IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent of:	Singh et al.	
U.S. Patent No.:	8,756,336	Attorney Docket No.: 50048-0057IP1
Issue Date:	June 17, 2014	
Appl. Serial No.:	14/109,972	
Filing Date:	December 18, 2013	
Title:	AUTOMATIC MULTIMEDIA UPLOAD FOR PUBLISHING DATA AND MULTIMEDIA CONTENT	

SUPPLEMENTAL DECLARATION OF DR. PATRICK TRAYNOR

I, Patrick Gerard Traynor, of Gainesville, Florida, declare that:

I. QUALIFICATIONS AND BACKGROUND INFORMATION

1. My name is Patrick Gerard Traynor, and I have been retained by TikTok Inc. to provide my opinions and conclusions as an expert on unpatentability grounds in this *Inter Partes* review (IPR) concerning U.S. Patent No. 8,756,336, specifically in response to the arguments presented in Cellspin Soft's ("Cellspin") Patent Owner Response in IPR2024-00757 (POR). My qualifications for forming these conclusions are presented in my original declaration. TTI-1003, ¶¶2-14.

2. In writing this Supplemental Declaration, I have considered the following: my own knowledge and experience, including my work experience in mobile systems and networks; my experience in teaching those subjects; and my experience in working with others involved in those fields. In addition, I have analyzed the following publications and materials, in addition to other materials I cite in my declaration:

- U.S. Patent No. 8,756,336 to Singh et al. ("the '336 patent") (TTI-1001)
- Excerpts from the Prosecution History of the '336 patent (TTI-1002)
- U.S. Patent Application Publication 2005/0209927 to Aaltonen et al. ("Aaltonen") (TTI-1005)
- U.S. Patent Application Publication 2006/0129631 to Na et al. ("Na") (TTI-1006)
- *HTTP: The Definitive Guide* ("Gourley") (TTI-1007)
- U.S. Patent Application Publication 2013/0315235 to Foo ("Foo") (TTI-1009)
- International Publication No. 2008/028508 to Drescher et al. ("Drescher") (TTI-1010)
- U.S. Patent Application Publication 2007/0174393 to Bosschaert et al. ("Bosschaert") (TTI-1011)
- Internet Archive of Mobic.com, "Ericsson Unveils the First Bluetooth Phone," available at https://web.archive.org/web/20001002110758/http://www.mobic.com:80/, last accessed February 29, 2024 (TTI-1012).
- U.S. Patent No. 8,862,757 to Singh et al. ("the '757 patent") (TTI-1013)
- Excerpts from the Prosecution History of the '757 patent (TTI-1014)

- Japanese Patent Application Publication No. 2005-303511 to Takahashi Susumu and Certified Translation ("Takahashi") (TTI-1016)
- International Publication No. 2005/109781 to Lind et al. ("Lind") (TTI-1017)
- U.S. Patent Application Publication No. 2008/0165982 to Hankey et al. ("Hankey") (TTI-1018)
- Hypertext Transfer Protocol -- HTTP/1.1, June 1999 ("RFC2616") (TTI-1019)
- U.S. Patent No. 7,181,207 to Chow et al. ("Chow") (TTI-1020)
- U.S. Patent No. 7,333,955 to Graves et al. ("Graves") (TTI-1021)
- U.S. Patent No. 8,095,463 to Hartmaier ("Hartmaier") (TTI-1022)
- WAP MMS Architecture Overview Version 25-April-2001 ("MMS_1.0") (TTI-1023)
- U.S. Patent Application Publication No. 2009/0007196 to Ganesan ("Ganesan") (TTI-1024)
- Transcript of the Deposition of Pavan M. Gajendragad (TTI-1027)
- Merriam Webster definition for "along with," retrieved March 24, 2025 (TTI-1029)
- 3GPP TS 23.140 ("MMS V6.9.0") (TTI-1030)

- Merriam Webster definition for "in addition to," retrieved March 25, 2025 (TTI-1031)
- lftp(1) – Linux man page, available at https://linux.die.net/man/1/lftp (TTI-1034)

II. LEGAL PRINCIPLES

A. Anticipation

3. I have been informed that a patent claim is invalid as anticipated under 35 U.S.C. § 102 if each and every element of a claim, as properly construed, is found either explicitly or inherently in a single prior art reference. Under the principles of inherency, if the prior art necessarily functions in accordance with, or includes the claimed limitations, it anticipates.

4. I have been informed that a claim is invalid under 35 U.S.C. § 102(a) if the claimed invention was known or used by others in the U.S., or was patented or published anywhere, before the applicant's invention. I further have been informed that a claim is invalid under 35 U.S.C. § 102(b) if the invention was patented or published anywhere, or was in public use, on sale, or offered for sale in this country, more than one year prior to the filing date of the patent application (critical date). And a claim is invalid, as I have been informed, under 35 U.S.C. § 102(e), if an invention described by that claim was described in a U.S. patent granted on an

application for a patent by another that was filed in the U.S. before the date of invention for such a claim.

B. Obviousness

5. I have been informed that a patent claim is invalid as "obvious" under 35 U.S.C. § 103 in light of one or more prior art references if it would have been obvious to a POSITA, taking into account (1) the scope and content of the prior art, (2) the differences between the prior art and the claims, (3) the level of ordinary skill in the art, and (4) any so called "secondary considerations" of non-obviousness, which include: (i) "long felt need" for the claimed invention, (ii) commercial success attributable to the claimed invention, (iii) unexpected results of the claimed invention, and (iv) "copying" of the claimed invention by others. For purposes of my analysis above and because I know of no indication from the patent owner or others to the contrary, I have applied a date of December 28, 2007, as the date of invention in my obviousness analyses, although in many cases the same analysis would hold true even at an earlier time than December 28, 2007.

6. I have been informed that a claim can be obvious in light of a single prior art reference or multiple prior art references. To be obvious in light of a single prior art reference or multiple prior art references, there must be a reason to modify the single prior art reference, or combine two or more references, in order to achieve the claimed invention. This reason may come from a teaching, suggestion, or

motivation to combine, or may come from the reference or references themselves, the knowledge or "common sense" of one skilled in the art, or from the nature of the problem to be solved, and may be explicit or implicit from the prior art as a whole. I have been informed that the combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results. I also understand it is improper to rely on hindsight in making the obviousness determination.

III. INTERPRETATIONS OF THE '336 PATENT CLAIMS AT ISSUE

7. I have been informed by Counsel and understand that the best indicator of claim meaning is its usage in the context of the patent specification as understood by one of ordinary skill. I further understand that the words of the claims should be given their plain meaning unless that meaning is inconsistent with the patent specification or the patent's history of examination before the Patent Office. Counsel has also informed me, and I understand that, the words of the claims should be interpreted as they would have been interpreted by one of ordinary skill at the time of the invention was made (not today). I have been informed by Counsel that I should use December 28, 2007 as the point in time for claim interpretation purposes.

IV. RESTATEMENT OF CONCLUSIONS

8. It is still my opinion that the claims of the ’336 Patent are unpatentable, and except where otherwise noted, my opinions as discussed in my original declaration remain the same. To restate those conclusions:

- Based upon my knowledge and experience and my review of the prior art publications listed above, I believe that claims 1-5 of the ’336 patent are obvious over Aaltonen in view of Drescher.
- Based upon my knowledge and experience and my review of the prior art publications listed above, I believe that claims 1-5 of the ’336 patent are obvious over Takahashi in view of Na.
- Based upon my knowledge and experience and my review of the prior art publications listed above, I believe that claims 1-5 of the ’336 patent are obvious over Takahashi in view of Na and Lind.

V. ANALYSIS OF CELLSPIN’S ARGUMENTS

A. Claim Construction

1. Along with

9. Cellspin construes “along with” as limited to “in addition to,” such that element 1[f] would require “transferring a data segment in addition to said user identifier.” By way of support, they reproduce a block quotation from the “’802 specification” and a portion of a Merriam Webster definition from the present day. POR, 9-12.

Intrinsic Evidence from the patent specification

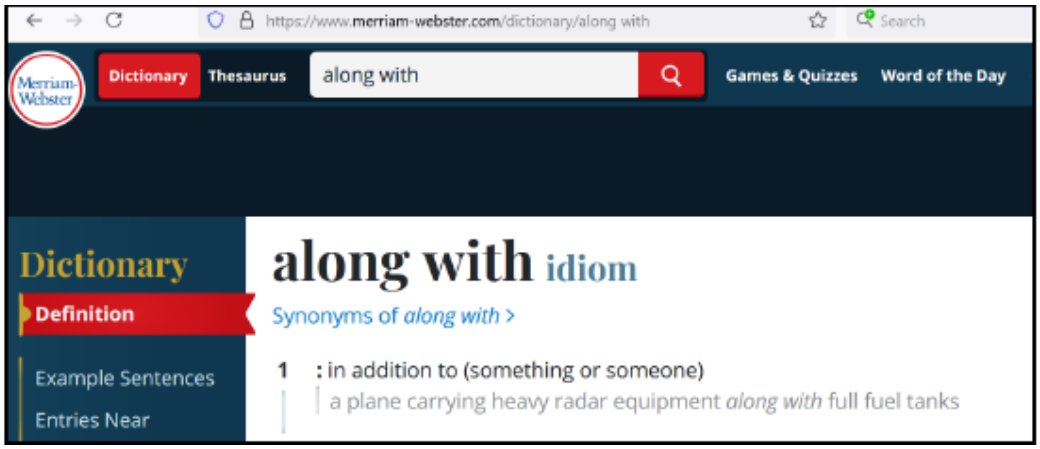
> **[0047]** If the user **201** is not satisfied **405** with the created multimedia object, the user **201** may review or delete **406** the multimedia object and start recording again. Otherwise, the user **201** transfers the multimedia object for publishing to a publication space selected by the user **201**. Additional information such as the list of the user preferences of the publication virtual spaces **205**, authentication identification, user preferences, default settings, manually entered geographical codes, and auction identifiers for eBay® and other shopping websites are selected **407** and transferred along with the user created multimedia content to the publishing service **204**. A remote method call **408** such as extensible markup language-remote procedure call (XML-RPC) may be initiated by the client application **202** to transfer the user created multimedia content along with the additional information to the publishing service **204**. The transfer to the publishing service **204** takes place using wireless technology, for example, global system for mobile communications, code division multiple access technology, wireless fidelity, or worldwide interoperability for microwave access.

POR, 10.

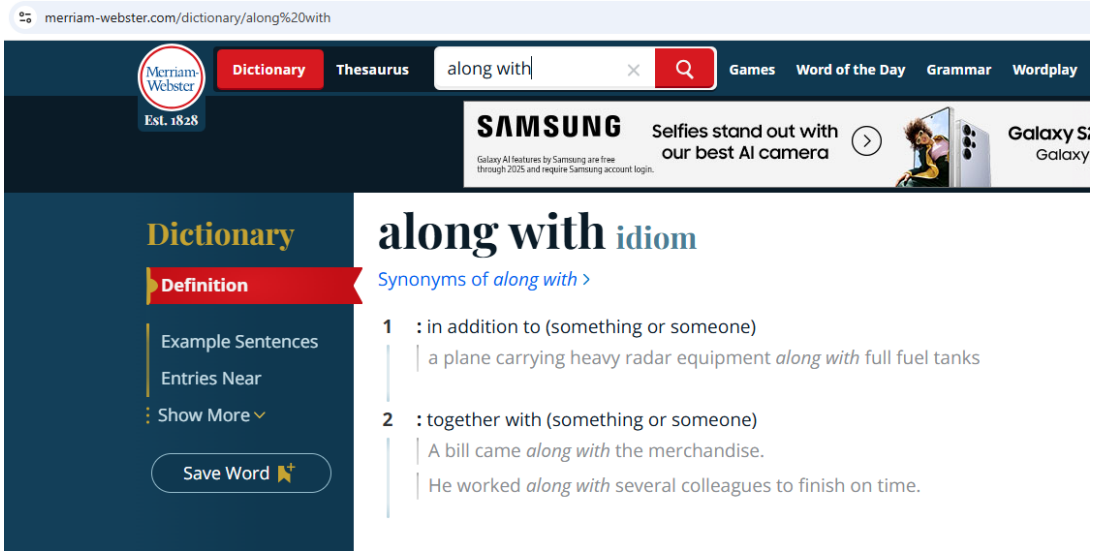
10. Nothing in the '802 specification block quotation demonstrates redefinition of the phrase "along with" that would disavow any plain meaning. POR, 9-12. The '802 specification block quotation merely uses the words "along with" without any explanation as to its meaning. *Id.*

11. Additionally, I note that the Merriam Webster definition, from the present day, is only one of multiple possible definitions for "along with" listed by Merriam Webster. POR, 11. Cellspin appears to acknowledge that "along with" is not limited to "in addition to," and can extend to these other definitions such as "together with," indicating that "along with" would have been interpreted broadly to

have multiple meanings. POR, 11. No justification is given as to why "in addition to"—what Cellspin has elected—is preferable to this other definition ("together with").



POR, 11



TTI-1029

12. The phrase "along with" does not have any special meaning in the context of the '336 Patent, and in my opinion, there is no reason to depart from the plain and ordinary meaning of "along with."

2. Segment Identifier

13. Cellspin argues that "HTTP based identifiers must be text." POR, 12-13. This is not necessarily true. Although text is certainly common in HTTP, the use of text-based HTTP identifiers is simply a design choice, and other options would have been available to a POSITA. For example, HTTP before the Critical Date supported the use of numeric "cookies" to identify a user, which can be limited to simply numeric identifiers without any additional text. TTI-1007, 277-278, 283-284. Additionally, the body of an HTTP message supports binary data, indicating that HTTP messages are not simply limited to text. TTI-1007, 64. Additionally, Counsel has informed me that, contrary to what Cellspin alleges in the POR, there is no agreed construction for this claim feature.

14. The phrase "segment identifier" does not have any special meaning in the context of the '336 Patent, and in my opinion, there is no reason to depart from the plain and ordinary meaning of "segment identifier."

3. User Identifier

15. The '336 Patent does not otherwise redefine or disavow any plain meaning of "user identifier." *See generally*, TTI-1001. I note that the only evidence

that Cellspin offers in support of its construction for this term is the testimony of Mr. Gajendragad. EX-2001, ¶47; POR, 13. I do not believe this testimony is consistent with the state of the art for the same reasons as discussed above for "segment identifier." See above, §V.A.2. Additionally, Counsel has informed me that, contrary to what Cellspin alleges in the POR, there is no agreed construction for this claim feature.

16. The phrase "user identifier" does not have any special meaning in the context of the '336 Patent, and in my opinion, there is no reason to depart from the plain and ordinary meaning of "user identifier."

4. Web Service

17. Cellspin alleges that "web service" should be construed to mean "[a] modular collection of Web protocol based applications that use standard Internet protocols such as HTTP, XML, and SOAP to provide connectivity." POR, 14-15, 27.

18. The '336 Patent does not define or disavow any particular definition of "web service"—I note that the specification does not even recite the phrase. *See generally*, TTI-1001; Petition, 11. Accordingly, there is no reason to depart from the plain and ordinary meaning of this phrase, which would have encompassed a "service" located on or available over the "web," for example, a website as taught by the Petition's prior art. Petition, 9-11.

19. The phrase "web service" does not have any special meaning in the context of the '336 Patent, and in my opinion, there is no reason to depart from the plain and ordinary meaning of "web service."

VI. AALTONEN AND DRESCHER RENDER THE CHALLENGED CLAIMS OBVIOUS (GROUND 1)

A. Aaltonen-Drescher renders obvious "applying a segment identifier to each data segment"

20. There are aspects of the Petition's prior art mapping that are uncontested in the POR. For example, the Petition identified segment identifiers included in either Aaltonen's "information packets" or "data packets" as satisfying element 1[d]. Petition, 15 ("Aaltonen discloses that 'information packets… added to the packet stream' 'between groups or blocks 120 of one or more packets' or alternatively 'data packets'… include 'an identifier'…). Cellspin fails to acknowledge and dispute that Aaltonen's data packets include a "segment identifier." POR, 46-55. This omission is impactful, as one of Cellspin's arguments is that Aaltonen's information packets are not "attached" to Aaltonen's data blocks. POR, 47-48. To the extent that a packet including the segment identifier must be "attached" to its respective data segment (which the claim language does not require), Aaltonen's data packets would disclose such an arrangement as they are within each data block. Petition, 15-16. Thus, this overlooked Petition mapping renders a portion of Cellspin's argument moot. POR, 47-48.

21. Additionally, the POR argues that the Petition maps Aaltonen's information packets themselves to the "segment identifiers" of the claim. See e.g., POR, 47. This is misleading. Rather, the Petition mapped the "identifiers" within Aaltonen's information and data packets as the claimed "segment identifiers," not the packets themselves. Petition, 15. This is a meaningful distinction, as the identifying information within Aaltonen's packets is not limited to describing their packets, but also the data blocks associated with their packets. *Id*.; TTI-1005, ¶[0103] ("each information packet can include a table uniquely identifying the block of packets before or after the respective information packet"). These data blocks are distinctly application layer constructs. *See below*, §VI.C.

22. Cellspin alleges that identifiers in packets can only be binary, and thus cannot be text. POR, 54-55. The basis for this argument is Cellspin's improper assumption that Aaltonen's data packets <u>must</u> be User Datagram Protocol (UDP) packets and their associated segment identifiers <u>must</u> be cyclic redundancy codes (CRC). *Id*. Aaltonen clearly indicates that UDP is only one possible protocol that can be used, and CRC is only an example method of segment identification. TTI-1005, ¶¶[0102]-[0103] ("In accordance with various protocols, such as the User Datagram Protocol (UDP) …"). Aaltonen also clearly indicates that there are alternatives to CRC, indicating that the selection of CRC would have simply been a

design choice. *Id*. For example, a POSITA could have alternatively used the HTTP header itself to identify data blocks within the context of HTTP. TTI-1007, 278-296.

23. Additionally, to the extent CRC has any relevance to whether a segment identifier would qualify as text, Aaltonen describes embodiments where CRC is not even used as the segment identifier. TTI-1005, ¶¶[0102]-[0103]. Aaltonen discloses that segment identifiers can include "a table uniquely identifying the block of packets." Petition, 15-16; TTI-1005, ¶[0103]. Aaltonen's segment identifiers (e.g., tables) cannot simply be binary data and nothing more.

B. Aaltonen-Drescher renders obvious "applying a user identifier to each data segment"

24. Cellspin argues that Drescher's user ID is "only sent in the initial request message to authenticate the user for that HTTP Session." POR, 31-33 (emphasis omitted). This directly contradicts Drescher's explicit disclosure. TTI-1010, 26:32-27:2. Drescher explicitly discloses that its user identifier can be sent with each data chunk. *Id*. Specifically, Drescher discloses that although the identity of a user need be shared only once, it "may be convenient nonetheless" to include the user's identity in "additional" messages. *Id*. Cellspin's argument that the user's identity is "only" sent in the initial message is at odds with the reference's very disclosure. *Id*.

25. Cellspin offers Drescher's FIGS. 8A and 8B as undisputable evidence that user identification is not transmitted with subsequent messages in Drescher, but

nothing in the figures or supporting disclosure actually supports Cellspin's interpretation that user identifying information cannot be included in any subsequent messages, or that FIGS. 8A and 8B are the only acceptable message format. POR, 32-33; TTI-1010, 36:24-33, FIGS. 8A, 8B. Drescher itself indicates that the syntax of these messages is simply an "example." TTI-1010, 7:23-24. In light of Drescher's disclosure elsewhere, as discussed above, a more consistent interpretation is that user identification is simply not pictured in FIG. 8B, but may nonetheless be included in other allowable message formats. TTI-1010, 26:32-27:2, FIG. 8B.

26. Additionally, with respect to their proposed construction, Cellspin does not allege that Drescher does not satisfy the proposed construction, and they attack only Aaltonen in isolation (improperly assuming identifiers must be CRC). POR, 55-63. Drescher clearly indicates its user identifiers include a "name particularising the… [party] involved in the request" ("a text string that identifies uniquely a user of a web service …"). Petition, 17; TTI-1010, 25:32-26:21, 34:13-35:4, 35:26-36:21. A "name" is most commonly represented <u>by</u> text, as opposed to binary data. *Id*. Drescher also discloses that user identity is used to determine "permissions" to allow "access to resources at the server" ("… and contains sufficient information to authenticate a user of the web service"). *Id*. For this reason, Aaltonen and Drescher would render the proposed construction obvious even if it was applied. *Id*.

C. Aaltonen-Drescher renders obvious applying the identifiers "at the application layer level"

27. The OSI model is a conceptual framework composed of abstract layers, and applying rigid lines of demarcation to these layers is improper (e.g., declaring that all information carried by a particular data packet is information at the transport layer). The common understanding is that functionality exposed to an application (e.g., the segmenting of data by the content manager) is distinctly application layer functionality. Said another way, if you were to assume that all information in a data packet is assigned to the transport layer of the OSI model, application layer protocols (like HTTP) would not exist, as data in transit (e.g., a transmitted HTTP data block) could only theoretically be assigned to the transport layer. In actuality, the layers of the OSI model complement each other, and act to conceptually (not physically) separate networking functionality.

28. Aaltonen's identifiers are applied at the application layer, as required by the claims. The identifying information in Aaltonen's information and data packets describes blocks of packets ("a table uniquely identifying the block of packets"). Petition, 15; TTI-1005, ¶[0103]. These data blocks are created by Aaltonen's content manager, an application, which "break[s] up the upload content into a plurality of portions" ("blocks"). Petition, 4-5, 9; TTI-1005, ¶[0060], FIG. 6. Functionality exposed to an application (e.g., the segmenting of data by the content manager) is distinctly application layer functionality. While individual packets may

be transport layer constructs, Aaltonen's "blocks" of packets are established by an application, and are thus clearly not. Petition, 4-5, 9; TTI-1005, ¶[0060], FIG. 6.

29. Mr. Gajendragad's opinion to the contrary is incorrect. The POR and Mr. Gajendragad argue that "a POSITA would readily appreciate the fact that FTP and HTTP had no concept of segmentation of data at the Application Layer in 2007." POR, 19. Additionally, Mr. Gajendragad opines that "[a]s of 2007, a POSITA would have understood that HTTP was only being used between web servers and requesting Browsers." POR, 23; EX-2001, ¶67.

30. These opinions are factually incorrect. Na itself undermines the assertion that HTTP was limited to only browsers as of 2007. TTI-1006, ¶¶[0003]-[0004], [0052], [0062], [0067]-[0068], [0072]-[0075], [0111], [0116]. Na explicitly discloses the use of HTTP in Multimedia Messaging System (MMS), which a POSITA would have readily appreciated is not confined to a web browser. *Id*.; *see also* TTI-1030, 25-26, 132-134. The MMS standard as of 2005 included messaging between MMS clients and server-based Value Added Service Providers ("VASPs"). *Id*. The messaging for VASP services used the Simple Object Access Protocol ("SOAP") 1.1 format, <u>which itself used HTTP</u>. *Id*. The SOAP format allowed for many different types of communication, beyond that provided by a simple web browser, to include any combination of multimedia, images, text, and audio. *Id*.

31. Additionally, the opinion that "a POSITA would readily appreciate the fact that FTP and HTTP had no concept of segmentation of data at the Application Layer in 2007" is similarly off-base. Segmentation of data at the application layer was well known prior to the Critical Date and, in addition to the prior art combinations presented in the Petition, MMS as of 2005 (a distinctly application-layer protocol) also included options to transmit a particular MM as a collection of separate elements ("streaming," where an MM is transmitted as "one or several MM elements"). TTI-1030, 18-19, 35-36. As discussed above, when the MM in question is part of a VASP, this transmission is performed with SOAP and HTTP. TTI-1030, 25-26, 132-134. Sophisticated File Transfer Program ("lftp") is another example of a segmented file transfer protocol that performed upload recovery at the application layer ("Every operation in lftp is reliable, that is any not fatal error is ignored and the operation is repeated. So if downloading breaks, it will be restarted from the point automatically"). TTI-1034. lftp was initially created in the late 1990s and was compatible with HTTP and FTP, among other file access protocols. *Id*.

D. Aaltonen-Drescher renders obvious a "web service"

32. Even if Cellspin's construction of "web service" was adopted, the prior art would still disclose the construed feature. Petition, 11; TTI-1003, ¶42; TTI-1005, ¶¶[0056]-[0057]. As explained in the Petition, Aaltonen discloses its mobile station can use "a conventional Web browser for communicating in accordance with…

HTTP" ("Web protocol based applications that use standard Internet protocols such as HTTP"). *Id*.

VII. TAKAHASHI AND NA RENDER THE CHALLENGED CLAIMS OBVIOUS (GROUNDS 2A/2B)

A. Cellspin's arguments fail to rebut the Petition's showing that a POSITA would have been motivated to combine Takahashi's and Na's teachings because MMS is compatible with and endorses HTTP

33. I have been informed by Counsel that the POR argues for bodily incorporation of Na into Takahashi. While I appreciate this is not the legal standard, it is my belief that bodily incorporation of these references would have been possible (to the extent that has any relevance). Not only is MMS compatible with HTTP, the MMS standard itself specifies the use of HTTP when transmitting certain MMs (e.g., SOAP formatted MMs). TTI-1030, 25-26, 132-134. Thus, even if bodily incorporation was to be required, this is hardly an insurmountable obstacle to a POSITA. At worst, this would have required a POSITA to convert the format of Takahashi-Na's messages into a SOAP-friendly format, which itself would have been predictable, as SOAP was a well-known format specified by a standard. *Id*.; *see also* TTI-1030, 25-26, 132-134. Such routine coding ability would have been well within the capability of a POSITA.

B. Takahashi-Na renders obvious "a user identifier", and the Petition's mappings of "user identifier" are consistent

34. Cellspin argues that the Petition's mapping of "user identifier" is inconsistent in the Takahashi-Na ground between elements 1[e], 1[j], ad 1[k]. POR, 84-90. This is not true. The Petition mapped the user identifier in 1[e] to Takahashi's "user ID specific to a user" (a "user identifier") included in the "file name" formatted as "user ID + YYYYMMDDHHMISS (year, month, day, hour, minute, and second)." Petition, 46; TTI-1016, ¶¶(0010), (0013), (0032), (0035), (0064), (0066), (0070), FIG. 5. Cellspin does not dispute that Takahashi's user ID satisfies the claimed "user identifier." POR, 84-90.

35. Na's "message ID assigned to the media data to be uploaded (X-Msg-id, e.g., a terminal number and upload time information in the form of MIN_MMDDHHMMSS)" is in a similar format as Takahashi's file name that includes the user ID. TTI-1003, ¶117 (cited at Petition, 47 (element 1[e])), ¶139 (cited at Petition, 59 (element 1[j])). Na's terminal number uniquely identifies a particular user of the web service, which he corroborates with multiple references. *Id*. (citing TTI-1020, 4:7-10, 4:17-19, 2:60-63, 9:10-13, 12:46-49; TTI-1021, 7:39-45; TTI-1022, 3:25-27); POR, 86; EX-2001, ¶¶207-208 (terminal number "is not a unique user identifier of the web service").

36. The Petition also further elaborated that, in the combination, Takahashi's filename (including the user ID) would have been applied to each data segment by using a request message that includes the user ID for each data segment,

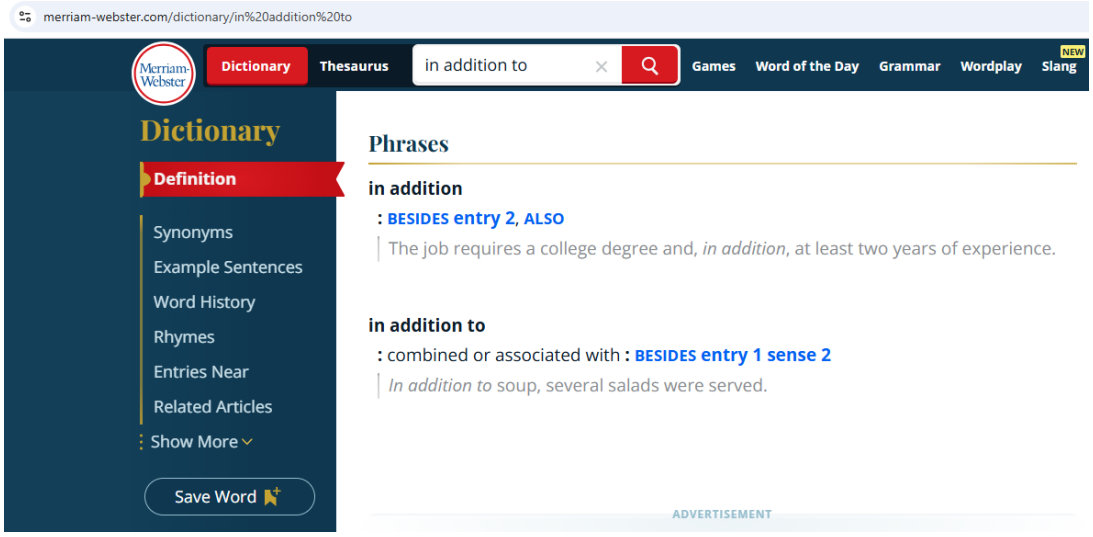
as suggested by Na, because each request message in Na includes a "message ID" in a similar format to Takahashi's filename. Petition, 47, 59; TTI-1006, ¶¶[0053], [0062]-[0063], [0078], [0116]-[0117], FIGS. 2, 15. Thus, Takahashi's "user ID" and Na's "terminal number" are synonymous concepts and both render obvious "user identifier."

37. The Petition's analysis in elements 1[j] and 1[k] maps both "the 'terminal number' or user ID" to "said user identifier." Petition, 59-60, 65. This mapping carried through each of elements 1[j] and 1[k] discusses that messages sent between the terminal and web service reference Na's message ID, which would have included Takahashi's user ID (due to its similarity to Na's terminal number) in the combination (the synchronization request in 1[j], and response in 1[k]). Petition, 58-67.

C. Takahashi-Na renders obvious "transferring a data segment along with said user identifier" (element 1[f])

38. Cellspin argues that Takahashi's filename is not transferred "along with" data segments because the filename is not sent "in addition to" the data. POR, 68-69. Cellspin's argument assumes that "in addition to" somehow implies a requirement that the "data segment" and "user identifier" be separable. *Id*. The plain meaning of "in addition to" does not support such a requirement. TTI-1031; *see above* §V.A.1. Indeed, according to Merriam Webster, "in addition to" includes objects that are "combined." *Id*. In Takahashi, the filename is combined with the

data as an HTTP request and is thus transferred in addition to the data. Petition, 48-49; TTI-1016, ¶¶(0049), (0005)-(0008), (0020)-(0030), (0042)-(0043).



TTI-1031

39. Second, as discussed above, Cellspin assumes that "along with" must be construed to mean "in addition to," as opposed to other definitions that appear to be consistent with the prior art (e.g., "together with"). TTI-1029; *see above*, §V.A. Takahashi's filename is clearly transmitted "together with" each data segment. POR, 11; Petition, 46-48 (Takahashi discloses that in "transmitting the divided image using HTTP, the generated file name" including the user ID "is also transmitted together").

40. For this reason, even if Cellspin's construction is adopted, Takahashi-Na renders it obvious.

D. Takahashi-Na renders obvious "segment identifier"

41. Cellspin does not dispute the Petition's mapping of Takahashi's "division number" to the claimed "segment identifier," even under Cellspin's construction. Petition, 44-45. Rather, Cellspin asserts that "Petitioner relies of [*sic*] Na 'X-Total-Seq' and 'X-Seq-No' as 'segment identifier'." POR, 80. Cellspin argues that "Na Segment identifiers are 'Binary Encoded'" and thus Na's segment identifiers fail to meet Cellspin's construction. *Id.*; *see above* §V.A.2. As explained above, "segment identifier" should be given only its plain and ordinary meaning, which would encompass an identifier that identifies a data segment as taught by each of Takahashi and Na.

42. Further, as discussed above in §VII.A the Petition never proposed bodily incorporating Na directly into Takahashi. Rather, the Petition proposed that Na's teachings would have been combined within Takahashi's general disclosure, which describes transmitting data as an HTTP request pursuant to the HTTP protocol. Petition, 44-46; TTI-1016, (0053), (0055)-(0057), (0068), (0085), (0090), FIG. 3. A POSITA implementing Takahashi's HTTP-based functionality would have found it obvious to implement segment identifiers as text strings in accordance with the HTTP protocol. Indeed, Cellspin admits that "HTTP is a text-based protocol." POR, 83.

E. Takahashi-Na renders obvious "web service"

43. Even if Cellspin's construction of "web service" was adopted, the prior art would still disclose the construed feature. Petition, 40; TTI-1016, ¶¶(0052), (0054), (0061)-(0062), FIG. 2. As explained in the Petition, Takahashi discloses its "image storage server" has "a WEB (World Wide Web) server" (hosting "Web protocol based applications…") and publishes images "on a web page" using HTTP requests ("…that use standard Internet protocols such as HTTP"). *Id*.

VIII. ADDITIONAL REMARKS

44. I currently hold the opinions set expressed in this declaration. But my analysis may continue, and I may acquire additional information and/or attain supplemental insights that may result in added observations.

45. I hereby declare that all statements made of my own knowledge are true and that all statements made on information and belief are believed to be true. I further declare 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 Section 1001 of the Title 18 of the United States Code.

Dated: 11 April 2025 By: _____