UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TIKTOK, INC.,

Petitioner,

v.

CELLSPIN SOFT, INC.,

Patent Owner

IPR2024-00759

U.S. Patent No. 8,862,757 B2

Before GREGG I. ANDERSON, CYNTHIA M. HARDMAN, and MICHAEL A. VALEK, *Administrative Patent Judges.*

PATENT OWNER SUR-REPLY

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MCM Portfolio LLC v. Hewlett-Packard Co.,
812 F.3d 1284 (Fed. Cir. 2015) 25

Pfizer, Inc. v. Apotex, Inc.,
480 F.3d 1348 (Fed. Cir. 2007) 25

TABLE OF EXHIBITS

Number	Description
2001	Declaration of Pavan M. Gajendragad
2002	Petitioner's District Court Disclosures
2003	Cohen
2004	Harrison
2005	Joint Claim Construction Statement
2006	2007 CCNA Cisco Certified Network Association Study Guide
2007	WAPARCH
2008	MMS 1.0 Specification Excerpts
2009	IrDA - OBEX Version 1.3
2010	Book Excerpts
2011	'030 File Wrapper
2012	Book Excerpts
2013	'766 File Wrapper
2014	'121 Patent Notice of Allowance
2015	'381 Patent Notice of Allowance
2016	2003 Bluetooth Specification, Version 1.1
2017	Website Excerpts
2018	MIT Article
2019	Wikipedia Page
2020	Oracle Document

2021	Wikipedia Page
2022	Second Declaration of Pavan M. Gajendragad

I. INTRODUCTION

The Reply filed by Petitioner TikTok fails to overcome the numerous defects as identified in Patent Owner's Response. Accordingly, Patent Owner once again requests that the Board hold that the Challenged Claims are patentable over the art cited by the Petitioner.

II. ARGUMENT

A. The District Court Claim Construction Facts

The record below is not in dispute and, despite Petitioner's complaints, the claim construction synopsis provided by Patent Owner is accurate. First, Petitioner acknowledges the fact that it is seeking two different claim constructions in two different forums under same *Phillips* standard. The only "dispute" here centers on the math underlying Petitioner's and Patent Owner's views of what constitutes an individual contested claim term.

In any event, the District Court ruled on the stay well *after* the filing of the Patent Owner Response in the instant matter, and it has zero effect on the agreed-to terms via the normal Local Patent Rule disclosure procedure. At the end of the day, of course, *consistency must still apply*. Moreover, before the Motion to Stay was granted, Patent Owner Cellspin filed its Opening Claim Construction Brief in the District Court and sent all the material and exhibits to the technical expert appointed in the case.

In a decision newly designated as "informative" by the USPTO, the PTAB provided important guidance on the procedural requirements for IPR Petitions and, in particular, it emphasized the need for *consistency between IPR proceedings and parallel litigation. See Cambridge Mobile Telematics, Inc. v. Sfara, Inc.*, IPR2024-00952, Paper 12 (P.T.A.B. Dec. 13, 2024). In its decision, the Board exercised discretion to deny the Petition, concluding that the Petitioner in that matter had violated 37 C.F.R. §42.104(b)(3) by failing either to provide constructions explicitly, identify structure, or *adequately justify its contradictory positions.* Thus, the majority denied institution under 35 U.S.C. §314(a) due to procedural deficiencies in the Petition. The very same result should occur in the instant action.

B. Unlike Those of Petitioner, the Claim Construction Positions of the Patent Owner Remain Consistent

1, Web Service

Petitioner fails to offer meaningful rebuttal or evidence for why the 2005 Microsoft Dictionary definition of the term "web service" should not be adopted here. Petitioner cannot argue or point to any other definition for "web service" because it is a standard technical definition and there is no alternative definition. Instead, Petitioner offers nothing more than attorney argument which is not compelling or correct. *See* Second Gajendragad [Exh. 2022] at ¶ 13.

Petitioner argues that a "recipient" can be an "origin server," "digital broadcaster," and/or "digital broadcast receiver" ("one or more web services"). *See* Petition at 9. The only reasons Petitioner does not want an industry standard Microsoft definition are because: (i) Petitioner has conceded that the Altonen "origin servers" that work in accordance with the Multimedia Broadcast "Multicast" Service (MBMS) are NOT a web service or a web site; and (ii) Petitioner has also conceded that terrestrial digital video broad casting (*e.g.,* DVB-T, DVB-H, ISDB-T, ATSC, etc.) also is NOT a web service or a website.

In its Reply, Petitioner erroneously suggests that the "patent does not define or disavow any particular definition of 'web service.'" *See* Reply at 10. First, the term "web service" is/was a well-known industry term as clearly defined in the 2005 standard Microsoft Dictionary. Second, the written description clearly says its protocol choice for servers was XML and HTTP, and both of those protocols are part of the Microsoft web service definition in the 2005 dictionary. *See* Second Gajendragad [Exh. 2022] at ¶ 14.

2. Along With

In its Reply at 5, Petitioner wrongly alleges that: "[n]o justification is given in the POR as to why 'in addition to' – what Cellspin has elected – is preferable to this or other definitions ('together with')."

But the Patent Owner Response clearly provided such justification, as it focused on "in addition to" because the text in the '802 application specification at [0047], used similar language. As noted, [0047] says: "along with additional information" and also says "additional information such as …transferred along with." Both the Patent Owner Response and Mr. Gajendragad highlighted that specific disclosure.

The Board should adopt "in addition to" but can also adopt "together with." But "along with" cannot be construed as "inside." In Takahashi, the "User ID" is embedded "inside" the filename. The User ID of Takahashi is *not* sent "in addition to" the filename, nor is it sent "together with" the file name. The claims plainly require that the User ID and File be separate. In the related IPR2024-00770 and IPR2024-00769, when arguing that a "file" is an "object," Petitioner and its technical expert have taken the directly contradictory position that "filename" is inside a "file header" that is part of the "file data." *See* IPR2024-00770 Reply at 17 ("This mapping applies to CellSpin's constructions because a file is a structure for organizing data, and it has value (the picture) and an identifier (filename)"). If filename is inside the file and inside the file header structure of the file, then filename cannot be "along with", "in addition to" or even "together with" the file, if it is already a part of the file data inside and being part of the file header data. *See* Second Gajendragad [Exh. 2022] at ¶ 16.

Considering both example sentences for "together with" in the Merriam Dictionary, it is clear that: (i) Bill was not hidden "inside" the merchandise, and (ii) He was not "inside" several colleagues.

The context in the '802 disclosure is very clear that all the things envisioned by the patentee to be sent "along with" cannot be "inside" the file name. *See* Second Gajendragad [Exh. 2022] at ¶ 17. Now, in its Reply at 24, Petitioner wants to go a step further and not only define "along with," but now also adding the definition of "in addition to" from the Merriam Dictionary in support of its faulty "combined" argument. Of course, the cited example sentences for "combined" do not help Petitioner. More specifically: "In addition to soup, several salad were served." Plainly, soup and salad were not mixed together or served "inside" each other. Again, in Takahashi, the User ID is part of the file data, since it is embedded in the file name, whereas the claims require the file and User ID to be two different things. *See* Second Gajendragad [Exh. 2022] at ¶ 18. Indeed, Petitioner itself argues for that position in the related IPR2024-00770 and IPR2024-00769.

3. Segment Identifier and User Identifier as Text String

Petitioner contends that "Cellspin and Petitioner have not agreed to a construction for this claim feature." But Petitioner is the one who actually *proposed* the requirement for both of these terms being a "text string" in the District Court. Later, Petitioner rescinded and simply wanted plain and ordinary

meaning. Petitioner's shifting sand approach to claim construction is a reflection of its inability to match the cited art to the claims.

In its Reply, Petitioner erroneously argues that "HTTP supported the use of *numeric* 'cookies' to identify a user, which can be limited to simply numeric identifiers without any additional text." This is simply untrue. It is well-known that HTTP cookies are *alphanumeric text* files – not simply numeric. They contain letters, numbers, and other characters that are used to store and retrieve information about a user's browsing session. Specifically, a POSITA would readily appreciate that the values stored in cookies are typically a random string of alphanumeric characters. "Netscape Navigator stores cookies in a single text file called cookies.txt," and "Microsoft Internet Explorer stores cookies in individual text files." *See, e.g.* TTI 1007, page 285 and 287 (*see* Second Gajendragad [Exh. 2022] at ¶ 19):

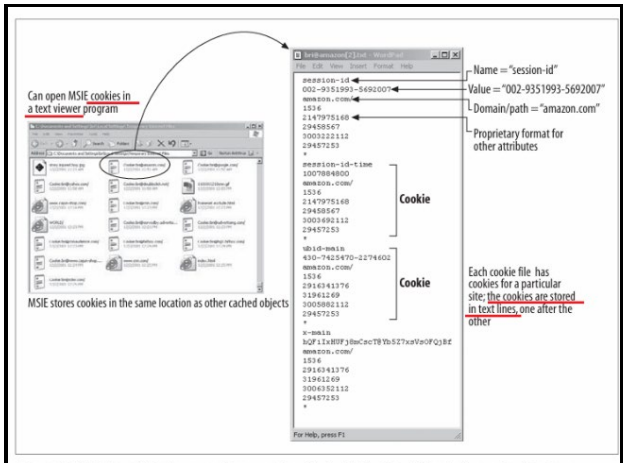


Figure 11-4. Internet Explorer cookies are stored in individual text files in the cache directory

Netscape Navigator cookies

Different browsers store cookies in different ways. Netscape Navigator stores cookies in a single text file called *cookies.txt*. For example:

```
# Netscape HTTP Cookie File
# http://www.netscape.com/newsref/std/cookie_spec.html
# This is a generated file!  Do not edit.
#
# domain                  allh   path     secure expires     name       value

www.fedex.com             FALSE  /        FALSE  1136109676  cc         /us/
.bankofamericaonline.com  TRUE   /        FALSE  1009789256  state      CA
.cnn.com                  TRUE   /        FALSE  1035069235  SelEdition www
secure.eepulse.net        FALSE  /eePulse FALSE  1007162968  cid        %FE%FF%002
www.reformamt.org         TRUE   /forum   FALSE  1033761379  LastVisit  1003520952
www.reformamt.org         TRUE   /forum   FALSE  1033761379  UserName   Guest
  ...
```

Further, Petitioner suggests that the "body of an HTTP message supports binary data." Of course, Patent Owner never argued that "body" of HTTP cannot support binary data, but rather that the HTTP "Header" is limited to text only. *See* Second Gajendragad [Exh. 2022] at ¶20.

Most importantly, Petitioner does NOT rely on content-data (*e.g.* divided-part of the image-data) to contain either a segment identifier or user identifier, because the claim requires data-content (divided-part-of-file) to be different from segment identifier and user identifier. For that reason, it does not matter if the HTTP content-data can be either encoded text or binary, what matters is encoding of the header of the HTTP, not the chunked-segmented part of the content-data. The indisputable facts are: (i) HTTP *body-**content*** (data/file-data) can be text encoded or binary encoded; and (ii) HTTP **Headers** are ONLY Text-Based NOT Binary. Indeed, Section 4.2 of HTTP RFC 2616 specifies that header fields follow a text-based format (*see* Second Gajendragad [Exh. 2022] at ¶ 21).

Likewise, the TEXT rule (Section 2.2) defines header field values as sequences of octets interpreted as US-ASCII characters, with optional encoding for

non-ASCII characters. This indicates that headers are designed to be text strings, not binary data. In fact, there is no provision in RFC 2616 for encoding HTTP headers themselves as binary. *See* RFC 2616 (www.rfc-editor.org/rfc/ rfc2616.txt). HTTP RFC 2616 was valid from June 1999 until it was obsoleted by the publication of RFCs 7230–7235 in June 2014. *See* Second Gajendragad [Exh. 2022] at ¶ 22.

If Petitioner is going to rely on HTTP then both segment identifier and user identifiers have to be text-based strings. Petitioner has not cited to any authority where HTTP headers (not content / divided-part-of-file) before 2014 were anything other than text-based strings. *See* Second Gajendragad [Exh. 2022] at ¶ 23.

C. Mr. Gajendragad

Petitioner points out that Mr. Gajendragad was mistakenly identified as "Dr. Gajendragad" by Patent Owner. Of course, Mr. Gajendragad readily confirmed in his deposition that he possesses a Master's degree – not a doctoral degree – and acknowledged this as an honest typographical drafting mistake. This fact is simple noise and does not have any bearing on the merits.

Petitioner further makes much of the fact that Mr. Gajendragad is an acquaintance of the named inventor of the challenged patents. While this is obviously true and readily admitted, it is likewise irrelevant to the merits. Plainly, the experience of Mr. Gajendragad speaks for itself, and his opinions are set forth

with specificity and subject to cross examination. It is telling here that Petitioner failed to elicit any testimony from Mr. Gajendragad which contradicts or undermines his opinions.

Of course, every statement from Mr. Gajendragad is backed by solid evidence and exhibits. None of the statements are without supporting evidence or direct experience with the underlying technologies and chipset testing. The same cannot be said for Petitioner expert, who has himself abandoned his original theories (*e.g.* HTTP User Agent as a user identifier) and came up with new theories (like converting ALL Na-Takahashi messages into a third intermediary SOAP protocol for the combination to work).

D. Ground One: Aaltonen and Drescher Fails

1. Aaltonen fails to teach "applying a segment identifier to each of said data segments at the application layer level"

All aspects of Petitioner's mapping for "segment identifier" have been rebutted by Patent Owner. Petitioner now wants to *abandon* its reliance on "segment identifier" being "information packets" and wants to transition to an alternative argument that segment identifiers could be "data packets." Of course, Petitioner **never** identified what identifier **in** the data packet was supposed to be the so-called segment identifier. *See* Second Gajendragad [Exh. 2022] at ¶ 24.

Moreover, Petitioner has provided NO evidence of a "segment identifier" in any "data packet," just baseless assertions with no supporting evidence. Still further, Petitioner uses language like "preferentially" in its Petition for this context. Even in its Reply, Petitioner **does not identify** what identifier in the data packets would supposedly constitute a "segment identifier." If "data packets" are part of broken-down image data, where is the segment identifier in the data packet? Patent Owner disputes the notion that Aaltonen discloses any block identifiers or segment identifiers, and Petitioner never showed any evidence of a "segment identifier" or "block identifier" in the alleged "data packet." *See* Second Gajendragad [Exh. 2022] at ¶ 25.

Even in its Reply, Petitioner ONLY asserts that information in the "table" as the only source of segment identifier. *See* Reply ("it would have been to a POSITA that Aaltonen's segment identifiers (e.g., tables)"). This alleged "table" is only mentioned in Aaltonen paragraph 103. Nowhere in the original Petition or the Reply brief does Petitioner show that the alleged "table" was sent with the "data packets" or was part of the "data packet." Moreover, the word "table" is ONLY mentioned <u>twice</u> in Aaltonen and it is in paragraph 103 and only in reference to *information packets* NOT data packets. *See* Aaltonen at ¶ 103 ("each <u>information packet</u> can include a <u>table</u> uniquely identifying," and "each <u>information packet</u> can include a <u>table</u> including the CRCs"). There are no "tables" in the data packet in

Aaltonen, thus Petitioner cannot rely on "tables" as segment identifiers in the data packets. *See* Second Gajendragad [Exh. 2022] at ¶ 26.

In its Petition for Element 1[d], Petitioner asserted a multitude of exemplary segment identifiers and mapped all of them to "segment identifier." These included: "information packets… added to the packet stream;" "data packets" within its HTTP data "blocks" ("data segments"); and "a number of packets in the block of packets." All such examples, according to Petitioner, are "examples of 'applying a segment identifier to each of said data segments.'"

After Patent Owner pointed out that all these are UDP packets and UDP level packet information, and thus have nothing at all to do with "segment identifier" or "block identifier," Petitioner now reverses course. By way of its Reply, Petitioner suggests that "[t]he Petition mapped the 'identifiers' within Aaltonen's information and data packets as the claimed 'segment identifiers, not the packets themselves." This is entirely false, as a review of the Petition makes clear. The Petition asserted **ALL of them as examples** of segment identifier, but now Petitioner argues that it only meant "identifiers" within the information packets and not the information packet themselves. In the process, Petitioner now limits its reliance for "segment identifier" to be simply "tables." In it Reply, Petitioner suggests: *"Aaltonen's segment identifiers **(e.g., tables)** are not limited to*

binary data." Petitioner's new reliance on "tables" within the information packet does not withstand scrutiny for at least *six* different reasons.

First, the "table" is still part of the UDP packet. *See* Second Gajendragad [Exh. 2022] at ¶ 27. The text relied upon by Petitioner is from paragraph 103, which discusses a "table" inside a UDP packet that includes CRCs. This has NOTHING to do with a block identifier or segment identifier at the application layer. *See* Second Gajendragad [Exh. 2022] at ¶ 28.

The "table" inside a UDP packet that includes CRCs has NOTHING to do with a block identifier or segment identifier at the application layer. *See* Second Gajendragad [Exh. 2022] at ¶ 28.

Second, since "table" is part of the information packet and Aaltonen **does not require** the storage of ALL information packets, that means that NOT all Aaltonen tables are required. BUT if each "table" is a unique segment identifier, as in the challenged claims, then Aaltonen will not be able to reassemble the file without a missing table. *See* Second Gajendragad [Exh. 2022] at ¶ 29. The bottom line is that "table" information inside the UDP packet is NOT equivalent to a segment identifier, no matter how many times Petitioner asserts that false narrative.

Third, using the UDP based "table" from the Aaltonen paragraph 103 that talks about UDP to assert a UDP packet table being a HTTP segment identifier is

plainly incorrect. This is because of the fundamental fact that HTTP uses TCP. Petitioner's argument is simply technically false. *See, e.g.* TTI 1007, page 329 (*see* Second Gajendragad [Exh. 2022] at ¶ 30):

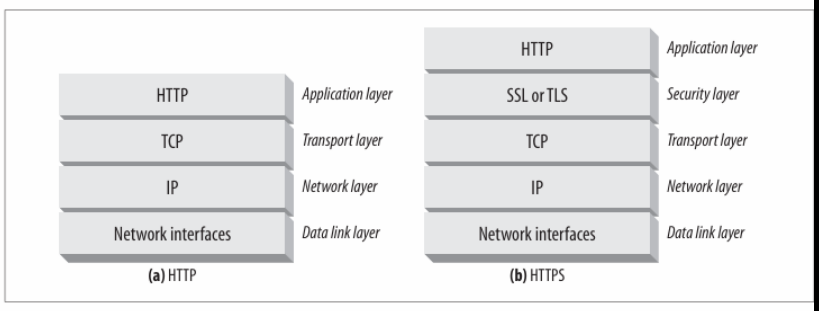


Figure 14-2. HTTPS is HTTP layered over a security layer, layered over TCP

Fourth, the reason Aaltonen talks a lot about UDP, UDP based tables, and UDP CRC tables, is because the Aaltonen Origin Server is based on Multicast, and Multicast is based on UDP. Again, Petitioner's arguments are technically unsound and incorrect, as there is obviously no mention of (and no need to mention) TCP in Aaltonen. *See* Second Gajendragad [Exh. 2022] at ¶ 31.

Fifth, TCP does not need these UDP-based "tables" to alleviate the concern of paragraph 103 for the "correct order of the packets." This is because TCP ensures data packets are received in the same order they were sent. TCP achieves this using TCP *sequence numbers* in the header of each TCP level segment, which allows the receiver to reassemble the TCP data correctly even if some TCP segments are received out of order. Each TCP segment is assigned a unique sequence number, which is used to track the order of packets in a TCP connection.

The bottom line is that a UDP-based "table" that helps achieve the "*correct order of the packets"* can NEVER be a TCP Segment Identifier at TCP level, let alone HTTP application layer identifier that uses TCP as a lower layer protocol. *See* TTI 2006, page 150, 153 (*see* Second Gajendragad [Exh. 2022] at ¶ 32):

Key Concepts of Host-to-Host Protocols

Since we have seen both a connection-oriented (TCP) and connectionless (UDP) protocol in action, it would be good to summarize the two here. The following list highlights some of the key concepts that you should keep in mind regarding these two protocols.

TCP	UDP
Sequenced	Unsequenced
Reliable	Unreliable
Connection-oriented	Connectionless
Virtual circuit	Low overhead

TCP/IP and the DoD Model **109**

The TCP header is 20 bits long. You need to understand what each field in the TCP segment is. The TCP segment contains the following fields:

Source port Is the port number of the host sending the data. (Port numbers will be explained a little later in this section.)

Destination port Is the port number of the application requested on the destination host.

Sequence number Puts the data back in the correct order or retransmits missing or damaged data, a process called sequencing.

Acknowledgment number Defines which TCP octet is expected next.

Sixth, "table" information in the packets, be it UDP or TCP, will always be binary. It is a known fact that lower-level protocols (UDP, TCP, IP, Ethernet) are almost always binary. Dr. Traynor does not recognize this, as it is not about CRC or if there is an alternative to CRC. The fact is that packet level "table" information is always binary. *See* Second Gajendragad [Exh. 2022] at ¶ 33.

Still further, Petitioner says that segment identifier "tables" are attached at the application layer. This is simply false, as explained in detail in the Patent Owner Response. Nevertheless, Petitioner persists in arguing that "[t]he identifying information in Aaltonen's information and data packets describes blocks of packets ('a table uniquely identifying the block of packets')." *See* Second Gajendragad [Exh. 2022] at ¶ 34.

To satisfy the element 1[d] "applying segment identifiers at the application layer," Petitioner originally relied on "these identifiers are applied to **data blocks** at the application layer level." Now, however, Petitioner shifts reliance to simply "a table uniquely identifying the block of packets" as the so-called segment identifier. The problem for Petitioner is that in Aaltonen this "table" is only for "information packets" and they are plainly not part of data blocks (FIG 10). This alleged "table" is only mentioned in Aaltonen at paragraph 103. Nowhere in the original Petition or the Reply does Petitioner show that the alleged "table" was sent with the "data packets" or was part of the "data packet." *See* Second Gajendragad [Exh. 2022] at ¶ 35.

Further, the word "table" is ONLY mentioned *twice* in Aaltonen and it is in paragraph 103, in reference to "information packets" NOT "data packets." If Petitioner says "table" or information in the "table" is a segment identifier, then it cannot be applied at the application layer. Of course, the original Petition on page 19 requires these segment identifiers to be applied to the data blocks for it to be applied at application layer. *See* Second Gajendragad [Exh. 2022] at ¶ 36. Again, Petitioner's moving target is problematic, as illustrated by its ever-changing theory for segment identifiers and changing its reliance from "information packet" itself to information *inside* the information packet "table" and then to "data packets" that don't even have this "table."

2. Aaltonen and Drescher BOTH fail to teach "applying a <u>user identifier</u> to each of said data segments"

Petitioner in its Reply is now saying that for the element 1[e] "user identifier," it never relied on Aaltonen but ONLY on Drescher. Specifically, the Reply at 13 says "The Petition <u>instead</u> turned to Drescher for this limitation." This position is simply false. The first 3 lines of the Petition for the element 1[e] on clearly show Petitioner also relying on Aaltonen as well for user identifier (*see* Second Gajendragad [Exh. 2022] at ¶ 37).

BUT if Petitioner is now forgoing its reliance on Aaltonen for "user identifier" then its Petition cannot meet the claim requirements 1[j] and 1[k] because both of them require "user identifier," and the original Petition only relies on "Aaltonen." *See* Second Gajendragad [Exh. 2022] at ¶ 38.

Likewise, the Petition at 26 says for Element 1[j]: "Aaltonen discloses that" and does not rely at all on Drescher. It also shows the annotated Fig 11 at Petition page 28 and highlights "HEAD URI" and annotates the text saying it shows "for said user identifier." *See* Second Gajendragad [Exh. 2022] at ¶ 39.

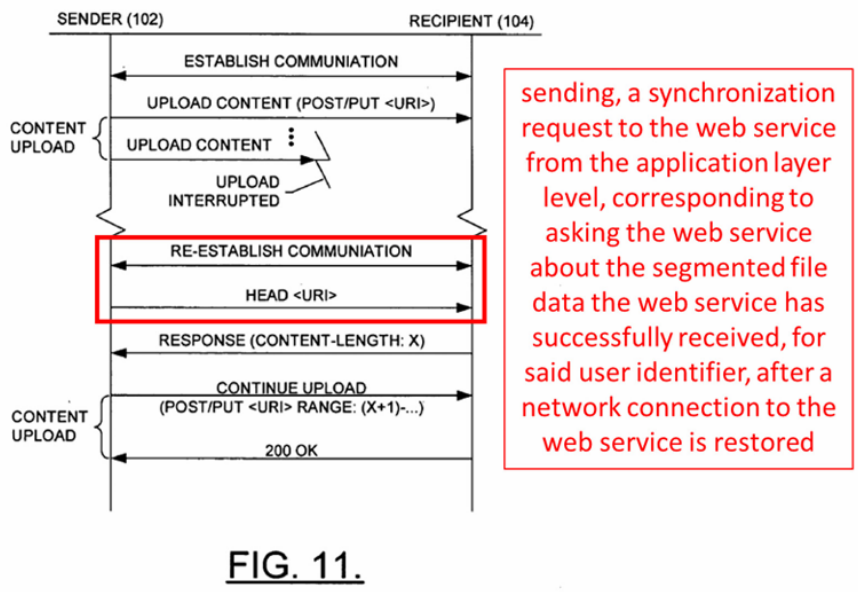


FIG. 11.

TTI-1005, FIG. 11.

Similarly, page 28 of the original Petition says for Element 1[k]: "Aaltonen discloses that." The Petition continues: "the user identifier that identifies the sender of the upload content. TTI-1005, ¶[0102], FIG. 11." Plainly, the Petition relies exclusively on Aaltonen text and figure. *See* Second Gajendragad [Exh. 2022] at ¶ 40.

Again, there is NO mention of Drescher for either element 1[j] or 1[k] in the original Petition. Again, *Petitioner changes its theories and abandons sections of its own arguments when Patent Owner points out the obvious technical flaws*. The reliance on Fig 11, and Aaltonen paragraph [0102] text in its petition clearly show reliance of Petitioner on URI as a user identifier in Aaltonen. *See* Second Gajendragad [Exh. 2022] at ¶ 41.

With respect to "user identifier" in element 1[e], Petitioner originally relied on Drescher "TTI-1010, 25:32-26:21, 34:13-35:4, 35:26-36:21." Now, in its Reply, Petitioner concedes that Drescher does NOT disclose sending "user information" with the data, as it had alleged in its Petition. Because Patent Owner has clearly shown that the user identifier was only sent initially for authentication (8A) and not with the data (8B), Petitioner's argument fails.

Petitioner's new theory relies on a *completely different portion of the text,* namely: "TTI 1010, 26:32-27:2." The Reply, for the first time, now speculates that "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, *e.g.,* in other allowable message formats. TTI-1010, 26:32-27:2."

> If secure sockets are used and if one of the identities is transferred using the secure sockets method it is not
>
> 26
>
> WO 2008/028508 PCT/EP2006/008710
>
> 26
>
> essential to repeat that identity in the additional http headers, but may be convenient nonetheless.

New theories at this point from Petitioner should be excluded and, in any event, Petitioner's argument only shows snippets of the relied-upon text. The full text from TTI 1010, 26:32-27:2 actually says: "If secure sockets are used and if

one of the identities is transferred using the secure sockets method it is **not** essential to **repeat that identity** in the **additional** http **headers**, but may be convenient nonetheless." Here, the text says additional **"headers"** and Petitioner in its Reply misleadingly modifies "header" to "messages." More specifically, the Reply states: "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."** Of course, Drescher never says "messages" it says "headers." As Petitioner and a POSITA would readily understand, HTTP Headers and HTTP messages are completely different constructs. HTTP messages can contain multiple headers and each header usually has a different content and purpose. *See* Second Gajendragad [Exh. 2022] at ¶ 42.

Further, Figures 8A and 8B represent two different *messages* (*i.e.,* 8A Authentication Message, and 8B Content Message). The Figures again make it clear that the additional "**more http headers**" are ONLY in 8A initial authentication messages. *See* Second Gajendragad [Exh. 2022] at ¶ 43.

```
GET /foo/huge-picture.gif HTTP/1.1

Host: www.example.org
Range: bytes=0-1048575
Date: Tue, 8 Aug 2006 16:25:31 GMT
User-Agent: Mozilla/5.0
Connection: Keep-Alive
X-parHTTP-User: MIIDmzCCAoOgAwIBAgIBZTANBgkqhkiG9w0BAQQFADCBpzELMAGAlUEBh[...]
X-parHTTP-Endorser: MIIEvzCCA6egAwIBAgIBbzANBgkqkiG9w0BAQQFADCBpzELMAkGAlUEBh[...]
X-parHTTP-Consignor FyJIIEWTCCA6mgAWIBAgIBcTANBgkqhkIG9w0BAQQFADCBpzELMAkGAlUEBh[...]
[more HTTP headers]
[empty request body]
```

Fig 8A

```
HTTP/1.1 206 Partial Content
Date: Tue, 8 Aug 2006 16:25:33 GMT
Server: Apache/2.0.54 (Debian GNU/Linux)...
Accept-Ranges: bytes
Connection: Keep-Alive
Keep-Alive: timeout=15, max=100
Content-Range: bytes 0-1048575/10485760
Content-length: 1048576
Content-Type: application/octet-stream
GIFS9a\.T $..<..4 J+ O...,*D+Q..&$T.%....Qa E'b.' $Z.6.
N.. .8. .R._.1 ,jT.&F. . .) (5* . .T., . .V.f*.7((q.Dr. . . .p.O Ai.$6.-
.UUU. . .g."p.d.$ <.#FH4 0)5.. .4. .WR. . . .PuZ.n. .B. .F-I. . . !Er.*P
.R.COXp. .Q$.T.i>1 u. .<Ly. . .Jn. .7. .Y54%,i.$#. (*1..
[...]
```

Fig 8B

To reiterate, the new theory and text referenced by Petitioner (TTI 1010, 26:32-27:2) is talking about more/additional **headers** in Figure 8A authentication message and not 8B. There are NO more or additional headers in 8B message to repeat. Rather, more-additional headers only exist in 8A. *See* Second Gajendragad [Exh. 2022] at ¶ 44.

The wording in TTI 1010, 26:32-27:2 about "**repeat** that identity in the additional http headers" requires that information is present in at least ONE header in a message already. That requirement is ONLY fulfilled by the 8A initial authentication message. The "convenient" part is because each "header" in a

message is handled differently. Because the parallel HTTP architecture of Drescher is completely different from the patented system, there is simply NO mention of sending user information with the content-data because authentication is handled differently in the parallel HTTP of Drescher. *See* Second Gajendragad [Exh. 2022] at ¶ 45.

E. Grounds 2A and 2B: Takahashi and Na Fails

1. The combination of Takahashi and Na fails because it is inoperable and its elements are incompatible

Now that Patent Owner has pointed out the *inoperability and incompatibility* of the proposed combination of Takahashi and Na, Petitioner has now put forth an entirely new theory. That new theory is that Na and Takahashi purportedly work together as a combined solution. This cannot be correct, as ALL Takahashi-Na messages need to be converted into a completely different ***third protocol*** *format "Simple Object Access Protocol (SOAP)"* and *use VASP services to work*. *See* Second Gajendragad [Exh. 2022] at ¶ 46.

Petitioner's own expert now admits that without conversion to a *third intermediate mediation SOAP protocol,* the proposed combination of Takahashi and Na cannot function as intended and as laid out in the original Petition, rendering the obviousness argument untenable. Without reimplementing everything in SOAP and using VASP services, the combined system fails because

both systems are inoperable with each other. *See* Second Gajendragad [Exh. 2022] at ¶ 47.

The Reply cites its expert as saying "this would have required a POSITA to convert the format of Takahashi-Na's messages into a SOAP-friendly format." Then, the Reply states that "[t]he SOAP format allowed for many different types of communication, beyond that provided by a simple web browser." Still further, the Reply states that "**messaging** between MMS clients and server-based Value Added Service Providers ("**VASPs**"). The messaging for **VASP services used** the Simple Object Access Protocol ("**SOAP**")." Finally, the Reply states that "*when the MM in question is part of a VASP, this transmission is performed with SOAP.*" This new theory now requires POSITA to incorporate and convert everything into a **third** protocol (namely, Simple Object Access Protocol (SOAP)), using new prior art and new evidence in the form of "3GPP TS 23.140" 218 pages of TTI-1030. The new theory according to Petitioner's own expert also requires POSITA to use Value Added Service Providers (VASP) services, because MMS message used VASP services. This is clearly new evidence and new theory both conversion to SOAP and using VASP services were not part of the original Petition, and should be stricken._*See* Second Gajendragad [Exh. 2022] at ¶ 48.

Under 37 C.F.R. § 42.23(b) and the Patent Trial and Appeal Board Consolidated Practice Guide, a petitioner's reply must **not introduce new theories**

or evidence that could have been presented earlier. The PTAB has consistently held that a reply brief **cannot proceed in a new direction** by introducing arguments that were absent from the original petition. This principle was reaffirmed in *Juniper Networks, Inc. v. Swarm Technology LLC***,** IPR2021-01445 (PTAB Feb. 7, 2023). The PTAB cited the Federal Circuit's decision in *Intelligent Biosystems, Inc. v. Illumina Cambridge Ltd.,* 8212 F.3d 1359, 1369-70 (Fed. Cir. 2016), emphasizing that belated arguments and evidence **may not be considered** if they were absent from the petition. The Board further clarified that replies should not introduce **entirely new factual and legal positions**. Here, Petitioner has done exactly the opposite of what is required under 37 C.F.R. § 42.23(b) and the Patent Trial and Appeal Board Consolidated Practice Guide.

Furthermore, even if POSITA applies Petitioner's new theory, the Petitioner's expert **still** leaves out what POSITA would have to do with two *incompatible* "encoding" issues of Na and Takahashi. He also leaves out what happens (even if converted to new SOAP) to all the *Extra* Header fields and extra message fields in Na, because Petitioner's expert recommendation is to *only convert* all Na and Takahashi "message" format to SOAP. The Takahashi server is still NOT going to understand these completely incompatible extra MMS header fields. Finally, Petitioner's expert has no answer to how a "Filename" that is not

even present in any of the Na header field can be sent to the Takahashi server. *See* Second Gajendragad [Exh. 2022] at ¶ 49.

As discussed above, both references operate on conflicting principles *and this mismatch creates a technical barrier that cannot be bridged through routine optimization (Petitioner new theory validates this view)*. Overcoming this incompatibility demands significant innovation. In *In re Gordon*, 733 F.2d 900 (Fed. Cir. 1984), the Federal Circuit rejected an obviousness finding when a combination made a device inoperable for its intended use. Here, no POSITA would pursue a combination that leads to such a clear and predictable failure and requires a conversion to a *third mediation protocol and use of VASP services*. *See* Second Gajendragad [Exh. 2022] at ¶ 50. The inoperability of the prior art combination alone is sufficient to defeat the obviousness challenge, and the Petition fails.

The Federal Circuit's ruling in *In re Omeprazole*, 483 F.3d 1364 (Fed. Cir. 2007) is instructive: combinations that produce incompatible or suboptimal outcomes lack the motivation needed for an obviousness finding. Here, the inventive leap required to reconcile (conversion to a *third mediation protocol and use of VASP service)* these differences highlight the non-obvious nature of the claimed invention.

Petitioner has invoked *KSR Int'l Co. v. Teleflex Inc.,* 550 U.S. 398 (2007), and *MCM Portfolio LLC v. Hewlett-Packard Co.,* 812 F.3d 1284 (Fed. Cir. 2015), to argue obviousness. These cases, however, do not support Petitioner's arguments, but instead bolster the patent's validity.

KSR permits combinations based on "common sense," but only when there is a reasonable expectation of success. Here, the inoperability and incompatibility of the prior art and the additional requirement of (new) third intermediate protocol, eliminate any such expectation. The Federal Circuit clarified in *Pfizer, Inc. v. Apotex, Inc*., 480 F.3d 1348 (Fed. Cir. 2007), that obviousness requires a POSITA to foresee a functional outcome. No rational artisan would expect success from a combination that fails so decisively without the intervening complicating steps (none of which are adequately explained by Petitioner).

Likewise, *MCM Portfolio* emphasizes that obviousness hinges on what the prior art teaches, not just whether elements can be physically combined. In the instant case, the cited art combination teaches *away* from the claimed invention by suggesting an unworkable result without the implementation of a third mediation protocol, when combining MMS message and encoding architecture that is completely different from Takahashi regular web. The prior art combination is inoperable and its components incompatible as admitted by Petitioner's own

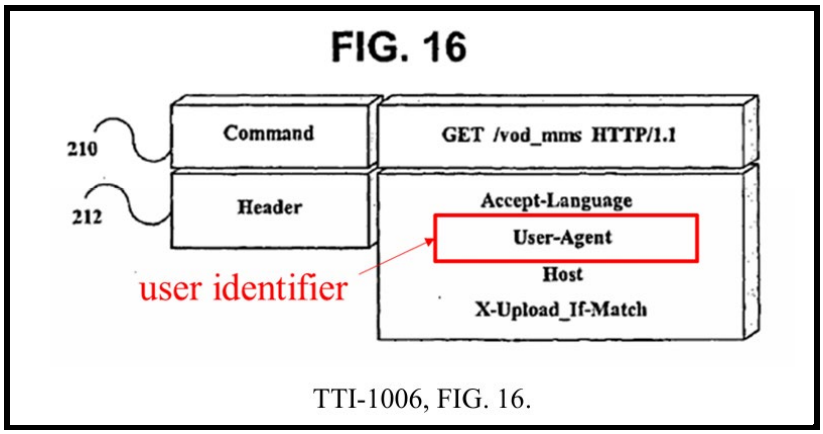
expert. *See* Second Gajendragad [Exh. 2022] at ¶ 51. Under the legal frameworks of *KSR* and *MCM Portfolio*, no basis exists for an obviousness finding.

2. Inconsistent "User Identifier" mapping

After Patent Owner pointed out the obvious technical fact that the web based "User Agent" in the HTTP headers are not unique at all and thousands of people can have the same "User Agent," Petitioner now abandons the argument that the "User Agent" can be the User ID (as clearly argued in the Petition for elements 1[j] and 1[k]). This abandonment of "User Agent" lays bare the fatal flaws of the Petition.

With respect to the "User ID" of element 1[c], the original Petition relied on Takahashi to send the "Filename". *See* Second Gajendragad [Exh. 2022] at ¶ 52.

With respect to the "User ID" of element 1[j], the original Petition relied on the "Terminal Number" and "User Agent." The term "terminal number" is only mentioned three (3) times in the whole Petition: two times for claim 1 element 1[j], and one time for claim 4. There is zero mention of "terminal number" for element 1[e] or element 1[k]. Rather, the original Petition heavily relied on "User Agent" for its user information, including in reference to the figures (*see* Second Gajendragad [Exh. 2022] at ¶ 53):



TTI-1006, FIG. 16.

Because the original Petition relied on the messages of Na for Element 1[j], the Takahashi filename embedded User ID cannot be used. This is because there is NO way to send a filename in Na MMS header or MMS Messages. *See* Second Gajendragad [Exh. 2022] at ¶ 54.

For the "User ID" of element 1[k], the original Petition only relied on "user agent information," with zero mention of "terminal number" or "filename." Once again, the term "terminal number" is only mentioned three (3) times in the whole Petition: two times for claim 1 element 1[j], and one time for claim 4. There is absolutely NO mention of "terminal number" for element 1[e] or element 1[k]. Once again, filename user ID cannot be sent in Na Messages because there is NO file or file name in Na that is sent to MMS servers. There is also no explanation of why and how filenames will be sent or IF any file name is sent in Na messages. *See* Second Gajendragad [Exh. 2022] at ¶ 55.

Finally, Petitioner also has inconsistent encoding positions relating to the recited "user identifier" in Element 1[e] (HTTP Web Text Encoding), Element 1[j]

(MMS Binary Encoding) and Element 1[k] (MMS Binary Encoding). The entirely haphazard and inconsistent mapping for each element in the claim for the same claim term "user identifier" dooms the Petition.

F. No Circumvention

Petitioner complains that the images in the Response are actually designed as tricks to "circumvent the word count limit." Of course, a review of the images quickly dispels such notion, as each image simply reflects facts which are otherwise stated in the brief or is offered for the convenience of the Board (as opposed to pulling the same from the cited exhibit). None of the images contain argument, and Petitioner's objection lacks merit.

//

Date: May 2, 2025

Respectfully submitted,

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CERTIFICATION OF WORD COUNT

The undersigned hereby certifies that the foregoing complies with the type-volume limitations of 37 C.F.R. § 42.24 and contains 5,576 words, excluding those portions exempted under 37 C.F.R. § 42.24(a)(1).

Dated: May 2, 2025

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CERTIFICATION OF SERVICE

Pursuant to 37 C.F.R. §§ 42.6(e) and 42.105(b), the undersigned certifies that on May 2, 2025, a copy of the foregoing document was served by electronic mail on the following:

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