

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

HULU, LLC,
Petitioner,

v.

PUCS, INC.,
Patent Owner.

IPR2021-00811
Patent 10,728,619 B2

Before JONI Y. CHANG, DANIEL J. GALLIGAN and,
MICHAEL T. CYGAN, *Administrative Patent Judges*.

CHANG, *Administrative Patent Judge*.

DECISION
Granting Institution of *Inter Partes* Review
35 U.S.C. § 314

I. INTRODUCTION

Hulu, LLC (“Petitioner”) filed a Petition requesting an *inter partes* review (“IPR”) of claims 1–12 (“the challenged claims”) of U.S. Patent No. 10,728,619 B2 (Ex. 1001, “the ’619 patent”). Paper 2 (“Pet.”), 2. Pucs, Inc. (“Patent Owner”) filed a Preliminary Response (Paper 9, “Prelim. Resp.”). Patent Owner also filed a statutory disclaimer of claims 8–12 of the ’619 patent. Ex. 2004 (Statutory Disclaimer). Accordingly, we consider only Petitioner’s unpatentability contentions with respect to the remaining challenged claims, i.e., claims 1–7 of the ’619 patent. *Cf.* 37 C.F.R. § 42.107(e) (“No *inter partes* review will be instituted based on disclaimed claims.”).

Under 35 U.S.C. § 314(a), an *inter partes* review may not be instituted unless the information presented in the petition “shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” For the reasons stated below, we determine that Petitioner has established a reasonable likelihood that it would prevail with respect to at least one claim. We hereby institute an *inter partes* review as to claims 1–7 of the ’619 patent.

A. Related Matters

The parties indicate that the ’619 patent is involved in *Pause Commercials, Inc. v. Hulu, Inc.*, Case No. 2:21-cv-02302-RGK-KES (C.D. Cal.). Pet. 80; Paper 4, 1.

Patent Owner filed a Motion to Correct Clerical Error (Paper 6), seeking to correct claim 8. Patent Owner also filed a Request for Certificate

of Correction (Ex. 2001) seeking to correct claims 1 and 8, which was approved (Ex. 2002). However, as discussed above, Patent Owner filed a statutory disclaimer of claims 8–12 of the '619 patent. Ex. 2004. Under these circumstances, Patent Owner's Motion to Correct Clerical Error is dismissed as moot.

Further, the parties filed a joint Stipulation, agreeing that the correction for claim 1 “does not make a substantive change in the meaning or scope of claim 1.” Paper 12. This Decision refers to the language of claim 1 before the certificate of correction.

B. The '619 Patent

The '619 patent discloses a method for displaying tailored advertising in response to user media playback behavior. Ex. 1001, code (57).

Figure 1 is reproduced below.

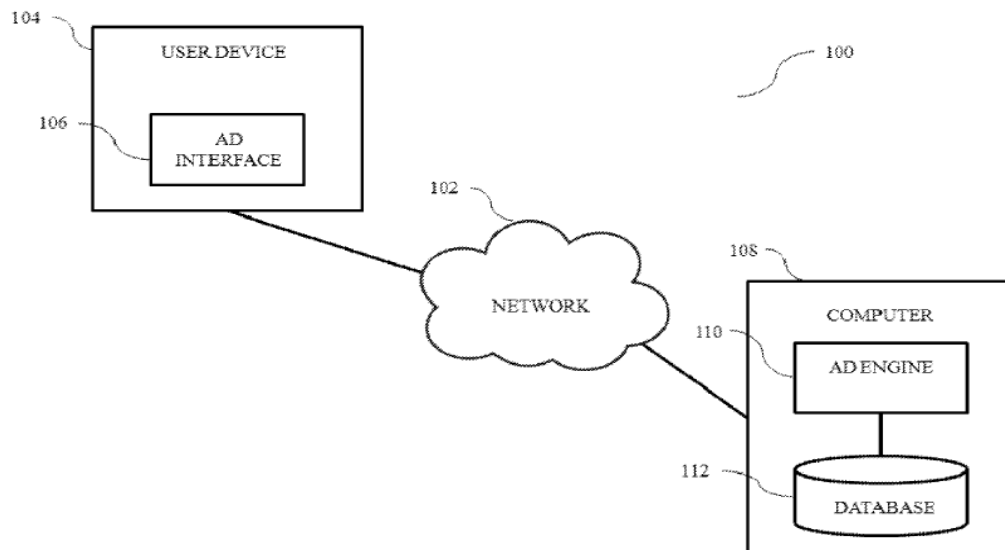


Figure 1 illustrates a block diagram of a distributed data processing environment. *Id.* at 2:40–41. As shown in Figure 1, distributed data processing environment 100 includes user device 104 and server computer 108 interconnected over network 102, e.g., a telecommunications network, a local area network (LAN), and the Internet. *Id.* at 4:6–12. User device 104 (e.g., a smart phone or laptop) includes ad interface 106, which provides a user interface to ad engine 110. *Id.* at 4:28–37.

Figure 3 of the '619 patent is reproduced below.

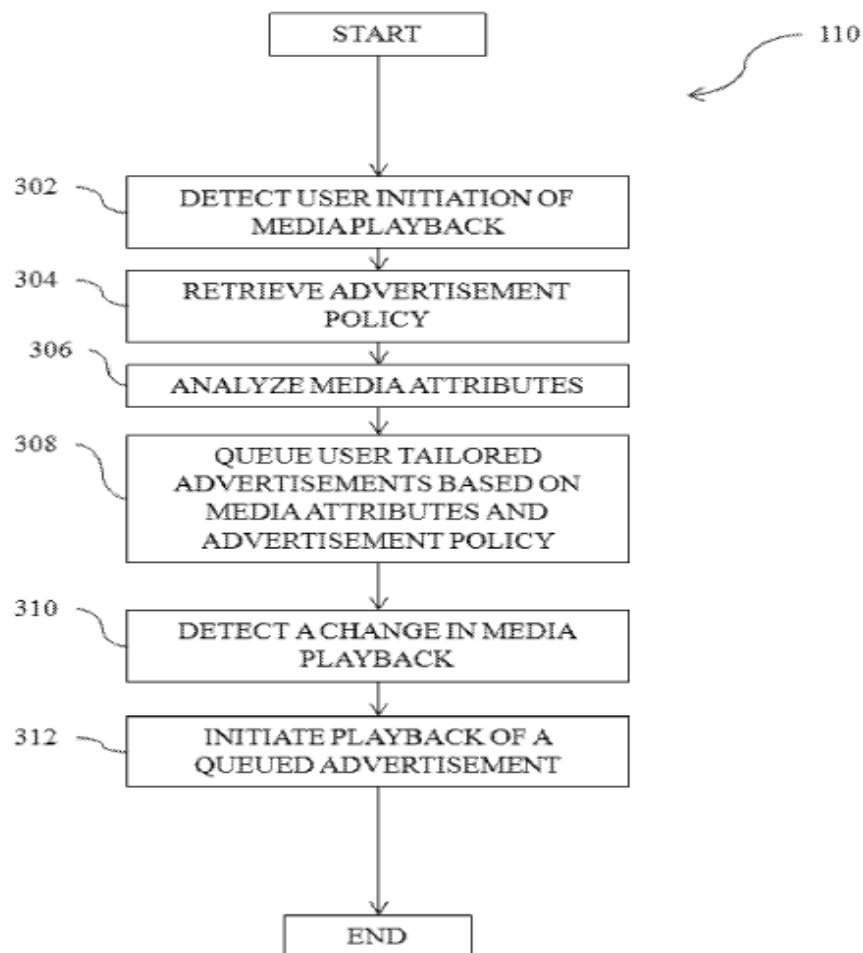


Figure 3 of the '619 patent above shows a method of compiling and initiating playback of advertisements in response to a media playback action. *Id.* at 2:44–46. At step 302, ad engine 110 detects user initiation of media playback. *Id.* at 7:8–9. For example, ad engine 110 can detect the selection of a media file for playback, such as a television comedy from an over-the-top media streaming service. *Id.* at 7:10–15. At step 304, ad engine 110 retrieves the advertisement policy. *Id.* at 7:30–31. At step 306, ad engine 110 analyzes media attributes to filter one or more advertisements from available advertisements. *Id.* at 7:39–41. At step 308, ad engine 110 queues advertisements based on the analyzed media attributes and the advertisement policy. *Id.* at 7:61–63. At step 310, ad engine 110 detects a change in media playback. *Id.* at 8: 31–32. At step 312, ad engine 110 initiates playback of a queued advertisement.

C. Illustrative Claim

Of the remaining challenged claims 1–7, claim 1 is independent. Claims 2–7 depend from claim 1. Claim 1 is illustrative:

1. [1a] A method for displaying tailored advertising in response to user media playback behavior via an over-the-top data delivery system, comprising:
 - [1b] verifying an identity of the user;
 - [1c] analyzing historical data associated with the identity, wherein the historical data includes patterns of user behavior associated with one or more advertisements;
 - [1d] detecting media playback by the user;
 - [1e] analyzing content associated with the media playback;

- [1f] retrieving an advertisement rule associated with the user;
- [1g] queueing user tailored advertisements based on the analyzed content and the advertisement rule; and
- [1h] delivering an advertisement from any one or more third-party services in response to detecting a pause in the media playback.

Ex. 1001, 11:54–12:3.

D. Prior Art Relied Upon

Petitioner relies upon the references listed below (Pet. 2):

Name	Reference	Date	Exhibit No.
Santangelo	U.S. Patent Application Publication No. 2011/0264530 A1	Oct. 27, 2011	1004
Zigmond	U.S. Patent No. 6,698,020 B1	Feb. 24, 2004	1005

E. Asserted Grounds of Unpatentability

Petitioner asserts the following grounds of unpatentability (Pet. 10):

Claims Challenged	35 U.S.C. §	References
1–7	103	Santangelo
1–7	103	Santangelo, Zigmond

II. ANALYSIS

A. Level of Ordinary Skill in the Art

In determining the level of ordinary skill in the art, various factors may be considered, including the “type of problems encountered in the art; prior art solutions to those problems; rapidity with which innovations are

made; sophistication of the technology; and educational level of active workers in the field.” *In re GPAC, Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995).

Here, citing to the Declaration of Stephen Gray for support, Petitioner asserts that a person of ordinary skill in the art of the ’619 patent would have had “a bachelor’s degree in computer science or a similar field with at least four years of experience in delivery of media content and advertising over the Internet,” or “a master’s degree in computer science or a similar field.” Pet. 17 (citing Ex. 1003 ¶¶ 59–61). At this juncture, Patent Owner does not proffer any assessment regarding the knowledge of an ordinarily skilled artisan.

To the extent necessary, and for purposes of this Decision, we adopt Petitioner’s assessment of the level of ordinary skill in the art, with the exception of the open-ended language “at least,” because it is consistent with the ’619 patent and the asserted prior art. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001).

B. Claim Construction

In an *inter partes* review, we construe a patent claim “using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. [§] 282(b).” 37 C.F.R. § 42.100(b) (2020). Under this standard, the words of a claim generally are given their “ordinary and customary meaning,” which is the meaning the term would have to a person of ordinary skill at the time of the invention, in the context of the

entire patent including the specification. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (en banc).

In light of Petitioner’s arguments and supporting evidence in this present record, we find that it is necessary to construe only the following claim elements and terms for our determination of whether to institute a review: (1) “over-the-top,” (2) “queueing,” and (3) “third-party services.” *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (noting that “we need only construe terms ‘that are in controversy, and only to the extent necessary to resolve the controversy’” (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999))).

I. “over-the-top data delivery system”

The preamble of claim 1 recites “[a] method for displaying tailored advertising in response to user media playback behavior via *an over-the-top data delivery system*.” Ex. 1001, 11:54–56 (emphasis added).

At this preliminary stage, both parties treat the preamble of claim 1 as limiting. *See, e.g.*, Pet. 21–25; Prelim. Resp. 2–3, 5. “Generally, the preamble does not limit the claims,” however. *Allen Eng’g Corp. v. Bartell Indus., Inc.*, 299 F.3d 1336, 1346 (Fed. Cir. 2002)). Regardless of whether the preamble is limiting, we find that Petitioner shows sufficiently for purposes of institution that the recitation in the preamble is satisfied by the prior art, as discussed below. Therefore, on this record, it is unnecessary for us to determine whether the preamble of claim 1 is limiting.

As to the meaning of the term “over-the-top data delivery system,” Petitioner asserts that a person of ordinary skill in the art would have understood that the term “is satisfied by, at least, sending data over another’s network, which includes using publicly accessible internet connections to deliver media streams,” citing the Specification, Mr. Gray’s testimony, and Santangelo for support. Pet. 18 (citing Ex. 1001, 9:26–31; Ex. 1003 ¶¶ 63–64; Ex. 1004 ¶ 102). At this juncture, Patent Owner does not dispute this claim construction, but merely argues that “terms in the body of the claims, including the queueing limitation, must be construed consistently with respect to delivering advertising in an over-the-top data delivery system.” Prelim. Resp. 1–3. We address that argument in our claim construction analysis for the term “queueing” (Section II.B.2 below).

For purposes of this Decision, we adopt Petitioner’s proposed claim construction for the term “over-the-top data delivery system” as it is consistent with Specification and Mr. Gray’s testimony. Notably, the Specification discloses that “OTT systems can include any one or more systems or elements of a larger system that use publicly accessible internet connections to deliver video streams.” Ex. 1001, 9:26–31. Mr. Gray also explains that “the [S]pecification uses ‘over-the-top’ or ‘OTT’ in various embodiments to describe systems that are able to access the internet and deliver media streams, or access the internet and establish a connection with an ad engine.” Ex. 1003 ¶ 64 (citing Ex. 1001, 1:22–27 (describing prior art “Thomas does not disclose analyzing the media content and user data to queue advertisements to over-the-top (OTT) internet signals”), 9:32–34

(disclosing that “OTT systems advantageously allow digital content to be accessible by any devices that can access the internet and establish a connection with ad engine 110’’)). Moreover, as Mr. Gray testifies, Petitioner’s proposed claim construction is further supported by Santangelo’s description of “over-the-top” in the context of providing content over a network: “network services are sent ‘over the top’ of other provider’s infrastructure, thereby making the service network substantially network-agnostic” (Ex. 1004 ¶ 102). *See* Ex. 1003 ¶ 64.

In light of the Specification and the evidence in this record, we determine for purposes of this Decision that the term “over-the-top data delivery system” as used in the preamble of claim 1 encompasses a system “sending data over another’s network, which includes using publicly accessible internet connections to deliver media streams,” adopting Petitioner’s proposed claim construction. Pet. 18.

2. “*queueing*”

Claim 1, among other things, recites:

queueing user tailored advertisements based on the analyzed content and the advertisement rule; and

delivering an advertisement from any one or more third party services *in response to detecting a pause in the media playback*.

Ex. 1001, 11:64–12:3 (emphases added).

Petitioner asserts that a person of ordinary skill in the art would have understood that the term “queueing” means “designating one or more advertisements for display or delivery,” citing the Specification and

Mr. Gray’s testimony for support. Pet. 19 (citing Ex. 1001, 8:18–20, 9:9–25; Ex. 1003 ¶¶ 65–66).

Patent Owner counters that a person of ordinary skill in the art would have understood the term “queueing” to mean “*preparing a user tailored advertisement for immediate playback upon detection of a pause.*” Prelim. Resp. 2–3. Patent Owner argues that “terms in the body of the claims, including the queueing limitation, must be construed consistently with respect to delivering advertising in an over-the-top data delivery system,” and that “realistic insertion of advertising in an over-the-top data delivery system requires that *queueing in Claims 1–7 must provide for immediate playback* during a pause in media playback.” *Id.* Patent Owner also contends that the Specification discusses “difficulties in delivering advertising in an over-the-top data delivery system.” *Id.* According to Patent Owner, the Specification provides solutions that “include storing advertisements on a local memory,” “pre-loading them into RAM,” and “actively retrieving them into a buffer.” *Id.* (citing Ex. 1001, 6:66–67, 7:2–3, 9:11–13, 9:20–23; Ex. 2003 ¶ 63, 68, 69, 75).

Based on the current record, we are not persuaded by Patent Owner’s arguments. Patent Owner conflates the “queueing” limitation with the “delivering” limitation. The “delivering” limitation merely requires delivering “an advertisement.” It does not require delivering one of those advertisements in the queue.

More importantly, Patent Owner’s proposed claim construction for the term “queueing” would improperly import limitations from the Specification

into the claim by requiring (1) “preparing a user tailored advertisement *for immediate playback* upon detection of a pause” and (2) “storing advertisements on a local memory,” “pre-loading them into RAM,” and/or “actively retrieving them into a buffer.” Notably, claim 1 does not recite an “immediate playback” limitation, a local memory, RAM, or a buffer. Patent Owner does not argue that the Specification sets forth a special definition of the claim term that requires reading those limitations into the claim. The Federal Circuit “has repeatedly ‘cautioned against limiting the claimed invention to preferred embodiments or specific examples in the specification.’” *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1346–47 (Fed. Cir. 2015). Significantly, “[i]t is the *claims*, not the written description, which define the scope of the patent right.” *Id.* at 1346.

In addition, the term “immediate playback” is a term of degree and highly subjective. Patent Owner does not identify where in the intrinsic record provides a person of ordinary skill in the art with objective boundaries for ascertaining the term’s scope. *Cf. Interval Licensing LLC v. AOL Inc.*, 766 F.3d 1364, 1371 (Fed. Cir. 2014) (If a claim employs a term of degree, the intrinsic record must provide those skilled in the art with “objective boundaries” to assess the term’s scope.); *Halliburton Energy Servs., Inc. v. M-I LLC*, 514 F.3d 1244, 1251 (Fed. Cir. 2008) (“Even if a claim term’s definition can be reduced to words, the claim is still indefinite if a person of ordinary skill in the art cannot translate the definition into meaningfully precise claim scope.”).

The portions of the Specification cited by Patent Owner do not use the term “immediate playback.” Ex. 1001, 6:66–67, 7:2–3, 9:11–13, 9:20–23. Nor do they make the meaning of “immediate playback” reasonably clear. *Id.* At most, the Specification discloses playing an advertisement during the pause in the media playback. *See, e.g.*, Ex. 1001, 8:18–20 (“The queued advertisements can then playback in the designated order when the user pauses the movie.”).

To the extent that Patent Owner suggests that the “queueing” limitation requires “storing advertisements on a local memory,” “pre-loading them into RAM” (random-access memory), or “actively retrieving them into a buffer,” we disagree. Prelim. Resp. 2–3. Patent Owner attempts to improperly “limit[] the claimed invention to preferred embodiments or specific examples in the specification.” *Williamson*, 792 F.3d at 1346–47.

Nothing in the portions of the Specification cited by Patent Owner requires an over-the-top data delivery system to include a local memory, RAM, or buffer. Rather, those portions of the Specification merely describe preferred embodiments and specific examples. Ex. 1001, 6:66–7:1 (“*In some embodiments*, ad engine 110 . . . stored the advertisement data in local memory for later playback.”), 7:1–4 (“*For example*, ad engine 110 can cause user device 104 to pre-load advertisement content into random access memory (RAM) for later playback during a user-initiated pause”), 9:11–14 (“*In a preferred embodiment*, ad engine 110 initiates the playback of a queued advertisement stored on a local storage media (e.g., internal hard drive, internal solid-state drive, random access memory, etc.).”), 9:20–22

(“*For example*, ad engine 110 can retrieve actively begin retrieving data for an advertisement into a buffer once ad engine 110 detects a pause in the playback.”) (emphases added).

Indeed, the Specification makes clear that “[g]roupings of alternative elements or embodiments of the invention disclosed herein are not to be construed as limitations.” *Id.* at 3:33–35. Moreover, the Specification contemplates retrieving an advertisement directly from a database residing on a server computer. *Id.* at 9:18–20.

For these reasons, we decline to adopt Patent Owner’s proposed claim construction. Rather, for purposes of this Decision, we construe the term “queueing” as “designating one or more advertisements for display or delivery,” adopting Petitioner’s proposed claim construction because it is consistent with the Specification and Mr. Gray’s testimony. Pet. 19; Ex. 1001, 8:18–20, 9:9–25; Ex. 1003 ¶¶ 65–66.

3. “*third-party services*”

Claim 1 recites “delivering an advertisement from any one or more *third party services* in response to detecting a pause in the media playback.” Ex. 1001, 12:1–3 (emphasis added). In this regard, Petitioner argues that the term “third-party services” encompasses “a service by a party that is not the content provider that provides advertisements.” Pet. 19 (citing Ex. 1003 ¶¶ 67–68). At this juncture, Patent Owner does not proffer a claim construction for this term.

Petitioner’s proposed claim construction is consistent with the Specification. As Petitioner notes (Pet. 19), in the context of interactive

software applications such as video games, for example, the Specification refers to “third-party entities” as separate from the party associated with the video game. Ex. 1001, 8:63–9:8 (describing “advertisements for third parties (e.g., an interactive advertisement allowing a user to order delivery from a food delivery service directly in the video game)”).

For purposes of this Decision, we adopt Petitioner’s claim construction for the term “third-party services,” construing the term to encompass “a service by a party that is not the content provider that provides advertisements.” Pet. 19.

C. Principles of Law

A patent claim is unpatentable under 35 U.S.C. § 103 if the differences between the claimed subject matter and the prior art are such that the subject matter, as a whole, “would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) objective evidence of non-obviousness.¹ *See Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

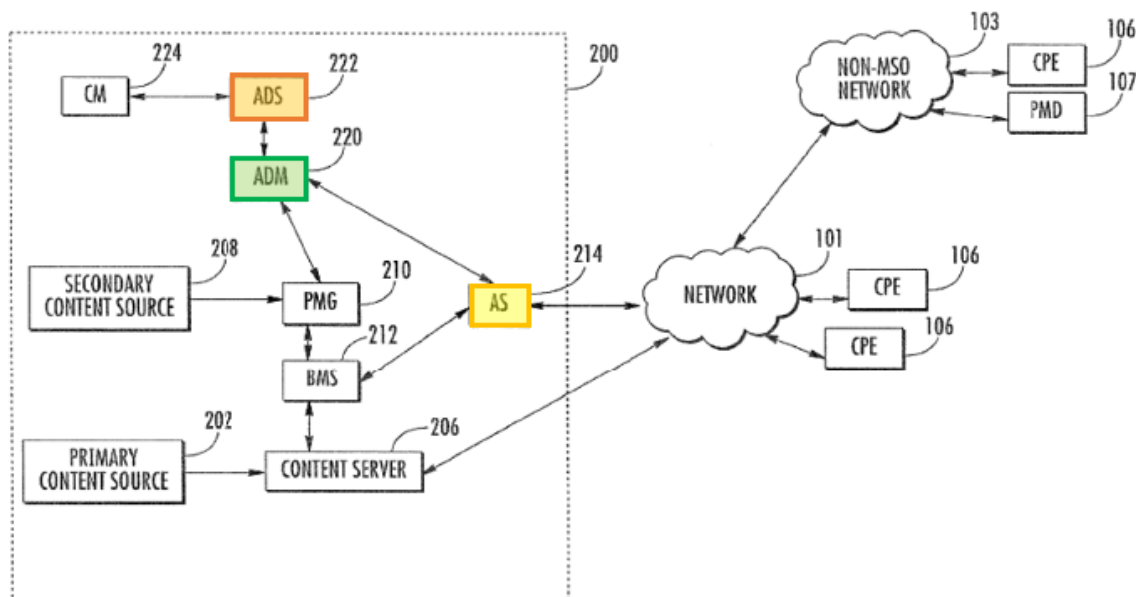
¹ Neither party presents evidence or arguments regarding objective evidence of non-obviousness in the instant proceeding.

D. Brief Overviews of the Asserted Prior Art References

1. Santangelo (Ex. 1004)

Santangelo discloses an apparatus and methods for dynamic secondary content (e.g., advertisement) and data insertion and delivery. Ex. 1004, codes (54), (57).

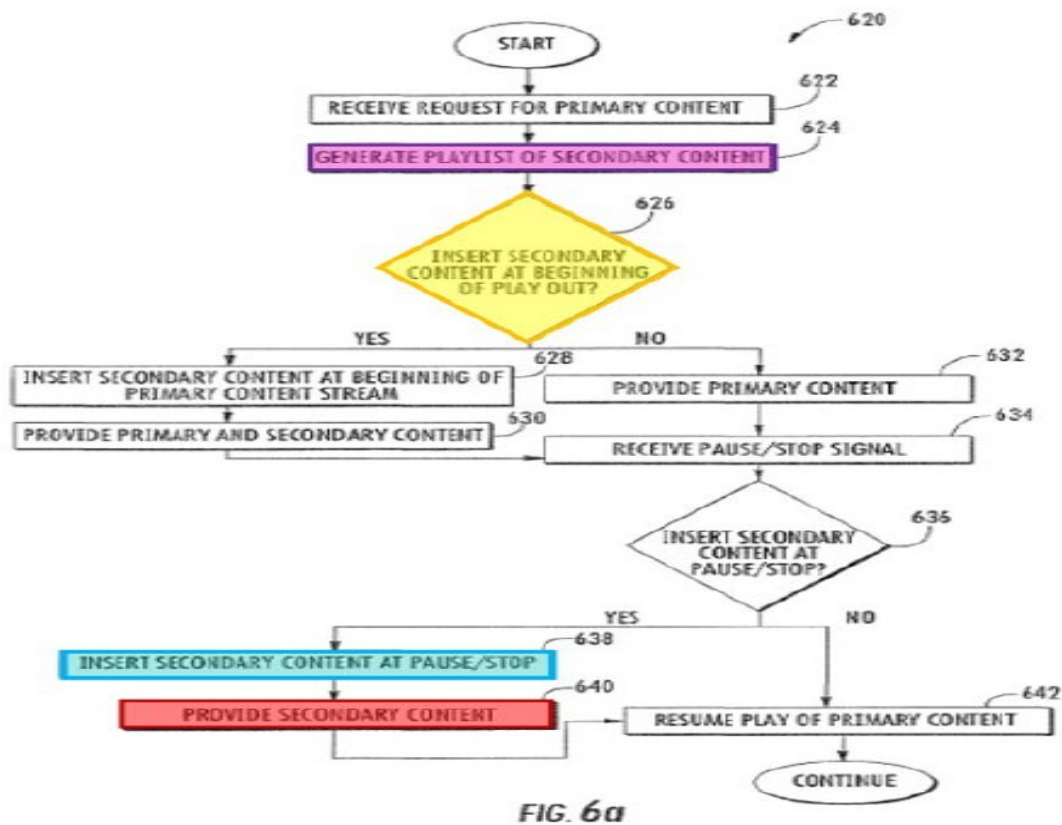
Figure 2 of Santangelo is reproduced below (with color annotations added by Petitioner). Pet. 13.



Annotated Figure 2 of Santangelo above is a high-level block diagram of a content and data distribution network for use in dynamic secondary content insertion or dynamic advertisement insertion (“DAI”). Ex. 1004 ¶ 99. Network 200 comprises (1) primary content sources 202, (2) content server 206, (3) secondary content sources 208, (4) package media gateway (“PMG”) 210, (5) business management system (“BMS”) 212, (6) application server (“AS”) 214 (yellow), and (7) content management

entities, which include e.g., advertisement management system, advertisement delivery manager, or advertisement decision manager (collectively and individually referred to as “ADM”) 220 (green), advertisement decision service (“ADS”) 222 (orange), and campaign manager (“CM”) 224. *Id.* Management entities cooperate to provide content, including secondary content, to customer premises equipment (“CPE”) 106 and portable media devices (“PMD”) 107 in communication with network 101, including via non-multiple systems operator (“MSO”) network 103. *Id.*

Figure 6a is reproduced below (with color annotations added by Petitioner). Pet. 24.



Annotated Figure 6a of Santangelo is a logical flow diagram, illustrating an exemplary method of providing secondary content insertion. Ex. 1004 ¶ 39. At step 622, a request for primary content from a user terminal is received at primary content server 206. *Id.* ¶ 193. At step 624, primary content server 206 sends a message to ADM 220, triggering the creation of a playlist of secondary content at step 624 (pink). *Id.* ¶ 195. The message identifies the subscriber in order to enable the entities charged with identifying secondary content to perform the selection based on what is known about the subscriber (such as demographic, psychographic, firmographic, geographic and/or behavioral variables). *Id.* At step 626 (yellow), the dynamic secondary content insertion application determines whether content will be inserted at the beginning of play out of the requested primary content. *Id.* ¶ 196.

At step 636, when a pause or stop command is received during the playback of the primary content, the dynamic secondary content insertion application determines whether secondary content should be inserted. *Id.* ¶¶ 197, 198. At step 638 (blue), if it determines that secondary content should be inserted, the secondary content from the playlist is inserted at the pause/stop command. *Id.* ¶ 200. At step 640 (red), the secondary content is presented to the user. *Id.* At step 642, subsequent to the presentation of the secondary content, the primary content resumes play if there is any portion of the primary content which remains to be played. *Id.* The user may select a specific secondary content to receive from among the available secondary content. *Id.* ¶ 203.

2. Zigmond (Ex. 1005)

Zigmond discloses a system and method for selecting and inserting advertisements into a video programming feed. Ex. 1005, code (57). Zigmond recognizes the need to select user tailored advertisements. *Id.* at 1:23–26. Zigmond allows advertisers to target individual viewers based on the needs and interests of individual viewers and households. *Id.* at 4:10–12. Zigmond discloses using advertisement selection rules and criteria, such as viewer characteristics, video programming content, geographical location, programming content, and advertisement content to select advertisements for display. *Id.* at code (57), 4:25–29, 10:58–61, 11:30–49, 12:62–66, 13:51–58.

Figure 4 of Zigmond is reproduced below.

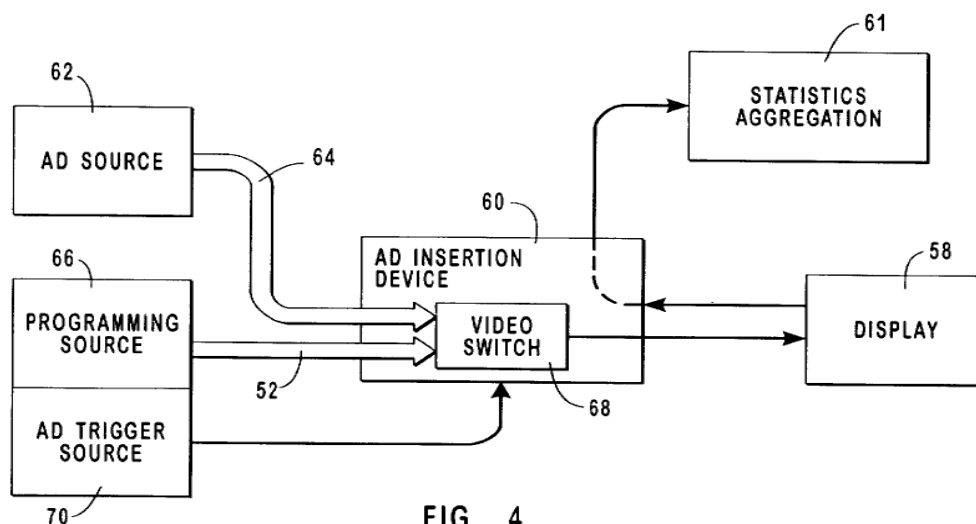


Figure 4 of Zigmond above is a diagram illustrating a system for receiving advertisements from an advertising source and video programming from a programming source. *Id.* at 5:52–55. Advertisement source 62 may be a local repository storing a plurality of advertisements. *Id.* at 8:3–7.

Advertisement stream 64 delivers the advertisements from advertisement source 62 to ad insertion device 60 over an advertisement or other video channel. *Id.* Alternatively, advertisement source 62 may be a just-in-time system for delivering advertisement stream 64 to ad insertion device. *Id.* at 8:9–11.

E. Ground 1 – Obviousness over Santangelo

Petitioner asserts that claims 1–7 are unpatentable under § 103 as obvious over Santangelo (Ground 1). Pet. 21–49. Patent Owner opposes. Prelim. Resp. 5. Upon consideration of the parties’ arguments and supporting evidence, we are persuaded that Petitioner has demonstrated a reasonable likelihood of prevailing in showing that claims 1–7 are unpatentable under § 103 as obvious over Santangelo.

1. Claim 1

Petitioner asserts that Santangelo teaches or suggests all of the limitations recited in claim 1. Pet. 21–41. Based on the evidence in this record, we agree with Petitioner for purposes of this Decision.

Notably, for the preamble of claim 1 (Element 1a, “[a] method for displaying tailored advertising in response to user media playback behavior via an over-the-top data delivery system”), Petitioner explains that Santangelo discloses “an apparatus and methods for inserting targeted advertising into content requested by a user.” *Id.* at 21 (citing Ex. 1004, codes (54), (57), ¶ 61 (disclosing “methods and apparatus for providing

primary content to network users, the primary content having secondary content (e.g., targeted advertisements . . . , etc.) inserted therein”).

Petitioner also explains that a person of ordinary skill in the art would have understood that Santangelo teaches an over-the-top data delivery system because, as shown in Figure 2 of Santangelo (reproduced above), the system sends contents and advertisements to a user over a network controlled by the system provider (e.g., network 101) or over another provider’s network (e.g., non-MSO network 103). Pet. 22–23 (citing Ex. 1004 ¶¶ 75, 79, 99, 102, Fig. 2; Ex. 1003 ¶¶ 75–77). And Santangelo further teaches “network services are sent ‘over-the-top’ of other provider’s infrastructure, thereby making the service network substantially network-agnostic” and “selection of a video for play via the Internet, such as via the ‘YouTube®’ website.” Ex. 1004 ¶¶ 79, 102, *cited in* Pet. 23; *see* Ex. 1003 ¶¶ 76–77. In addition, Petitioner explains that Santangelo also teaches “displaying tailored advertising in response to user media playback behavior.” Pet. 23–25 (citing Ex. 1004, code (57), ¶¶ 39, 99, 148, 149, 186, 193–201, 203, Figs. 2, 6, 6a; Ex. 1003 ¶¶ 78–81).

As to Element 1b (“verifying an identity of the user”), Petitioner explains that Santangelo teaches authenticating the subscriber (i.e., user) before providing content to the subscriber. Pet. 25–27 (citing Ex. 1004 ¶¶ 126 (incorporating by reference U.S. Patent Application No. 12/536,724, which discloses that “[c]ontent should only be provided to a subscriber whose identity has been authenticated to an identity server” (Ex. 1014

¶ 18)), 163 (“the user must be authenticated in order to receive content”), 193, 194, 268, 269, Fig. 6a).

With respect to Element 1c (“analyzing historical data associated with the identity, wherein the historical data includes patterns of user behavior associated with one or more advertisements”), Petitioner explains that Santangelo discloses capturing the patterns of user behavior associated with one or more advertisements, such as the user’s reactions to sports-related versus family programming advertisements. Pet. 28–29 (citing Ex. 1004 ¶¶ 243–245, 268; Ex. 1003 ¶¶ 87–89). Petitioner argues that a person of ordinary skill in the art would have found this limitation obvious because “analyzing captured behavior of an identified user that often fast forwards through sports-related advertisements (i.e., one viewing pattern with respect to a first advertisement), but views advertisements for family programming (i.e., another viewing pattern with respect to a second advertisement) is analyzing historical data capturing patterns of user behavior associated with one or more advertisements.” *Id.*

Regarding Element 1d (“detecting media playback by the user”), Petitioner explains that Santangelo discloses “detecting button presses by the user that activates play, pause, and other playback and trick mode events that control media playback by the user.” Pet. 29–31 (citing Ex. 1004 ¶¶ 182, 193, 268, 269, Fig. 6a; Ex. 1003 ¶¶ 90–92).

In connection with Element 1e (“analyzing content associated with the media playback”), Petitioner explains that Santangelo teaches selecting advertisements based on the content of the media being played. Pet. 31–33

(citing Ex. 1004 ¶¶ 119, 186 (describing selecting content for an advertisement playlist based on “genre of the selected primary content”), 195, 244–247, Fig. 6a; Ex. 1003 ¶¶ 87–89, 93–99).

For Element 1f (“retrieving an advertisement rule associated with the user”), Petitioner explains that Santangelo teaches using business or operational rules associated with the user for controlling the selection and insertion of advertisements. Pet. 33–36 (citing Ex. 1004 ¶¶ 185, 186, 195 (the content management entities select an advertisement playlist based on what is known about the subscriber, such as demographic, psychographic, firmographic, geographic and/or behavioral variables), 245, 272–274 (“the business/operational rules can be used to dynamically (or manually) control the selection and/or insertion of secondary content”), 281–284; Ex. 1003 ¶¶ 87–89, 100–106).

As to Element 1g (“queueing user tailored advertisements based on the analyzed content and the advertisement rule”), Petitioner explains that Santangelo teaches “generating a secondary content playlist that is ready to be used, based on analyzed characteristics and the advertisement rule” as discussed for Element 1f. Pet. 36–38 (citing Ex. 1003 ¶¶ 107–110).

According to Petitioner, Santangelo teaches that the secondary content playlist is generated at step 624 before any secondary content is inserted in response to a pause at step 638 and presented to the user, as shown in Figure 6a of Santangelo (reproduced above). *Id.* (citing Ex. 1004 ¶¶ 186, 197, 198, 200, Fig. 6a). Mr. Gray testifies that a person of ordinary skill in the art would have understood that “Santangelo’s teaching of generating a

playlist of advertisements that are ready and waiting to be used is ‘queueing’ advertisements because the advertisements are designated for playback and waiting to be inserted into the primary content as needed,” and that a “playlist” is “commonly understood to have a play order.” Ex. 1003 ¶ 109.

With respect to Element 1h (“delivering an advertisement from any one or more third-party services in response to detecting a pause in the media playback”), Petitioner explains that Santangelo teaches delivering advertisements from third party services and displaying them when the user pauses or stops playback of the requested content. Pet. 38–41 (citing Ex. 1004 ¶¶ 182, 193–200, Fig. 6a). In particular, Petitioner contends that Santangelo’s playlist comprises a queue of user-tailored advertisements based on the analyzed content and the advertisement rule, as discussed above for Element 1g, and the content in the playlist is delivered in response to detecting a pause in the media playback. *Id.* (citing Ex. 1004 ¶¶ 182, 193–200, 269 (“the client application 810 may insert secondary content when the user pauses or otherwise stops playback of requested content”), Fig. 6a (step 638 (“INSERT SECONDARY CONTENT AT PAUSE/STOP”), step 640 (“PROVIDE SECONDARY CONTENT”))). Petitioner notes that Santangelo also discloses advertisements from different third-party services, such as sports-related services, theme parks, movies, restaurants, car-related services, mobility-related services, travel, home repair, real-estate, and major appliances. *Id.* (citing Ex. 1004 ¶¶ 62, 245, 256, 278, 279, 282).

In its Preliminary Response, Patent Owner argues that “in an over-the-top system, preparing advertisements for *immediate playback* upon detection of a pause is needed for reduced latency and better reliability in playback,” relying on its proposed claim construction for the term “queueing.” Prelim. Resp. 5 (citing Ex. 2003 ¶¶ 63, 68, 69, 75) (emphasis added). Patent Owner also argues that “Santangelo has no teaching, suggestion, or motivation to provide advertisements *for immediate playback*, and not even an awareness of the need to do so in an over-the-top system.” *Id.* at 5–6 (emphasis added).

Patent Owner’s arguments are unavailing, as they improperly rest on Patent Owner’s proposed claim construction for the term “queueing” that requires “preparing a user tailored advertisement *for immediate playback* upon detection of a pause.” *Id.* at 2–6. In addition, nothing in claim 1 requires “reduced latency and better reliability in playback.” *Id.* at 5.

As discussed above in our claim construction analysis, we decline to adopt Patent Owner’s proposed construction. Rather, in view of the claim language and Specification, we construe the term “queueing” for the purposes of this Decision as “designating one or more advertisements for display or delivery.” Patent Owner admits that Santangelo “discloses the generation of a playlist of advertisements,” and “having it ready to be sent to the user.” Prelim. Resp. 5–6. As discussed above, the content in Santangelo’s advertisement playlist is delivered in response to detecting a pause in the media playback. Ex. 1004 ¶¶ 182, 193–200, Fig. 6a. For example, Santangelo discloses that a user viewing primary content may

elect to pause the program and then the dynamic secondary content insertion application “immediately determines whether to insert one or more secondary content asserts therein.” *Id.* ¶ 185.

In light of the foregoing, we determine that Petitioner has demonstrated a reasonable likelihood it would prevail in showing that claim 1 would have been obvious over Santangelo.

2. Claims 2–7

Having reviewed Petitioner’s arguments and supporting evidence in the present record, we determine that Petitioner has established adequately for purposes of this Decision that Santangelo teaches or suggests the limitations recited in claims 2–7. *See* Pet. 41–61. Accordingly, we determine that Petitioner has demonstrated a reasonable likelihood of demonstrating that those claims also would have been obvious over Santangelo. At this juncture, Patent Owner does not present separate, specific arguments regarding those dependent claims.

3. Conclusion on Obviousness over Santangelo

Based on the evidence in the present record, we are persuaded that Petitioner has demonstrated a reasonable likelihood of prevailing in showing that claims 1–7 are unpatentable under § 103 as obvious over Santangelo.

F. Ground 2 – Obviousness over Santangelo and Zigmond

Petitioner asserts that claims 1–7 are unpatentable under § 103 as obvious over Santangelo and Zigmond (Ground 2). Pet. 61–75. Petitioner explains how the combination of Santangelo and Zigmond teaches or

suggests each limitation of the claims and provides reasons to combine the prior art teachings. *Id.* For example, Petitioner explains that Santangelo teaches Element 1f (“retrieving an advertisement rule associated with the user”) as discussed in Ground 1, obviousness based on Santangelo alone. Pet. 68. Petitioner asserts that, to the extent Patent Owner argues that Santangelo does not sufficiently disclose this “advertisement rule” element, Zigmond would have rendered this element obvious by expressly teaching using “ad selection rules” based on “identifying characteristics of viewer” to select advertisement “specifically associated with characteristics of the viewer or the household,” such as recent advertisement content, permitted themes (e.g., parental locks), etc. Pet. 68–71 (citing Ex. 1005, 4:24–34, 9:56–10:3, 10:36–63, 11:30–53, 11:66–12:14, 12:62–66, 13:51–58, 14:13–20). Petitioner also asserts that a person of ordinary skill in the art would have been motivated to modify Santangelo’s method to include Zigmond’s additional monitoring functions and selection rules because it would “provide advertisers and users greater control on what advertisements to display,” furthering Santangelo’s goals for selecting user tailored advertisement. *Id.* at 61–64 (citing Ex. 1003 ¶¶ 18–20, 173–178).

Upon review of the parties’ arguments and evidence, we are persuaded that Petitioner has demonstrated a reasonable likelihood of prevailing in showing that claims 1–7 are unpatentable under § 103 as obvious over Santangelo and Zigmond. As discussed above, Petitioner has shown sufficiently for purposes of instituting a review that Santangelo teaches or suggests all of the limitations in these challenged claims.

Petitioner also has articulated a sufficient reason to combine the teachings of Santangelo and Zigmond for purposes of this Decision.

For Ground 2, Patent Owner essentially relies on the same arguments presented for Ground 1. Prelim. Resp. 6–7. We have addressed those arguments above and we find those arguments are likewise unavailing here for the reasons stated above.

Upon consideration of Petitioner’s explanations and supporting evidence in this current record, we are persuaded that Petitioner has demonstrated a reasonable likelihood of prevailing in showing that claims 1–7 are unpatentable under § 103 as obvious over Santangelo and Zigmond.

III. CONCLUSION

For the foregoing reasons, we determine that the Petition and evidence in this record establish that there is a reasonable likelihood that Petitioner would prevail in challenging claims 1–7 of the ’619 patent based on the grounds discussed above. At this juncture, we have not made a final determination with respect to the patentability of the challenged claims, nor with respect to claim construction.

IV. ORDER

For the foregoing reasons, it is

ORDERED that pursuant to 35 U.S.C. § 314(a), an *inter partes* review is hereby instituted for the following asserted grounds:

Claims Challenged	35 U.S.C. §	References
1–7	103	Santangelo
1–7	103	Santangelo, Zigmond

FURTHER ORDERED that pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial; the trial will commence on the entry date of this Decision.

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