PC! The philosophy is reflected by terms such as PocketPC[.]" (*Id.*) An example of a Casio E-115 PocketPC is shown in Hansmann (at right). (*Id.*, p.36, Fig. 2.5.) This device had a color touchscreen display capable of displaying 65,000 colors, eight hours of battery life, and weighed about a half a pound. (*Id.*, p.40 (Table 2.1).) Windows CE devices are also mentioned in Neibauer as an exemplary personal digital assistant (PDA) OS usable with the Yahoo! Mobile service. (Neibauer, pp.166 (00111), 171 (00116), ¶3.)

43. Hansmann explains that "Windows CE devices are technological wonderboxes, generously equipped with fancy hardware features," such as "a color display with a good resolution, enabling multimedia applications such as computer games." (Hansmann p.36.) Figure 2.6 below, for example, shows screen displays of a PocketPC version of the Microsoft Calendar, Word, Mail, and the Internet

Explorer web browser:

Figure 2.6: PocketPC Version of Calendar, Mail, Word, and Internet Explorer



(Hansmann, p.38, Fig. 2.6.) On the bottom right of Figure 2.6 above, for example, a web page is displayed on the Pocket PC version of Internet Explorer with various different sections that include links and graphical images, with scroll bars available

on the right and bottom to allow the user to see more of the web page on the screen.

44. Another category of mobile devices were known as handheld PCs or "sub-notebook" computers that also ran Windows CE, which were larger than Pocket PC devices and had larger screens. Hansmann identifies the Compaq Aero 800, Hewlett-Packard (HP) Jornada 820, and the NEC MobilePro 880 as examples of Windows CE devices that were commercially available at the time, each having a touch screen display capable of displaying 65,000 colors with 800 x 600 resolution. (Hansmann, p.40-41 (Table 2.1).) I note that a screen resolution of 800 x 600 was a common resolution for full-size desktop PC displays in the late 1990s and full-size laptops as of the early 2000s.

45. I also note that **Exhibit 2023**, cited by Dr. Medvidović, is an article entitled *LG Electronics Phenom II*, which appears have come from a December 1997 article of Pen Computing Magazine. It describes a Windows-CE palmtop computer that had a 7.1 inch screen and included a full keyboard and a stylus. (EX2023, at 1.) This article further confirms that as of 1997, more than four years before the priority date, mobile devices were already being commercialized and offered to the public with larger screens and more advanced user controls.

46. Yet another category of mobile devices were cellular phones or smart phones. For example, Palm devices as described above could also incorporate cellular phone functionalities. (Hansmann, p.32 (describing the Qualcomm pdQ

Smart Phone).) Smart phones from companies like Ericsson also incorporated PDA functionality and featured larger screens. (*Id.*, pp.46-47 & Fig. 2.9 (Ericsson R380).)

47. Accordingly, while I agree with Dr. Medvidović that mobile devices as of June 2002 were not as advanced as modern-day smartphones such as the Apple iPhone or iPad, his suggestion that mobile devices in June 2002 were too primitive to present the Yahoo! Clubs features described in Neibauer is without basis. Mobile devices as of June 2002 were fully capable of communicating over the Internet, accessing web pages, and performing other communication tasks. It would have been obvious to present all of the features of Neibauer on which I rely on a mobile device, including adapting or converting the Neibauer web pages as necessary based on the characteristics of the mobile device a described in Cheng. As I will explain below, Cheng discloses the ability to keep track of device profile information for particular mobile devices or classes of mobile devices, such as the type of screen and the types of user input the device can accept. The amount of adaptation and conversion of the Neibauer web pages would have depended, of course, on the size of the display and other capabilities of the mobile device. Laptop and handheld PC devices would have been able to present the Neibauer interfaces with little or no adaptation. Smaller screen devices such as those found on mobile phones and PDAs, on the other hand, generally would have required more adaptation and streamlining to adapt the features for the device. This is fully contemplated by Cheng which, as

fully described below, discloses a technique of adapting or converting web pages based on the device profile specifying information about the display and input capabilities of the target mobile device, including the type of screen it uses. By June 2002, adapting the web pages of Neibauer for the capabilities of particular types of mobile devices would not have been technologically challenging, and would have fallen well within the capabilities of an ordinarily skilled artisan. This is particularly true considering, as I will discuss in more detail, the fact that those features of Neibauer required nothing beyond elementary web and HTML functionalities.

48. I also disagree with Dr. Medvidović's suggestion that wireless networks as of the priority date had slow transfer rates that may have been unsuitable for website content. (¶110.) Dr. Medvidović's analysis ignores the fact that, while it is true that wireless data transfer rates were lower in June 2002 than they are today, the lower data rate was offset by other factors, including the fact that web pages and photos in June 2002 required far less data than they do today.

49. For example, one wireless network that was available as of June 2002 was the 3G cellular network. As Dr. Medvidović explains, "[t]he 3G network was introduced in 2001," which "marked the beginning of widespread use of the internet on mobile telephones." (¶40.) Dr. Medvidović also acknowledges in his declaration that 3G provided a data transfer rate of up to 144 kilobits (kbps) per second, and was introduced prior to 2002. (¶141.) This rate equates to approximately 18,000

kilobytes (KB) per second, as Medvidović acknowledged at his deposition. (EX1033 (Medvidović Depo.), at 24:6-20, 25:7-27:7.) The patents-in-suit expressly acknowledge and identify "third generation (3G)" as an example of "[a] network suitable for use with the invention" ('336, 4:8, 4:14-16.)

50. Several other cellular wireless networks were also widely available prior to June 2002. As mentioned above, my opening declaration identified GSM, the dominant wireless (cellular) mobile network in widespread use in the United States the late 1990s and early 2000s. Hansmann explains that GSM had a data connection of 9.6 kilobits per second. (Hansmann, p.45.) Hansmann further explains that "[f]rom the year 2000 on, a new enhancement to GSM, called General Packet Radio Service (GPRS) is available," which "will increase the bandwidth of mobile data communication up to 115 kbps [kilobits per second]." (*Id.; see also Microsoft Computer Dictionary* (5th ed. 2002) (**EX1034**), p.237 ("**GPRS** *n*. Acronym for **G**eneral **P**acket **R**adio **S**ervice. A third-generation enhancement to the Global System for Mobile Communications (GSM), which supports nonvoice applications such as Web browsing and other servicing requiring transfer of data packets without limits in message size. Systems using the service can be immediately connected when needed and therefore seem to the users to be always on.") (bold and italics in original); *Maintaining the Mobile Edge*, PC Magazine (September 4, 2001) (**EX1036**), p.006 ("General Packet Radio Service, or GPRS, is

a protocol that works with the existing GSM standard to move data packets through the wireless network at speeds to up to 115Kbps (although speeds up to 56Kbps are more likely), providing users with an 'always-on' connection, similar to wired broadband services such as cable or DSL… GPRS is here and manufacturers are marketing GRPS phones, with an emphasis on faster data rates, better web capabilities, and continuous connectivity to mobile Internet services.").)

51. The transfer speeds of 3G, GSM/GPRS, and GSM – all known and available to the public prior to June 2002 – would have been more than adequate for transferring the simple web pages and modestly-sized images described in Neibauer, which were typical in the late 1990s and early 2000s. For example, consider Figure 21-10 of Neibauer showing a club photo album:

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

Blueraja's BOND GIRL Album Back To: Album List

Created by blueraja3 on 22-Nov-1999

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

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

FIGURE 21-10 Club photo album

(Neibauer, p.478 (00162), Fig. 21-10.)

52. A skilled artisan would have appreciated that photo album page above was a simple webpage that could have been encoded using basic HTML elements, such as HTML forms and hyperlinks. This was typical of "Web 1.0" webpages, consisting primarily of HTML elements that were the foundation for the vast majority of websites in the late 1990s and early 2000s. A page like this would have consumed, at most, only a few kilobytes of data and could have been transmitted wirelessly to a mobile device using 3G, GSM/GRPS or even GSM, in a matter of seconds.

53. Figure 21-10 in Neibauer above also shows a number of exemplary photos in the "James Bond Movie Series" photo album ranging from 10 kilobytes (10 KB) to 53 kilobytes (53 KB). These were typical sizes for photo files available on the Internet as of the late 1990s and early 2000s. Digital cameras during this time period were more limited than they are today; a typical resolution for a digital camera image (such as one captured by a webcam, camera phone or entry-level consumer point-and-shoot digital camera) as of the late 1990s or early 2000s was on the order of 320x240 or 640x480 pixels (and often used a limited 8-bit or 16-bit color palette), which after image compression would have resulted in digital photos with file sizes consistent with the exemplary photos listed in Figure 21-10 above.[3] Neibauer itself acknowledges these typical limitations, describing how each club was limited to only "5 MB of space to store photographs," and noting a "Resize Photo" option in connection with adding a photo to a club "to make better use of the club's Web space and to make photos easier to view." (Neibauer, pp.477 ("Each club is given 5 MB of space to store photographs."), 478 (00161-00162).) Using the "Resize Photo" option, selecting large "reduces the photo so that its largest dimension is no more

[3] I also note that popular display resolutions at the time included VGA and SVGA, which were commonly limited to simultaneously displaying 8-bit color (256 different colors). This stands in stark contrast to present day displays, which commonly allow color depth of 24-bit (with an additional 8 bits for transparency, or alpha, channel), which offers over 16.7 million different colors.

than 640 pixels," while "[m]edium reduces it to 480 pixels, and small to 300 pixels." (*Id.*, p.478 (00162).)

54. For example (and putting aside beneficial techniques such as interlacing and progressive rendering used to display an image as it being downloaded), the 21 kilobyte (KB) photo of Famke Janssen listed in Figure 21-10 above would have been downloaded in under two seconds using 3G (assuming a 144 kbps/second rate), under five seconds using GSM/GPRS (assuming a 56 kbps/second rate), and approximately 15 seconds using GSM (assuming a 9.6 kbps/second rate). Accordingly, it would have been entirely feasible – both technically and commercially – to implement the features of Neibauer to allow a mobile device to upload and download photos using conventional wireless networks available prior to June 2002.[4]

[4] During the deposition of Dr. Medvidović, he was asked a series of questions on redirect (by Patent Owner's counsel) about the time it would take to transfer very large images – such as two megabyte (2000K) photo files – over a wireless network prior to June 2002. (EX1033 (Medvidović Depo.), at 83:3-86:2.) This line of questioning was irrelevant because it relies on hindsight by assessing wireless bandwidth prior to June 2002 against the size of ***present day*** digital images. But as explained in the text, digital images prior to June 2002 were much smaller than they are today – both in terms of resolution and file size – and thus required considerably less bandwidth to transfer over wireless networks. Dr. Medvidović also testified, on redirect based on Patent Owner's questions, that the Yahoo! group chat described in Neibauer could not be supported by then-existing GSM and GSM/GPRS networks because of their low transfer rates. (*Id.*, at 77:15-78:14.) This testimony was not

55. I also note that, as of June 2002, non-mobile users frequently connected to the Internet and websites such as Yahoo! using dial-up networks, which had maximum data transfer rates of 56 kilobits/second. (*See also* EX1033 (Medvidović Depo.), at 34:3-14.) Wireless networks such as 3G, as a result, were capable of ***faster*** speeds than the dial-up networks that users frequently used to connect to the Internet and access websites such as Yahoo!, further undermining Dr. Medvidović's unsupported suggestions that the features of Neibauer could not have been provided using wireless networks as of June 2002.

56. And this does not even take into account the further efficiencies that would have been achieved when Neibauer's web page content was adapted for a handheld mobile device, such as reducing the size or resolution of images for the mobile device as necessary, based on the teachings of Cheng. (Cheng, 11:4-19 (describing reduction of web page images for mobile device).) **Exhibit 2017** cited by Dr. Medvidović, for example, explains that in 2000, "Opera introduced a browser

credible because, as Dr. Medvidović later admitted, he did not even know the data transfer rates of GSM or GSM/GPRS. (*Id.*, at 87:7-88:18.) He also conspicuously was not asked about whether the chat feature could be provided using existing 3G wireless networks – which it could have been. Moreover, the chat features in Neibauer would have required only transmission of ***text*** data, which requires considerably less data than images, and thus, could have been provided using any one of the GSM, GSM/GPRS, or 3G networks available prior to June 2002. As explained in the text, Neibauer supports basic HTML chat and does not require Java. (Neibauer, p.456 (00140).)

compatible with various operating systems," and "[t]he introduction of Opera Mini revolutionized the mobile browsing experience by employing proxy servers to process and compress data before delivery to the end device." (EX2017, p.3.) "This approach significantly accelerated browsing speeds, particularly on networks with limited bandwidth." (*Id.*)

57. The other features of Neibauer that I rely upon in my opening declarations would have required far less data than uploading and downloading photos. For example, my opening declarations relied on the Yahoo! Clubs private message board and group chat features, which allowed users to send and receive textual messages. Transmission of text data requires far less network bandwidth than transmitting image data, so these features could have been readily implemented using conventional 3G, GSM/GPRS, and GSM networks. Neibauer further confirms that the Yahoo! chat feature could have been provided using ordinary HTML, without having to use Java. (Neibauer, p.456 (00140).)

58. Dr. Medvidović also vastly understates the capabilities of the web as of June 2002. He contends that, prior to 2004, the web was in the "Web 1.0" phrase – a term commonly used to refer to first generation web technologies that were less complex than modern websites. He contends that Web 1.0 was "primarily a one-way, static-content hypertext system" primarily designed "to provide information to users without allowing user to engage or interact, beyond requesting content to be

displayed in the browser by clicking a hyperlink." (¶43.) But this statement is demonstrably false, and anyone who had ever used a website prior to 2004 would have known this to be inaccurate.

59. Dr. Medvidović admits, for example, that the Yahoo! Clubs features in Neibauer (published in 2000) represented "Web 1.0" functionality. (EX1033 (Medvidović Depo.), at 70:10-19, 71:20-72:2.) But as explained in Neibauer and in my opening declaration, Neibauer (which was published in 2000, well before the June 2002 priority date) plainly describes a website with which users could engage and interact, for example, by allowing users to receive and ***send*** textual messages, download and ***upload*** photos, and engage in a number of other two-way interactions in which the user provides input or contributes content to the website. (Neibauer, pp.473-480 (00157-00164.) For example, Neibauer discloses the ability of users to read, compose and post textual messages (pp.469-472 (00153-00156), 477 (00161)), to view and upload photos (pp.477-479 (00161-00163)), and engage in text chat (p.479 (00163)). With respect to text chat, for example, Neibauer specifically discloses that it can be provided using ordinary HTML (a common characteristic of "Web 1.0" websites), as noted. (Neibauer, pp.456-57 (00140-00141).) Accordingly, Neibauer discloses the ability of a user to engage and interact with the website over the Internet, well before June 2002, using "Web 1.0" technology that went far beyond clicking a hyperlink. While it is true that more modern "Web 2.0" websites

in use today often rely on more complex web technologies than simple HTML (such as advanced JavaScript frameworks), and offer more advanced collaboration features, Dr. Medvidović's suggestion that earlier "Web 1.0" websites such as Yahoo! could not provide for user engagement and interaction, is simply inaccurate and refuted by Neibauer itself.

60. The ability to interact and engage with a website, and provide input to a website such a text and photos, was basic and standard "Web 1.0" functionality. The ability of a web page to prompt the user to enter text or upload a file (including a photo file) could have been accomplished using basic HTML form techniques that prompt the user to input data that is transmitted from the user's browser to a website. (*See* Laura Lemay, *SAMS Teach Yourself Web Publishing With HTML 4 in 21 Days* (2d ed. 2000) (**EX1038**), p.429 ("HTML forms have been around virtually since the beginning of the HTML language, and are widely supported by all leading Web browsers."); *id.*, p.430 ("An *HTML form* allows you to gather information from a person visiting your Web page. You can take the information you collect and send it to a script residing on your Web server to manipulate or store it.") (italics in original); *id.* ("When a person fills out an HTML form, he or she enters information or makes choices using the form controls. The final step is submitting it, at which time several things happen. First, the form identifies the controls within the form that contain data and builds a form data set to contain it. Next, the data is encoded

and sent to the Web server to be processed."); *id.*, p.445-46 ("The file select control enables you to enable a person to upload a file along with the form."); *id.*, p.446, Fig. 14.9.) For example, the following HTML would have prompted the user to enter textual information in a text box which would be sent to a website:

```
<form   method="POST"   enctype="application/x-www-
form-urlencoded" action="[Destination URL]">
    Enter your message:
    <input type="text" name="message">
    <input type="submit" value="Submit">
</form>
```

In the example above, the web browser would prompt the user to enter a textual message and press the "Submit" button, to which the browser would respond by transmitting ("posting") the text input by the user via the HTTP POST method to the specified destination URL.

Enter your message: [ ] Submit

The same basic HTML technique would also have allowed the user to select a file (such as an image file) for uploading to a website:

```
<form   method="POST"   enctype="multipart/form-
data" action="[Destination URL]">
    <input type="file" name="file">
    <input type="submit" value="Submit">
</form>
```

Choose File No file chosen Submit

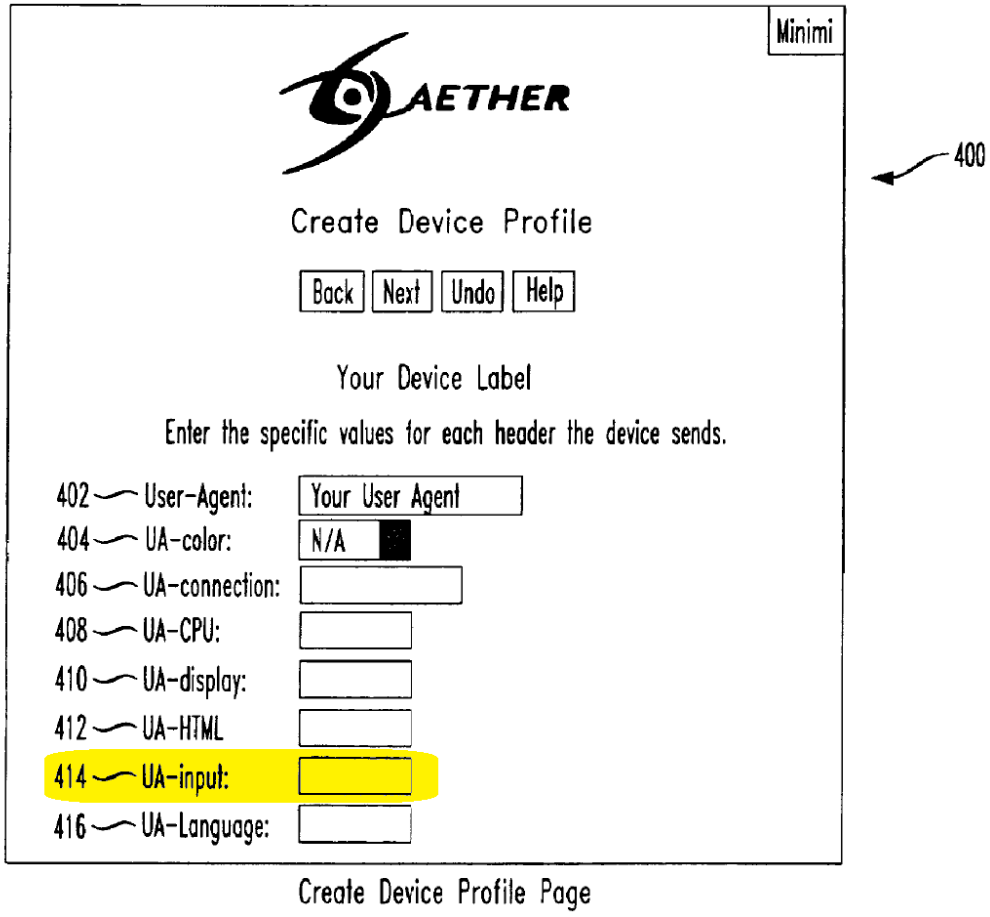
In this example, as shown, the user would be prompted to select a file (such as a digital image file) and press the "Submit" button, to which the browser would have responded by transmitting (posting) the selected file to the specified destination URL using the known HTTP POST method.

61. Both examples above use well-known HTML form elements and the equally well-known "HTTP POST" method, which was available no later than 1997 with the release of HTML 3.2 (via incorporation of RFC 1867 into the HTML 3.2 specification). Dr. Medvidović admitted at his deposition, in fact, that standard FTP (File Transfer Protocol) and HTTP POST techniques were known prior to June 2002 and permitted the upload of a photo file to a website. (EX1033 (Medvidović Depo.), at 30:3-31:13, 32:20-33:2.) As he conceded, using HTTP, "[i]t was certainly possible to send content that was not just a web request, and that content could have been a static file." (EX1033 (Medvidović Depo.), at 30:15-31:6.) He admitted, for example, that prior to June 2002, one could send a text file, an image file – or any other kind of file – over the Internet from a browser to a server using HTTP. (EX1033 (Medvidović Depo.), at 32:20-34:2.)

62. And Dr. Medvidović identifies nothing to suggest that these basic HTML techniques would have been unavailable to mobile devices as of June 2002.

To the contrary, Cheng expressly discloses the ability to create a device profile for a mobile device specifying the types of web user input – including files and images – the mobile device can support. The creation of a user profile is shown in Figure 4:

FIG. 4



(Cheng, Fig. 4 (highlighting added).)

63. Figure 4 shows a screen display allowing input of data about to define a profile for a particular type of user-agent (UA) (*i.e.* mobile device). (Cheng, 8:4-8, 8:47-62.) Field **410** (UA-display), for example, allows input of information about the type of display used by the mobile device. (Cheng, 8:33-36, 8:47-51.) Field **412** (UA-HTML), as another example, is used to "specify the version of HTML of the

mobile device **108**." (Cheng, 8:35-36; *see also id.*, 8:47-51.) Field **414** (UA-input) shown in highlighting above "is used to specify the types of input fields (e.g., password field, **text box, image, file**, etc.) of the mobile device **108** screen display." (Cheng, 8:36-39 (emphasis added).) Cheng thus expressly contemplates that a mobile device can provide text, image, and file data input by a user for transmission to a website. Once established, the device profile information enables proxy server **110** to identify the mobile device **108**, and to determine which webpage conversions to perform for that device. (Cheng, 8:54-62, 7:59-65 ("FIG. 2 is a simplified flow diagram of a conversion workflow for HTML-based mobile devices, as contemplated by the present invention. In step **201**, a device profile is created for each type of mobile device **108** in accordance with the HTTP. It is envisioned that each mobile device **108** is registered with the proxy server **110** to indicate which conversions for the device **108** are desired. Then, when conversion engine **110** receives a request **106**, it compares the headers in the request **106** with the headers in an extraction and conversion file associated with the requesting mobile device **108** to determine which conversions to perform.") (emphasis added).) "It should also be understood that in addition to providing a device profile for an individual mobile device **108**, device profiles can also be created for a group of mobile devices **108**, as well as all mobile devices **108**." (Cheng, 5:26-29.)

64. For this reason, I also disagree with Dr. Medvidović's opinion that

Cheng only discloses "uni-directional transmission of data from a website to be displayed on a mobile device but does not provide for transmission in the other direction" (¶120), as this is directly refuted by Cheng itself. As explained above, Cheng expressly discloses the ability to establish a device profile that specifies, among other things, "the types of input fields (e.g., password field, **text box, image, file**, etc.) of the mobile device **108** screen display." (Cheng, 8:36-39 (emphasis added).) There would be no reason for Cheng to store the types of input supported by a mobile device in a device profile if, as Dr. Medvidović asserts, the proxy server in Cheng was completely incapable of supporting webpages that received those types of inputs, and adapting them for mobile devices. To the contrary, these device profiles, as explained above, are used in specifying the required processes for adaptation and conversion of web pages for the mobile device. Dr. Medvidović's contention that Cheng is incapable of supporting user input from mobile devices, including text, images, and files, is without basis.

65. Cheng also discloses that mobile device **108** issues a request **106** for an original web page using standard HyperText Transport Protocol (HTTP), as was well-known in art, which is received by proxy server **110**, which is used to issue a request **112** to the web server **102** via the Internet. (Cheng, Fig. 1, 2:19-21, 3:58-4:2, 7:65-8:2.) As I explained in my opening declaration for the '039 patent, the photo provided by user would have been included in the HTTP request received by

proxy server and origin web server **102**, such as an HTTP POST request as explained above. (IPR2024-00248, EX1002, ¶100 ("The claimed '**server**' for purposes of claim 19 either corresponds to origin server **102** in Cheng… or proxy server **110**… as both would have received the HTTP request that included the photo under the proposed combination (*i.e*. first by the proxy server **110**, then by origin server **102**).") (bold and italics in original).) A person of ordinary skill in the art would thus have understood that the input to the website – whether it be text, file or photo input – would have been provided to the website via the HTTP request from the browser to proxy server **110** (such as the well-known HTTP POST request discussed above), which would have forwarded that request to web server **102**.

66. In fact, proxy server **110** would not need to do modify or in any way alter the HTTP request from mobile device **108** – it would simply have forwarded it to web server **102** unaltered – because proxy server **110** in Cheng is fully responsible for adapting webpages from web server **102** for transmission to the mobile device **108**. As Dr. Medvidović concedes in his declaration, in fact, "[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." (¶373; *see also id.*, ¶170.) This further confirms that the proxy server would not have changed the substance of the request from the mobile device **108** before it is forwarded to web server **102**. And the fact that the proxy server in Cheng is expressly capable of handling text, image and file

input from the user, as discussed above, further confirms that the mobile device **108** would have been capable of sending this information to the web server **102** through the Cheng proxy server.

67. Dr. Medvidović does not mention, let alone address in any way, Cheng's disclosure of text, image and field input for mobile device profiles. (Cheng, 8:36-39.) Cheng expressly contemplates that a mobile device can provide this type of input for a website. Cheng also explains that his web page conversion techniques can be used for "all web sites." (Cheng, 2:29-32, 12:32-35 ("Global conversions are rules that change or format web content on all web pages **104** for either one type of device or all devices."); *see also id.*, 12:29-31 ("The number of possible conversions is virtually infinite, and may include any of the appropriate combinations of methods and transforms.").) Cheng could have fully supported the type of text and photo input in Neibauer that a user could provide through the Yahoo! Clubs user interface using basic HTTP functionalities, when adapted for a handheld mobile device using the techniques of Cheng.

68. Accordingly, by June 2002, mobile devices that were capable of accessing the Internet and the web over a wireless network were already well-known commercially available to the public and would have been more than capable of accessing the features in Neibauer on which I rely, though a mobile device as described in my opening declarations. The patents did not invent these

technologies – to the contrary, the Background section of the written description acknowledges that they were well-known:

> One of the most rapidly expanding aspects of wireless networking involves the accessing of information content over wireless networks via web-enabled mobile devices. Examples of such devices include mobile telephones, personal digital assistants (PDAs), palmtop computers, etc. **As is well-known**, these and other web-enabled devices not only provide access to the Internet, but can also be used to support other types of wireless networking functionality, such as messaging, distributed collaboration, and location-based services.

('336, 1:30-40 (emphasis added).)

IV. RESPONSE TO DR. MEDVIDOVIĆ ARGUMENTS ABOUT THE PRIOR ART

69. Dr. Medvidović offers a number of opinions about the various prior art references upon which I relied.

A. Response to Comments about Neibauer

70. Dr. Medvidović makes a number of comments about Neibauer that, in my opinion, are irrelevant to the obviousness analysis or how a skilled artisan would have regarded the reference. For example, he contends that Neibauer is not a "serious reference" because it is a reference geared towards laypersons instead of engineers and computer scientists working in software development. (¶94.) But the fact that Neibauer is not geared towards a technical audience does not diminish its

relevance as disclosing a web-based messaging and collaboration service. Neibauer would have been pertinent for its disclosure of these features, despite the fact that it does not disclose how to implement them from a technological standpoint. As I explained in my opening declaration, the features on which I rely from Neibauer "involve nothing more than straightforward web programming techniques relying on standard technologies such as HTTP, HTML, and could have been implemented using off-the-shelf web browser and web server software." (EX1002 in IPR2024-00246, ¶108.) Dr. Medvidović does not dispute this.[5] As noted previously, in fact, Dr. Medvidović acknowledges that Neibauer would have represented "Web 1.0" technology (EX1033 (Medvidović Depo.), at 70:10-19, 71:20-72:2), which would have been basic and elementary knowledge to skilled artisans by June 2002.

71. If anything, the broader appeal and audience of Neibauer would have made it even ***more*** pertinent and interesting to a person of ordinary skill in the art, as it describes the functionality of the features of an already-successful Yahoo! web site. Neibauer provides clear depictions of these features, including screen shots and descriptions of the functionality, and the popularity of the site would have provided

[5] I also explained that "I am not suggesting that an ordinarily skilled artisan could have replicated the entire Yahoo! service based on the description in Neibauer, as the Yahoo! website has features and functionalities (such as the ability to scale to many millions of users) that go beyond the limitations of the challenged claims." (EX1002 in IPR2024-00246, ¶108.)

a motivation for a skilled artisan to adopt those features in their own products.

72. Dr. Medvidović also faults my reliance on the disclosures in Neibauer about Yahoo! Mobile to argue that a person of ordinary skill in the art would have been motivated to allow the Yahoo! Clubs functionality to be provided on a mobile device. But I plainly acknowledged in my opening declaration that "Neibauer does not expressly disclose that the Yahoo! Clubs feature was available for use with mobile devices," but nevertheless explained that "it would have been obvious to extend mobile device functionality to cover that feature, in order to allow user-created clubs to be accessed by users via mobile devices." (EX1002 in IPR2024-00246, ¶119.) Dr. Medvidović does not adequately explain why adapting the relied-on features of Yahoo! Clubs features to operate on a mobile device would have been technologically challenging. He does not dispute any aspect of my analysis in which I explained that transcoding techniques for converting web pages into a format suitable for other types of devices were already well-known, as was the existing of industry-standard technologies for describing pages for viewing on mobile devices. (EX1002 in IPR2024-00246, ¶¶119-120, 122-123.) Dr. Medvidović's views about the Cheng reference are also based, as explained, on the erroneous premise that it does not permit the mobile device to provide input to a website – a proposition directly refuted by Cheng as discussed above and further below.

73. Dr. Medvidović also contends that the Yahoo! Mobile features in

Neibauer only focus on the ability to "*view* information that has been received from the Internet, as opposed to being received from a mobile device." (¶97 (italics in original).) But as I explained above in my discussion of Cheng, this is a non-issue. The ability to upload a file or photo from a mobile device to a webpage over the Internet was well-known and trivially simple to implement using basic HTML elements that were well-known since the 1990s. And in any event, his statement about the inability of the Yahoo! Mobile features in Neibauer to accept input from users is also demonstrably incorrect, as the screenshots shown in Neibauer expressly show the ability of a user to provide textual input to the website for obtaining stock quotes and movie showtimes. (Neibauer, p.171 (00116).)

74. Dr. Medvidović also contends that the Yahoo! Clubs web pages on which I rely would not have been usable on a handheld mobile device. (¶¶104-109.) But this argument appears to be based on nothing more than the proposition that the Yahoo! Clubs shown in Neibauer were originally designed to be shown on a larger display, and the fact that Neibauer does not describe Yahoo! Clubs as one of the features that could be made available on mobile devices.

75. But these pages and functionalities of Yahoo! Clubs on which I relied in my opening declarations are not complex or media-intensive – they present little more than standard HTML forms (such as allowing the user to enter text or upload photos and files), lists of hyperlinked content items that the user can click on and

display, all of which would have been implemented using basic HTML techniques. For example, consider again the club photo album page shown in Figure 21-10:

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

Blueraja's BOND GIRL Album Back To: Album List

Created by blueraja3 on 22-Nov-1999

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

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

FIGURE 21-10 Club photo album

(Neibauer, p.478 (00162), Fig. 21-10.) The photo album page shown above is little more than a list of hyperlinked names of photos that the user can click on and view. A person of ordinary skill in the art would have regarded this as the type of web page that would have been straightforward to adapt for viewing on a mobile device. For example, the list of photos in Figure 21-10 could have been readily presented on a smaller screen mobile device by simply removing some of the other fields (such as the size or post-date), or by placing that information vertically below the hyperlinked

photo name and caption. These types of adaptations would have been viewed as little more than a routine implementation detail by a person of ordinary skill in the art. For example, one exemplary conversion of the page in Figure 21-10 using the techniques of Cheng (assuming conversion to a handheld mobile device rather than presentation on a laptop computer) may have looked like:

This type of adaptation is similar to the exemplary screen display shown in Neibauer for the Yahoo! Mobile service, which show the ability to divide functionality into multiple different screens and provide selections through scrollable lists of clickable items, which were typical adaptations and conversions for displaying web pages on smaller screen mobile devices:

(Neibauer, p.171 (00116).) It would have been obvious to adapt the features of Yahoo! Clubs to be presented on a smaller screen mobile device (to the extent required by the claims), using known proxy server conversion techniques as disclosed in Cheng.

B. Response to Comments about Miller ('336, '801 patents)

76. Dr. Medvidović makes a number of comments about Miller, cited in the IPRs for the '336 and '801 patents, many of which are irrelevant to the purpose to which I applied that reference in the proposed combination or rely on immaterial differences between Miller and the other references with which it was combined. I will address these arguments below.

77. Dr. Medvidović argues that Miller does not disclose a "**mobile information channel**," but I did not rely on Miller for that claim limitation, but for the ability of a user to create a web-based community and specify the specific features (e.g. message board, etc.) to include. (IPR2024-00246, EX1002, ¶¶59, 103-104; IPR2024-00247, EX1002, ¶¶59, 95-96.) Dr. Medvidović claims that a skilled

artisan would not have been motivated to combine Neibauer and Miller because of what Dr. Medvidović calls "significant differences in their focus," specifically the fact that Miller does not disclose use with social clubs. (¶115.) But this argument focuses on a difference that a skilled artisan would have found immaterial. Miller and Neibauer both disclose the ability of users to create collaborative web-based environments – the fact that they may focus on a different category of user is technologically irrelevant. As explained in my opening declarations, the combinability of Neibauer and Miller was further supported by the fact that Miller discloses many of the same collaborative features that Neibauer describes as being available for clubs, including message boards (Miller, 0047:20-33 ("Bulletin boards")), chat (0052:23-24 ("Chat groups")), contact list (0049:19-26 ("White pages")), among others. (IPR2024-00246, EX1002, ¶107; IPR2024-00247, EX1002, ¶99.) The fact that Miller does not expressly mention "social" clubs would have been regarded as irrelevant to its combinability with Neibauer.

78. Dr. Medvidović makes a number of other unpersuasive arguments about Miller based on distinctions with Neibauer that are either immaterial and superficial, or non-existent. For example, he states that Miller is silent regarding "message boards" (¶118), but ignores the fact that Miller expressly discloses bulletin board feature – which is a message board. (Miller, 0048:20-23.) He also contends that Miller teaches chat room functionality based on using chat room software, and

uploading photos in the context of auctions or catalog sales (¶118), but he does not explain why this is relevant given that the proposed combination relies on Neibauer's, not Miller's, chat and photo sharing features.

C. Response to Comments about Cheng

79. As I fully explained above, Dr. Medvidović's opinions about Cheng are based on the false premise that it only discloses "a uni-directional transmission of data from a website to be displayed on a mobile device but does not provide for transmission in the other direction" (¶120), but this is incorrect. As explained previously, Dr. Medvidović expressly discloses the ability to specify, as part of the device profile of a mobile device, that the mobile device is capable of text, image, and file input. (Cheng, 8:36-39.) Cheng thus expressly contemplates that a mobile device user can input text, image, and file data for transmission to a website. Once established, the device profile information enables proxy server **110** to identify the mobile device **108**, and to determine which webpage conversions to perform for that device. (Cheng, 8:54-62, 7:59-65.)

80. As I also explained, Cheng further discloses that mobile device **108** issues a request **106** for an original web page using standard HyperText Transport Protocol (HTTP), as was well-known in art, which is received by proxy server **110** and used to issue a request **112** to the web server **102** via the Internet. (Cheng, Fig. 1, 2:19-21, 3:58-4:2, 7:65-8:2.) As explained above, input provided by the user –

including an uploaded photo – would have been included in the HTTP request received by proxy server and origin web server **102**. (IPR2024-00248, EX1002, ¶100 ("The claimed '**server**' for purposes of claim 19 either corresponds to origin server **102** in Cheng… or proxy server **110**… as both would have received the HTTP request that included the photo under the proposed combination (*i.e.* first by the proxy server **110**, then by origin server **102**).") (bold and italics in original).) A person of ordinary skill in the art would thus have understood that the input to the website – whether it be text, file or photo input – would have been provided to the website via the HTTP request from the browser to proxy server **110**, which would have forwarded that request to web server **102**. In fact, as noted, proxy server **110** would not need to do modify or in any way alter the HTTP request from mobile device **108** – it would simply have forwarded it to web server **102** unaltered – because proxy server **110** in Cheng is fully responsible for adapting webpages from web server **102** for transmission to mobile device **108**. The fact that Cheng is expressly capable of handling text, image and file input, as discussed above, further confirms that mobile device **108** would have been capable of sending this information to the web server **102** when using the website through the proxy server

techniques of Cheng.[6]

81. Dr. Medvidović also that Cheng "makes no mention of methods to manage the type of connection required by two-way content transmission" (¶120), but ignores that two-way content transmission was a built-in feature of the web and HTTP techniques supported by Cheng, as fully described in **Part III** above.

82. Dr. Medvidović also suggests that it would have been "technically infeasible" to adapt web pages for mobile devices using the techniques of Cheng "given the rich capabilities of relevant website technology available at the time such as HTML, Java, JavaScript, and Flash, and the relatively meager capabilities… of mobile phones and PDAs in the 2002 era." (¶123.) I note that his argument about the supposedly "rich capabilities of relevant website technology" directly contradicts his earlier assertion that websites prior to 2004 used rudimentary "Web 1.0"

[6] Dr. Medvidović also contends, in a footnote, that the cache in Cheng would have interfered with the ability to provide photo data in an HTTP request. (¶166 n.7.) This argument makes no sense since, as explained in the text, Cheng expressly contemplates that mobile device users can provide text and photo input to websites. A skilled artisan would thus have understood that Cheng's capabilities, including its caching capabilities, would have been designed to accommodate HTTP requests that contain user input such as photo content. Cheng also expressly discloses caching as an "optional[]" feature of his web page translation system, so to the extent there was any issue, the feature could simply not be used. (Cheng, 5:50-52.) In any event, it is questionable if the pages in Neibauer would be cached, as they are dynamically created for the logged-in user based on its identity and selections; they are not the types of static (unchanging) web pages, commonly accessed by many users, that are commonly stored in web caches for improved performance.

technologies. (¶43.) As noted, Dr. Medvidović agreed at his deposition that the features of Neibauer would have relied on "Web 1.0" technologies. (EX1033 (Medvidović Depo.), at 70:10-19, 71:20-72:2.) The techniques described in Neibauer, on which I rely, would have relied on nothing more than standard HTML and would not have required Java, JavaScript, Flash, or other more advanced web technologies that became more popular after June 2002.

83. Dr. Medvidović also suggests that Yahoo! Clubs would have required capabilities that would have gone beyond Cheng, but does not explain the basis for this proposition. (¶125.) Cheng expressly discloses the ability to translate web pages, and images, for a mobile device, as explained, and to allow users to provide text, image, and file input through their mobile devices. As I explained in **Part III** above, the features of Neibauer on which I rely would readily have been adapted for mobile handheld devices using the techniques of Cheng.

D. Response to Comments about Ausems

84. Dr. Medvidović also makes a number of arguments about Ausems that overlook the purpose for which it was cited. Ausems was cited to show an example of a mobile communications device that, among other things, incorporated a digital camera for recording, storing, and transmitting digital images. Dr. Medvidović acknowledges in this declaration that cellular phones with front-facing and rear-facing cameras were introduced, respectively, in 1999 and 2000. (¶38.) There

appears to be no dispute that digital cameras, and their incorporation into mobile devices, was well-known by June 2002.

85. Dr. Medvidović primarily faults Ausems for not describing the details about how video or images would be transmitted from a handheld mobile device. (¶¶133-137.) But as he acknowledges, Ausems expressly discloses the ability of phone engine **210** to operate on a digital control channel to send images, but contends that "Ausems does not disclose how to accomplish that task." (¶¶139-140.) But in that same section, he acknowledges that existing 3G wireless networks supported data speeds up to 144 kbps/second. (¶141.) As I explained in detail in **Part III** above, 3G and even the earlier GSM/GPRS and GSM networks would have been sufficient to transmit the simple images (and even video) on the Internet as of June 2002.[7]

86. His arguments about Ausems also ignore the fact that the proposed combination does not rely on the teachings of Ausems to disclose transmission of image or video information to a website over the Internet. Under the proposed

[7] Dr. Medvidović also argues that Ausems was filed in 1999 but does not explain the relevance of this fact. (¶134). I understand from counsel that, under the patent laws, any questions about enablement of a prior art reference are determined based on the priority date of the patent at issue – in this case June 2002 – and not the date on the prior art. The disclosures of Ausems would thus have been understood and interpreted in the context of the wireless technologies and networks known and available to skilled artisans as of June 2002.

combination, image or video data would have been transmitted using the techniques of Neibauer, alone or in combination with Cheng.

87. Dr. Medvidović also contends that Ausems and Cheng would not have been combinable because the two are in different patent classifications, but he does not explain the relevance of this fact. (¶141.) A skilled artisan would have focused on the *disclosures* of Ausems, not its *classification* by the Patent Office, in assessing its relevance.[8] As I explained previously, Ausems is an analogous reference in the field of wireless and mobile communications and would have been pertinent to problems facing the inventor including how to obtain device-captured image data, sharing it with other users, and the capabilities of conventional mobile devices. (IPR2024-00246, EX1002, ¶181.) Cheng, for its part and as I explained in my opening declarations, is an analogous reference in the field of network-based communications systems, including the ability to make web-based information content available on mobile devices, and would have been reasonably pertinent to problems facing the inventors, including how to implement a web-based system for making information content available to mobile device users, including how to

[8] I note also that Cheng's U.S. classifications include 707/10, and at least one reference in the same classification, U.S. 5,845,282 to Alley, was cited during prosecution of Ausems. (*See* Cheng, field (52); Ausems, field (56).) Cheng and Ausems are therefore related even by overlapping Patent Office classification.

properly format and deliver web content to handheld mobile devices given their limited display space and navigational capabilities. (*Id.*, ¶118.)

E. Response to Comments about Squibbs ('801, '578, '348, '039 patents)

88. Dr. Medvidović next makes a number of arguments about Squibbs that likewise overlook the purpose for which it was cited, and focus on superficial differences between Squibbs and Neibauer that a skilled artisan would have found immaterial. For example, Dr. Medvidović states that the map-based user interfaces in Squibbs were designed for presentation of a display on a PC, rather than as part of a website or an information channel permitting interaction with a mobile device. (¶¶146, 297, 406.) This argument attacks Squibbs individually and ignores the combination with Neibauer alone and in further view of Cheng, which would have resulted in location-features being made available as part of the Yahoo! Clubs photo sharing functionalities and available for mobile (including handheld mobile) devices, as explained in my opening declarations.

89. Dr. Medvidović also attacks the Squibbs and Neibauer combination by attacking Neibauer individually, focusing on the Yahoo! Maps disclosures – ignoring the fact that my declaration merely cited that feature to show that Neibauer and Squibbs were readily combinable, and that Neibauer identifies providing maps as consistent with then-existing web-based user interfaces such as Yahoo! His

argument that the type of maps-based interface in Squibbs could not have been shown on mobile devices as of June 2002 is also incorrect; as explained in **Part III**, mobile devices were far more capable in terms of their display capabilities than Dr. Medvidović suggests. To the extent adaptations would have been required such as shrinking the images or streamlining the user interface to fit the screens of certain smaller-screen devices, this would have been obvious based on the teachings of Cheng and the knowledge of a skilled artisan. As explained previously, moreover, handheld mobile devices such as Windows CE devices also included user interface "scroll bars" allowing a user to view relevant portions of a webpage that otherwise would not entirely fit on the screen. (Hansmann, p.38, Fig. 2.6 (bottom right, mobile Internet Explorer example).)

F. Response to Comments about McElfresh ('348 patent)

90. Dr. Medvidović next makes a number of arguments about McElfresh, cited only against certain dependent claims of the '348 patent, that likewise lack merit. (¶150.) Dr. Medvidović appears to argue that McElfresh does not disclose obtaining data from at least one data feed "**periodically**" because, according to him, McElfresh requests an ad-request and response system that provides "on-the-fly" ad selection. (*Id.*) But Dr. Medvidović does not explain this argument in any detail, and does not provide any proposed interpretation for "**periodically**." As explained in my opening declaration, when a web site wants to show a page, it contacts ad

server component **112**, which responds by delivering a set of ads for display to the user. (IPR2024-00250, EX1002, ¶¶168-170.) I further explained that obtaining the feed containing a plurality of advertisements ("**data**" from "**at least one data feed**") would have occurred under the proposed combination "**periodically**," as claimed, "for example, when webpages of the club sharing photo sharing feature are being prepared for delivery to a user." (*Id.*, ¶172.)

91. Dr. Medvidović does not explain how the obtaining of data when webpages are being prepared for delivery does not disclose obtaining the data "**periodically**," which merely requires that the obtaining take from time to time. The claims do not require any fixed interval, and the step of obtaining the data would not need to occur all the time – it would only at those points in time when the user is accessing particular pages of the Yahoo! Clubs in Neibauer that incorporate the claimed "**web-based shared information channel**," such as the photo sharing feature. The fact that the data is obtained at the point when these ads are prepared does not mean it is not obtained periodically as claimed.

92. In fact, the mechanism disclosed in the prior art mirrors the disclosure in the '348 patent, which discloses "an XML/RSS feed" (which corresponds to the claimed "data feed") that can be integrated with the content "upon delivery[.]" ('348, 17:35-43 ("Selectable or uploadable content may include, for example, an XML/RSS feed… Distribution, delivery and service options may include, for

example… particular content to be combined or otherwise integrated with the content item upon delivery, etc.") (emphasis added).) Dr. Medvidović further contends that claims 11, 16, and 20 further require that the data from the identified feed comprise at least one advertisement, and that "[t]hat limitation is also not taught by McElfresh." (¶150.) No further explanation is provided; as I explained in my opening declaration. McElfresh plainly discloses that Rad Server **112** delivers a set of advertisements for display to the user. (IPR2024-00250, EX1002, ¶¶169-170.)

G. Response to Comments about Harvey

93. As explained in my opening declarations, Harvey was cited solely to account for a construction of "**mobile information channel**" in a prior district court case involving parent patents to the challenged patents, in the event Patent Owner attempted to advance that construction here. It does not appear that Dr. Medvidović is attempting to pursue such a construction here, and as such "do[es] not offer any further construction regarding Harvey." (¶151.) I note that Dr. Medvidović does not challenge any aspect of my application of Harvey in the event the district court construction of "**mobile information channel**" were adopted.

V. RESPONSE TO DR. MEDVIDOVIĆ ARGUMENTS ABOUT ALLEGEDLY NON-ANALOGOUS NATURE OF NEIBAUER

94. Dr. Medvidović next argues that Neibauer is not an analogous reference for purposes of obviousness of the challenged claims. His arguments on this point largely mirror those I addressed in **Part IV.A** above, primarily that Neibauer is not

analogous because it is a non-technical geared primarily towards end users. (¶¶156-157.) I understand from counsel that, under the patent laws, a prior art reference is analogous to the challenged claims if one of two tests are satisfied: (1) the reference is from the same field of endeavor as the claimed invention (even if it addresses a different problem); or (2) the reference is reasonably pertinent to the problem faced by the inventor (even if it is not in the same field of endeavor as the claimed invention). I am further informed that, under the patent laws, the scope of analogous art is to be construed broadly.

95. As I explained in my opening declarations, Neibauer is an analogous reference that satisfies both of these criteria. (IPR2024-00246, EX1002, ¶106.) I explained that Neibauer is an analogous reference in the same field disclosing "functionality for managing information content accessible through the Internet, through a series of web-based information channels that provide the ability to exchange messages and collaborate among multiple users," and 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 using web-based user interfaces." (*Id.*) Dr. Medvidović does not address these rationale in any way.

96. As I explained in **Part IV.A** above, Dr. Medvidović's arguments about Neibauer are superficial and lacking in substance. A person of ordinary skill would

not have disregarded a reference such as Neibauer simply because it was geared towards end users. To the contrary, as I explained, a skilled artisan would have found Neibauer pertinent in describing popular web-based collaboration features, which includes detailed step-by-step descriptions of how to use the user interfaces that provide those features. I note that Neibauer actually provides more details about the functioning of collaboration features such as message boards, chat, and photo sharing, than the written description of the challenged patents which merely lists these features as exemplary M-Channels without providing further detail. ('336, *e.g.*, 8:27-41.) As I explained in **Part IV.A**, the implementation of these collaboration features would have been straightforward to a skilled artisan with knowledge of web programming and developing mobile device applications, such that a further technical description would have been unnecessary. And contrary to Dr. Medvidović's argument, the fact that Neibauer is geared towards a wider audience would have made it even ***more*** pertinent to a skilled artisan, as it would have underscored to a skilled artisan that these features were used as part of a popular Yahoo! service that had commercial appeal, making it more pertinent than a disclosure in an obscure patent application that very few would likely have seen.

97. Dr. Medvidović also ignores the fact that the Patent Office already found Neibauer pertinent to the alleged invention. I have reviewed excerpts of proceedings in an *inter partes* reexamination of U.S. Patent No. 8,135,801 attached

as **Exhibit 1024** to the IPR petitions. The ’801 was patent at issue in that reexamination (distinguished from U.S. Patent No. 8,825,801 challenged in IPR2024-00247) was the direct parent of the ’336 patent, shared the same written description, and recited similar claimed features. As shown in **Exhibit 1024**, the PTAB used Neibauer as a basis to reject the claims at issue in that reexamination, which was affirmed by the Federal Circuit. This further indicates that Neibauer is sufficiently related to the field of the challenged patents, and is a type of prior art reference that can properly be used to show unpatentability here.

98. Dr. Medvidović further argues that, under the patent laws, a reference is only considered “reasonably pertinent” if it addresses the same problem as the patent. (¶159.) I understand from counsel that this is not a correct statement of the law, as a finding that a prior art reference have the “same purpose” may support an obviousness rejection but is not a requirement. What is required, I am informed by counsel, is that a person of ordinary skill in the art would reasonably have consulted the reference and applied its teachings in seeking a solution to the problem that the inventor was attempting to solve. Neibauer nevertheless satisfies even Dr. Medvidović’s narrower test for reasonable pertinence because Neibauer is attempting to solve a problem that the inventors also attempted to solve – how to manage information content in a web-based system. (’336, 1:23-26.)

99. Although it is true that the patents also disclose use of mobile devices

and wireless networks, this is not the only problem the inventors were attempting to address, nor is it even an essential element of the alleged invention described in the written description. I note that the written description makes clear that the alleged invention can be used with "a wired local area network (LAN)" ('336, 4:11-12), and that user terminals used by end users "may comprise a non-mobile device, including, by way of example, a desktop personal computer" ('336, 4:46-51). I note that the independent claims of U.S. Patent No. 8,825,801 (**EX1039**), the parent of the '336 patent as mentioned above that was invalidated in reexamination, did not even recite a mobile device or communication over a wireless network. In my opinion, therefore, Dr. Medvidović's analogousness analysis defines the "problem" the inventors were attempting to solve too narrowly and ignores the broader information content management problem that Neibauer, and the challenged claims, both attempted to address.

VI. RESPONSE TO DR. MEDVIDOVIĆ ARGUMENTS ABOUT THE ALLEGED LACK OF MOTIVATION TO COMBINE NEIBAUER WITH CHENG

100. Dr. Medvidović next argues that a skilled artisan would not have been motivated to combine Neibauer and Cheng, but many of his arguments focus on the proposition that Cheng discloses only a "unidirectional" flow of information (¶¶162-169) – a proposition that is demonstrably untrue as I explained in **Part III** and **Part IV.C** above. Dr. Medvidović also argues that two-way transmission of content

"often implies a persistent connection between the two" (¶169), but this is demonstrably untrue as HTTP – which facilitates a two-way connection as fully described above – is considered "connectionless" because a connection between a client and server need only be maintained for as long as needed for the client to send a request and receive a response from the server.

101. Dr. Medvidović also contends that the cache in Cheng would have interfered with the ability to provide two-way communication by preventing the initial request from the mobile device from reaching the origin web server. (¶¶170, 359, 166 fn.7.) I addressed this argument above; as noted, Cheng expressly contemplates that mobile device users can provide text and photo input to websites, thus making clear that Cheng's capabilities would have been designed to accommodate HTTP requests that contain user input such as photo content. Cheng also expressly discloses caching as an "optional[]" feature of his web page translation system, so to the extent there was any issue, the feature could simply not be used. (Cheng, 5:50-52.) In any event, it is questionable if the pages in Neibauer would be cached, as they are dynamically created for the logged-in user based on its identity and selections; they are not the types of static (unchanging) web pages, commonly accessed by many users, that are that are commonly stored in web caches for improved performance, as discussed previously. (*See supra,* footnote 6.)

102. Dr. Medvidović also contends that Cheng's techniques would have

been undesirable because mobile device users would need to have known about the proxy server, and would have had to alter their configuration and/or browsing behavior to account for the proxy server. (¶172.) This argument also fails. Cheng expressly discloses that if a mobile device "does not enable a proxy server **110** to be used, the present invention enables mobile devices to be redirected to proxy through the proxy server **110** by typing (or in some way, entering or implementing) the proxy server **110** address (location) and the URL of the desired web site **104** in, for example, the address field of the mobile device **108** browser." (Cheng, 6:43-50 (emphasis added).) The term "redirection" in the web context refers to a well-known mechanism in which a web site could send a message to a client web browser asking it to reconnect (redirect) using another URL. URL redirection was a feature built-into standard HTML (such as HTML redirect code 301), which allowed servers to instruct browsers to *automatically* redirect to another URL (or to redirect upon the user clicking a hyperlink). This would typically cause the redirected-to URL to appear in the address bar of the web browser, causing the web browser to access the page at the new URL. And even if the user had to manually enter the initial URL to the proxy server (which would not have been required), the user would only need to do this once, as they could simply "bookmark" the redirected page for future use. Cheng also makes clear that, for *subsequent* URLs from the original web site after the initial access by the mobile device, those URLs are rewritten *automatically* to

route through the proxy server **110** through a decorated URL, thus requiring no further user action. (Cheng, 6:59-62 ("For example, the proxy server automatically re-writes all of the other links within the site that are initially proxied to via the decorated URL.") (emphasis added).) This ability to rewrite URLs to route through an intermediate proxy server was a basic property of web proxy servers, which as I explained in my opening declarations, were common prior to June 2002.

103. Dr. Medvidović also speculates that Cheng may not have supported the range of HTML required to implement the features in Neibauer (¶¶174-175), but does not identify a single feature in Neibauer that Cheng would not have supported beyond the alleged lack of "two-way" communication that I addressed above, which is refuted by both references. Cheng further explains that "[t]he number of possible conversions is virtually infinite, and may include any of the appropriate combinations of methods and transforms." (Cheng, 12:29-31.) Cheng further explains that his techniques can be used for conversions "for all web sites." (Cheng, 2:30-32.) And as fully explained above in **Parts III** and **IV.C** above, Cheng expressly discloses creating mobile device profiles that specify the ability to provide text, image, and file data as inputs to a website. (Cheng, 8:36-39.)

104. There is therefore no support for Dr. Medvidović's suggestion that the Yahoo! Clubs features in Neibauer on which I rely would have been outside the capabilities of known mobile device conversion techniques as described in Cheng.

There is also no basis for Dr. Medvidović's speculation that adapting the features of Neibauer for smaller screen handheld mobile devices (to the extent required by the claim) would have been technologically difficult or would have required undue experimentation; as explained repeatedly above, these features would have been implemented on the original Neibauer websites using exceedingly basic web programming techniques such as HTML techniques for "Web 1.0" websites.

105. Dr. Medvidović also claims that mobile devices "would have been utilizing the WAP protocol, not HTML or HTTP" (¶175), but this argument is not only irrelevant, but refuted by Cheng itself. Cheng expressly discloses conversion techniques for "HTML-based mobile devices," and discloses that mobile devices can support HTML. (Cheng, 7:59-8:2 ("FIG. 2 is a simplified flow diagram of a conversion workflow for HTML-based mobile devices, as contemplated by the present invention."), 8:34-36 ("In step **312**, the UA-HTML field is used to specify the version of HTML of the mobile device **108**.").) Regardless of whether a mobile device used WAP, HTML, or some other web page description language, it would have been obvious to present the features of Neibauer, on which I relied on my opening declarations, for display on such a device.

VII. RESPONSE TO DR. MEDVIDOVIĆ COMMENTS ABOUT THE '336 PATENT IPR (IPR2024-000246)

106. Dr. Medvidović next makes a number of arguments about **Ground 1** of the '336 IPR petition (¶¶178-191), but most of those arguments were addressed and

refuted by the analysis above and depend on his proposed constructions of "**mobile device**" and "**mobile information channel**," both of which are incorrect for the reasons explained above in **Parts II.A** and **II.B**. Nevertheless, as I also explained above, these constructions would not impact the obviousness analysis even if adopted, as the proposed combination discloses these limitations even under Dr. Medvidović's proposed constructions.

107. Dr. Medvidović also discusses **Ground 2** of the '336 IPR petition (¶¶192-193), which addresses dependent claim 7 (*i.e.*, "The method of claim **1** wherein the shared content is obtained from a device-captured data source of the first user, said device-captured data source comprising a source of at least one of device-captured video data, device-captured image data, device-captured audio data and device-captured location coordinates."), and relies on the Ausems reference. Dr. Medvidović's arguments about **Ground 2** are arguably irrelevant, as **Ground 1** also separately explained why claim 7 was obvious based on the disclosures of Neibauer alone, as explained in my opening declaration. (EX1002 in IPR2024-00246, ¶¶136-137.) Dr. Medvidović does not make any separate arguments directed to **Ground 1** as it pertains to claim 7, leaving my arguments unrebutted.

108. Nevertheless, Dr. Medvidović's arguments about claim 7 as to **Ground 2** are without merit. He argues that Ausems does not disclose a method of uploading digital images to a mobile information channel. (¶¶193-193.) But this argument is

incorrect for the reasons explained in **Part IV.D** above, as wireless transmission of data was already well-known. This argument is also irrelevant because **Ground 2** did not depend on Ausems for transmission of a photo to the website, as this was already provided under **Ground 1** under Neibauer alone or in view of Cheng. (EX1002 in IPR2024-00246, ¶180 ("For example, under the proposed combination with Ausems, the club founder would have obtained image data using a digital camera of its device, which would have been transmitted for upload to the club for sharing with other club members, for example, <u>using the photo sharing features described in Neibauer</u>.") (emphasis added).) **Ground 2** instead relied on Ausems to show an example of device-captured image data (*id.*), and Dr. Medvidović does not dispute that Ausems discloses this.

VIII. RESPONSE TO DR. MEDVIDOVIĆ COMMENTS ABOUT THE '801 PATENT IPR (IPR2024-000247)

109. Many of Dr. Medvidović's arguments about the '801 patent refer back to his arguments about the '336 patent addressed above. (¶¶196-209.) He also purports to provide additional opinions about the '801 patent that largely repeat, paraphrase, or simply refer back to earlier arguments. (¶¶211-261.) For example, Dr. Medvidović also argues that Cheng "does ***not*** teach anything with respect to *receiving* content from a mobile device" (¶211 (emphasis in original)), which is incorrect as explained above.

110. Dr. Medvidović also argues that Neibauer does not disclose receiving

additional content from a mobile device associated with "**at least one wireless network**" (¶235), but this argument depends on an erroneous construction of wireless network as explained in **Part II.C** above. But even if this erroneous claim construction were adopted, it would still not distinguish the prior art for the reasons stated in **Part II.C**, as wireless networks existed that were "separate" from the Internet, such as 3G, GSM/GPRS, and GSM, that were well-known.

111. Dr. Medvidović also addresses certain dependent claims of the '801 patent, but does not appear to present any additional arguments beyond referring back to his arguments about claim 1, or arguments about the alleged absence of limitations in these claims that also appear in claim 1 (such as "mobile information channel"). (¶¶252-261.)

IX. RESPONSE TO DR. MEDVIDOVIĆ COMMENTS ABOUT THE '039 PATENT IPR (IPR2024-000248)

112. Dr. Medvidović's arguments about this patent largely refer back to earlier arguments. He argues again that the proposed combination does not render the challenged claims of the '039 patent obvious because of his "**mobile device**" construction (¶¶270-272), the alleged failure of Neibauer alone to disclose use of Yahoo! Clubs features on mobile devices and the alleged shortcomings of handheld mobile devices at the time (¶¶273-275), the allegedly unidirectional nature of data transmission in the Cheng reference (¶¶276), and the alleged difficulty in making the Yahoo! Clubs features in Neibauer available on a mobile device (¶¶277-290).

These arguments are without merit and were fully addressed above.

113. Dr. Medvidović also makes arguments about the claimed "**wireless networking functionality**" limitation (¶¶293-295), but these arguments depend on an erroneous construction refuted in **Part II.D** above, that would require such functionality be implemented "independent" of the Internet. But even if this erroneous construction were adopted, it would not distinguish the proposed combination. This is because my proposed combination also relied on Squibbs to provide a second theory for this claim limitation. (IPR2024-00248, EX1002, ¶¶112-113.) Under this second theory, as I explained, the information associated with '**at least one wireless networking functionality of the mobile device**" comprises location information of the mobile device. (*Id.*, ¶¶112, 121.) I further explained that, as explained in Squibbs, one way for a mobile device to obtain its location information us using a built-in GPS receiver. (*Id.*, *e.g.*, ¶¶113, 120.) It was well-known to skilled artisans that obtaining location information of the mobile device through GPS was a wireless networking functionality that was "*independent*" of the Internet, as the location information was calculated by using GPS signals wirelessly received by the device from satellites, which were used by the device to calculate its current location. (Squibbs, ¶¶0004 ("… digital camera **3** equipped with a GPS receiver for determining camera location using signals <u>from satellites **2**</u>…..") (emphasis added).) Receipt and processing of GPS signals from satellites to

determine a device location, as disclosed in Squibbs, was a wireless networking functionality that was independent of the Internet. GPS signals from satellites are directly transmitted wirelessly to GPS receivers using specific carrier wave frequencies – they are not delivered over the Internet.

114. Dr. Medvidović attacks Squibb individually as involving a system in which location information may be used by displayed on a personal computer (PC). (¶¶298-299) This argument is without merit for the reasons stated in **Part IV.E**, as it ignores the proposed combination of Squibbs with Neibauer and Cheng, in which the photo and location data would have been uploaded to a server for inclusion with the photo sharing feature disclosed in Neibauer. (IPR2024-00248, EX1002, ¶¶121-122.) Under the proposed combination, therefore, the location information would have been incorporated into, and displayed as part of, the web-based features described in Neibauer.

115. He also argues that Squibbs is not combinable with Neibauer because, according to him, Squibbs uses "separate devices to send photo data and location data to the network store" (¶298), but this is incorrect, as the cell phone in Squibbs could send both pieces of information as I explained in my opening declaration. (IPR2024-00248, EX1002, ¶120 ("The cell phone, concurrently with the upload of photo image data, also transmits location information associated with the photo.") (citing Squibbs, ¶0101).)

116. Dr. Medvidović contends that a skilled artisan would not have been motivated to combine Neibauer and Squibbs, and that my proposed combination is based on hindsight. (¶¶299-301.) But as I explained, the motivation comes from Squibbs itself, which explains that classification of photos was a longstanding issue. (IPR2024-00248, EX1002, ¶124 (citing Squibbs, ¶0002).) This motivation is further underscored by the other disclosures in Neibauer, described in my opening declaration, showing the placement of annotations on maps to identify the location of events. (*Id.*) Dr. Medvidović claims that "none of the photos or albums Neibauer describes are related to a location" (¶301), but Neibauer makes clear that a Yahoo! club can be created for a wide variety of reasons, including "any topic that interests you or as a home page where friends and family can stay in touch." (Neibauer, p.473 (00157).) Neibauer, in fact, identifies "Travel" as one type of club. (Neibauer, p.473 (Figure 21-6 (listing "Travel" under "Clubs Directory" heading).) A skilled artisan would have understood, as I previously explained, that "[t]he ability to associate a location with a digital photo would have provided a clear benefit to the club photo sharing feature of Neibauer by improving the classification and enjoyment of uploaded photos." (IPR2024-00248, EX1002, ¶124.) That motivation derives from the disclosures of the prior art, not from hindsight.

117. The remaining arguments made by Dr. Medvidović about claim 19 of the '039 patent appear to repeat earlier arguments. (¶¶303-306.) Dr. Medvidović

also briefly addresses dependent claim 21 (which depends from claim 19) (¶309), but he does make not arguments beyond those already articulated for claim 19, or attempt to distinguish Bandera for the advertising elements for which it was cited.

X. RESPONSE TO DR. MEDVIDOVIĆ COMMENTS ABOUT THE '578 PATENT IPR (IPR2024-000249)

118. Dr. Medvidović's arguments about this patent appear to merely repeat, paraphrase, or refer back to arguments made earlier in his declaration, which I fully addressed above (¶¶311-354).

XI. RESPONSE TO DR. MEDVIDOVIĆ COMMENTS ABOUT THE '348 PATENT IPR (IPR2024-000250)

119. Dr. Medvidović's arguments about this patent also appear to merely repeat, paraphrase, or refer back to arguments made that were addressed above Dr. Medvidović further argues, in a variant of his argument about Cheng only disclosing unidirectional data flow, that the proposed combination of Neibauer and Cheng would require "a completely new up-conversion functionality that is not disclosed by any of the references" (¶358), but it is unclear what he means by "up-conversion," although it is possible this is just another restatement or paraphrasing of his argument about Cheng supporting only one-directional transfer of data from a website to a mobile device. As explained in detail in **Part III** above, under the combination of Neubauer and Cheng, an uploaded photo would have been passed through from the mobile device to the proxy server **110**, to the origin web server **104**, in the HTTP

request **106**. The proposed combination would not have required that proxy server **110** modify or in any way alter the HTTP request from mobile device **108**, let alone "up-convert" the photo for upload to web server **104**. Dr. Medvidović's other arguments were addressed above.

120. With respect to his arguments about the McElfresh reference that focus on the requirement of "**periodically**" obtaining data from at least one data feed (¶¶408-410), as I explained in **Part IV.F**, this argument is without merit. Dr. Medvidović also argues that the proposed McElfresh combination has no reasonable expectation of success because, according to him, the ad selection in McElfresh is based on user information that is provided from the user to the website. (¶408.) This argument appears to again be based on the erroneous assumption that the Neibauer-Cheng combination would not allow the mobile device user to input or otherwise send data to the website, an argument I addressed above.

121. He also contends that the available advertisements in McElfresh is not a "**feed**," but he does not explain why. (¶410.) As I explained in my opening declaration, Patent Owner (who retained Dr. Medvidović) has argued that the term "**feed**" simply means "*a provision of information*," which McElfresh clearly satisfies by providing a set of advertisements that can be provided to a website. (IPR2024-000250, EX1002, ¶173.) To the extent Dr. Medvidović is providing some different interpretation of "feed," he does not disclose it in his declaration.

XII. CONCLUSION

122. In signing this Declaration, I recognize that the Declaration will be filed as evidence in a contested case before the Patent Trial and Appeal Board of the United States Patent and Trademark Office. I also recognize that I may be subject to cross-examination in this proceeding. If required, I will appear for cross-examination at the appropriate time. I reserve the right to offer opinions relevant to the invalidity of the challenged claims at issue and/or offer testimony in support of this Declaration.

123. I hereby declare that all statements made herein of my own knowledge are true and that all statements are made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001.

Dated: January 9, 2025

Respectfully submitted,

Vijay K. Madisetti 1/9/25

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